

SETTLEMENT CHANGES IN THE SOUTHWEST
HIGHLANDS OF SCOTLAND

1700 - 1960

Robert Alan Gailey

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ILLUSTRATIONS.

The sources for all graphical and cartographical illustrations are given in the diagrams.

The photographs included as Fig. 25 and Figs. 1, 2 and 3 in Appendix 3d are copies of photographs taken by Rev. J. B. MacKenzie of Colonsay about 1880. The originals are in the possession of the Mid-Argyll Antiquarian Society, and the author is indebted to Mr. Cregeen for bringing these to his notice.

All other photographs were taken by the author during the course of field work in Argyll.

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Many ideas incorporated in the following chapters were developed in discussion with colleagues and friends, and in some cases it is impossible to separate ideas based solely on the evidence from Argyllshire, from others referable to a wider Highland context. While expressing gratitude for such stimulating contacts with others, and the hope that the value of these contacts was not entirely one-sided, the author wishes to make it clear that ultimate responsibility for this thesis lies solely with him, and any shortcomings in presentation and interpretation of factual material are his own. Wherever the published or unpublished work of other scholars has been utilised, full acknowledgement and appropriate references have been given.

Finally, the author declares that he alone is responsible for the composition and presentation of this thesis on "Settlement Changes in the Southwest Highlands of Scotland, 1700-1960", for the degree of Doctor of Philosophy in the Faculty of Arts of the University of Glasgow.

Signed:

(Robert Alan Gailey)

Date: 10th February, 1961.

Ulster Folk Museum,
Northern Ireland.

SOURCES.

The sources used in this thesis are of eight types:

1. For the mid-eighteenth century, the Military Survey of Scotland (Roy's Map), Webster's Enumeration of the Population in 1755, and the Valuation of Argyll in 1755 provide the basic information.
2. Collections of estate papers, including estate maps and plans, provide information for the eighteenth and nineteenth centuries.
3. The Statistical Accounts of the 1790's and the New Statistical Accounts of the 1840's provide valuable information for each parish. These have been commented on frequently in the past, and more recently by authors such as Geddes (143:17-29).
4. Published tours and accounts by various authors, many of them non-Scots, during the eighteenth and nineteenth centuries. A good example is provided by Pennant's Tours.
5. Government and other official publications, including Royal Commissions' Reports and Evidence, Select Committee Reports, and Reports by bodies such as the Crofters Commissions, Land Court and Congested Districts Board. These deal mainly with the period since 1840.
6. Published literature in periodicals and books, including MS material published by the Scottish History Society and by individuals (see under Mackay, F.F., Mactavish, Duncan).
7. Modern maps including the 1st Edition of the 1:10,560 Survey of Argyll, which was completed between the 1860's and 1880's. The 1:253,440 sheet of Glasgow and the Middle West provided a base map for many illustrations in the thesis, and sheets of the 1:63,360 7th Series were similarly used. The basic document used for field-work was the G.S.G.S. 1:25,000 map, which is based on a photographic reduction of the 1:10,560 Survey, with contours added from the 1:63,360 sheets. For extensive work of the nature needed for this study of rural settlement in Argyll these sheets proved excellently suited.
8. Census material. The material used is of three types.
 - (i) Published census material of a summary nature, by parishes from the beginning of the nineteenth century onwards.
 - (ii) Unpublished Census Enumeration Books, up to and including the Census of 1891. These are available for study in New Register House, Edinburgh.
 - (iii) The unpublished Index of Place-Names (with populations) for Scotland, derived from the 1951 Census. This was used by permission and courtesy of the Registrar General of Scotland, and the author is indebted to Dr. James Caird for bringing it to his notice.

UNPUBLISHED DOCUMENTARY SOURCES.

The Inverneil Papers. J. L. Campbell, Isle of Canna. Microfilm/photostat copy held in Glasgow University Library. (Inverneil).

The Argyll Papers. His Grace, the Duke of Argyll. The documents consulted were on loan to the Royal Burgh of Campbeltown, and access to them was gained through the good offices of Mr. Duncan Colville, Machrihanish. (Argyll).

The Kilberry Papers. Miss Marion Campbell, Kilberry (Kilberry).

The Knockbuy Rentals. Miss Marion Campbell, Kilberry. (Knockbuy).

The Valuation of Argyll, 1751 (typescript). Miss Marion Campbell, Kilberry. MS copy in Register House.

The Riddell Papers, Ardnamurchan and Sunart. The Department of Agriculture for Scotland, Oban. The initial information on these papers came from Mr. Renfrew, Senior Lands Officer, Oban. (Riddell).

The Macdonald of Sanda Papers. Register House, Edinburgh. (Sanda).

The Campbell of Stonefield Papers. Register House, Edinburgh. (Stonefield).

Census Enumeration Books. New Register House, Edinburgh, 1841, 1871, 1891. (C.E.B., 1841, 1871, 1891).

Parish Register in possession of the Kirk Session of Kilchoan Parish Church, Ardnamurchan, 1775-1873. By permission of Rev. N. G. Macdonald, Kilchoan Manse. (Kilchoan Reg.).

West Highland Survey Township Punch Cards. Consulted by permission of the Director, School of Scottish Studies, Edinburgh. (W.H.S. Cards).

N.B. These sources are referred to in the text of the thesis and in the appendixes using the word, or words, or abbreviations given in brackets at the end of each source above.

UNPUBLISHED CARTOGRAPHIC SOURCES.

The Military Survey of Scotland (Roy's Map). c.1750. Glasgow University Library photostat copy.

Map of Inverneil. Wm. Douglas. no date (c.1760). Inverneil Papers.

Plans of Inverneil and Knap. Taylor and Skinner. 1776. bound volume. Inverneil Papers.

Map of Tynish, Danna and Ulva. 1786-1787. John Wilson. Inverneil papers.

Map of the District of Kintyre. George Langlands and Son. 1793. Kelvingrove Museum, Glasgow, and Mr. Duncan Colville, Machrihanish. R.S.G.S. "Early Maps of Scotland, 1936". p.93.

Map of Argyllshire. George Langlands and Son. 1801. Mr. Duncan Colville, Machrihanish. R.S.G.S. "Early Maps of Scotland, 1936". p.94.

Plan of Ardnamurchan and Sunart Wm. Bald, 1806 and 1807. Department of Agriculture for Scotland, Oban Offices.

Map of the North Part of Argyllshire. John Thompson. 1824. Mr. Duncan Colville, Machrihanish.

Plan for the Improvement of Inverneil. Js. Johnstone. 1827. Inverneil Papers.

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5. Report of Her Majesty's Commissioners of Enquiry into the Condition of the Crofters and Cottars in the Highlands and Islands of Scotland. 1884. (Napier Commission).
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11. Report of the Scottish Land Court, 1913.
12. Report of the Commission of Enquiry into Crofting Conditions, April 1954. (Taylor Commission). Cmd.9091.
13. Minutes of Evidence given before the Taylor Commission. (Unpublished. Consulted by permission of Professor A. K. Cairncross, Glasgow University).
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The Statistical Account.

Parish	Minister/Author	Year.	Volume.	Pages.
15. Ardnamurchan	Alex. Campbell	1798	20	286-296
16. Morvern	Norman M'Leod	1794	10	262-276
17. Lismore & Appin	Donald M'Nicol	1791	1	482-502
18. Ardchattan & Muckairn	Ludovick Grant	1793	6	174-182
19. Glenorchy & Inishail	Joseph M'Intyre	1793	8	335-361
20. Kilchrenan & Dalavich	Wm. Campbell	1793	6	266-273
21. Kilninver & Kilmelfort	Patrick Campbell	1794	10	315-325
22. Kilbrandon & Kilchattan	John MacFarlane	1795	14	157-169
23. Kilmore & Kilbride	Patrick M'Donald	1794	11	121-137
24. Glassary	Dugald Campbell	1794	13	653-664
25. Kilmartin	Hugh Campbell	1793	8	90-109
26. Inveraray	Paul Fraser	1793	5	287-308
27. Craginish	Lachlan M'Lachlan	1793	7	436-449
28. North Knapdale	Archibald Campbell	1793	6	255-265
29. South Knapdale	(various gentlemen)	1797	19	308-326
30. Kilcalmonell & Kilberry	Alexander Campbell	1794	10	54- 67
31. Saddell & Skipness	George MacLiesh	1794	12	475-489
32. Killeen & Kilchenzie	Alexander Stuart	1797	19	627-631
33. Campbeltown	John Smith	1794	10	517-567
34. Southend	David Campbell	1792	3	363-368

The New Statistical Account. Volume VII. Argyllshire.

Parish	Minister/Author	Year	Pages
35. Ardnamurchan	Angus M'Lean	1838	117-163
36. Morvern	John M'Leod	1843	163-195
37. Lismore & Appin	Gregor M'Gregor	1841	223-256
38. Ardchattan & Muckairn	Hugh Fraser	1844	468-522
39. Glenorchy & Inishail	Duncan MacLean	1843	82-103
40. Kilchrenan & Dalavich	Wm. Fraser	1843	372-276
41. Kilninver & Kilmelfort	John Ferguson	1843	61- 71
42. Kilbrandon & Kilchattan	Finlay M'Pherson	1843	71- 81
43. Kilmore & Kilbride	Dugald N. Campbell	1843	522-533
44. Glassary	Dugald Campbell	1844	675-700
45. Kilmartin	Donald MacCalman	1844	547-567
46. Inveraray	Colin Smith	1843	1- 44
47. Craginish	Archibald Francis	1843	45- 61
48. North Knapdale	D. MacLachlan	1844	631-643
49. South Knapdale	Duncan Rankin	1840	257-276
50. Kilcalmonell & Kilberry	John M'Arthur	1843	408-412
51. Saddell & Skipness	John MacFarlane	1843	436-453
52. Killeen & Kilchenzie	D. Macdonald	1843	376-394
53. Campbeltown	?	1843	453-468
54. Southend	Daniel Kelly	1843	413-436

ABBREVIATIONS.

A.	Antiquity.
A.C.	Archaeologia Cambrensis.
A.H.R.	Agricultural History Review.
A.S.	Advancement of Science.
A.U.R.	Aberdeen University Review.
C.M.J.	Caledonian Medical Journal.
C.R.	The Celtic Review.
E.G.	Economic Geography.
E.H.R.	Economic History Review.
G.	Geography.
Gw.	Gwerin.
G.J.	The Geographical Journal.
G.R.	The Geographical Review.
I.B.G.	Transactions and Papers of the Institute of British Geographers.
I.G.	Irish Geography.
J.D.H.S.	Journal of the Donegal Historical Society.
J.R.A.I.	Journal of the Royal Anthropological Institute of Great Britain and Ireland.
M.	Man.
M.A.	Medieval Archaeology.
P.O.	Planning Outlook.
P.R.I.A.	Proceedings of the Royal Irish Academy.
P.S.A.S.	Proceedings of the Society of Antiquaries of Scotland.
S.A.	Scottish Agriculture.
S.A.E.	Scottish Agricultural Economics.
S.G.M.	Scottish Geographical Magazine.
S.H.R.	Scottish Historical Review.
S.J.P.E.	Scottish Journal of Political Economy.
S.R.	The Sociological Review.
S.S.	Scottish Studies.
T.G.A.S.	Transactions of the Glasgow Archaeological Society.
T.R.H.A.S.S.	Transactions of the Royal Highland and Agricultural Society of Scotland.
U.F.	Ulster Folklife.
U.J.A.	Ulster Journal of Archaeology.

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U.J.A., 21,1958, pp.115-126.
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All published sources, unpublished papers read before academic audiences, and unpublished theses or dissertations have been numbered consecutively, the list being alphabetically by authors.

Unpublished MS sources are referred to by a word, e.g. the Inverneil Papers are referred to as 'Inverneil', the Macdonald of Sanda Papers as 'Sanda'.

In both cases this is followed by a colon, which in turn is followed by some means of locating the reference within the source. In published literature, a page or chapter reference is usually sufficient; in collections of unpublished MS papers some title to identify the source is given, within which a page reference is given if pagination exists, otherwise the title of the source is the only possible means of location. MS estate maps are referred to by giving the title of the map, the surname of the cartographer and the date of survey. In some cases where the source is evident from the text of the thesis, it is sufficient to give the cartographer's surname and the date. The MS estate maps have not been included in the consecutively numbered list of sources and bibliography, nor have the collections of MS estate papers. This system was adopted in an attempt to reduce the physical bulk of the thesis, for it does away with the necessity for footnotes, or references grouped at the ends of chapters, or at the end of the thesis. Footnotes are reserved for additional explanatory information which, if included in the text, would break the logical train of thought.

SECTION I
INTRODUCTORY

Chapter 1.

INTRODUCTION

Systematic study of the rural landscapes of the Highlands of Scotland has been neglected until recently by geographers in Britain. Indeed, the same might be said of Scotland in general. This neglect is even more apparent when we examine the contributions to the historical geography of Scotland. Apart from some local studies, mainly in the Lowlands, the field is relatively untouched. There has been no attempt to produce for Scotland a study comparable in scope with Flatres' examination of Cornwall, Wales, Man and Ireland. It is unfortunate that Flatres was unable to extend his studies to include Scotland, especially the west Highlands and Islands, for it is apparent that there have been differences in the course of events affecting the development of rural landscapes over the past two centuries, as between the Highlands and the other Celtic ends of Britain. A view from the air in a flight from Glasgow to Belfast is sufficient to demonstrate how different these rural landscapes can be. Flatres described Scotland as "vaste, lointaine et complexe" (125:10), but suggested that sufficient work had been done to indicate essential similarity between Scotland and the lands he studied. It must be admitted that in early times this correspondence existed; the ancient land divisions of Highland Scotland, Man and Ireland have been shown to have had a common origin (see Appendix 3c, and the work of McKerrall). It can also be agreed that the processes effecting change over the past two centuries are of the same order, but the results of these processes in the Scots environment have been unique. As an example, three years' experience of the Highlands has convinced the author that the landlords and their agents must be held in large part responsible for the moulding of the present rural scene. Flatres put a similar claim forward as a result of his work in the other countries. However, the much tighter control exerted by the Highland laird over his estate and tenantry produced a more orderly and planned landscape than was the case in Ireland, and one must look to areas such as North Ayrshire, with its "evolved landscapes", the work of the "bonnet lairds" (184:104), to find a Scots counterpart to much of the rural scene of North Wales or

the Isle of Man.

This thesis deals with the rural landscapes of the Southwest Highlands, in particular with the County of Argyll, but wherever possible, Argyllshire is put into a broader Highland or Scottish context. In the final analysis, the work is regional, and areal differentiation in Argyllshire will become apparent. Nevertheless there is no attempt to provide a balanced geographical description of the county, dealing with the present or any period in the past. I am concerned to show in how far the study of changes in settlement form and distribution over a period of time is relevant to the adequate comprehension of the present settlement pattern. It is generally accepted that full discussion of settlement is an integral part of regional geography, for in settlement we see one prominent material expression of man's relationships with his total physical and human environment, the study of which is accepted as a central theme of all geographical work.

At the core of any definition of settlement lies the physical existence of human habitation on the earth surface, in distributions varying in density, pattern and time. Fully treated, settlement is much more than this, a fact implicit in MacSween's work in North Skye (217). In his relations with his environment man develops a complex of economic and social activities, revolving about his habitation site, which produces varying material expressions in the landscape. The development of field patterns immediately comes to mind. A particular Argyllshire example is the considerable alteration wrought in the physical landscape in the vicinity of the miners' homes at Easdale and Ballachulish. Similarly, the development of the communications network is intimately associated with the settlement pattern, serving the needs of a local population. In turn, of course, communications, once established, may alter the pre-existing settlement pattern, as in many crofting townships where crofters have moved their houses to a roadside for convenience, deserting an earlier siting associated with a self-sufficient economy now disappeared. Similar influence exerted by roads on settlement has been shown in western Ireland (133:71).

The central theme of this thesis is a study of changing settlement form and distribution. We are concerned with the disappearance of a widespread pattern wherein small nucleations of houses were the dominant element, and its replacement by the equally widespread distribution either of isolated farm steadings or of crofting townships. The latter may lie anywhere on a settlement continuum, the extremes of which are nucleation and absolute dispersal of settlement. As a side issue, the rise of local and regional service centres for rural communities must be touched on briefly. Related topics such as the development of field patterns, the spread of bracken, and the decline of Gaelic speech, will be considered.

No discussion of settlement can mean much without relating it to the facts of population. Population is the life-blood of settlement. This is not to imply that a complete statistical study of population distribution and structure is required. For present purposes the study of population is necessary only in so far as it assists in analysis of the viability of settlement at any stage.

While the ultimate outcome of this study is a contribution to the regional study of the Highlands, it more properly is to be considered as lying within the field of historical geography. In attempting to show how evolution through time is necessary to the analysis of the modern scene, an historical outlook is inevitable. Darby suggested that there are two possible approaches in historical geography (104:648). His "horizontal" approach involves the reconstruction of the regional geography of past periods from contemporary records. However laudable as an academic exercise, this approach can be of little value in the study of modern regions, regardless of the number of these cross-sections in time which may be presented in sequence. Relying on contemporary records, valuable information for modern purposes is lost in being unable to provide adequate relation between adjacent cross-sections. The complementary "vertical" approach involves the study of an element, or complex of elements of the total geographical synthesis (such as settlement), in

its changing aspect and relationships through time. Inherent danger lies in the fact that the study may transgress widely within the province of workers in a related systematic field, and that the geographical significance of the study will be lost. This places the historical geographer in something of a dilemma, for what may be relevant to the study of the changing circumstances of the element or complex under consideration, may well be irrelevant to any ultimate regional synthesis.

Ideally, historical geography should consist of some integration of the two approaches, but the practical problems involved are considerable. Reassessing the plan adopted in a work on English historical geography, Darby indicated one manner in which this integration may be attempted (105:149). Alternate chapters would consist of regional studies at different periods, separated by chapters evaluating the changes taking place from period to period, and the processes effecting these changes.

An analogy from geomorphology may assist. Geomorphology has developed along apparently precise lines as a physical science. It has been customary to study the evolution of landforms in terms of structure, process and stage. It is beside the point, here, that this basis is currently held in question by some geomorphologists and that the study of process has largely been neglected in favour of structure and stage, an inevitable outcome of the geological roots of the subject. Darby's horizontal approach is comparable with geomorphological stage. The vertical approach is paralleled, for instance, by the study of the development of river systems, which for full understanding requires knowledge of hydrology, and unless priorities are kept in view, it will develop into hydrology. Structure exists in historical geography in two forms. It is the starting point of the study, and also the physical, social and economic circumstances surrounding the development of subsequent changes. Structure might be regarded as a convenient datum for study, but it is inevitably a product of previous evolution.

This analogy may be extended to process also. Just as geomorphologists are now realising the need to study physical processes in relation to the development of landforms, so in historical geography an understanding of the factors giving rise to changes through time in any area is essential. "The main instrument of historic change is, of course, Man himself" (104:647). Recognition of process in historical geography entails familiarity with, and research in social and economic affairs.

Kirk demonstrated this last point most convincingly, but his argument appears in a little-known publication and is not as widely recognised as it deserves (174:152-60). He pointed to the fallacy of assuming a dichotomy between man and environment, upon which possibilist and determinist interpretation has been based by many geographers. Accepting that man and environment are elements in a single continuum, the search for simple causal relationships may be discarded, and replaced by referring human actions in any set of circumstances to the relief of stresses in what Kirk called "the behavioural environment" (175:159). Now, man's relations with his environment are comprehensible, for the behavioural environment is itself an evaluation of physical nature and social relationships, conditioned by the inherited experience of earlier generations in the same, or in quite different environmental circumstances. Consequently we must study an environment which is as much a psycho-social entity, as it is a physical reality.

The value of this philosophical basis is apparent when we consider changes taking place in eighteenth and nineteenth century Argyllshire, when lairds and factors were applying to a Highland area agricultural techniques and improvements worked out and tested initially in a Lowland context. The circumstances of landform and climate, social and technical apparatus, in the two regions were quite different, and a period of trial and error, of adjustment of the new methods to a new environment was necessary. The point of the argument is that those introducing the new farming had a background and experience quite different from that of the peasant farmers who had to carry out

the work, and some friction between the two elements in society was inevitable. To view geographical inter-relationships in this way seems to the author infinitely preferable than to adopt the inconsistencies inherent in possibilist (and probabilist), and simple determinist arguments.

Wherever settlement changes can be documented fully, the factors found to operate the changes are invariably human ones. One can think of the desire on the part of the lairds to create unified farms, if only for convenience of collecting rents, and so bring about the dispersal of population and the disintegration of nucleated rural settlement. Prestige in a social sense may often be held responsible for the appearance of policies around the lairds' houses, especially in the early nineteenth century, and as at Inverneil, the planting of these policies necessitated the removal of clachans housing small communities of joint-tenants.

These arguments do not deny the ever-present influence of the physical landscape, but it is claimed that the physical landscape may not be held solely responsible for the initial siting, form and subsequent changes in settlement. Man can not live in vacuo. To consider the last example above, the planting of policies. The accidents of topography may not be held directly responsible for the decision to indulge in this form of landscape gardening, but the precise form which the policies should take may well have been suggested, or even controlled, by the details of topography, in relation to prevailing ideas as to form, order and beauty. However, the evaluation of the same topography by laird and by peasant farmer was quite different, and we see here a clash of cultures, between Highland and Lowland ideals in a Highland area.

Chapter 2.

THE SETTING OF THE STUDY

We are concerned with one of what Evans has called the "Atlantic Ends of Europe" (115:54). Argyllshire consists of a series of peninsulas radiating west, southwest and south from Rannoch Muir and the mountainous country of Breadalbane. Separating the peninsulas are the deep drowned valleys of the Clyde firths, the Sound of Jura and the Firth of Lorne which is continued in the Linnhe Loch and the Great Glen. Northern Argyll is broken up similarly by the Sound of Mull and Loch Sunart. These sea-water lochs are continued in glacially over-deepened, steep-sided and flat-floored valleys cutting deeply back into the mountain masses of the northeast of the county. Ribbon lakes fill some of the deeper troughs, the supreme example being Loch Awe. Could all the available water stored as ice be released by an amelioration of climate in the appropriate areas, the interpenetration of land and sea would be even more considerable than it already is. For its area, the county has a greater length of sea-coast than any other in Britain and Ireland. Argyll epitomises the tattered ends of Europe.

Here we still have, as Evans pointed out (115:64), the opportunity to study the impact of modern industrial, and one might add Lowland society, upon the peasant values of a Highland zone, where the well-worn tradition has been one of assimilation of new traits, rather than replacement of existing ones, as Sir Cyril Fox showed in his study of the Personality of Britain, first published in 1932.

In common with the other Atlantic Ends of Europe, the Highlands retain for study archaic forms and practices, and though there is now a dominance of dispersed single farmsteads, the echoes of the communal past remain in the settlement pattern. This is also true of other parts of the Celtic west, for instance in Donegal (113:26-7). In Scotland there is still township organisation with commonties, and a degree of communal effort over a large area of the Highlands. But the position of Argyllshire within Scotland makes the study of the southwest Highlands of considerable interest. Lying at the southwest

extremity of the northern limit of Old Red Sandstone rocks (Fig.1), Argyll lies open to influences from Lowland Scotland more readily almost than any other part of the Highlands. Elsewhere access is through difficult mountain passes or across extensive areas of bleak moorland, but much of Argyll is readily accessible across the relatively quiet waters of the Clyde, and along the many sea-lochs to the heart of the county. The firths allowed the passage of ideas and men alike in recent times and in the distant past, as witnessed by the extension of the distribution of megalithic tombs of Clyde-Carlingford type along Loch Fyne.

Of importance to the present work is the part played by Argyllshire in introducing improved methods of farming to the west Highlands in general. Lebon clearly indicated two rural patterns which were emerging in Ayrshire during the eighteenth century (184:103-4), the replanning of considerable areas by wealthy proprietors along formal lines being in contrast to the gradual evolution of enclosure in areas owned by the bonnet lairds. Within view of the Ayrshire coast, could one remove the towering bulk of Arran, lies the great breakwater of the peninsula of Kintyre. It is not difficult to find contacts across the Clyde. Elements of both Ayrshire rural patterns are to be found in Argyllshire. Also, during the seventeenth century the Earl of Argyll planted people of Lowland stock in Kintyre (208:Ch.X), thereby ensuring for his successors that there would be a population ready to carry out the social and economic plans of the eighteenth century ducal family. We find that agricultural improvement was progressing from the 1730's onwards in Kintyre (135:103), which is as early as any other part of the Highlands and earlier than most. Kintyre particularly, and southern Argyll in general terms, must be looked on as a bridgehead of Lowland influence on the periphery of the Highlands.

That the position of this bridgehead was peripheral is of no consequence in arguing for its importance to the Highlands at large. It is important to realise, as Huggins demonstrated in 1935 (169: Figs. 3 and 4), that the human distributions of the Highlands are

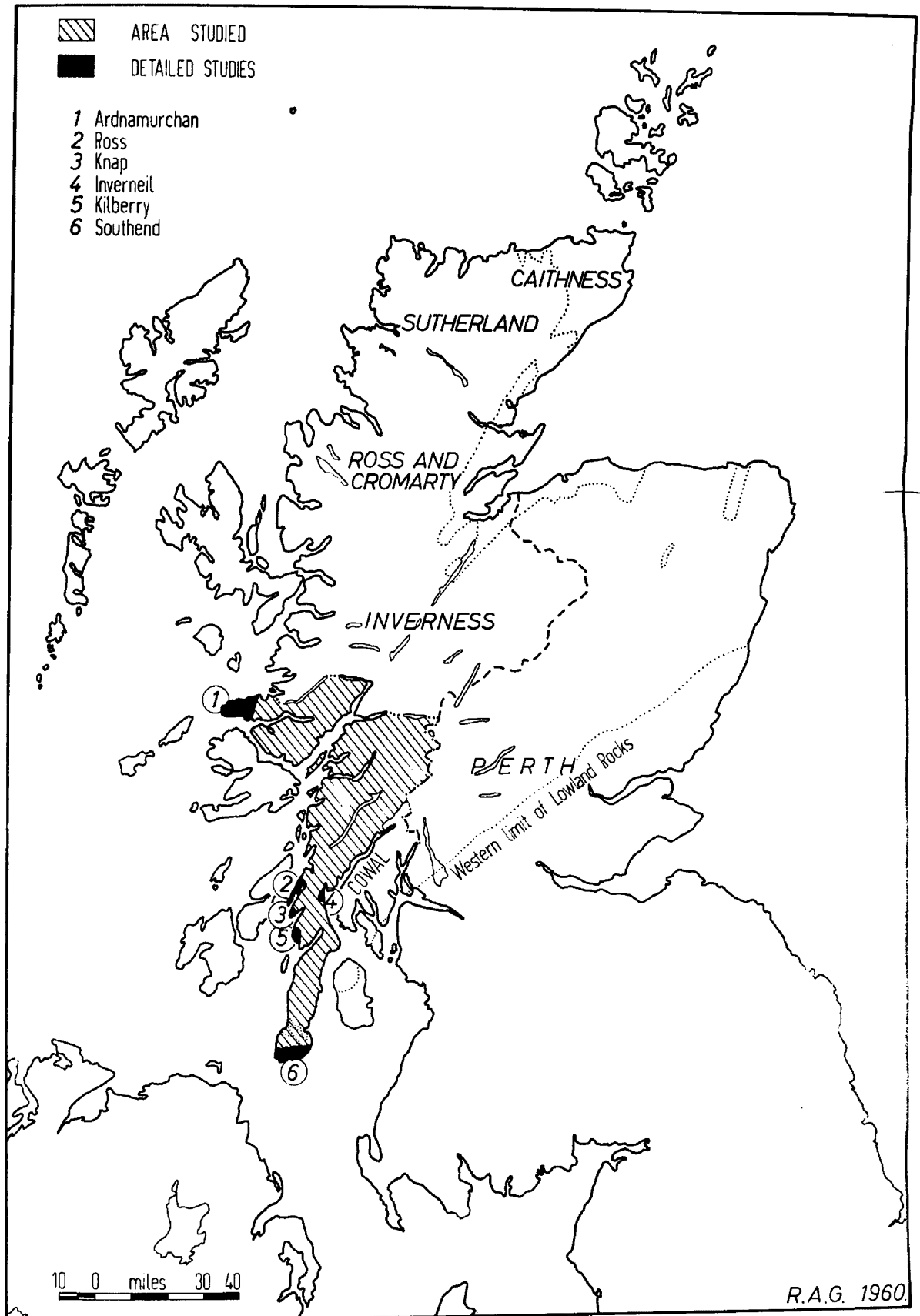


Fig. 1.

peripheral in nature. The large mountain masses of the central and northwest Highlands, together with extensive areas of barren ice-scoured lowland, often mantled by soggy bog in the west Highlands, ensure that man has little intensive use for the greater part of the Highland area. Settlement belongs to the coasts and the major valleys, and only in the northern Hebrides may this pattern be modified even slightly.

Most of Argyll south of the Linnhe Loch may be considered a Highland exception, and so expand an idea first expressed by Symons in dealing with Kintyre (265). Lorne "is remarkable for the fact that the population appears to be less restricted than in other areas, although there are no sea lochs to introduce intrusions of coastal population, as in the case of the massifs of Cowal" (169:306). This is so in an area of considerable relief although there are "large areas under 800 feet and few peaks of 1500 feet" (169:305). While Lorne is considerably more amenable to human occupation than most of the Highlands and Islands, in part due to kinder soils derived from drift based on the underlying basalts over large areas, nevertheless the amount of relief is consistently higher than in Lowland areas. If only on account of its extremely dissected nature, Lorne is indubitably Highland, a feature which it shares with Knapdale. An extreme is reached in North Knapdale, where relief is not considerable and altitudes seldom exceed 600 feet, but where the degree of dissection may only be described as fantastic. In the Tayvallich peninsula especially, travel is relatively easy along the grain of the country from northeast to southwest, but transverse travel is extremely difficult. Steep slopes have resulted from the etching of basins and valleys into recumbent structures in the strongly metamorphosed, heterogeneously durable pre-Cambrian and Lower Palaeozoic sediments (Fig.2.).

For man and settlement, it is not mere physical altitude, nor even extremes of relief which are of vital importance. The degree of what, for want of an adequate term, may be called minor dissection in the major landforms is important in terms of



Fig.2. Looking north along Linnhe Mhuirich from Dun Mhuirich in North Knapdale. The broken topography of the area is immediately evident, with wooded slopes rising suddenly from restricted areas of low land, often marshy or rocky. Altitudes are relatively low and there is a distinct "grain" to the country. The economy has been mainly pastoral, but forestry is becoming increasingly important in terms of local employment.

accessibility. This is a factor of increasing importance as rapid transport becomes more essential in a rural economy no longer self-sufficient in the essentials of life. In the eighteenth century a small community was able to maintain itself in what now would be considered an extreme topographic situation. As self-sufficiency disappeared these inevitably would have been deserted as viable settlements because of their relative inaccessibility, if for no other reason, but other factors usually hastened this contraction in the distribution of settlement.

Raised beaches fringing the coasts emphasise the peripheral distribution of settlement, especially in Kintyre, but also on the shores of Lochs Creran, Etive, Leven and the Linnhe Loch. An understanding of the human potentialities of the raised beaches is basic to any discussion of settlement and population distribution in the southwest Highlands. In dealing with late eighteenth century Kintyre, it has already been pointed out that raised beach, per se, does not necessarily imply fertility and suitable circumstances for settlement (135:102, Appendix 4.). For human purposes the raised beaches may be thought of in two groups. The first includes the lowest raised beach, also called the Neolithic or Twenty-Five Foot Beach, together with lower rock platforms and coastal benches. Secondly there are higher beaches found at altitudes up to about 120 feet. The relative chronology of these littoral benches is of little importance here except to note that the 25 foot beach is younger than the others. Consequently its surface deposits have been subjected to soil-forming processes and rejuvenation for a shorter period than those of the higher beaches. Thus the younger beach is inherently less fertile than the others, all other factors being equal.

It is more important to distinguish the manner in which the beaches came into being in the different areas. Quiet water conditions which presumably obtained during the formation of the beaches fringing the Clyde complex of firths, and in the sea lochs from about Oban northward to the Linnhe Loch, gave rise to

aggradational platforms constituted of gravels, sands and muds. The potential fertility of these beaches, when raised and subjected to soil-forming processes is greater than that of the degradational benches which so often fringe areas like west Kintyre where stormy open water conditions prevail. It should be noted, however, that in west Kintyre the lowest beach has all the appearance of being degradational and the upper ones aggradational, and that simple generalisations will not necessarily suffice. In extreme situations such as at the Mull of Kintyre, degradational platforms degenerate into mere rock notches, or even disappear.

Further analysis is needed. Interplay between drift along the shore and tidal currents has brought about the accumulation of beach material in certain localities in coastal forms such as spits and tombolos, which have been preserved as fossil features following relative changes in sea-level. The outstanding example in Argyll is the large area of 25 foot beach at Rhunahaorine on the west coast of Kintyre. Other examples exist, such as the area of the Kiel Crofts at Barcaldine between Loch Creran and Ardmucknish Bay. There is a smaller raised beach spit projecting into Loch Fyne at Crarae.

The agricultural potentialities of the beaches vary according to the time they have been subjected to sub-aerial weathering and erosion. The erosive effects of running water on the beaches is important. Streams have cut back much farther into the higher beaches not only because they are older, but also because there is greater work for them to do being higher above base-level. The lowest beach, younger and providing less of an altitudinal difference between its surface and base-level, is less markedly incised by juvenile gorges. It follows that the higher beaches will be better drained than the lowest which today is often marshy and unreclaimed. (272:152). The clearest example of this contrast seen in the field was at Kilberry in South Knapdale (Figs. 3 and 4).

It is also desirable to know something of the materials into which the beaches were cut. The raised beaches are either wave-cut platforms in solid rock with possibly a later thin mantle of infertile material, or, the beaches are cut into relatively



Fig.3. Raised beaches on the west coast of Knapdale at Cretshangan Bay. The lowest beach (25 ft.) is generally barren, but parts were improved at various times. Part of an upper and more fertile beach supporting arable land and settlement appears at the left, grading imperceptibly into a low-level erosion surface.



Fig.4. A view of the lowest raised beach, here mainly a rock platform with only a thin over-mantle, at Stotfield Bay, Knapdale, looking north. A dun was situated on top of the raised beach "island" seen left of centre.

unconsolidated drift materials or are built up of beach material derived from a more or less wide area. In either of the latter two cases the human potentialities of the beaches are greater than in the first case.

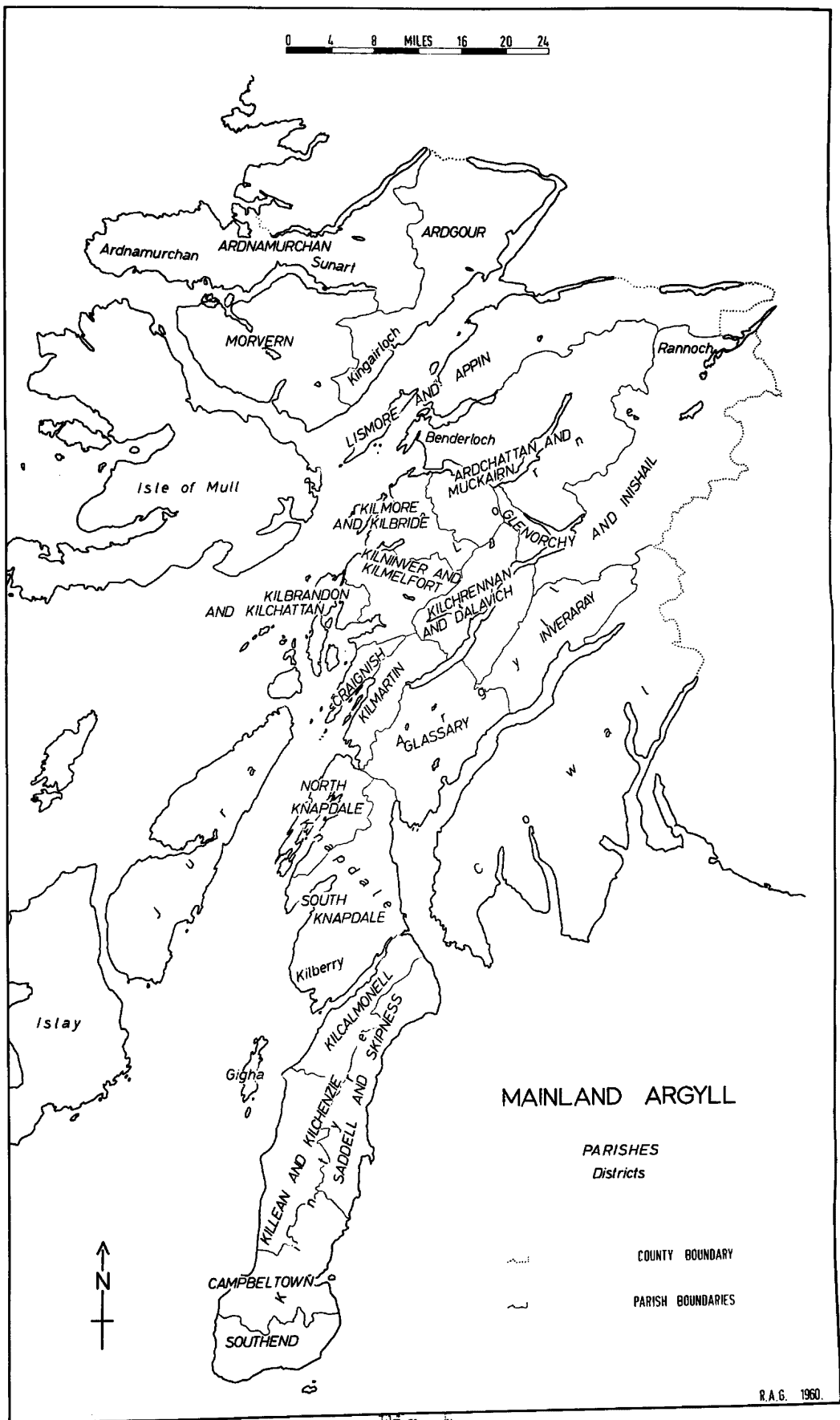
Human utilisation and settlement of the beaches is not solely a function of their physical nature. Equally important is the technical ability of man at different stages to deal with the problems presented. When agrarian improvements were in their infancy in the eighteenth century, the upper, more adequately drained beaches were utilised fully and it was on them that settlement was distinctly concentrated (135:102). Between then and now with ever-increasing technical ability to carry out artificial drainage and fertilisation of the lowest beach, settlement has tended to migrate downwards, and it is on the lowest beach, especially in Kintyre, that the roads have developed. Having found that in some places the 25 foot beach was improveable, attempts were made to utilise it in places where it is represented by a degradational bench, where the soil was too thin and barren ever to support tillage or good grazing. These unsuccessful improvements remain as mute reminders that a process of trial and error was involved in introducing new agrarian methods to Argyllshire.

The area with which this thesis deals specifically is confined to the mainland of Argyll, but omits the whole of the district of Cowal (Fig.1). Admittedly a County boundary is an arbitrary line to use, but along most of its course in this case it is found in an area of negative value to man for settlement. The boundary follows high ground from the Clyde to the Great Glen, and thereafter water, following Lochs Eil and Shiel to separate the district of Ardnamurchan from the remainder of the northwest Highlands. The northeast of the county is almost devoid of settlement, supporting a sparse distribution of sheep-farming communities. In human geography this might be considered a negative core, around which has developed a peripheral positive region of settlement on the coasts and in the major valleys.

Only in the Loch Awe depression does the habitable area become extensive and even there the limitations imposed by topography and vegetation are severe.

Detailed field and documentary work was completed in three main areas. These are distributionally isolated from each other, with one at either extremity of the county in the Parish of Southend and in the western part of Ardnamurchan. In Knapdale, the third area, samples of different types of rural landscapes were studied in the Tayvallich peninsula, the Kilberry district of South Knapdale, the Inverneil glen on Loch Fyneside, and in the Knap Estate at the Point of Knap. More generalised work based mainly on published material covers the remainder of the county. Field work, apart from that above indicated, was carried out in north Kintyre, on upper Loch Fyneside and on Loch Aweside.

The inverted L-shaped area consists of twenty-one parishes (Fig.5), varying in size from the fourteen and a half square miles of Craignish to the two hundred and twenty-nine square miles of Glenorchy and Inishail. These civil parishes in most cases are amalgamations of two or more pre-Reformation ecclesiastical parishes, echoed often in the parish names beginning in the element Kil-. Killeen and Kilchenzie, or, farther north, Kilbrandon and Kilchattan, are examples. The modern parish of Southend includes the old parishes of Kilcolmkill and Kilblaan, and Campbeltown includes Kilkerran, Kilmichael and Kilchousland. More important for this study are the boundary changes which took place in the civil parishes at the end of the nineteenth century. Prior to this Kilcalmonell, with the district of Kilberry, now in South Knapdale, was a single parish. The change has brought administrative recognition to the divide between Kintyre and Knapdale in the Tarbert isthmus. The old parish of Kilcalmonell and Kilberry suggests the unifying influence of West Loch Tarbert. Modern land communications have altered the bonds of regional unity, and made obsolete the sea lochs in this respect, so it is now more logical to include Kilberry with South Knapdale. Nevertheless much of Kilberry, with Kilcalmonell, still looks to



Tarbert as the local service centre, and not to Ardrishaig-Lochgilphead at the other extremity of the parish.

When Ardour came into existence as a civil parish at the end of the nineteenth century, it was created by amalgamating the Kingairloch district of Lismore and Appin with the Argyllshire portion of Kilmallie, which lay partly in Argyll and partly in Inverness. Lismore and Appin now includes only these two areas and again indicates the changed evaluation of a sea-loch as a unifying influence. The old parish of Lismore and Appin, which included Kingairloch, straddled the Linnhe Loch.

Simpler was the separation of the Argyllshire districts of Ardnamurchan and Sunart from the Inverness-shire districts of Arasaig and Moidart, so that now no civil parish transcends the county boundary.

The parishes of Lismore and Appin, Kilmore and Kilbride, and Kilbrandon and Kilchattan are each partly insular, but they have not all been fully included in this thesis. The reason lies in the nature of the eighteenth century sources available. Roy's Map was confined to the mainland, and so the insular part of Kilbrandon and Kilchattan, and Kerrera were not adequately mapped. On the other hand, the island of Lismore was included in the survey, and so Lismore and Appin is treated fully.

These boundary changes have entailed estimations and corrections based on eighteenth and nineteenth century population figures if there is to be valid comparison between them and later population totals. There is a margin of error involved. In most cases the estimates of the West Highland Survey have been used. However, it has been shown in Appendix 1 that some of these estimates were considerably in error. The author believes that no more accurate figures may be derived than those presented here, in view of the available evidence.

Broader territorial groupings than the civil parishes are distinguishable. The district north of the Great Glen is an

obvious example, and following Local Government practice the area has been designated the District of Ardnamurchan. Ardnamurchan now refers to the whole civil parish, but in the eighteenth century implied only what is now called West Ardnamurchan, or colloquially, "the west end".

The district of Lorne from which the heir to the Dukedom of Argyll takes his title, approximates to the district west of Loch Awe and north of Loch Craignish. Local administration has extended the term north of Loch Etive (North Lorne), an area with its own territorial terminology. Appin is the mainland part of the parish of Lismore and Appin. Benderloch is the upland and coastal fringe area between Lochs Creran and Etive, and is part of the Ardchattan district of the parish of Ardchattan and Muckairn.

While Glenorchy - part of Glenorchy and Inishail - technically belongs with Lorne, topographically it should more properly be included with the district of Argyll. Argyll, now the county name, originally applied to the area between Lochs Awe and Fyne, from which the Argyll family took its title.

Knapdale includes the north and south parishes of that name including the district of Kilberry, originally a part administratively of Kintyre. Kintyre refers to the whole peninsula south of the Tarbert isthmus.

Lastly, the division of Cowal stands rather apart from the remainder of the mainland county, not only in physical, but also apparently in human terms. Eighteenth century communications from Cowal converged on Inveraray, the ancient capital of the county (Fig.10). Modern communications have altered man's evaluation of the area, and Cowal may now almost be regarded as belonging with the lands bordering the upper Clyde estuary. Southeast Cowal is oriented towards Glasgow and has dormitory functions. The most rapid means of travel from Dunoon is across the Clyde, either to Renfrewshire or to Dunbartonshire. Cowal's re-orientation may extend backwards in time beyond the mid-eighteenth century, as the distribution of policies on Roy's Map seems to suggest.

Cowal was omitted from this study for practical reasons. Its inaccessibility for field-work, and its present distinct personality, suggested that it deserves separate treatment, which would be beyond the scope of this thesis. A halt had to be made in terms of completing the work and it was thought that the twenty-one parishes considered here provided sufficient areal cover to recognise regional differentiations in the settlement pattern, and to attempt to make some generalisations about settlement, which would provide a background to further studies of Cowal or neighbouring areas of other counties.

The serious study of settlement in the Highlands has largely been neglected. The problems faced by students of rural settlement in Highland Britain have been aired recently (117:333-45), wherein Fairhurst suggested that in Western Scotland the modern settlement pattern had its roots in an age-long order, and that the ultimate comprehension of modern settlement demands a marrying of the techniques of geographical and archaeological investigation. Thus the geographer must push his regional studies back before the eighteenth century (117:336). Development in settlement from 1700 on is the theme here, but the other aspect of the study, suggested by Fairhurst, has been dealt with briefly in Appendix 3. The sole recent synthetic study of rural settlement and landscapes in the Atlantic Ends has been provided by Flatres, but he excluded Scotland. It is hoped that this thesis will be regarded as a minor contribution towards filling this gap.

There have been studies by various people on certain specialised aspects of the development of rural landscape and society in the Highlands, and some detailed regional studies covering very small areas. The immense amount of work produced by Geddes some years ago may not be ignored, regardless of feelings about the relevance and interpretation of some of it. His study with Forbes of contrasting Highland and Lowland settlement in late seventeenth century Aberdeenshire is important (138:98-104), and parallels between Argyll and Aberdeen will become evident. His ideas on the present position and development of the rural labour force are

interesting, and possibly important in planning for future settlement requirements (141:5-21). The work of Grant (151:481) and Handley (162: Chs. IV and X) on runrig provide a good general background to the study of eighteenth century settlement, but in the case of Argyllshire their views will need some modification. Inevitably generalisations by such authors can not avoid overlooking the differences which often obtained between adjacent local areas, and may be of importance in these extremely fragmented Atlantic Ends, reflecting alike the intense conservatism of the local peasantry, and the differing background and experience of the lairds, and their chief agents, the factors.

The most important study recently in Highland historical geography was that by MacSween of part of north Skye, where he has demonstrated successfully the extent to which modern rural landscape and society are explicable in terms of the past. Complementary with his views on shielings (218:75-88) is Gaffney's interesting study of "Summer Shealings" in the east central Highlands, where the gradual change from transhumant to permanent settlement, or the total abandonment of the transhumant sites, has been documented (132:20-35). In this connection the existence of farm or settlement sites with the element Ari- in their place-names is relevant (Ari- : Airidh : shieling). In Argyll, no such settlement can be shown to have been a shieling site, as distinct from a permanent settlement, later than the beginning of the sixteenth century. The evidence comes from the appearance of these farms in Rentals of 1505 and 1541 (Exchequer Rolls of Scotland xii, xvii, 208:12). This hints that the change in status of these sites was earlier than 1500, which is certainly earlier than Gaffney found in the eastern Highlands (132:34). Admittedly the evidence in Argyll is tenuous, but at the moment nothing more definite may be said of the chronology of this change, the study of which may prove vital in the study of Highland settlement generally. As with all aspects of domestic settlement before 1700 the necessary evidence does not seem to exist for the Highlands.

Chapter 3.

SOURCES AND METHOD OF STUDY

Source materials, apart from field evidence, have been listed at the beginning, together with all published references combined with a bibliography. It is now necessary to show in a general way the method followed in the work and where the different classes of source material have been used.

An attempt is made to integrate the horizontal and vertical approaches in historical geography already discussed. However, at no period is a complete portrayal of the area given. The body of the work consists of four sections. In the first the aim is to outline the circumstances of settlement distribution, pattern and form during the eighteenth century, using mid-century as a pivotal point to discuss changes already in evidence or latent in the settlement. The sources available for the mid-eighteenth century are important in a wider context than Argyllshire, and include Roy's Map, Webster's Enumeration of the Population in 1755, and the 1751 Valuation of Argyll. Full discussion of the accuracy and value of these sources will be found in Appendix 1. These three cover the mainland area of the county in its entirety. Additional evidence for selected areas is available from other contemporary sources, such as published tours and travels, and collections of estate papers. I have discussed already what may be determined about settlement and population in Kintyre from the study of two estate censuses for the later eighteenth century (135:99-107) Appendix 4). Comparable material from other areas is derived from published studies, especially useful being Mason's "Conditions in the Highlands After the Forty-Five" (223). The county has been put in its correct political setting at this period by Fergusson (124).

No absolutely firm datum for the study may be given. The necessary starting point for work of this nature in any area is a function of the availability of source material, and in this respect estate papers are a variable quantity. Some rentals exist from before 1700, while others do not commence until the 1780's or later. However, from the available material, and by inference and analogy, it is

possible to discuss the whole of the eighteenth century in general.

The second major section is in the form of three regional studies where settlement changes are followed in detail, using local sources, especially estate papers, and others such as the Kilchoan parish register. Here lies the greatest value of field study. Impressions created by the documentary sources may be examined on the ground, but more important, the gaps in the record may often be closed by field study. The areas concerned have already been detailed, each representing a distinct rural landscape, whether due to natural physical factors, or due to human decisions taken in the past, or to a combination of the two.

With the local studies as a background, settlement distribution and form are examined over the twenty-one parishes from 1800 to 1950. Sources for this county-wide study are the Statistical Accounts and County Agricultural reports at the end of the eighteenth and beginning of the nineteenth centuries, and the mid-nineteenth century New Statistical Accounts. Thereafter, reliable sources other than the decennial censuses, are difficult to find. It is perhaps significant that of the numerous government commissions and committees which dealt with Highland affairs throughout the nineteenth century, few made any reference to Argyllshire. These bodies were primarily concerned with the crofting regions farther north and west, where, relatively, physical conditions were much more difficult than in Argyllshire. Really from these sources there is information only for the district of Ardnamurchan and the islands of Mull, Tiree and Coll. The various reports which dealt with destitution and famine about the mid-nineteenth century remain silent about Argyllshire south of the Great Glen, and it may be that Salaman's claim for national distress during the period 1845-7 will have to be modified (253:375). Greater agrarian diversification, lesser dependence on the potato, and larger holdings probably ensured that though the potato blight was widespread during this period in Argyll, its effects were not as severely felt as in other rural areas of the country. This suggestion reiterates Gray's views on the period (158:223-236).

The final section is a discussion of the present distribution and pattern of settlement, with some suggestions about the viability of the modern settlement pattern. Information comes from the field, from analysis of modern topographic maps at various scales, and from the 1951 census. It will be shown in how far the present settlement reflects pre-improvement patterns, and also what direct survivals there are of these eighteenth century patterns.

Chapter 4.

HUMAN EVALUATION OF THE PHYSICAL LANDSCAPE

Already the areal fragmentation and peninsular nature of Argyllshire have been mentioned. The degree of geological and physiographical fragmentation experienced is such as to defy, almost, reasoned description of the stage upon which the human drama has been played. It is not intended to describe fully in an evolutionary manner the major and minor landforms of the county. This is a separate study with little relevance to the present theme. Rather, it is necessary to consider those aspects of the physical background which have affected vitally the conditions of human settlement.

Landforms, if not vegetation, may be taken as static in comparison with the relatively more rapid human changes which have characterised the southwest Highlands over the past two and a half centuries. This is a practical expediency, for it is implicit in geomorphology that landforms do develop and change, but the time scale involved is of a different order from that with which we are here concerned.

There is a structural grain to the county, imparted to it by geological processes, which follows the Caledonian trend from northeast to southwest. As a result Argyll has lain open to influences from the south and southwest. This is most clearly seen in prehistoric times but operated still in the eighteenth century, when agrarian changes arrived from Ayrshire, and Galloway, rather than by simple landward contact with the northwest Lowlands of Scotland. In the development of the modern communications network since about 1750, this grain has exerted controlling influences so strong that the only adequate modern east-west route in the county has to make use of fault-controlled transverse valleys, or glacially breached watersheds, like the great gash of the Pass of Brander. In miles, Loch Awe is close to Loch Fyne in the east and to the Atlantic coast in the west, but the nature of the intervening topography is such that travel between Kilchrenan and either Oban or Inveraray is tedious and even difficult.

The peninsular nature of the county has greatly affected the maintenance of viable community life in many areas in recent years. Rural depopulation is endemic throughout the county, but its effects are greatly exaggerated in remote areas like west Ardnamurchan.

The simplest way in which to view the geology of the area for our purposes, is to consider it as built on a base of highly metamorphosed Moinean and Dalradian sediments and igneous rocks, into which were intruded vast masses of both basic and acid rocks, especially in the north and northeast, and over which in Lorne, Mull and Morvern were extruded masses of basalts of Old Red Sandstone and also Tertiary age. Significantly, Kintyre provides the major exception, because due to down-faulting an area of mainly Old Red Sandstone sediments and Carboniferous deposits has been preserved in the Laggan, incidentally providing the Highland area with one of its two operative coal mines at Machrihanish. The whole area was subjected to considerable faulting, and most of the main valleys and sea lochs are fault-controlled in their alignment. Tertiary erosive activity ensured that all the middle and upper Palaeozoic, and later rocks, were stripped off the basement complexes. Apart from the Laggan, other exceptions of minor areal significance, but otherwise important, were preserved beneath Tertiary igneous rocks in Ardnamurchan and Morvern.

The relative durability of the various main masses of rocks has been of prime importance in the development of mountain, hill, upland flat and coastal lowland. It is true to say that the highest most rugged mountain land may be correlated with intrusive igneous masses. Both occur in the north and northeast of the county. The extruded lavas have been carved into considerable mountain masses, but the structure of successive flows has given rise to flat areas at high altitudes. The lava country is often tempered by the development of good soils on the easily weathered basalts. This contrasts with the higher areas of metamorphosed and intruded igneous rocks which were scraped bare by the Quaternary ice and where there has been little or no subsequent development of an over-mantle. The Moine schists generally produce high land, if

only because of intimate association with other more resistant rocks.

Farther south and east the Dalradian schists give rise to lower hill land, but still rugged and extremely fragmented, as in Knapdale. However, where more resistant rocks occur with the schists, such as quartzites, a return to truly mountainous terrain is experienced in Cowal. North and central Kintyre, and parts of the southern extremity of the peninsula, belong to the Dalradian country. Kintyre is epitomised in a mature landscape, with a considerable development of a high level bench at or just under 1000 feet, rising above which are isolated monadnocks like Cnoc a' Bhaile shios, Beinn an Tuirc and Cnoc Moy, but no summit exceeds 1500 feet in altitude.

The downfaulted Palaeozoic rocks of the Laggan have been eroded down almost to base-level, and have permitted the development of a rural landscape reminiscent of much of Lowland Scotland. The Laggan is the one extensive area of level or gently undulating land in Argyll, but agriculture is made difficult by poor drainage and Machrihanish airport further sterilises much of the Laggan for settlement.

More important for man than the solid geology is the drift cover. Quaternary glaciation moulded a pre-existing landscape severely, but it seems unlikely that the vast ice masses involved added any new major topographic elements. Valley troughs were over-deepened, and with post-glacial ice melting and relative changes in sea-level many of these were drowned to form the sea lochs of today. Watersheds were breached in several places due to ice spilling over between adjacent catchment basins. Possibly the most spectacular and best known example is provided by the Pass of Brander, currently being exploited for power. But humanly more important are the depositional legacies of the Quaternary Period, in two aspects - the glacial and glacio-fluvial drifts plastered against the hill-slopes, and the littoral raised beaches. The latter have already been sufficiently treated.

Being in close proximity to the main centres of ice dispersal in the Highlands, Argyll was not extensively covered in drift deposits. The action of the ice was mainly erosional, not depositional. Areas of drift are infrequent north of a line between Oban and Inveraray, and south of this they are never extensive where they do occur. Some

of the finest examples are in Knapdale, for instance at Kilberry where the drift merges at its lower limit with the upper margins of the highest raised beach, and together they form a considerable area of superior grazing land and some arable. However, topographic and other factors often limit the economic potentialities of the drift areas to little save better than average hill grazing. The major exceptions to this are at Kilberry, Stonefield in north Kintyre, and in the Laggan, where, as in Kilberry, close association with aggradational raised beach deposits adds to the value of the drift area. In these low-lying drift areas, good agricultural land has only been developed through the expenditure of considerable effort in the past in drainage and other improvements. Isolated pockets of settlement and agriculture were also supported on small drift areas preserved in major hollows on the west side of the spine of Kintyre, such as on the middle Barr and Clachaig waters. These hollows were cut in the relatively soft Loch Tay Limestone of the Dalradian series, which added to the agricultural value of the drift, especially when liming was so widely favoured after about 1800.

As the ice-fronts retreated at the end of the Ice Age, many marginal lakes were dammed up against the ice in valleys, especially on the east side of Kintyre. I have noted similar occurrences in some minor glens on the north coast of Ardnamurchan. Associated with these lakes, spreads of lake-floor sediments, marginal gravel terraces, or estuarine and deltaic deposits, now incised by rejuvenated streams, all provide the county with innumerable patches of fertility, very well marked in Kintyre, Knapdale and mid-Argyll. In Southend every minor valley has its glacio-fluvial deposits, the dissected remains of which provided well-drained level infield land and settlement sites for runrig communities. Inaccessibility in the modern period, even if there were no other factors operating, has meant that many of these sites have been abandoned, but their proximity to extensive hill grazings in many cases ensured that they were gradually incorporated in areas of extensive stock rearing, cattle first and sheep later. Glen Hervie

will be discussed fully later, and another example is the Balnabraid Glen on the Southend-Campbeltown boundary.

The northern fringe of the Lochgilphead-Crinan lowland, and the Kilmartin Glen illustrate the value of spreads of glacio-fluvial material where glacial Loch Awe overflowed southwards while the Pass of Brander was still blocked by ice.

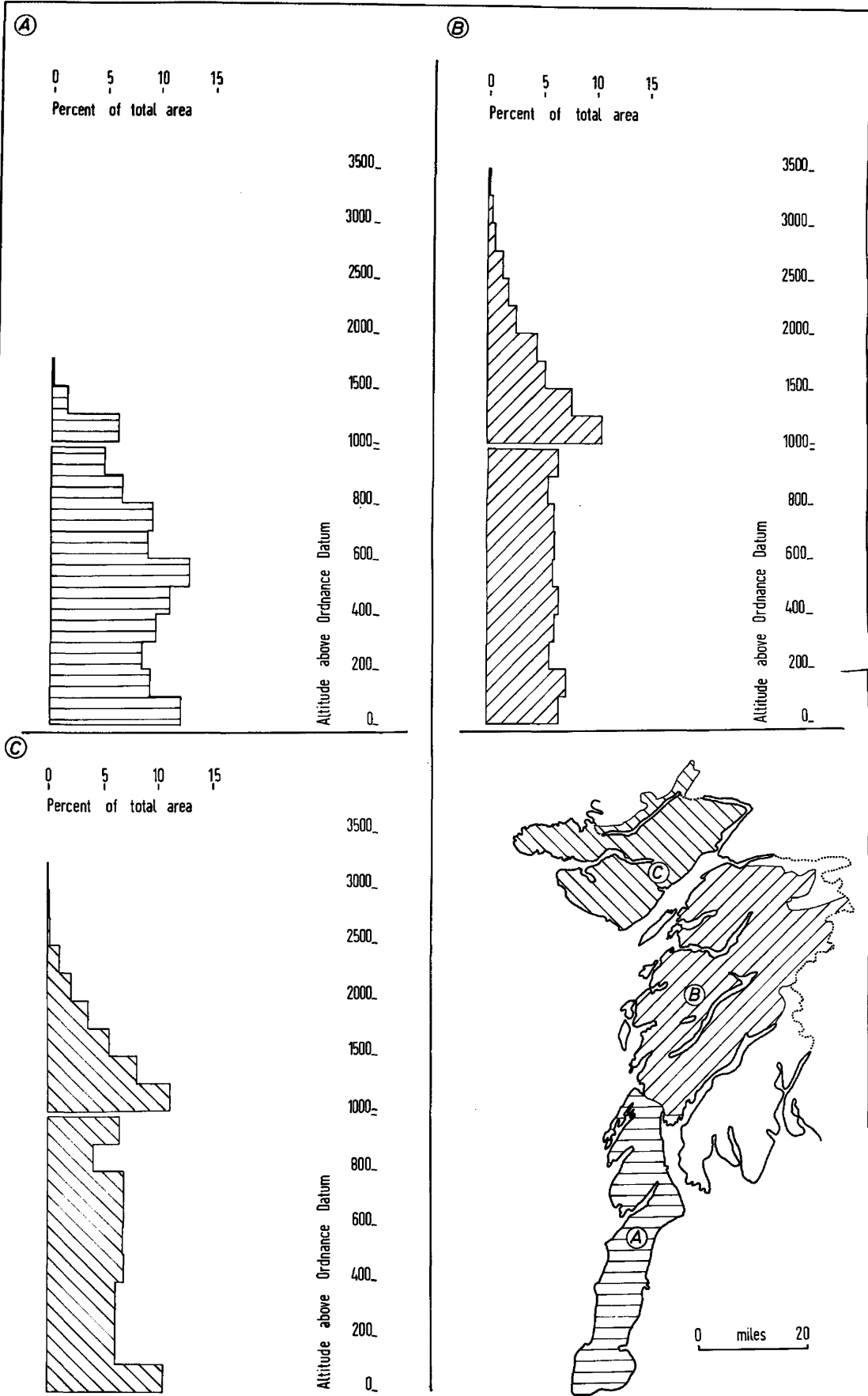
Minor relief features at low altitudes, produced either by ice erosion, or by post-Glacial weathering and slumping, were of vital importance to settlement. Gullying in the drift plastered against the valley sides produced detrital fans where the gradient suddenly alters at the junction of valley side and valley floor. Time and again these provided well-drained settlement sites along the sides of the major valleys, away from the centres of the valleys which were liable to sudden flooding. Excellent examples are to be seen in Glens Fyne and Shira in the northeast of the county. These sites suited admirably the needs of a peasant farming community which had no cumbersome equipment for which level land was essential, but they were abandoned when agrarian improvements were accepted on a wide scale. The old clachans on these sites were then replaced by substantial farm steadings, generally sited towards the centre of the now well-drained valley floors.

Ice erosion scoured out the relatively softer of the metamorphosed rocks in North Knapdale, producing a topography of alternating ridges and hollows. In the Tayvallich peninsula, for instance, almost every hollow and valley supported a separate community of joint-tenants, subsisting mainly on the proceeds of a pastoral economy, and to whom crop-farming was a subsidiary activity of relatively little importance. The grain farms were found on the poorly developed raised beaches at the southern end of the peninsula and about Carsaig. This is a distinction which has also been made in Kintyre in the latter part of the eighteenth century, between the muir farms of the interior and the littoral and Laggan farms which grew considerable quantities of barley for the Campbeltown distilleries (135:102-3).

Other examples of erosionally or structurally created sites used for runrig settlement, but now generally abandoned because

of inaccessibility, are found throughout the county. Bourblaige in Ardnamurchan was sited in a hollow excavated between an upstanding cone-sheet of one of the Ardnamurchan igneous ring complexes, and the lower southeast slopes of Ben Hiant (Fig.39, and Appendix 3a, Fig.10). On the west side of the Mull of Kintyre, and also in southeast Morvern, inhospitable fault-controlled clefts provided the only settlement possibilities in upland areas. On the Mull of Kintyre the clachans clung to precipitous slopes, facing the worst the Atlantic could produce.

The distribution of area in relation to altitude will be discussed here, but will be referred to later when examining the height distribution of eighteenth century and modern settlement. Figure 6 is based on the Hypsographic Survey of Scotland, the figures of which were calculated by students at Glasgow some years ago. I am indebted to Mr. Halstead for bringing the Survey to my notice, and for his assistance in extracting material from it. Originally designed to cover drainage basins, the Survey has been modified for use here. In dividing the county into three areas, it will be noted that part of Inverness-shire north of Loch Shiel is included, and that part of north Argyll tributary to Kinlochleven is omitted. A small area at the southern extremity of Glassary parish was found to have been omitted inadvertently from the Survey. The original calculations were completed from an early edition of the 1:63,360 maps with contour intervals of 100 feet up to 1000 feet, and thereafter the intervals change to 250 feet. Consequently a discontinuity has been left in each diagram at 1000 feet to point to this statistical change. The area in each height range has been calculated as a percentage of the total area (Table 1.) and graphed in histogram form. The characteristics of each area will be described and interpreted, but it is important to note that it is the lower portion of each graph which is relevant to the present study, because settlement in Argyllshire is always below 1000 feet. The lower portion of a graph representing Kintyre only, and not the whole of area A, is included in Fig. 3 of Appendix 4 (135: Fig.3) where it is separately discussed. Finally, in interpreting these



diagrams it is necessary to remember that an arbitrary statistical framework is imposed on the land surface, a form of analysis which may not always be valid, and using altitudinal groups as wide as 100 feet much detail inevitably is lost.

A. Southern Argyllshire, Kintyre and Knapdale, is distinguished from the remainder of the county by the absolute concentration of the land area below 1750 feet with ninety per cent of the area below 1000 feet. A relative minimum of land area exists between 800 and 1000 feet, but about 800 feet there is a slight maximum. Below this there is a significantly larger area between 400 and 600 feet, below which steeper slopes produce a smaller area in each altitudinal range downwards, until the raised beaches bring a return to maximum areas between sea level and 100 feet.

B. This area is quite different. Above 1000 feet slopes are complex, with a suggestion of maximum areas and so flatter surfaces somewhere between 1000 and 1500 feet, and also just below 2000 feet, though the latter is less significant than the former. Below 1000 feet there are two slight maximal areas, one immediately below 1000 feet, the second between 100 and 200 feet. The latter may partly be due to the upper raised beaches, which otherwise are not so significant as in area A. Nevertheless their absolute importance for settlement remains.

C. North of the Great Glen a third set of characteristics presents itself. Again there are indications of a high level bench at about 1000 feet, but thereafter slopes seems to be regular with few marked breaks of significance upwards to 2500 feet. The areas involved at this altitude, however, are slight. The generalised slope above 1000 feet is convex, that below 1000 feet concave. The lower slopes are complex rather than simple and the maximal area appears in the first 100 feet of altitude. These characteristics suggest glacial overdeepening of major valleys on a regional scale, a feature evident in the field. The maximal area of littoral benches and glaciated valley floors carried the greatest proportion of the settlement of this area.

Thus there is evidence for the areal importance of raised

beaches and other low-lying areas, and here the settlement is concentrated. In the southern part of the county there seems to be a bench at about 500 feet, and another one at about 800 feet. The latter, however, may be merely a part of the more generally developed surface at about 1000 feet in the central and northern districts of the county.

It may be thought that these benches would provide opportunities for settlement, particularly that at about 500 feet, but in the west Highlands, in fact anywhere, the topography must be assessed in relation to the complex of climate and vegetation. In an important paper dealing with approximately the southern half of Argyllshire, Watson suggested that "The peat-forming process rests for about one-third of the year on the lowland, but may be continuous on the highland" (272:152). In this context the benches we have been considering are definitely highland; they are normally peat-covered and so of little value for intensive economic exploitation. The value of these areas has been as summer pastures and the only settlement they have supported has been in the form of shielings.

North of the Great Glen, and in northern Argyllshire in general, we are dealing with lands of blanket bog and open moor where the soils, if any, are badly leached and too acid for trees to flourish. In south Kintyre at the other extreme of the county, soils are better able to maintain their fertility, though still subject to leaching. In the south, if aspect relative to prevailing winds were sufficiently sheltered woods or forests could be maintained. Botanically and ecologically Argyll is a "zone of tension" between the wet, overcast and windy northwest Highlands and Islands, and the drier and warmer east and south of Scotland where brown earth soils and woodland could be, and were maintained (272:149).

The fact that woodland, if not forest, was widespread in Argyll in the post-medieval period is well documented, and in the eighteenth century there was considerable exploitation of these resources to provide charcoal for iron-smelting. The ore was imported and the smelting was carried out at Bonawe, and at Furnace on Loch Fyne.

By the mid-eighteenth century the distribution of woodland was only a shadow of what it had been, yet a comparison of Roy's map with later maps shows that there has been very extensive exploitation of woodland since 1750. Graham relates many of the abandoned settlement sites in Skipness to charcoal burning and iron smelting activities of this period (148:97-8).

Watson's thesis in his study of the vegetation of south Argyll was that man is the deciding factor in a delicately balanced ecological climax in the vegetation cover, and that in many cases the present existence of peat bog is a direct result of human interference with the vegetation in the past. He also suggested that man still has it in his power to decide whether forest or bog will dominate the landscape (272:passim). By the introduction of domesticated animals, and especially sheep in large numbers in recent times, man has greatly altered the quality and potentialities of hill grazings in the Highlands, and unwittingly encouraged the spread of bracken by decreasing the numbers of cattle on the hills in favour of sheep. Only cattle seem to be able to keep bracken down, but once it has gained a footing, even they are unable to make any impression on its advance (123:18-9). Future palaeo-botanists may be able to distinguish the period from about 1850 on in the Highlands by an increase in the relative quantities of bracken pollen in peat deposits. Unless a radical solution to the problems created by the over-grazing and mono-grazing of sheep, can be found the future settlement possibilities of large areas in the Highlands will be even more limited than they are now.

Climate operates to provide more, or less, suitable settlement sites through the vegetation, and also in its direct relations with the topography. Garnett studied the light value of different settlements in two areas adjoining or near to north Argyll. She pointed out the "fallacy of assuming that in high latitudes south-facing slopes are always those most favoured in every respect" (136:280). This fallacy has often been accepted, and stems from the application to high latitudes of a principle originally worked out in the quite different circumstances of high altitudes in low

latitudes, such as in the Alps. Diffused light from cloudy skies, all too common in western Scotland, is as important as direct sunlight, and Garnett showed that they are equally important as factors in suggesting which will be the most favoured sites for settlement. (136:274).

It is obvious in the field that settlement, in reality, is empirically sited in relation to an integral assessment of all physical aspects of the environment. The operative factors in the choice of two adjacent sites may be utterly different. Under the levelling influences of runrig society and economy the basic factors sought were sufficient room for the group of six to ten houses, close to a favoured area of infield land, with tolerable drainage on the settlement site, shelter from prevalent winds and a sunny aspect, or at least a site in which plenty of light was available. In the earlier periods, inter-communication between neighbouring clachans was unimportant in the sense of having a developed road network, probably because wheeled vehicles were almost non-existent. It was not until well into the nineteenth century in many cases that this became a significant locating factor. The development of a communications network and the disappearance of a self-sufficient economy in rural areas are two inextricably interwoven themes of the late eighteenth and nineteenth centuries.

The choice of a settlement site is subject to more than physical influences. The nature of the prevailing economy of which the local community was a part at the time of initial settlement, and the ability of the mental and material equipment of that community to deal with the physical influences, are equally potent factors. The choice of a particular site for a settlement is as much a matter of human decisions taken in the light of inherited experience, as it is of purely physical controls. Lastly, it should be realised that the chronology and background of initial settlement on most sites is not known.

Table 1.
Appendix to Chapter 4.

Extract derived from: Hypsographic Survey of Scotland.

Alt. Range ft.a.s.l.	A		B		C	
	(a)	(b)	(a)	(b)	(a)	(b)
3500-3750			11	-		
3250-3500			73	0.1		
3000-3250			202	0.4	3	-
2750-3000			415	0.7	22	0.1
2500-2750			806	1.4	96	0.2
2250-2500			1138	1.9	335	1.0
2000-2250			1521	2.6	750	2.1
1750-2000			2691	4.6	1298	3.7
1500-1750	40	0.1	3105	5.3	1871	5.5
1250-1500	407	1.4	5100	7.8	2867	8.1
1000-1250	1796	6.1	6274	10.7	3965	11.2
900-1000	1329	4.8	3805	6.5	2263	6.5
800-900	1902	6.5	3280	5.6	1848	4.2
700-800	2749	9.3	3638	6.3	2454	6.9
600-700	2637	8.9	3644	6.2	2438	6.9
500-600	3736	12.7	3556	6.1	2369	6.8
400-500	3233	10.9	3896	6.6	2450	6.9
300-400	2757	9.7	3638	6.3	2202	6.2
200-300	2482	8.4	3424	5.8	2185	6.2
100-200	2692	9.2	4322	7.4	2173	6.2
0-100	3556	12.0	3907	6.7	3713	10.5
Total	29,516	100	58,446	100	35,302	100

A. South Argyll
B. Mid-Argyll
C. North Argyll

- (a) Area in each altitudinal range in tens of acres.
(b) Percentage of total area in each altitudinal range.

SECTION II

THE EIGHTEENTH CENTURY

Chapter 5.

THE HIGHLANDS IN THE EIGHTEENTH CENTURY

Of all periods in Highland history the eighteenth century is at once best documented and most completely studied. This is fortunate, for to the eighteenth century the geographer must look for the immediate roots of most of modern settlement in the Highlands. The present settlement pattern is comprehensible only in terms of the changes which have taken place, based on the pattern widespread about 1750. The background to settlement studies of this period is well known. The Highlands during the first half of the eighteenth century presented a landscape of open fields, with few of the pattern-making and view-restricting fences and walls ubiquitous today. Society was differently organised, on a communal basis, but in a state of flux, passing from the paternalism of the Clan System to the autocracy of a money economy in which the leaders of society had come to accept a set of values alien to the traditions of the Highlands.

Throughout the Highlands, as a glance at any appropriate sheet of Roy's Map will show, there existed a single settlement form, the nucleated clachan.⁺ This was associated with an openfield economy. The available arable was divided into two categories, infield and outfield. Even in Lowland Scotland runrig prevailed in many areas into the eighteenth century, but by 1750 (234:61), the enclosure of open lands was well under way. Planted woodland, too, was essentially a Lowland phenomenon, and nucleated rural settlement was being replaced by a pattern of dispersed farm steadings. At the end of the century in Lanarkshire "Dispersed farms were typical throughout the county, so were gentlemen's seats, except in the less hospitable parts of the Upper Ward" (111:107). In central Ayrshire these farms had "small kitchen gardens, laid out in plots surrounded by hedges and trees" (183:10), the latter planted mainly as a result of improving clauses inserted by the lairds in the leases. Third has

+ The term 'clachan' is defined in Appendix 3b.

shown in Midlothian, for instance, how thorough-going was this revolution from the old order (268:44-49). Much of the change dates from the third quarter of the eighteenth century, but some was earlier (267:91). Indeed, the basis for the disintegration of runrig was laid at the end of the previous century. In 1695 the Scottish Parliament passed an Act providing for the division of Commonities, which had the effect of abolishing runrig ownership (83:33). The Act was so framed that runrig tenancy remained untouched, but Sheriff Campbell considered its importance was such that the dissolution of the Clan system in the Highlands, in its agrestic character, though not in its patriarchal aspects, had its origin here (83:33-34). The Act told of the "great Disadvantage arising from lands lying runrig, and that the same is highly Prejudicial to the Policy and Improvement of the Nation", and it advocated and permitted the enclosure of land (122:xxiv. Acts of the Parliaments of Scotland, IX, 421, c36). We may suggest also that the disintegration of clachan settlement in the Lowlands dates from this period, for the concomitance of clachan settlement and runrig is now beyond dispute.

The Lowlands, then, were enjoying sufficient prosperity to see the initiation of a rural economy which had ceased to be self-sufficient, and a drift of population from the land to the rising industrial centres was under way by 1750. By contrast, the Highlands suffered two major military operations between 1700 and 1750. Measures of retaliation, on the orders of a Hanoverian leader who neither thought nor cared of their effects, wrought tremendous havoc in many Highland areas. In Morvern, for instance, houses were razed and cattle driven off by soldiers, and this on territory which belonged to the pro-Government Duke of Argyll (124:213). There is a distinction between an undertaking of this nature, and the local skirmishes endemic in Clan society during the centuries preceding 1700. It has been suggested that these local battles themselves were of no great antiquity, and that the Clan system only came into being with the downfall of the Lordship of the Isles (82:477).

The passing of the 1695 Act marked also the beginning of the

power wielded by the tacksmen in later years. Literally, a tacksmen was one holding from the laird a tack, or lease, of an area of land for a specified period of years under certain conditions binding to both parties. Tribal law of succession took cognisance of degree of propinquity to the chief, and operated towards inequality of interest in the clan lands. When these interests came to be affected by the statute against runrig, a select number emerged with holdings of much greater extent than was general in the body of the clan (83:84), and each group of smaller holders with whom the tacksmen had formerly cultivated in runrig co-operation became sub-tenants. The tacksmen were often cadet members of the lairds' families and many exerted considerable power in local affairs. They provided the officers of the Clans in the risings of 1715 and 1745, and earlier had acted as mercenaries in many foreign armies, and as adventurers in concerns such as the Hudson Bay Company (83:35). The gallowglasses who fought in Ireland during the sixteenth and seventeenth centuries were Highland tacksmen and others of similar status. (207:1).

There is accumulating evidence to show that though the tacksmen were significant socially and economically, numerically they were rather few. In many places the land was let directly by the laird to communities of joint-tenants, similar in circumstances to the sub-tenants under the tacksmen. This is certainly true in the eighteenth century, but rentals before 1700 mention none but the tacksmen. In North Knapdale tacksmen were almost non-existent, though several appeared farther south at Kilberry. The Duke of Argyll rid his Kintyre estates of these intermediaries early in the century, and Forbes of Culloden tells of setting lands in Morvern, Mull and Tiree, on behalf of the Duke, directly to joint-tenants, by-passing the tacksmen who had a strong hold on the local communities, and thus increasing the estate rental (5:387-394). In Skye there were insufficient tacksmen to take up all the farms on the Macdonald Estates in Trotternish, and MacSween has noticed a considerable movement by individual tacksmen from tack to tack between 1721 and 1733 (217:35). On Breadalbane lands, tacksmen

existed in the more outlying regions like Netherlorn in Argyllshire, but on Loch Tayside, the joint-tenants cultivating the land held directly from their chief (189:xxxiii). Obviously Breadalbane used his tacksmen to maintain his authority only in the outlying parts of his estates, realising that the more of his lands he administered himself the greater would be his rental.

In the eighteenth century the tacksmen provided for the lairds an easy means of estate administration. Collection of rent was easier from a few individuals than from many joint-tenants, but since the tacksmen had to live, this was at the cost of keeping the total estate rentals at a relatively low level. It was usually only on the larger estates that the tacksmen were found, and many administered more land than some of the minor lairds who owned and administered on their own account as few as half a dozen farms each. The tacksmen were charged a low rent, especially where a return in military service was expected. In turn they made their profits by charging higher rents to the communities of sub-tenants who worked the land. "The average tacksmen was seldom seriously interested in agriculture" (217:31) and in this respect "It is perhaps indicative that the large tacks and wadsetts were the stock-rearing parts of Trotternish" in north Skye (217:30). A tack normally consisted of a number of farms, and only infrequently would these be adjacent to each other.

In such a position the possibilities which presented themselves to the unscrupulous tacksmen were many, and cases of rack-renting are on record. By and large, however, the tacksmen were humanely disposed towards their sub-tenants. They acted as the organisers, and often the financiers of their particular communities (150:vii). Grant has shown how, during the third quarter of the eighteenth century, one tacksmen paid his rent to the laird from the rents he accumulated from his sub-tenants, leaving solely the produce of the land he worked on his own account for the maintenance of himself and his family (150:vii). The only distinction between tacksmen and sub-tenant here was that the former worked more land than the latter.

Eighteenth century Highland society was composed of sharply

demarcated groups. At the head of the system were the lairds, some of whom were powerful on a national scale like the Duke of Argyll and the Earl of Breadalbane. There were also landowners akin to the bonnet lairds of Ayrshire. Below them were the tacksmen, and the parish ministers many of whom had not only a glebe but held a tack of two or three farms from their lairds. The bulk of the Highland population were the sub-tenants to the tacksmen, holding their possessions at will, and the joint-tenants who either had short leases from the lairds or held at will annually. At the base of the system were the cottars, servants, pendiclers and others, passing under a variety of names (223:passim, 217:38-40). Some of these were entirely landless and depended for their livelihood on what work they could obtain from tacksmen and joint-tenants, others were tradesmen and craftsmen supplying the needs of the local community. These often had a "cow's grass" and a potato patch, while others held a distinct and unvarying portion of the infield, either from the joint-tenants or directly from the lairds, but had no rights in outfield or common grazing. These latter holdings were usually called pendicles. There is seldom reliable material relating to this bottom stratum of society, which locally was very important, but it seems to be generally accepted that they were numerically not very significant before the mid-eighteenth century. Outwith the Highlands they did exist in considerable numbers by the end of the seventeenth century (138:102). The rise to national importance of this class was a phenomenon of the late eighteenth and nineteenth centuries.

The territorial basis for Highland society organised in the above manner, was the joint-farm, which some people have equated with "township". There is a risk of confusion between this use of "township" and the modern connotation of the same word in a crofting context, and so I have used the term "joint-farm" throughout to refer to the lands held, and sometimes worked in common by the occupants of a clachan. Geddes showed that the eighteenth century joint-farms in Lewis were not co-terminous with the modern crofting townships (140:57), the latter generally including two or more of the former.

The possible origins of these two units have been discussed in Appendix 3c, but there is little doubt that the basic unit and community to which the individual peasant farmer was responsible and to which he owed primary allegiance was the joint-farm.

In every joint-farm there were three essential elements. The group of houses was surrounded by, or lay peripherally to an area of infield land, often called the wintertown, and farther off were detached portions of outfield arable. Beyond this again were the common grazings. The three elements of dwelling, arable (infield and outfield), and common pasture were indivisible and interdependent. Under the equalitarian principles of runrig the stock a joint-tenant might carry was determined by the proportion of the total arable area on which he grew his crops. His arable was scattered over the whole of the infield and outfield in parcels or strips, sited on all types and qualities of land. To ensure equality, a periodic reallocation of the arable portions among the co-operating occupants of the joint-farms was normal in many areas. The land was held in common, the occupants were jointly responsible for the total rent, and many occupations were completed co-operatively. Thus for ploughing every man had to turn out at the same time, for the old heavy wooden plough demanded that each joint-tenant provide a single draught animal for the team. Thus the minimum size of clachan in the eighteenth century would seem to be about four dwellings though many were larger than this.

Within this framework, local conditions allowed of considerable variation in the utilisation of the arable land. Rotations of varying length were employed on both infield and outfield, that on the latter being of long duration. In extreme cases nothing more than a catch crop of oats was taken off any portion of the outfield for a year or two, the portion thereafter reverting to grass and heather for upwards of twenty years. Normally the infield was under cultivation each year, but some enlightened landlords did insist on one year's fallow in four, as early as the beginning of the eighteenth century. We are not here concerned with the details of the utilisation of the runrig lands; this has already been

adequately studied from contemporary sources (162:37-52, 158:19-20). Within the clachan community, individuals had up to ten acres of arable, or rather the produce from ten acres, in the southwest Highlands, but once across the Great Glen, including the district of Ardnamurchan, averages of five and six acres per joint-tenant were common (158:24). One other characteristic feature of this openfield economy has been studied by MacSween, in Skye, and Gaffney, in the east-central Highlands (218:75-88, 132:20-35). Without fences, other than a head-dyke, and possibly a wall around the kail-yard or stack-yard, if such existed, it was necessary to remove all large animals from the vicinity of the cultivated arable land while the crops were growing and being harvested. At other times of the year the arable reverted to common and was used as grazing. Dates had to be agreed by all concerned for the removal and return of animals. These dates were usually at the beginning of May and the beginning of November, periods which also held significance for the payment of rents.

This contingency was allowed for by a transhumant movement to summer pastures beyond the head-dyke. These often involved distances as short as one or two miles, but movements over thirty miles or more were known in Ross-shire (information from Mr. Malcolm MacSween). Consequently a subsidiary settlement existed, possibly at relatively high altitude, composed of small stone- and sod-walled huts, roofed with branches, and sods or straw, or heather. In form these transitory settlements recalled the amorphous nature of the parent clachans, and in Trotternish MacSween has been able to associate each group of huts with a separate joint-farm (218:Fig.1). Transhumance is known to be of considerable antiquity in the Atlantic Ends (218:86). Whitaker, using traditional and documentary sources, but not field evidence, has traced the existence of shielings in various parts of Scotland from 1500 onwards (275:167-174). It is likely that in Argyllshire, especially Kintyre, as on upper Donside, the shielings were falling into disuse during the eighteenth century.

Highland rural settlement of this period consisted of small clusters of houses, generally one cluster on each joint-farm. At Monymusk these were called "touns" (161:xiii), a Lowland term appropriate on the borders of Lowland and Highland Aberdeenshire. In the Highlands it is proper to refer to these small nucleations of settlement as clachans (121:69-70), but there are good reasons why this term should be accepted for widespread use to refer to this form of settlement (Appendix 3b).

Viewing the Highlands through English eyes, Burt in 1754 described these settlements thus,

"A Highland Town, is composed of a few Huts for Dwellings, with Barns and Stables, and both the latter are of more diminutive Size than the former, all irregularly placed, some one Way, some another, and, at any Distance, look like so many Heaps of Dirt; these are built in Glens or Straths, which are the Corn Countries, near Rivers and Rivulets, and also on the sides of Lakes where there is some Arable Land for the support of the inhabitants."

(67:II, Letter XX,130).

If to this we add,

"Their Huts are mostly built on some rising Spot at the Foot of a Hill, secure from any Bourne or Springs that might descend upon them from the Mountains."

(67:II, Letter XVII,63).

we have an adequate generalised description of eighteenth century Highland settlement distribution and form. As Burt suggested there was neither nucleus nor regular orientation to the houses in the group, unless one considers a general tendency for the individual houses to be situated along or across the slope, as MacSween noted in Skye (217:51). However, despite Burt, it is most unlikely that there were many outbuildings in the average Highland clachan, unless a communal corn-drying kiln like those surviving into the modern period in the Hebrides, and the ruins of which are to be found with the ruins of houses on many abandoned sites in the

Highlands (274: especially Fig.1).

A common, but not universal feature of Highland clachans was a small enclosed stack-yard, or kail-yard. Some sites had only one, but others had two, three or even more of these. But on other sites, again, there were none. Fairhurst employed the term "garth" to describe these (121:68). From the evidence at Lix, and in western Perth generally, it is possible that the number of enclosures on a site reflects the number of joint-tenants or sub-tenants in a settlement, each having a separate stack-yard. The small enclosures, often tree-lined, are evident on Roy's Map, and many ruined settlement sites in the Highlands may be identified initially by the garths for the enclosures persist long after the ruins of the houses have disappeared. There is evidence from Argyll which to some extent supports the correlation of garths and numbers of joint- or sub-tenants, but this may never, probably, be regarded as anything but an approximation, and not a rule. There is some evidence to suggest that these were originally comunally used.

Clachan sizes varied, but the factors determining the variations are not clear. At Monymusk groups of 8 or 10 houses were frequent (161:xiv), though the average was 6.8 houses per cluster (161:xv). In 1750 averages between 3.5 and 7.0 were typical of the Argyllshire parishes. (Appendix 1, Table 1). These figures may seem small in comparison with extant ruined clachans, but Fairhurst has argued that the ruined sites we see today were deserted after a period of rapid population growth, and so the house clusters had become abnormally large by the time they were finally abandoned (121:72).

Highland settlement and society were not unchanging during the eighteenth century. Alterations in the face of the land which later were to assume considerable significance, existed in embryo at least, by 1750. We have seen that the basis for an agrestic revolution in Clan society had existed legally from 1695, and some landlords, especially in the southwest Highlands, were not slow to enter into the spirit of the Act and initiate the abolition of runrig tenancy early in the eighteenth century. In large measure, however, this revolution could only be an integral part of a much wider one in

Highland affairs, and the end really arrived with a change in values at the top of the social scale. As a result of the 'Fifteen and 'Forty-Five risings, the power of the Highland lairds was considerably limited by law in the abolition of Heritable Jurisdictions, and these changes moved down the social scale in the prohibition of the wearing of Highland dress and the carrying of weapons. Ironically, this probably did more than anything else to consolidate the wearing of the kilt and to develop clan tartans. Finally, customary clan law gave way to a feudal code in the Highlands. The paternalism characteristic of clan chieftains gave way inevitably to the need and desire for money, particularly as the more important lairds were now involving themselves in the social life of the Scots and English capital cities. The tacksman system, already undermined in many areas, was dealt its final blow, but its place was taken by a more evil influence. Many lairds became financially involved, and their lands fell into the hands of people interested only in recouping the money owed them. The cattle trade, for long the staff of Highland life, came more and more to be organised on a financial basis, and lands were cleared to make way for extensive cattle farming, for instance around Inveraray and in Cowal (information from Mr. Cregeen).

The eighteenth century saw the development of the first adequate communications in the Highlands, and the routes shown on Roy's Map are a combination of the well-worn drove roads and the military roads constructed under General Wade between the two rebellions. Of the latter, Burt was enthusiastic. "These new Roads were begun in the Year 1726, and have continued about eleven Years in the Prosecution" (67:II, Letter XXV,285). They were built by soldiers stationed in the Highlands, and were designed with a view to keeping the unruly Highlanders in subjection, to view the situation through Government eyes. "The Standard Breadth of these Roads, as laid down at the first Projection, is sixteen Feet; but in some Parts, where there were no very expensive Difficulties, they are wider" (67:II,Letter XXVI,292). Often the military roads followed drove routes where countless cattle had beaten out a

track through the years, and so made the work of the engineers slightly easier. After the 'Forty-Five, road building was extended in scope and took on a civil rather than military character. Many later eighteenth century leases contain a clause insisting on the maintenance and building of roads and tracks. The effects of a good network of roads can not be under-estimated. The absolute isolation of many remote regions became relative, and true self-sufficiency for many communities disappeared. A degree of specialisation in Highland agriculture became possible. These distant Atlantic Ends of the United Kingdom were now accessible to inquisitive travellers from Lowland Scotland and England, who came, marvelled, and wrote down what they thought they saw, describing affairs from "behind the barrier of speech, ignorance and racial prejudice" as one Highlander put it (212:5). Nevertheless they left for posterity a valuable corpus of material dealing with a society and landscape in a state of flux.

Population throughout the eighteenth century was growing, and for a complex of reasons not to be distinguished easily one from the other, the rate of growth increased as the century wore on. The pacification of the Highlands, the increasing ability to deal with endemic diseases of which small-pox was one, and the greater concern and ability to alleviate the famines which were frequent visitors in the prevailing subsistence economy were contributory factors. Ross quoted evidence indicating a famine every six years on average between 1561 and 1748 (252:155). In view of the increasing population and the social changes already discussed, a proportion of the population became surplus and could no longer be accommodated within the structure of contemporary rural society. This was only partly due to the inability or unwillingness of the peasant farmers to adapt themselves to new conditions (58:83). The potentialities of local industrial resources were already taxed to the limit and could absorb only a tiny fraction of the surplus population, although locally the development of lead mining, iron smelting and slate quarrying was important. Strontian, Ballachulish, Easdale, Bonawe and Furnace were all important in the eighteenth

century in Argyll as minor industrial centres. The tacksmen became more totally redundant than any other group during the eighteenth century, and were left with little option but to salvage what they could and depart, or accept a lower status in life. Between 1763 and 1775 it has been calculated that 30,000 people left the Highlands (212:18). Many of these were tacksmen, some of whom took with them their sub-tenants. The majority originated north of the Great Glen, though the Argyllshire islands of Islay, Jura and Gigha contributed some to the stream of emigrants. Undoubtedly in many cases the tacksmen's capital had been a means of oppression, and their leadership had often been wrongly directed, but their education, leadership and capital, suddenly removed during the later eighteenth century, were qualities of which the nineteenth century Highlands stood badly in need (57:293). In this respect, as in so many others, the southwest Highlands fared better than the north and west, because changes had been initiated earlier and were more drawn out, giving society a chance to accommodate itself to new circumstances.

The tacksmen were not completely eliminated and some remained into the nineteenth century. Emigration became endemic towards the end of the century for by now population was "over-running its resources" (58:85). The appearance and acceptance of the potato after 1750 provided a basis for population expansion previously unparalleled. As in Ireland it permitted more people to live off the same area, encouraging early marriages and large families. As Fairhurst suggested, clachans now began to increase in size. At the same time landlords were turning to extensive methods of stock rearing, which involved the virtual clearance of population in some areas. The redundant population was left with the alternatives of emigration to the apparently empty and attractive lands across the Atlantic, of migration to the industrial Lowlands of Scotland, or of ekeing out a precarious living on the littoral margins of the north and west Highlands, supported on the vagaries of the kelp and fishing industries. Many elected to stay, to face an uncertain and impoverished future, and their descendants were later forced to

emigrate. There is an important distinction to be drawn between eighteenth century and later emigration from the Highlands.

"Broadly speaking, in the eighteenth century people go from the Highlands, in the nineteenth they are sent. The motive may be humane and the policy wise, but there is an obvious difference between voluntary and compulsory emigration" (252:160).

Chapter 6.

SETTLEMENT IN THE SOUTHWESTERN HIGHLANDS IN THE
EIGHTEENTH CENTURY

It has already been hinted that the southwestern Highlands stood apart from the remainder of Highland region. "Although in the eighteenth century, the south and east had possessed a small-holding system just as had the northwest, the land conditions in the former area were somewhat easier, the arable holdings somewhat larger, and cultivable land more extensive in relation to waste and pasture" (158:223). There is, however, reason to dispute Gray's claim that the arable margin was being significantly extended between 1750 and 1850, for field and cartographic evidence from various areas in Argyll parallels MacSween's findings in Trotternish, that the maximum extent of cultivable land had been attained soon after 1750 (217:46).

The anonymous author of "The Highlands of Scotland in 1750" was so impressed with Argyllshire that he claimed it to be "the richest of all the Shires in the Highlands or North" (181:133), and that it was more fertile than any other area. "The Islands of Jure and Isla; the Countries of Kintyre, Glassery and Cowal are famous for Corn and Grass. Lorn is famous for Barley and fine Pasture for Sheep." (181:134). The reason adduced for this happy state of affairs was that "The Numerous Gentry of this Shire have since the Union made a very great improvement in their Lands, whence it comes that they are all in easy Circumstances" (181:134-5),

Events during the seventeenth century, and the rise to power of Clan Campbell in the southwest underlie this eighteenth century prosperity and progressiveness. Following General David Leslie's expedition into Kintyre in 1647 to subdue Macdonalds and other rebellious Highland families, and the massacre at Dunaverty in Southend, an epidemic of plague swept the southern part of the county (208:Chs.VI-IX). It is thought that the disease was introduced by the Lowlanders of Leslie's army. In conjunction with the devastation caused by war, the plague decimated the population of southern Argyll, incidentally making it easier for

the Marquis of Argyll to introduce Lowland families and kinsmen of his own to much of Kintyre. However, the beginnings of the Lowland plantation were earlier, associated with the erection of the Burgh of Lochhead (Campbeltown) about 1609, which was intended to be "inhabited by Lowland men and trafficking burgesses" (208:24). The sum total of these events was that there existed a core of people of Lowland origin on the Argyll Estates in Kintyre, owing their position and security to the Argyll family. They had some obligation to execute the requests and suggestions of their superior, and it is easy to see a similar attitude in their successors when agricultural innovations were introduced to Kintyre early in the following century.

Alongside this there was a continuous process of take-over of land in southern Argyll on the part of the ducal family. In the fifteenth century the family held much less land than they did in the mid-eighteenth century, when the Duke was reckoned one of the major land-owners in the United Kingdom. He and the Earl of Breadalbane between them held more than half of Argyllshire and much of western Perthshire. The 1751 Valuation of Argyll picked out the maximum areal extent of the Argyll Estates, for soon after 1800 the Duke disposed of his lands in Morvern. Between the beginning of the sixteenth and the beginning of the eighteenth centuries, the lands of McNeill of Carskey decreased from twelve to sixteen merklands to the mere four for which the Duke granted charter to McNeill, and for which sasine was given in 1701. Looked at in relation to topography, it may be concluded that the Carskey lands were gradually cut to pieces by the Argyll family. The lands of Macdonald of Sanda were similarly dealt with (202:30). These are two documented examples of what was probably a widespread occurrence, even into the eighteenth century. The ducal family had been indulging in legalised land-grabbing, and many of the original Highland families had either become sub-tenants to Campbells, changed their names to Campbell in a few cases, or migrated to their kinsmen in Antrim.

Cadet branches of the Campbell clan also acquired or were granted

other estates throughout the county and in Perthshire. People of Lowland origin were encouraged to come to Argyllshire but they remained concentrated in Kintyre. The distribution of land in Kintyre is clearly seen from the Earl of Argyll's rental of 1678, and Table 2 is taken from McKerral's study of this rental (208:84). The emphasis in the Plantation had been on the southern part of the peninsula, and provided a base from which eighteenth century agrarian improvement radiated. The spread of the latter has been deduced also from study of estate censuses taken towards the end of the century (135:106, Appendix 4).

Table 2.

Distribution of land in Kintyre, 1678. Figures are in merklands.

Parish	Lowlanders.	Campbells.	Old Kintyre Stock.	Total.
Kilcolmkill	16	5	41	62
Kilblaan	17	1	19	37
Kilkivan	14	1	33	48
Kilkerran	10	14	22	46
Kilmichael	16	16	26	58
Kilchousland	40	2	2	44
Killeen	21	29	22	72
Kilkenzie	5	15	14	34
Saddell	-	20	-	20
TOTALS	139	103	179	421

It is equally clear that the old stock remained in Kintyre in considerable numbers, even though the controlling interests in land had passed to other hands. Of social relations in Kintyre later in the century, Pennant remarked, "the Lowlanders still keep themselves distinct from the old inhabitants, retain the zeal of their ancestors, are obstinately averse to patronage, but are esteemed the most industrious people in the country" (239:I,220). At this time Kintyre was exporting grain to Ayrshire for grinding, and the Laggan was "fruitful, pretty much inclosed, and the hedges grow well", although the peninsula in general was "naked:" (239:I,220-4). Improvements wrought by the Lowlanders of Kintyre were being experimented with by lairds and tacksmen elsewhere in the county mostly after 1750, though there were some earlier in the field, such as Campbell of Knockbuy on Loch Fyneside and in South Knapdale (101:145).

The distribution of the more important estates, generally those with half a dozen or more farms, has been tabulated according to proprietorial families (Table 3). This has been derived for the mainland areas of the county, including Cowal, from the Valuation of 1751. By valuation, the Duke of Argyll held almost three times the next largest estate on the mainland of Argyllshire, but it must be remembered that Breadalbane's territory penetrated deep into Perthshire, and in total he held a greater area than the Duke. Thirty-one of the fifty-one listed estates were owned by Campbells, which would give a more realistic estimate of Campbell territory than one in 1750, which claimed "Nine parts of Ten of the Whole Shire belong to the Duke of Argyll and his Clan" (181:133). Ten of the first fourteen estates were held by Campbells, but apart from this concentration at the top, the Campbell proprietors were evenly distributed over the whole range of estate sizes.

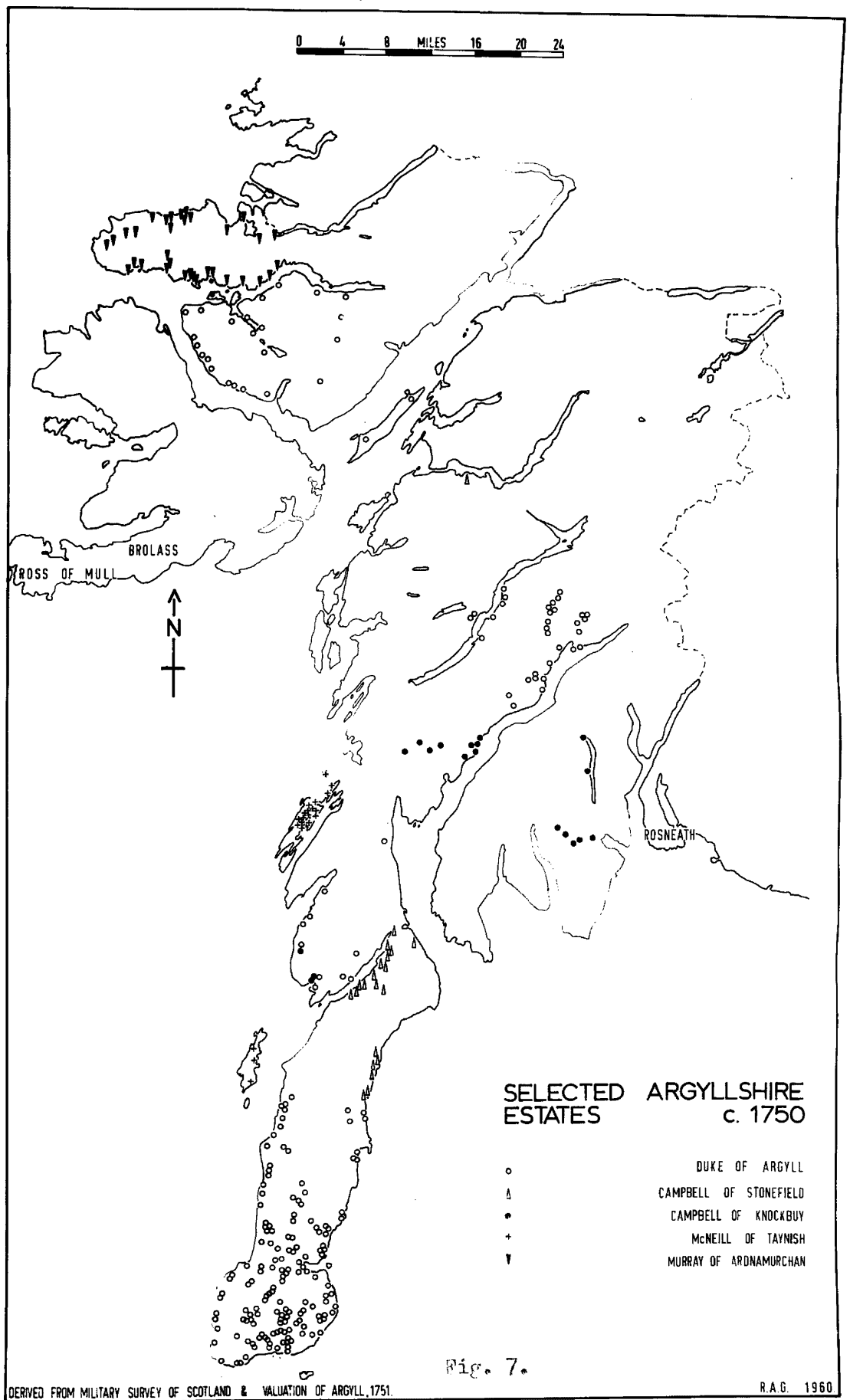
The inherent value of the land varied. Analysis of the farm values by districts suggests that Kintyre and parts of Cowal were more valuable than north Argyllshire, with the farms of mid-Argyll and Knapdale lying about the county average. This analysis is valid equally for the various areas held by the Duke of Argyll and the Earl of Breadalbane, and for the smaller estates held by other proprietors. In trying to assess the value of the land from the Valuation, it must be borne in mind that there may have been variations in the basis of valuation, as suggested in Appendix 1. Nevertheless, the above remarks agree with the comments of contemporary observers and with what field observation suggests about the pre-enclosure landscape. Inherently, southern Argyll was more fertile than the northerly districts of the county.

The distribution of farms of five estates is considered in Fig. 7, derived from the Valuation and from Roy's Map. The work was carried out from the 1:25,000 maps, transferred to a 1:253,440 outline, which was reduced to give the present map. The estate of Ardnamurchan was purchased by Murray in 1733, together with Sunart. In 1751 the latter was wadsetted to Cameron of Dungallon, so presumably Murray had got himself into financial difficulties between

Table 3.

Valuation of Argyll, 1751. Estates of Valued Rent £40 or more.

Proprietor.	Valued Rental.
Duke of Argyll	£1,453.15.10
Earl of Breadalbane	569. 8. 8
Sir James Campbell of Ardkinglass	369.17. 1
Sir Duncan Campbell of Lochnell	336.16. 4
Sir James Campbell of Achinbreck	276. 5.10
Alexander McMillan of Dunmore	246.10. 0
Archibald Lamont of Lamont	208.10.11
Charles Murray of Ardnamurchan	189. 0.10
John Macdonald of Largy	179.18. 8
Captain Duncan Campbell of Inverawe	146. 1. 5
James Campbell of Craignish	144.18. 3
Mr. John Campbell of Otter	140. 9. 0
Archibald Campbell of Knockbuy	139. 3. 0
John Campbell of Glensaddell	132. 4. 4
Roger McNeill of Taynish	130. 4. 8
Dugald Stewart of Appin	128.13.10
Archibald Campbell of Stonefield	128. 6. 3
Colin Campbell of Ederline	126.12. 4
Angus McAlester of Loup	118.17. 1
Donald Campbell of Airds	116. 3. 5
John Campbell of Barcaldine	116. 1. 2
Colin Campbell of Skipness	110.16. 2
Alexander Campbell of Shirvane	101. 2. 2
Neil McNeil of Ugadill	98.13. 1
Alexander McDougall of Dunollie	97.10. 6
Dugald Campbell of Glencarradale	96. 1. 3
Duncan Campbell of Southall	92.19. 5
Neil Campbell of Dunstaffnage	92. 8. 1
Sunart, wadsetted to Cameron of Dungallon	87. 8. 5
Neil Campbell of Duntroon	86. 3. 1
Robert McLachlan of McLachlan	81.17. 7
Archibald Campbell of Inverliever	81. 0. 2
McLean of Ardgour	76.11. 1
John Macdonald of Sanda	75. 2. 7
Donald Cameron of Lochiel	75. 0. 0
Duncan Campbell of Glendarewal	73. 2. 9
Captain John Campbell of Strachur	72.15. 3
Colin Campbell of Glenure	62. 6. 7
John Cameron of Glendessry, wadset lands	60. 3. 5
John Campbell of Barnacarry	54. 6. 1
Dugald M'Tavish of Dunardrey	52.13. 9
Ferquhard Campbell of Lagganlochan	51. 1.10
Neil McNeil of Machrihanish	48.12. 3
John Campbell of Kildaloig	47. 8. 0
Dugald Campbell of Kilmartin	46.15. 5
Lachlan M'Lean of Kingairloch	46.10.10
Charles Campbell of Ardchattan	44.17.11
Mr. George Wishart of Greenhall	44.15. 5
John McArthur of Milntown	44. 4.10
Duncan Campbell of Knap	43. 2.11
John Campbell of Danna	41.12. 7



1733 and 1751. This is interesting in view of the apparent enthusiasm with which this Lowland laird entered into his estate, when he had an estate census completed, possibly the first of its kind in the Highlands. His idealism was such that this census was taken to use as an example when advocating the adoption of a national enumeration as early as 1737 (232:passim). The Ardnamurchan estate was, and is, isolated, and very much a topographic unit which is also a social entity. The distribution of farm settlements is peripheral; each symbol is located on the clachan site as shown by Roy.

Similarly, isolation cut off the closely packed farms of the Taynish estate in north Knapdale. There were three farms in Gigha associated with the estate, which became separated in a legal action in the 1780's when Campbell of Inverneil was purchasing the estate to add to those of Danna and Ulva. These became the Ross Estate, which, with the lands of Knap and Inverneil, finally constituted the Inverneil Estate (see Chapter 8).

These two estates contrast with the other three shown. Taynish and Ardnamurchan were relatively small, unless one includes the wadsetted lands of Sunart with Ardnamurchan. They were localised, and each almost totally exclusive in its area. Larger estates were seldom so unified territorially. The Argyll Estates sprawled over the county, with concentrations of farms in Kintyre, of which the Duke owned half in 1751 (135:99), Loch Fynesside, Morvern, with two farms in Lismore and some others on Loch Awe side. Outside the scope of this thesis, he possessed lands in Mull in Broilass and the Ross, in Tiree and Coll, and at Rosneath in western Dunbartonshire on the route to his house in Dunbarton. The close concentrations of farms in Glens Aray and Shira, radiating from Inveraray, contrast with the sparse settlement of these glens today. There were clearances in Glen Aray soon after the Valuation was made to make way for extensive methods of cattle rearing.

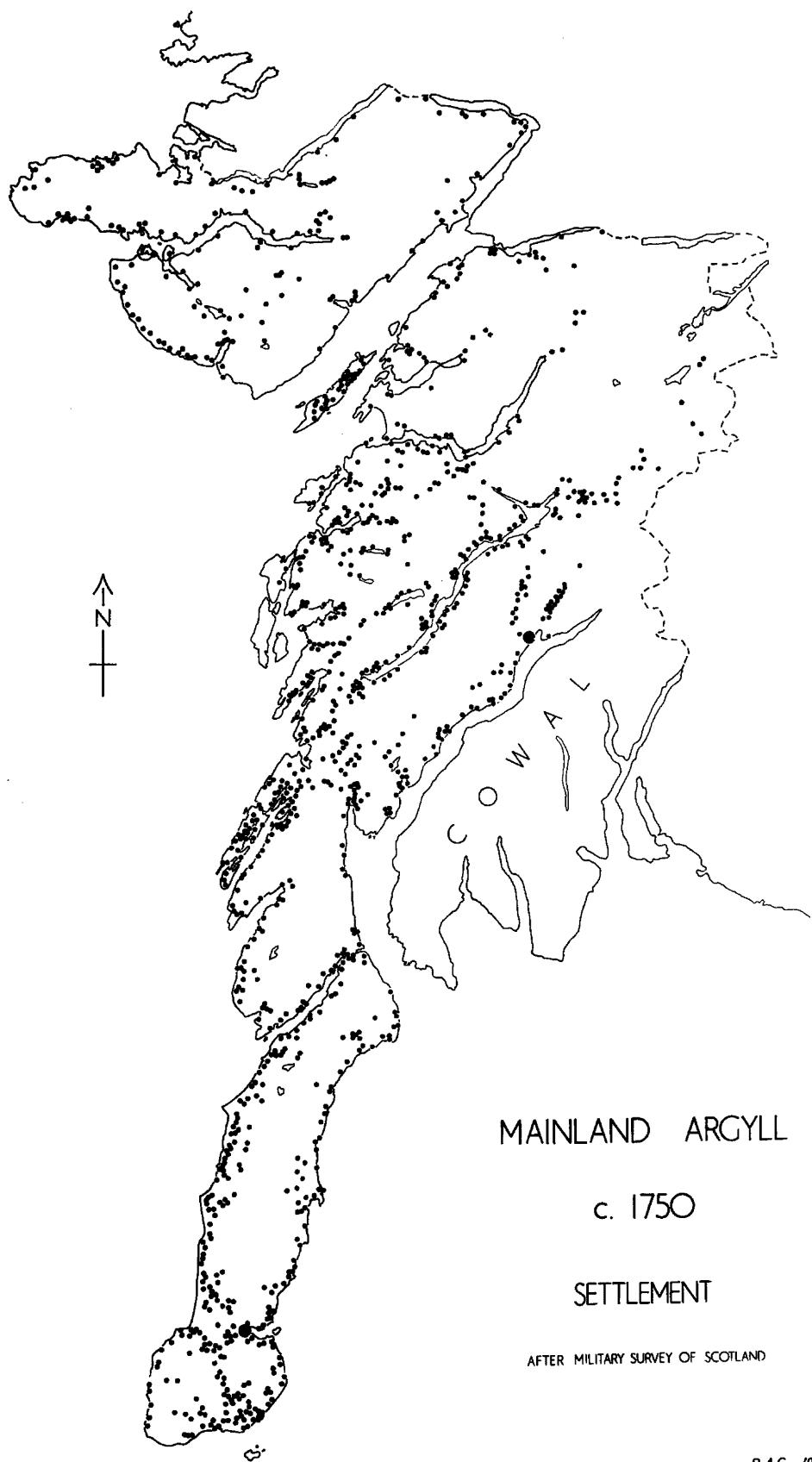
The core of Campbell of Stonefield's property lay on the till-plastered southern side of West Loch Tarbert, including the laird's own home and the home farms. Linked with these were farms

on the more barren east coast of Kintyre in the parish of Saddell, stretching southwards to march with the property of Glencarradale. Interspersed were the farms of Glensaddell.

The Knockbuy estate was probably the most fragmented of any in the county. There were farms in Kilberry, marching with those of a kinsman, and in Cowal, but the nucleus of the estate was at Minard on Loch Fyneside, with an almost continuous line of farms southwest to Kilmichael Glassary. This distribution is only understandable in relation to the drove routes of the period (Fig.10), for Knockbuy was intimately concerned with the cattle trade. With farms in Kilberry, he was able to buy throughout Kintyre and Knapdale, and bring cattle thence to Kilmichael to meet up with stock from his other lands. The Cowal farms, too, were closely related to drove routes, but their appearance in the Valuation is exceptional. Mr. Cregeen pointed out to me that these farms only appear in the Knockbuy rentals at about this time, and Knockbuy got rid of them soon after 1751. The reason is not clear. Possibly Knockbuy held these farms temporarily as security for a debt owing him, though one would have expected them to be entered in the Valuation as wadset lands in this case. There is no mention of them being wadsetted.

Fig.8, derived from Roy's Map, shows the distribution of settlement about 1750. Each settlement, irrespective of size or status, has been represented by a small closed circle. The two contemporary urban centres, Inveraray and Campbeltown, are shown as larger circles. Since clachan settlement was ubiquitous at this time, the map be taken also as a crude estimate of settlement density. The peripheral nature of eighteenth century settlement is obvious. The only sites away from the coasts in the district of Ardnamurchan were in the low-lying interior glens in Morvern, like Gleann Dubh and Gleann Geal. The concentration of settlement on the limestone-based soils of Lismore was immediately contrasted with the much sparser settlement elsewhere in the north of the county, and paralleled only in the deep, sheltered glens north of Inveraray, and again in the Tayvallich Peninsula in North Knapdale. Even in fertile southern Kintyre the same densities were not reached. The only completely

0 4 8 16 20 24
MILES



MAINLAND ARGYLL

c. 1750

SETTLEMENT

AFTER MILITARY SURVEY OF SCOTLAND

negative area for settlement was in the northeast of the county. In Lorne and in mid-Argyll settlement was not so closely confined to the sea and loch coasts as farther north, and some small tributary glens, relatively high up at 500 to 700 feet, had their share of houses. Many of these higher sites, and those in the glens at the head of Loch Fyne were cleared before 1800 to make way, first for cattle and later for sheep.

The concentration of settlement around Loch Sween stood apart boldly from the settlement of the remainder of Knapdale which was scattered and peripheral to the central hill masses of these peninsulas. The possibilities for peasant small-holding farming had been fully explored in the eighteenth century in North Knapdale. Even in the nineteenth century this was a closed, 'tight' community, slow to accept innovations, and encouraged in this attitude by the lack of interest shown by the proprietor after 1830. Runrig remained in some farms in the Tayvallich peninsula about 1870 (Appendix 5).

The distribution of eighteenth century settlement in Kintyre has already been discussed more fully than is possible here (Appendix 4; 135:102-3). The concentration of clachans on the west coast raised beaches gave rise to a lower line of settlements 50 to 100 feet above sea level, a line paralleled inland at about 150 to 200 feet by a discontinuous scatter of muir farms on the fringes of the arable area. The distinction between east and west Kintyre is obvious. A thinner scatter of clachans on the east coast, gave way on Loch Fyneside and in east Knapdale to absence of settlement due to steep rocky coasts. The Laggan in Kintyre was in process of reclamation so that settlement was largely confined to the raised beach benches around the margins. A tenuous line of clachans in extreme sites literally clung to the west coast of the Mull of Kintyre. Most of them were abandoned early in the nineteenth century when the Mull was converted into a large sheep-walk. The fact that they were in use in 1750 suggests considerable pressure on available resources, and further argues for the maximum extent of the cultivable area at about this time. This precipitous coast also supported at least one Iron Age/Dark Age settlement, from which the settlement of Innean Dunan took its

name, but this does not invalidate the previous argument, for the bases of settlement were not identical in this earlier period and in the eighteenth century. The southeast corner of Southend, lowlying and fertile with a sunny southerly aspect, was densely settled, and from here habitations could be found continuously up the Conie Glen and across the water-shed to the Laggan. The glens of the east coast of Southend, like Glen Hervie, were densely settled too, in comparison with their situation today.

It is possible to distinguish four separate regions of settlement in the county at this period.

1. The northwest and northeast of the county, north of an east-west line along Loch Etive, the head of Loch Awe, and north of Glen Orchy. Here, what settlement existed, was peripheral to the dominating hill and mountain masses, and largely coastal.

2. South of the previous region, and north of a line from the Point of Knap to Loch Gilp, lay a moderately densely settled area, where the pattern was largely controlled by the grain of the country, and all major, and many minor valleys were fully exploited. Settlement density reached a maximum in the southwest corner around Lochs Craignish, Crinan and Sween.

3. The remainder of Knapdale supported a westerly very sparse settlement, with concentrations only at Kilberry and along West Loch Tarbert.

4. In Kintyre the overwhelming importance of raised beaches was self-evident, but there was a clear demarcation in density and continuity of settlement between the east and west coasts. The major concentrations of settlement were on the upper raised beaches of the west coast, about Campbeltown and in southeast Southend.

From Roy's Map it is seen in a diagrammatic manner that rural settlement at this period consisted of small amorphous nucleations of houses, of which there was, on average, one on each joint-farm. The only variation was a division, in a very few examples, of the houses of a joint-farm into two or three very small groups scattered over the farm lands, as at Lix in Western Perthshire (121:75). It would be superfluous here to describe any of the house clusters in

detail. The settlement form was so widespread that Burt's generalised description quoted in the previous chapter will suffice. Occasionally another element appeared in the settlement pattern. At Kilian in Inveraray Parish, and apparently at Sanna in west Ardnamurchan, there were single large farm houses. Late in the century Kilian was a well organised sheep farm, as accounts for 1790-93 show (Inverneil:Kilian Farm Accounts), although the farm community included not only the chief tenant or tacksman and his family, but also servants such as dairy and pantry maids and cattlemen, for young cattle were bought in for both wintering and for summering for sale to drovers. Finally there was the shepherd and his family. The shepherd's wages consisted of one third of the annual profit on the total sheep stock, and it is possibly indicative of the quality of the man concerned that the profit increased from year to year without any significant increase in the size of the sheep stock. The housing of a community such as this may also have given rise to a small clachan, but if such existed about 1750, it was not indicated on Roy's Map. Examples like this were exceptional.

Clachans were a concomitant of openfield or runrig agriculture, and the original size of the clachan possibly depended on the size of the common plough team. Thus, lasting well into the nineteenth century in Knapdale most clachans consisted of four or five houses, suggesting correlation with a plough team of four horses. Knapdale was a community where there were few servants or cottars on the farms, though there were some pendiclers and crofters on individually held portions of land. In other areas small-holders were often an important element in society, and consequently clachans were often six to ten houses in size. Late in the eighteenth century, Barrichreil, on a tributary to the Euchar Valley in Netherlorn, was a clachan of sixteen families, and presumably a similar number of houses. It was claimed that this clachan was one "whose boast it was that every known trade required in the district was represented among the men" (152:145). Average clachan sizes for the Argyllshire parishes have been worked out for 1750 in Appendix 1. Groups of four or five houses were commonest, except in the north of the county

where six or seven houses per cluster was more usual. These sizes are suggested also from field study, though in no case can an extant ruined clachan be dated securely to the mid-eighteenth century. Examination of the lists of Fencible Men for 1692 shows that, on average, there were only three or four men available for military service from each joint-farm community at that period, which again hints at a clachan size of about four houses. Of eighty-four farms in Glassary, no man was eligible from one, and two others were 'wast' and presumably uninhabited. From the remaining eighty-one farms there were three hundred and eleven men, who, on grounds of age, were liable for military service, giving an average of almost four per clachan. The figure for Knapdale was three almost exactly (220:62 ff.).

Eighteenth century population totals for individual clachans are few, and single figures may be very misleading. Consequently only averages are given here for parishes or for groups of joint-farms.

Table 4. Clachan Populations.

District	Year	Number of families per clachan	Number of people per clachan
Ardnamurchan	1733	6.3	29.9
Sunart	1733	3.7	22.0
Southend	1779/92	2.9	20.4
Campbeltown	1779/92	3.1	20.8
Killlean and Kilchenzie	1779/92	4.5	30.3
Lix, Perthshire	1755	4.3	40.0
Glenelg	1755	--	13.0
Coygach	1755	--	14.9

Ardnamurchan and Sunart derived from Murray, 1733 (232)
 Kintyre parishes derived from Argyll Estates Censuses
 Lix, Glenelg and Coygach derived from Mason (223).

Clachan populations varied from area to area considerably, and equally the number of houses in the clachans must have fluctuated. The figures for the numbers of families per clachan should be compared with those of numbers of houses per settlement in 1750-55 (Table 1, Column D, Appendix 1). Both sets of figures are of the same order.

Transhumance has been accepted as one of the characteristic concomitants of clachan settlement and of runrig. There are today no transhumant movements in Argyllshire, but evidence as to the earlier existence of these practices may be had from three sources. Oral tradition tells of old shieling sites, and there are memories of older folk, usually now deceased, who went with the cattle to the summer pastures in the days of their youth. This puts the last survivals of transhumance back to about 1900, though Miss Campbell has told me of odd survivals later than this in Kilberry which she personally can recall. Field evidence may help, but only if one knows where to look. The traces of old shieling sites are not so clear in Argyll as they are in other parts of the Highlands. From a county-wide point of view cartographic evidence is the most rapid means of arriving at an assessment of the distribution of seasonal movements in the past, for many shieling sites are remembered in place-names, though often not in current local tradition. Fig.9 is an attempt to show the distribution of shieling sites, using the evidence on the 1:25,000 map sheets. The place-names on these sheets originated in written form on the first edition of the 1:10,560 maps, and so reflect folk memories of about 1870, as well as showing the sites currently in use at the date of survey. Only in Kilberry and in Glenorchy was the shieling movement still practised in the latter part of the nineteenth century. Hill, burn and loch names, however, attest the former existence of shielings over most of mid-Argyll, and there is sufficient evidence from north of the Great Glen to postulate their existence there also. In his "Reminiscences of a Highland Parish", MacLeod recalled the annual move to the shielings in Morvern at the beginning of the nineteenth century, but soon after clearances for deer and sheep put an end to the practice there (213:13).

Some farm names include the element -ari from the Gaelic word for a shieling. Most, if not all of these sites became permanent settlement sites before 1500, for they all appear as farms in the early sixteenth century judicial rentals of various

0 4 8 16 20 24 MILES



TRANSHUMANCE IN ARGYLL

- FARM NAMES WITH AIRIDH ELEMENT FROM THE MILITARY SURVEY OF SCOTLAND, c. 1750
- ✚ OTHER FARM NAMES WITH AIRIDH ELEMENT
- ▲ BURN AND LOCH NAMES WITH AIRIDH
- HILL NAMES WITH AIRIDH
- AIRIDH SITES ON G.S.G.S. 1:25,000 MAP SHEETS

parts of the county (208:12). The absence of much evidence for transhumance from Kintyre, in contrast to the relative abundance of all kinds of material on the other side of West Loch Tarbert, indicates that the practice had been abandoned in the peninsula before the eighteenth century. This may be linked with the Lowland plantation of Kintyre and the early improvement of agriculture.

The embryonic communications network of the mid-eighteenth century is interesting. Roads had not started to exert the influence on the siting of settlement which is so evident today in ribbon development of one form or another. The first map in Fig.10 is derived from Roy's Map. Not all of the routes shown by Roy may be taken as roads; some quite obviously were drove routes as a comparison with the second map shows. An intricate network of local routes is suggested, especially on the west coast north and south of modern Oban. North of the Great Glen however, well-defined routes were non-existent. For strategic reasons the empty northeast of the county had been relatively well provided with routes, for two rebellions in the first half of the century had shown how essential adequate communication was between Inveraray and the western Lowlands on the one hand, and Fort William, the Great Glen and Inverness on the other. In Kintyre the west coast route was the more important of the two shown, as it still is, and here and in Knapdale the commonly used routes and the drove roads coincided. The Loch Fyne route along the east coast of Knapdale did not come into existence until about the end of the eighteenth century (129:430), and its use as a drove route was a nineteenth century phenomenon. The drove roads after Cregeen are all later additions to those shown by Haldane, the Loch Awe side one being associated with the creation of a railhead at Dalmally.

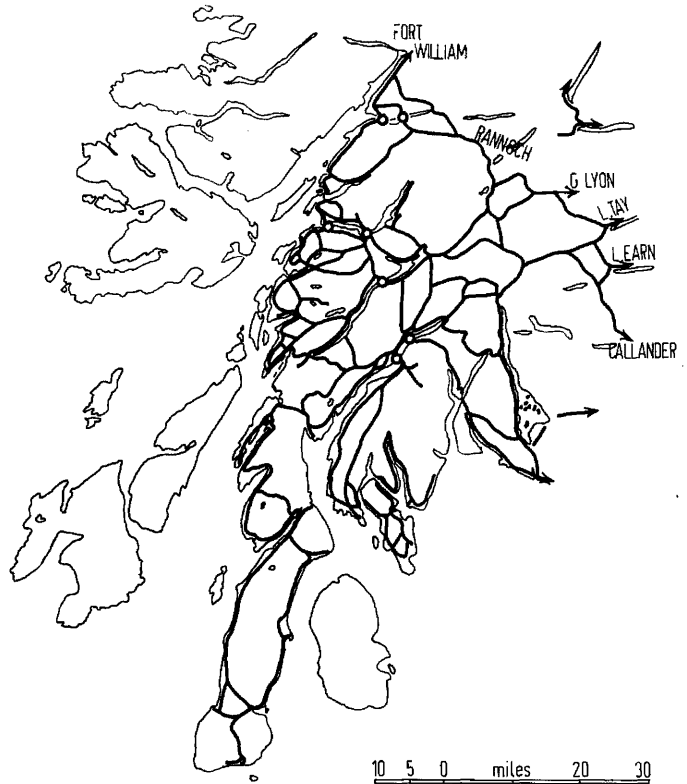
Cowal, and apparently Bute also, was oriented towards Inveraray, using the St. Catherine's ferry across Loch Fyne, a ferry which still operates. A reversal from this situation has taken place, and now outward traffic from Dunoon, and south and east Cowal generally, crosses the Clyde, or goes up to the Rest

EIGHTEENTH CENTURY COMMUNICATIONS IN THE SOUTHWEST HIGHLANDS

ROUTES FROM THE
MILITARY SURVEY.

• FERRIES

— ROUTES



DROVE ROADS.

.... ROUTES AFTER CREGEEN

— ROUTES
○ COLLECTING
GROUNDS } AFTER
HALDANE

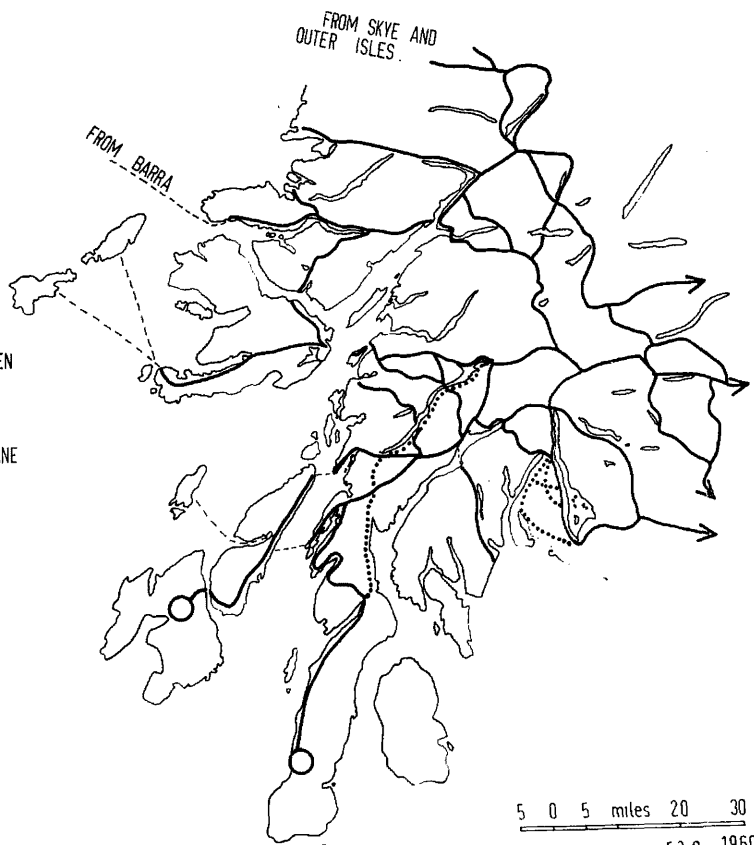


Fig. 10.

and Be Thankful pass and thence to Lochs Long and Lomond.

Ferries were extremely important. There were two on Loch Leven, two on Loch Etive, one on Loch Awe and two on Loch Fyne. In this respect Argyll was better off then than now, but it must be remembered that traffic in the eighteenth century was of a different order from that of today, and all bulky goods were transported by water. There was little vehicular traffic to be catered for. Many of the Statistical Accounts of the 1790's speak of wheeled carts as recent introductions, and there is little evidence to suggest the existence of roads in the modern sense, apart from one or two military roads, anywhere in the county before 1750, and thereafter development was slow until after 1800. Horses provided the normal means of transport for passengers, and also for goods such as the charcoal which was carried from various parts to the smelting furnaces at Bonawe and Furnace. The only real cause for extensive movement was the cattle trade, and the beasts transported themselves along the drove roads at their own pace. Robson, writing in 1794, put land communications in their proper setting when he claimed that "The great lines of roads through Argyleshire are generally good; but there is little done to the parochial ones: indeed the convenience of water carriage, exempts the people of Argyleshire from the absolute necessity of an expensive attention to the roads;" (250:33).

Regardless of the inadequacy of the contemporary communications by land, various innovations were introduced into Argyll, especially in the field of agrarian improvement. Since rural settlement was so intimately associated with the structure of rural society and with the agrarian framework, it is to be expected that changes in the latter would ultimately bring about alterations in the pattern of rural settlement. The remainder of this chapter deals with the evidence for these changes in eighteenth century Argyll. At this stage many of the changes were in their infancy, but their consideration is nevertheless relevant to the study of the ultimate evolution of the modern rural landscape.

We have noted that a legal basis for agrarian improvement had existed from the end of the seventeenth century, but the practical application of improving ideas did not really start till the 1730's. McKerral showed that on the Argyll Estates in Kintyre agricultural improvement was in process early in the 1730's (135:ref.12). Duncan Forbes of Culloden visited and reported on Mull, Morvern and Tiree in 1737. He was sent there by the Duke of Argyll to reorganise the distribution and tenancy of land, which was completed, not without initial set-backs, by the setting of land directly to the small communities of joint-tenants, and abolishing the intermediary of the tacksmen (5:387-394). However, in doing this Forbes was only following up a suggestion made to the Duke by Campbell of Stonefield, one of the early improving lairds in Argyllshire, who had been sent by the Duke to report on conditions in these areas early in the same decade (57:291). The abolition of runrig soon followed. In the southwest Highlands the two lairds who initiated this movement towards unified consolidated holdings for the peasant farmers were the Duke of Argyll and the Earl of Breadalbane. In 1776, the former gave instructions for the lotting of Tiree, but there is evidence to suggest that he had started lotting land in Kintyre even before this (Chapter 7). By 1785 the Netherlorn section of Breadalbane territory had been reorganised, though Loch Tayside was left till 1797 (154:49). By the end of the century all over Argyllshire, except north of the Great Glen, small and medium sized compact farms were replacing the old fragmented runrig holdings. In this share-out, all the lower ranks of agrarian society had some part, and the result was a diversification in agriculture unknown elsewhere in the Highlands, a feature which stood the area in good stead during the difficulties of the nineteenth century.

According to Pennant, Kintyre in 1772 was "open, and in general naked:" (239:I,220), but even as early as 1750 the beginnings of enclosure, the natural follow-on from consolidation of holdings, was evident in two forms. By mid-century a number of lairds had accumulated sufficient wealth to allow them develop in their home areas, generally about their own houses, ideas of landscape gardening

already in vogue in the Lowlands and originating presumably in England. More or less extensive policies were laid out about a number of lairds' houses, one of the finest examples being Stonefield on West Loch Tarbert-side. The influence of the Duke of Argyll in replanning Inveraray about this period, and of Campbell of Knockbuy's agricultural experiments at Minard on Loch Fyneside must not be underestimated in studying the spread of these innovations (101:145). Knockbuy's influence was also seen at Kilberry, for Campbell of Kilberry and Campbell of Knockbuy were closely related by blood. The majority of the policies located on Fig. 11 were on Campbell properties, but outlying examples did exist, as at Acharn in Morvern. An interesting concentration of policies existed along the coasts of the lochs of south Cowal, a distribution not paralleled by other enclosure at this period. This hints at the very early development of southeast Cowal as a wealthy residential "suburb" of the rapidly industrialising Clyde basin, at a time when Glasgow was growing to national importance. This still is partly the function of Cowal. The laying out of policies entailed what were the first clearances of any kind, for the areas of land incorporated in these ornamental enclosures had previously supported joint-farms and their communities.

Ornamental enclosure was an essential feature of the policies, but the idea of enclosure for other purposes inevitably presented itself. Fig. 12 indicates the distribution of enclosure about 1750 which in large measure parallels that of the policies, with two main exceptions. Cowal had little enclosure except the policies, and while other enclosures existed on Loch Aweside, there were no policies there according to Roy's Map. The enclosures marked by Roy were all large, and generally incorporated much more than arable land. Analysis of two Loch Aweside examples shows that what Roy portrayed is still discernible in the modern field pattern (Fig. 13), but the early enclosures included much rough moor grazing, especially in the Dalmally example. Clearly these were not for arable purposes, and must have been associated with

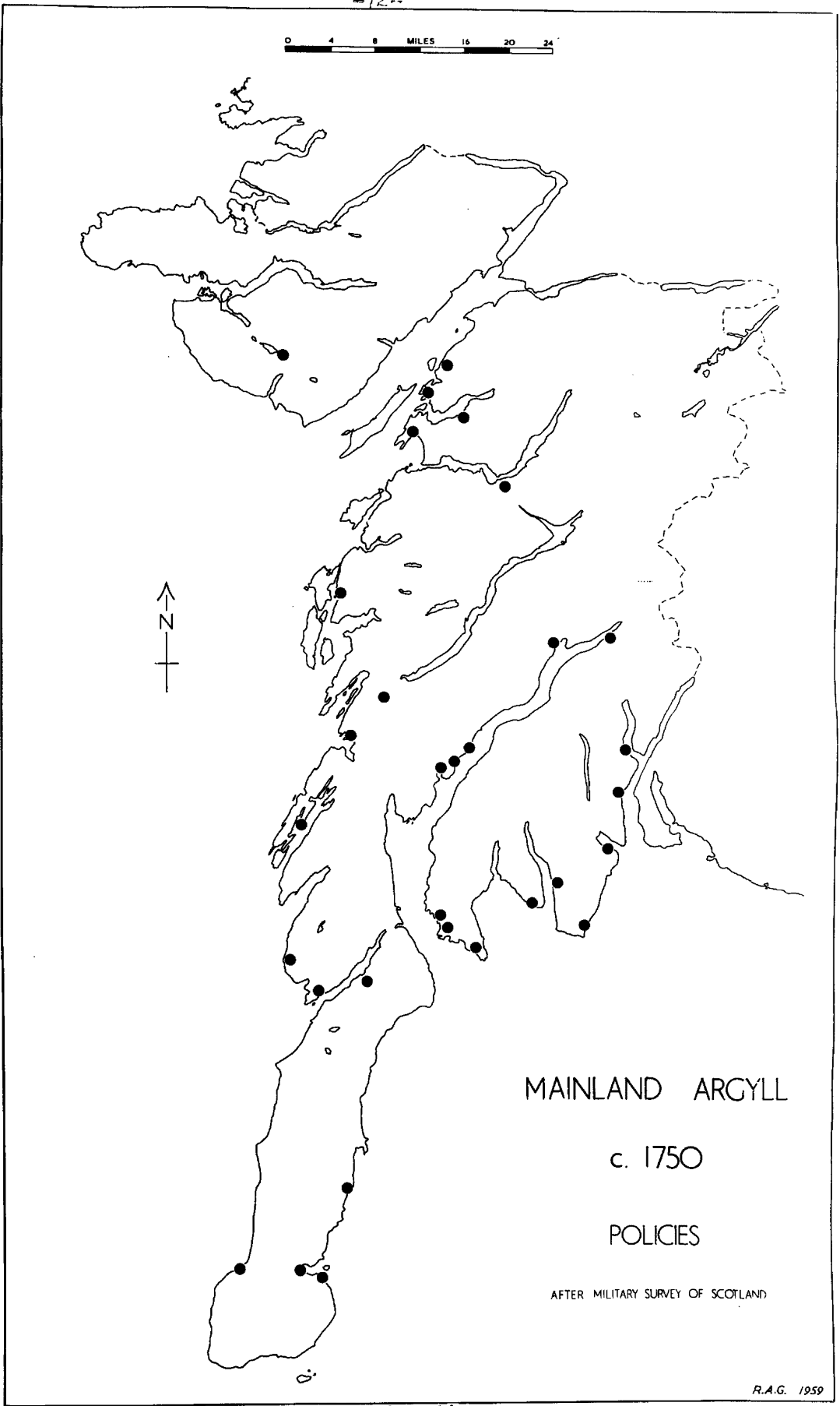
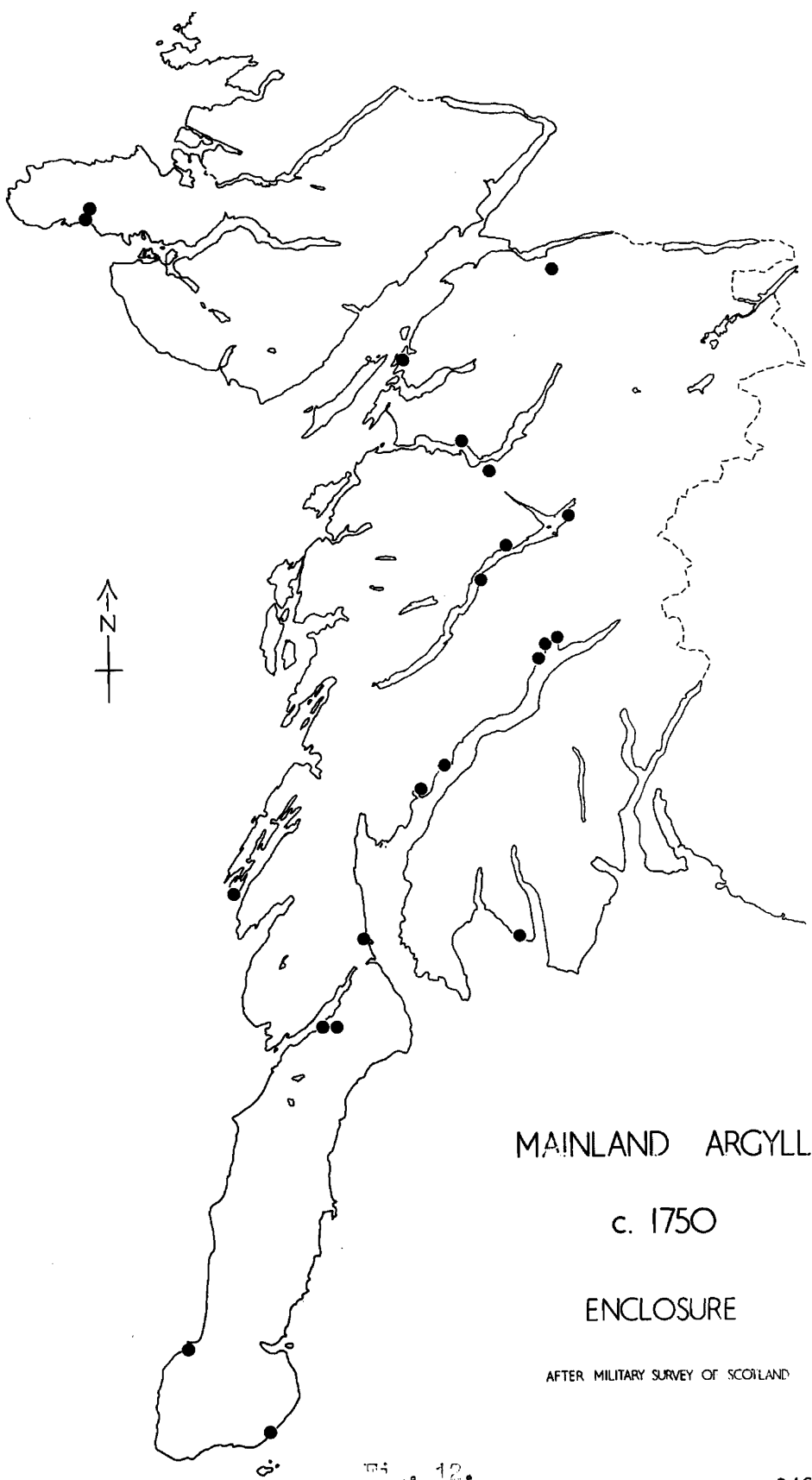


Fig. 11.

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MILES



MAINLAND ARGYLL

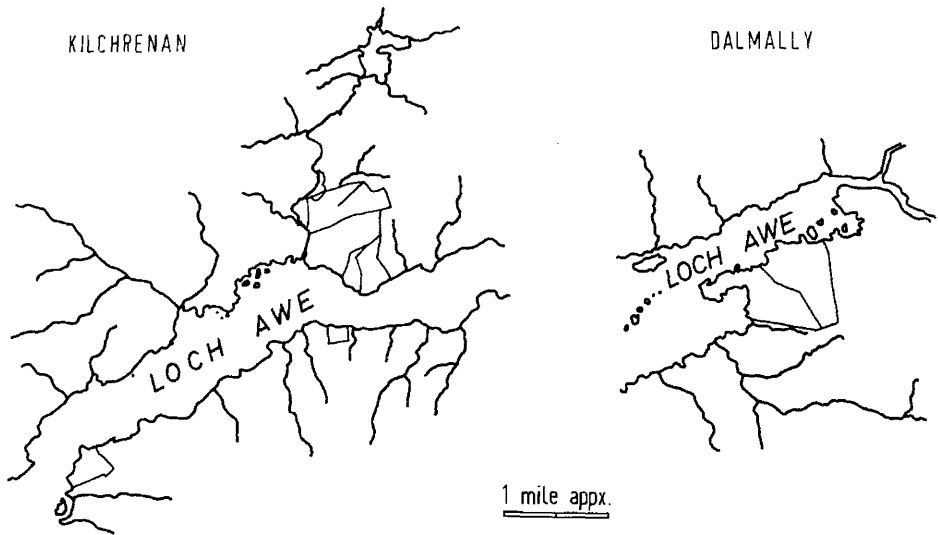
c. 1750

ENCLOSURE

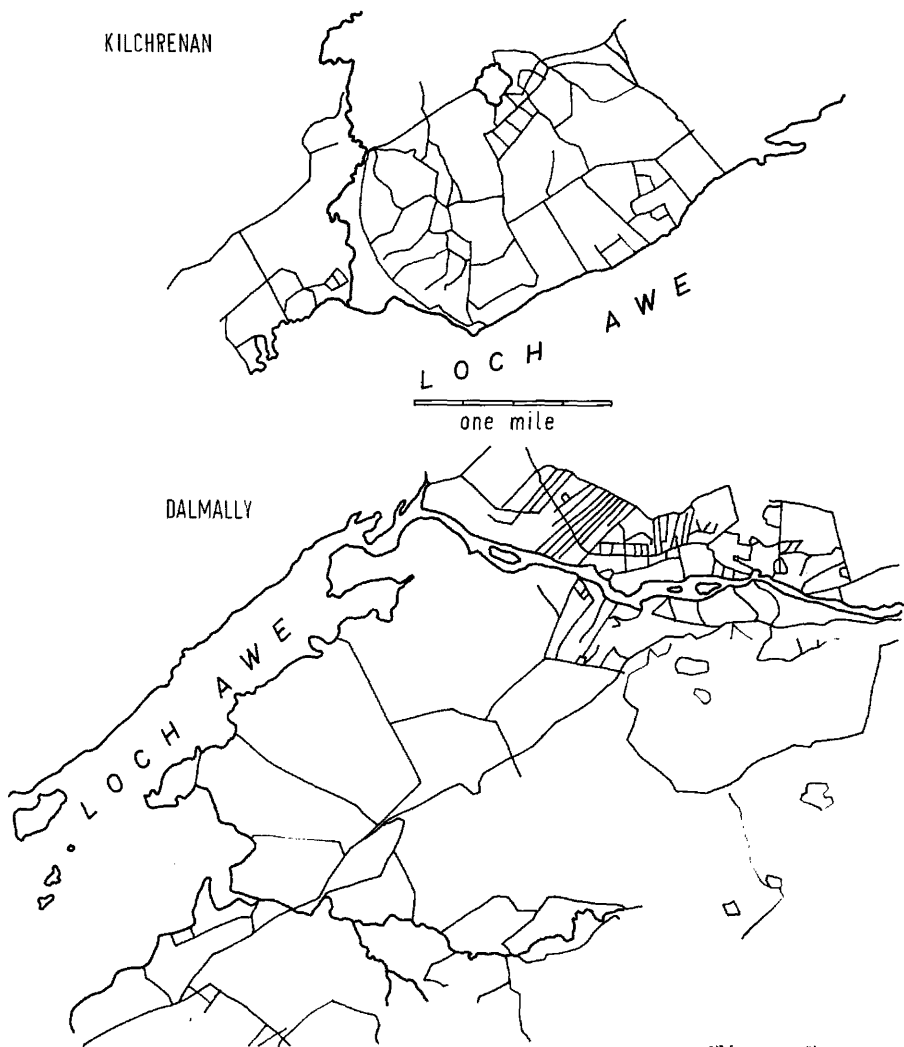
AFTER MILITARY SURVEY OF SCOTLAND

LOCHAWESIDE

ENCLOSURE



AFTER MILITARY SURVEY OF SCOTLAND



AFTER G.S.G.S. 1:25000 MAPS

Fig. 13.

r.a.g. 1960

stock, probably cattle. At Minard, Knockbuy's enclosures were laid out when he was experimenting with stock breeding as early as 1744 (101:145). It is of interest to compare the size of these early fields, with the smaller ones which later evolved for arable purposes as runrig died out, for instance at Kilchrenan. At Dalmally an entirely different pattern emerged, where the long narrow strips so clearly identified with the crofting region were laid out, probably in the early nineteenth century. This type of field pattern is here almost at its southwestern limit in the Highlands.

It is probable that one individual, Campbell of Knockbuy, was responsible for the introduction of much of the enclosure of Argyllshire as it existed by 1750. A letter from him to the Duke of Argyll, dealing with the encouragement of local trade in the county, dated 1744, contains many references to the value of, and necessity for enclosures if cattle of good quality were to be reared (Stonefield:Box I, No.17). He said that cattle could be improved by increasing their weight but for this it was necessary to "improve the County by inclosures". He also claimed that stone walls and not the customary feal dykes were necessary. He referred to the Duke's "several good inclosures attInverarae" which, with his own at Minard, were obviously well established by 1744. Of policies he said that they "might return a good deal of money to Argyllshire yearly. There is great plenty of plants and shrubs of which they are made, in it, labour in the Summer time, when only that work can be done, att the cheapest, and would be more so, were the shearers restrained from going to the low country, which might be effected. no where fitter for the tryale of this, than Inverarae, and Lochfyneside in general, which abounds with ferns, shrubs, and all the trumpery for that purpose".

In view of these events, particularly on the various properties of the Duke of Argyll, it is strange to find no stipulations in the general conditions governing leases, dealing with enclosure, on the Duke's lands in Mull and Morvern in 1787. The nearest approach was that the tenants were "bound to plant 100 trees for the Duke's

behoof round their Barn yards and Gardens or to enclose a convenient piece of ground elsewhere for this purpose. All ditches to be planted with Sallies within the first three years of the Tack." Social improvements were incorporated such as the prohibition of sub-letting, designed to prevent the re-emergence of tacksmen. The standard of peasant housing was of concern, for the tenants were bound not "to have any Creel or Wattled houses on their Lands except Shielings" and so they were allowed free timbers for their houses from the Duke's reserved woodlands. The cutting of peats, turf or scraws in meadows or on improveable ground was prohibited (Argyll: Rosneath No.8 Minute Book of Conditions of Leases, 1787).

In the Kintyre leases the improving clauses stipulated the construction of considerable lengths of stone and feal dykes, the planting of hedges and the cutting of drains. This all argues considerable improvement of arable land, especially about Campbeltown and Southend (Argyll: Langlands Reports, Kintyre Improvements). At the end of the century, the Duke, we are told, "in place of raising his tenants' rents, even upon nineteen year leases, which is the term commonly given, rather takes them bound to inclose and drain a certain portion of their farms." (250:27). These operations were obviously carried out and statistics of work completed exist in the estate papers, between 1797 and 1807. And yet, in a report on the Duke's property at Campbeltown and Southend in 1810, complaints are voiced at the lack of draining and enclosure, and the continued existence of multiple tenancy farms in some areas. The advisability of importing Lowland farmers to teach by example was considered, but (a commentary on the inadequacy of contemporary communications) the difficulty of disseminating ideas by this method is admitted, except in the immediate neighbourhood of such individuals. (Argyll: Rosneath No. 3 Report on the Duke's property at Campbeltown and Southend, 1810. no author noted). Comments such as this suggest that caution is needed for fear of imputing too much significance to the existence of the descendants of the seventeenth century Lowland planters in Kintyre. The progress of improvement remained slow.

At Minard, Campbell of Knockbuy took more and more of his estate

into his own hands between the 1740's and the 1760's. In 1757 the "nine Inclosures of Minard including Knockbuy not yet finished" were all in his own hands, and by 1767 Knockbuy itself had been fully enclosed (Knockbuy:Rentals 1757,1767).

From these small beginnings in the eighteenth century grew the present enclosure pattern of Argyllshire. As Lebon was able to say of Ayrshire, so it may be claimed that rural change in Argyll before 1750 was not inappreciable. But it was local and partial compared with the transformation wrought later on. "During the ensuing century, the carpet of the country was unpicked and rewoven in a new design" (185:109).

The eighteenth century saw, too, the beginnings of a social revolution. As farms became consolidated so the numbers of tenants decreased, and correspondingly, the ranks of cottars, servants and others were swollen. This was a change which attained greater impetus and significance in the following century. The original runrig clachans housed all the tenants, and also the few tradesmen and craftsmen necessary in these closed rural communities. Occasional specialised tradesmen appear in the 1692 lists of Fencible Men, including a herd at Drainlia in Glassary, a smith in Kilmichell and a tailor in Margmonagich, both in Kintyre (220:67 ff.). In most cases however the tenants and sub-tenants acted as their own tradesmen and craftsmen.

Specialisation in occupations appeared with the gradual improvement in agriculture. This is plainly seen in the 1779 census of the Argyll Estates in Kintyre, taken almost half a century after the introduction of the first improving ideas to the peninsula (135:Table 2, Appendix 4). A summary of the Kintyre averages is given here, and for comparative purposes figures derived from Geddes and Forbes' study of late seventeenth century Aberdeenshire are placed alongside.

Highland Aberdeenshire in 1696 may be taken as representative of the structure of rural society under runrig, but the lowland area of the county had by this time started to change, for distinct inequality in status prevailed in the rural community. "The equalitarian Highland team may well have been the surviving prototype of the Lowland group" (138:103). By 1779, southern and central Kintyre displayed social

Table 5.
Social and Occupational Status of Clachan
Populations.

Aberdeenshire ... 1696. Kintyre ... 1779.
Numbers per Settlement.

Area.	Tenants.	Cottars & Subtenants.	Servants & Tradesmen.
Highland Aberdeen.	4.0		1.6
Lowland Aberdeen	1.9	1.9	1.8
Southend	1.3	1.6	1.5
Campbeltown	1.4	1.6	2.0
Killeen & Kilchenzie	2.0	2.5	1.7

Figures derived from Geddes and Forbes (138:100-103) and Gailey (135:Table 2).

characteristics akin to those of lowland Aberdeenshire 83 years previously, but within Kintyre there was variation from south to north. It has already been argued on the evidence from which the above figures are taken that central and northern Kintyre, represented by the parish of Killeen and Kilchenzie, retained more traces of the old order than did the southern end of the peninsula (135:106).

These changes were taking place at a time when population was increasing rapidly, following the final pacification of the Highlands and the introduction of the potato which was to become a vital food crop in the nineteenth century, particularly for the lower orders of society. In almost every parish in Argyll population increased markedly between 1750 and 1800 (Fig.50), though where figures are available, fluctuations in the upward trend during these 50 years were evident. These were caused by outward migrations due to a variety of factors. The emigration of tacksmen about 1770 was more significant north of the Great Glen, with really sensational departures from islands like Gigha, Islay and Jura, but mainland Argyll contributed some to the general stream. Points of embarkation for the tacksmen, some of whom took their sub-tenants with them, included Campbeltown, Gigha and Dunstaffnage Bay (57:281). The tacksman emigration ended in 1775 with the outbreak of the American

War of Independence, for it had been to the New World that these dispossessed semi-aristocrats of the Highlands had looked for new estates.

In contrast, after 1783 it was the peasant classes who provided the initiative and the numbers for a spasmodic emigration which lasted into the nineteenth century, again mainly to the New World, though some were content to migrate to the Lowlands of Scotland in search of industrial occupations. The impetus for emigration was now coming from below, not from above in the social scale. Significant factors were a growing familiarity with conditions and possibilities in North America, partly due to the reports from emigrants of the period before 1775, and the fact that Highland population was now over-running its resources. "Most eighteenth century writers were agreed that the rapid increase of population in the Highlands was a comparatively recent phenomenon, not dating back much before the opening of their own century. The time of its appearance is not difficult to explain; the removal, or partial disappearance of such checks to population as private war and the small-pox scourge did so much; the introduction of the potato, and the natural fecundity of the Highlander did the rest" (58:87). Emigration would have been inevitable, even had the infamous clearances of population never been carried out anywhere in the Highlands.

Twenty thousand people are said to have departed from their Highland homes between 1763 and 1775 during the tacksman emigration (252:165), probably a conservative estimate for another authority increases the number by fifty per cent (212:18). "Since Whitsunday last", says the Historical Register for June 1792, "upwards of 600 persons, old and young, have left Kintyre and gone to Glasgow, Paisley, etc., in order to be employed at the cotton works of these and neighbouring places By 1st August it is supposed that upwards of 2000 persons will have left Argyllshire, most of them to seek an asylum in a foreign country" (212:18-19). During the American War of Independence, Campbeltown alone is reputed to have contributed 1000 men to the navy, though it seems likely that these

men were derived from the whole of Kintyre rather than the parish of Campbeltown. This could explain a discrepancy noted in the age/sex structure of Kintyre in 1792 (135:105).

In the Statistical Accounts at the end of the century, a few ministers commented on emigration during the preceding forty or fifty years through which many of them had ministered to their respective charges. During the years 1790 and 1791, 120 people emigrated from Ardnamurchan (Argyllshire districts) to America, but the neighbouring Inverness districts suffered even more heavily, for the total emigrants from the whole parish numbered 696 people. Between 1780 and 1798, only 9 families left Ardnamurchan for the Lowlands of Scotland, but apart from these 54 individuals also departed for neighbouring parishes and for the industrialising south. (15:292). In the early 1790's, 140 people emigrated to America from Ardchattan and Muckairn, and in 1793 others were preparing to follow. Higher wages in the Lowlands were also attracting a few from this parish (18:178). However, from Kilchrenan and Dalavich, only two families departed for America during a half century (20:273), and generally from the central and southern parts of the county there were fewer emigrants than from the north. The minister of Kilninver and Kilmelford could remember no family leaving the parish during his ministry of 35 years (21:319), but unfortunately he said nothing about individuals leaving during the same period. As in Kintyre, the emigrants from Knapdale left sooner in the century than did the bulk of those from the north of the county. Between 1763 and 1797, 175 emigrants left for America from South Knapdale, of whom 100 left in 1774 alone (29:320). Focussing attention back to the north of the county, Rev. Donald M'Nicol, minister of Lismore and Appin, wrote in 1791, "There have been two emigrations from these parishes, particularly from Appin. The inhabitants are now become so crowded, that some relief of this sort, in one shape or another seems absolutely necessary. In 1775, the first ship, completely loaded with emigrants, mostly from these parishes, sailed for North Carolina. The American War, which broke out next year, put a stop to all attempts of this nature till last autumn, when another ship, with emigrants, mostly

from Appin, and the higher parts of Ardchattan parish, carried away about 200 people for North Carolina. Preparations are being made for another emigration from these parishes next year" (17:488).

Though the majority of the ministers said nothing about emigration, this does not imply there was none from the parishes concerned. Sufficient remarks exist to suggest that relief of population pressure on local resources by emigration was locally very important, and equally, this phenomenon was not spread consistently over the whole of the county. The southern districts of the county, earlier to adopt, or have thrust upon them, agricultural improvements and social reforms, were better able to adapt themselves to population increase during the later eighteenth century, than the northern areas where emigration provided the only answer. The existence of the flourishing burgh of Campbeltown in Kintyre must not be forgotten in this context. It served to absorb surplus agricultural population in the fishing and distilling industries. Other industrial activities were only of local importance; lead mining at Strontian could only temporarily absorb surplus population in Sunart, and was not even able to serve the needs of the whole district of Ardnamurchan.

SECTION III
REGIONAL STUDIES

Chapter 7.

SETTLEMENT CHANGES IN SOUTHEND

Where population may be located accurately with respect to dwellings, the distribution of population reflects the distribution of settlement, and suggests the sizes of individual settlement groupings. A series of population distribution maps has been drawn for the parish of Southend at intervals over the past two centuries, representing the population of each settlement by a circle of area proportional to the population of that settlement, on a suitable scale. This method provides a more accurate assessment of changes over a period, when using a series of maps, than the dot distribution method, but it pre-supposes ability to locate each settlement accurately.

For the eighteenth century, the Argyll Estates Censuses of 1779 and 1792 provide the necessary information. These have already been analysed for Kintyre (135:99-107), and the maps in Fig.14 are taken from that study. We are here interested only in the parish of Southend. The censuses provide only a sample, but it is a valid one, for the Duke of Argyll owned almost two-thirds of the parish (one hundred and fourteen and a half of a total of one hundred and eighty-five merklands according to the Valuation of Argyll in 1751). One of these maps refers to total population, the other to numbers of families. The scales were chosen to give circles of approximately the same size for both population and families, other things being equal, which makes comparison of the two maps easier.

The population of Southend in this period was found up to, but seldom above 500 feet, but it was largely concentrated in the fertile southeast plain and in the glens radiating from it. Population distribution was almost continuous across the watershed at the head of the Conie Glen and into the parish of Campbeltown. The limits of settlement had been pushed far back into all the glens of the parish. The settlements averaged about twenty-five people each over the parish, but they ranged from the three at Glenadill to the seventy-eight of Kildavy. The largest settlement, Machrimore mill, was

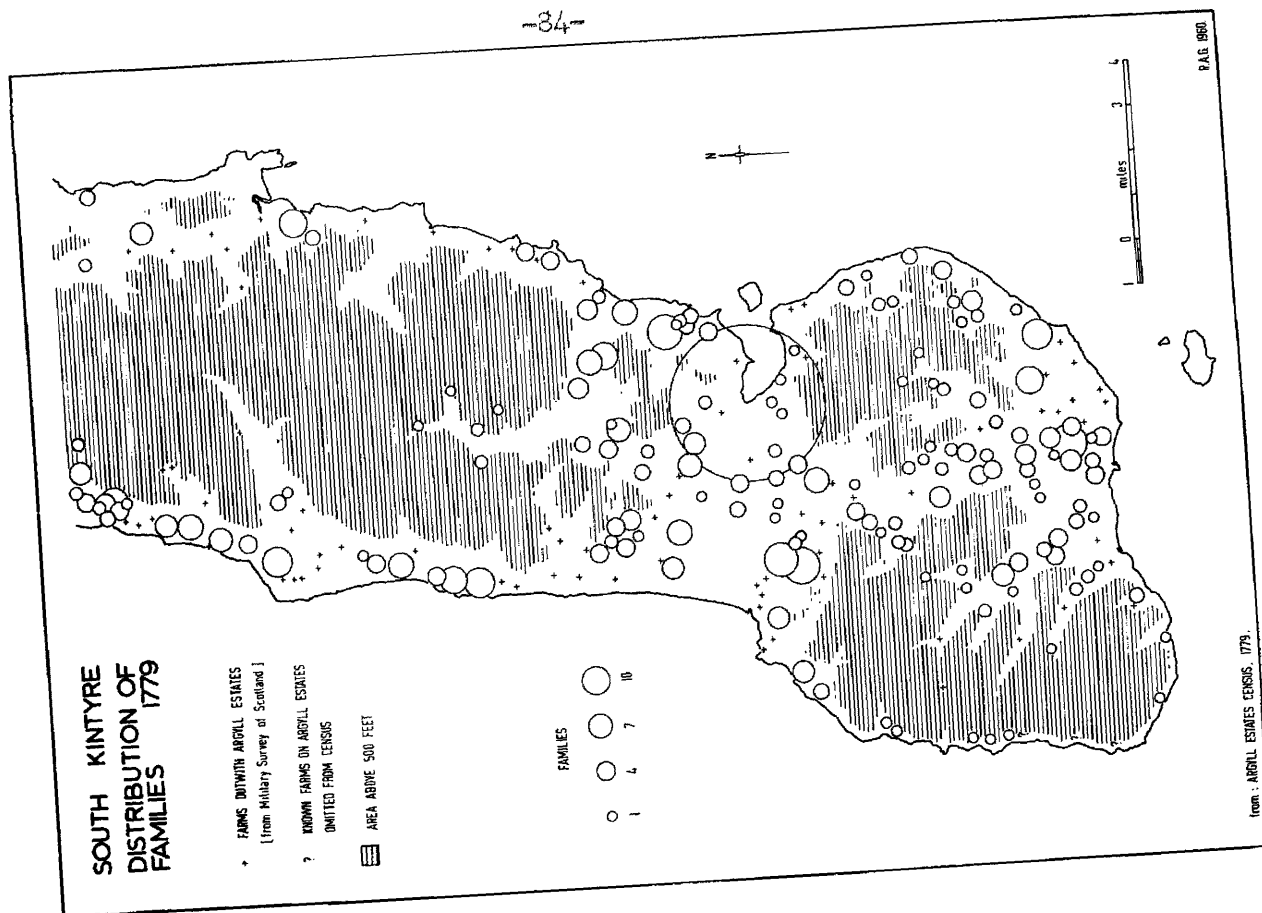
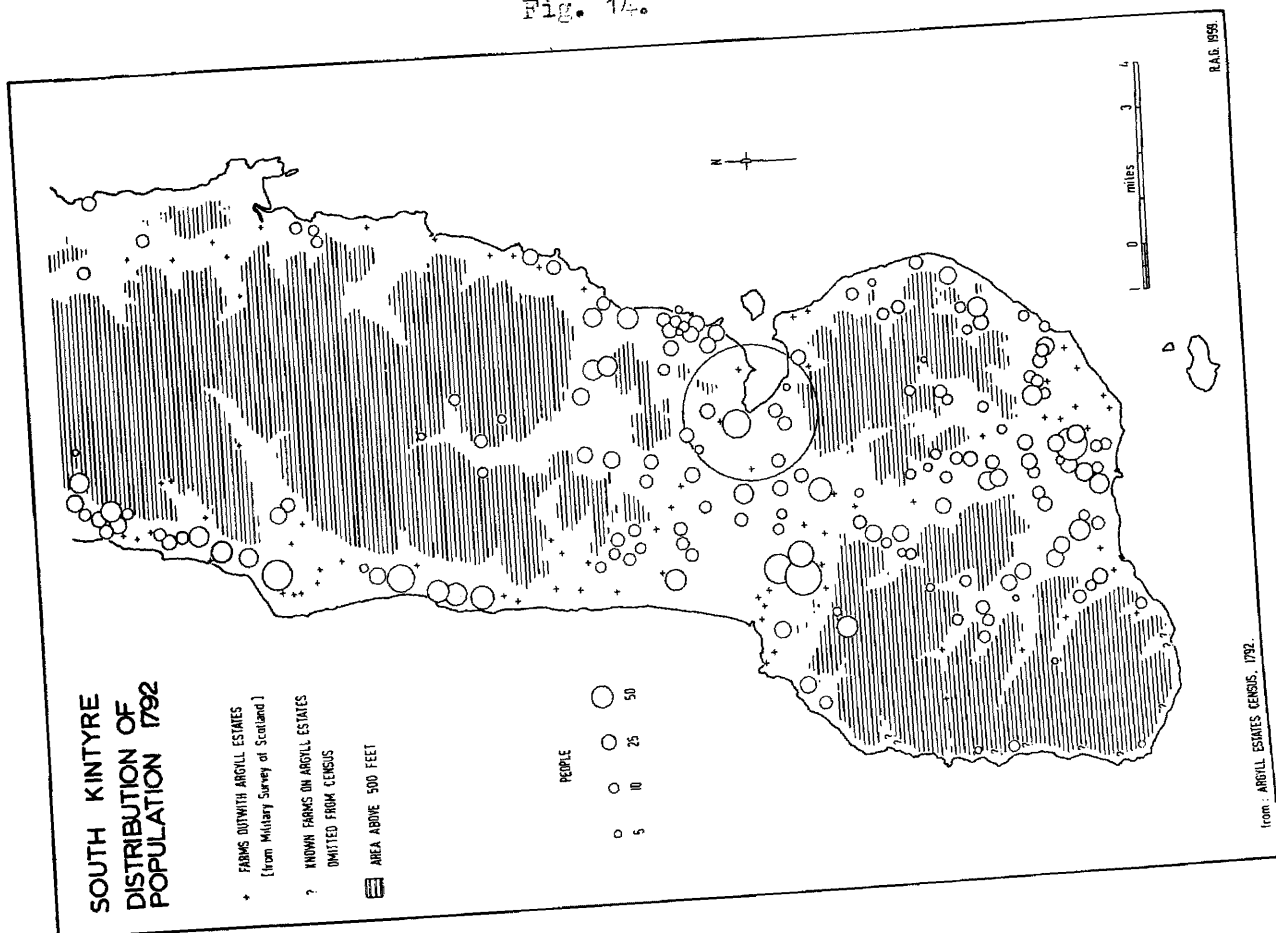


Fig. 14.



exceptional, since it was not solely a farming community. The next two largest groups, Kildavy and Polliwilline, were both divided into a number of separate farms between 1779 and 1792. Apart from these, there was a noticeable tendency for the larger settlements to be concentrated in the low-lying, fertile southeast and in the major glens, Glen Breackerie and the Conie Glen. Smaller than average settlements were found on more restricted sites in the narrower glens like the Balanabraid Glen in the east of the parish, above the larger groups already mentioned, and around the west and southwest coasts. In the last area the population groups were very small, consisting of a single, or at most two families. The evidence from the censuses thus indicates that all the houses in these ruined clachans were not necessarily contemporaneous (Appendix 3a, Site 1). These censuses seem to have been incomplete, for all these 'Innean' settlements on the west coast are mentioned in a rental of 1800, though many were included as parts of tacks consisting of more than a single farm, but it seems certain that all were still then occupied. They are not all listed in the two censuses (Argyll:Rosneath No.3, Rental 1800, Kilcolmkill Parish). From other rentals it is known that these settlements were abandoned as permanent sites between 1816 and 1818. 1816 is the last year for which there is a rental, though in 1817 some of the original tenants had not paid off their arrears and may still have been in occupation. By 1818 they had disappeared (Fig. 20) and so are not listed in an estate rental for 1820 (Argyll: Rosneath No.3, Rentals 1816, 1820, Roll of Arrears 1817). In 1843 we are told that the Mull, which included all of these farms, had become a single sheep walk supporting six thousand sheep, but in view of the evidence of the censuses and of contemporary rentals, it is difficult to give credence to Kelly's claim that the Mull had supported thirty or forty families towards the end of the eighteenth century (54:432). A maximum of twenty families is more likely.

During the latter part of the eighteenth century other changes were apparent. In 1779 Kildavy and Polliwilline in the southeast of the parish were single large multiple-tenancy farms with nine and five families respectively. By 1792 they had been divided into four

and three separate holdings each, all either single or double tenancies. This process of subdivision of farms was continuing throughout the eighteenth century and its concomitant was the consolidation of holdings and disappearance of runrig. Of a total of forty-five farms in 1779, only seven had more than two tenancies. In Table 6, which is the extract for Southend from the 1779 Census together with the farm population totals for 1792, the term tacksman must be interpreted to mean merely one holding a tack or lease of a farm. The earlier

Table 6.

Extract for Southend from the Census of the Argyll Estates, 1779. (N.B. Population totals for 1792 have been added from the Estate Census of that year and appear in brackets.)

List of families residing on His Grace the Duke of Argylls Property in Kantyre, distinguishing into Classes the number and Condition of the Men above twelve years of age who now constitute these Families 1st September, 1779.

Farms	1.	2.	3.	4.	5.	6.	7.
<u>KILCOLMKILN PARISH</u>							
Machribeg	4	2	2	7	1	12	(38)
Machrimore	5	3	1	6	2	12	(66)
Machrimore miln	16	1	1	.	15	17	(107)
Knockbaan	1	1	.	2	.	3	(8)
Monroy	3	1	.	3	2	6	(11)
Laigh Remuil	2	1	.	1	1	3	(13)
Feochaig	4	3	.	1	1	5	(32)
Auchinsawl	2	1	1	4	1	7	(10)
Borgadilmore	.	.	.	.	.	.	....
Borgadilbeg	1	.	.	1	1	2	....
Glenmanuilt	3	1	1	1	2	5	(10)
Cuilenlongairt	6	2	1	2	4	9	(27)
Glenadill	1	.	.	2	1	3	(3)
Ballivianan	4	2	1	1	2	6	(27)
Corrylack	1	1	.	1	.	2	(6)
Innendownan	.	.	.	.	.	.	....
Ballimontgomery	1	.	.	1	1	2	....
Strone	1	.	.	.	1	1	(4)
Mucklach	2	1	3	1	1	6	(17)
Cattadilmore	1	1	1	1	3	6	(21)
Ballinamoile & Ballimacvicar	.	.	.	.	.	.	....
Ballimaconlich	.	.	.	.	.	.	(6)
Innengoich	1	1	2	.	.	3	(6)
Ballibrenan	5	2	3	4	3	12	(25)

Farms	1.	2.	3.	4.	5.	6.	7.
Kerrifuar	2	1	2	.	1	4	(23)
Drummanrianach	1	1	2	1	.	4	(24)
Innencocallich	1	.	.	.	1	1	(11)
Ormsary	3	1	.	2	2	5	(33)
Lailt	4				4	4	(18)
Amod	5	2	2		5	9	(18)
Dalsmirran	1				1	1	(15)
Dailbraddan	1	1	3			4	(17)
High Gartvain	2	2		2		4	(32)
Brecklate	4	1	2	2	3	8	(20)
Knockstaplebeg	2	1	.	4	1	6	(12)
Brunerican	4	3	1	3	1	8	(17)
Laigh Gartvain	1	1	.	3	.	4	(13)
Keprigan	3	2	.	2	1	5	(35)
Kilirvan	4	2	3	5	2	12	(30)
North Carrine	4	2	1	2	2	7	(49)
South Carrine	3	2	1	2	1	6	....
Innenbea	1	1	.	2	.	3	
Total in Kilcolmkiln	117	47	34	69	67	217	(866)

KILBLAAN PARISH

Christolach	3	2	2	1	1	6	(24)
Dailmore	5	2	3	1	3	9	(26)
Kildavy	9	7	8	1	2	18	(8)
Kilchattan	2				2	2	(10)
Kerranbeg	3	2		2	1	5	(10)
Gartnacorach	1			3	1	4	(8)
Succoth	1	1	3			4	(40)
Glennahorvy	5	5	1	2	2	10	(10)
Caintoig	2	1			1	2	(76)
Pollivuline	11	6	7	3	6	22	(23)
Erradill	2			1	2	3	(29)
Kilblaan	5	3		4	2	9	(9)
Kerranmore	2	1	1		1	3	(18)
Glenmurill	1	1	1			2	....
Innenmore	1			1	1	2	....
Innenbeg	1				1	1	(20)
Corphine	3	2			1	3	(9)
Upper Gartloisken	1			1	1	2	(7)
Ellerick	1				1	1	(14)
Knocknagrein	2	1	1	1	1	4	(13)
Dailbuy	2	1	3	1	1	6	(22)
Laigh Gartloisken	4	2	2	2	2	8	(33)
Dungless	4	3	3	2	1	9	(13)
Innishroil	1	1	2		2	5	
Total in Kilblaan	72	41	37	26	36	140	(500)

1. Families 2. Tacksmen 3. Tacksmen's Sons 4. Servants
5. Cottars 6 Total 7. Total population in 1792.

social connotation of the term had almost entirely disappeared. The discrepancy between the numbers of tacksmen and numbers of families on the farms is considerable in some cases, and it is obvious that more than half of the population had become tenurially redundant giving rise to a numerically strong class of servants and cottars. The equalitarian aspects of runrig had disappeared. Considerable differentiation in status existed by the end of the eighteenth century in these rural communities.

The subdivision and consolidation of holdings was commented on in 1813 by Smith (261:32), who recommended similar innovations elsewhere in the county. He also claimed that other proprietors were following the Duke's example in Kintyre. "It is but doing bare justice to the greatest proprietor in the county, to say, that he has uniformly encouraged population and moderate possessions, refusing frequently the higher offers of the few for what was held by the many, and dividing his farms, instead of accumulating them like many others. In all his Grace's estate in Kintyre there is but one large sheep stock and this is not given to one, but to several" (261:33). Such consolidation was in the best interests of the community in the end, but it is obvious from the 1779 census that a considerable landless class had been created with the disintegration of runrig.

The maps for 1841 and 1891 (Fig.15) were constructed using the same method as for the earlier maps and are based on farm population totals extracted from MS census returns (C.E.B.:Southend 1841, 1891). These maps refer to the total population in their respective years and are not sample maps in the sense that those for the eighteenth century provide only a sample distribution of their periods. Still, in 1841, the distribution of population and sizes of community groupings were similar to those of the eighteenth century. Only in the western parts of the parish had there been contraction of settlement and population, and this only from extreme sites on the steep west coast. Many communities were still large numerically, and runrig lingered on in more inaccessible areas like Glen Hervie. A new element had come into being in the settlement pattern of the parish in the village of Southend, intended to be called Newton Argyll (54:426). About 1800

POPULATION DISTRIBUTION SOUTHEND

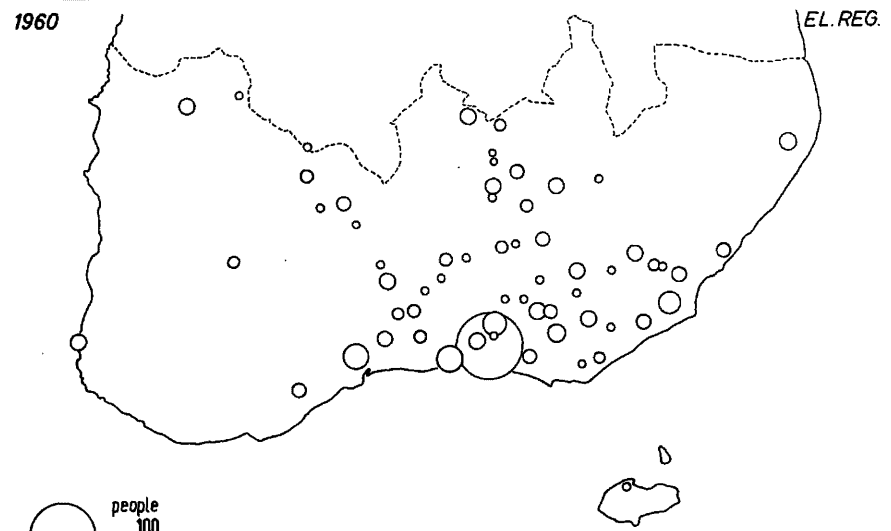
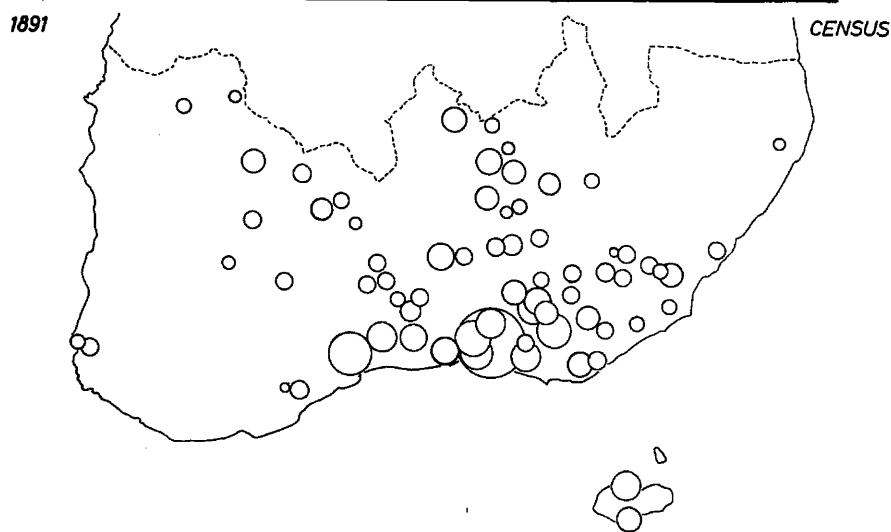


Fig. 15.

this planned estate village replaced the joint-farm of Muneroy (or Monroy) and was to act as a local service centre and fishing village, to absorb some of the surplus population created due to the decline in the total number of tenancies in the parish. Continued existence of large farm populations in 1841 is explicable in terms of the time taken to complete enclosure and drainage of the now consolidated farm lands. For this work a large labour force was necessary. Work was available for dispossessed families for some decades, so that the change-over from purely runrig conditions to the modern pattern of farms was a protracted process. In 1843 we are told that over the preceding 12 years the tenants of the parish had increased the arable area by one third through drainage. Presumably this referred to the extension of improvement to the old outfield areas. At this time also lime was being applied liberally to arable land for soil improvement, but enclosure was still regarded as inadequate (54:passim).

By 1891 the picture had been radically changed. Most farm populations had decreased to fewer than twenty people, representing the families of a principal tenant, possibly a shepherd, and sometimes some servants or possibly a cottar, though the last was most unusual. During the half century up to 1891 the number of full-time shepherds had increased from none to twenty-four, if the census occupations may be relied upon. At the same time Southend village maintained its population and only along the south coast of the parish was there a considerable concentration of people. More people in specialised occupations were living in or near the village than had done in 1841, and during this period the number listed in the census returns as farmers, presumably those who held leases, decreased from seventy-six to forty-nine. The Balnabraid glen in the east, on the boundary with Campbeltown parish had been cleared for sheep by 1841, and the clearance of Glen Hervie followed soon after. Most of the area above 250 feet had been put under sheep by mid-century, a change which inevitably affected many marginal settlement sites.

The map constructed for 1960 again uses the same method of portraying population distribution, but this time is based on the electoral register. Thus it is a sample map, and refers to the resident population over twenty-one years of age. However, if a

crude correction of treble the number of children at school in the parish (five to eleven years old) is applied about one hundred and forty would have to be added to the electoral register. If this were spread proportionally over the whole area, none of the circles would be significantly altered, for present purposes, and the sample will serve adequately. Today, each farm is essentially a single family concern, though there are some agricultural labourers and their families living in cottages in the Conie Glen, in the village, and in some new County Council houses, almost on the site of the old Machrimore Mill clachan. The only numerically large settlement is the village itself which has taken on tourist characteristics during the past half century but has lost much of its identity as a rural service centre due to the mechanization of farming. There has been further contraction of settlement and population in the west of the parish, but otherwise most settlements have maintained their existence.

Changes are equally apparent considering the course of population growth and decline since the mid-eighteenth century. The population graph (Fig.16) indicates continuous growth till 1831, but there is evidence to suggest that this is a false impression (Table 7). An estimate based on the 1792 figure for the Argyll Estates suggests

Table 7.
Population Densities

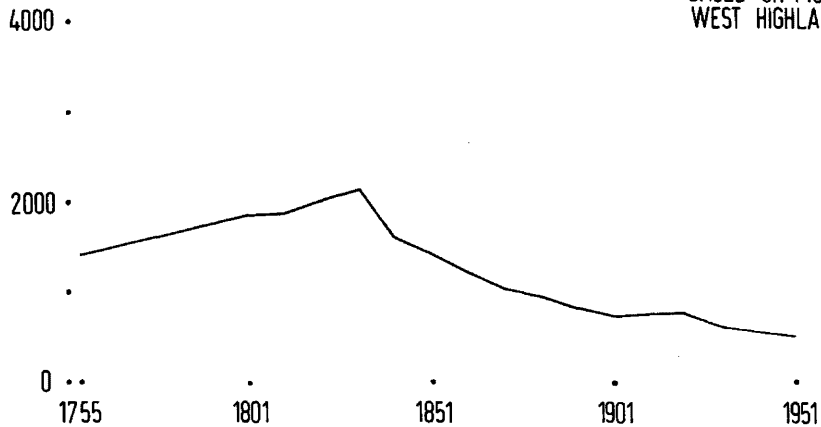
Year	Population	No. of Occupied houses.	No. of persons per Occupied House.	No. of persons per sq. mile.
1755	1391 ₂	290 ¹	4.8	26.8
1792	1818 ²			37.7
1841	1591	273	5.8	33.0
1891	829	154	5.3	17.2
1951	522 ₃	131	4.0	10.9
1960	502 ³			10.4

1. Appendix 1, Table.
2. Estimate based on Argyll Estates Census, 1792, and proportion of 1841 total population over the same area.
3. Estimate of Electoral Register plus three times the local school population. This is known to be an over-estimate, but it seems unlikely that the correction is as little as twice the school population which would give a density of 9.5 people per square mile.

that the actual peak of population was earlier, possibly about 1800.

GROWTH AND DECLINE OF POPULATION Southend

BASED ON FIGURES FROM
WEST HIGHLAND SURVEY.



POPULATION STRUCTURE

Argyll Estates, Southend

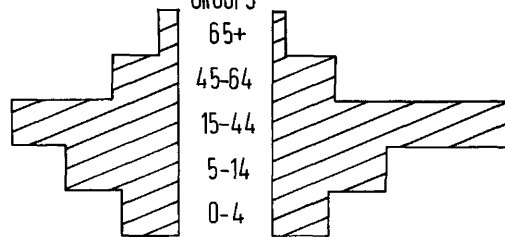
MALES

AGE
GROUPS

FEMALES

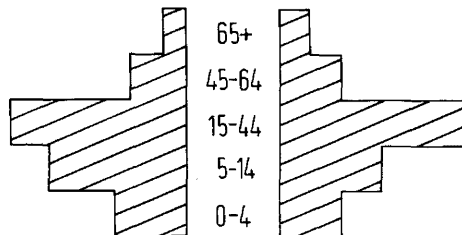
1792

ARGYLL ESTATES CENSUS



1841

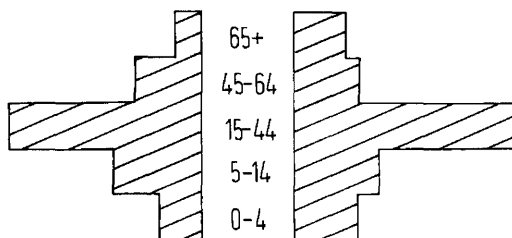
CENSUS



1891

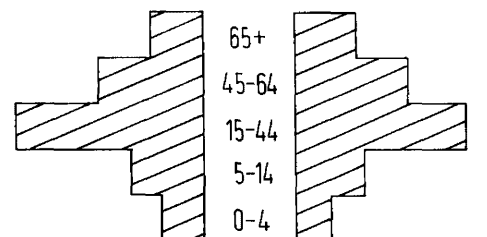
CENSUS

Kintyre (landward)



1951

CENSUS



20 15 10 5 0 0 5 10 15 20
% OF TOTAL POPULATION

During the nineteenth century there was, then, continual decline in the level of population, more severe during the first forty years, and then the rate of decrease falling off. Decline has continued during the present century, but much more slowly. In the 1950's the rate of decline has fallen to about 0.5 per cent per annum, and there is every sign of approaching stability in the level of population in the parish. The rapid decline at the beginning of the nineteenth century is associated with the rise of extensive sheep farming in the higher areas of the parish, and also with the realisation by the new landless class that the future held little for them at home. Once the greater part of agricultural improvement had been completed they were forced, economically, to move elsewhere.

Over the same two centuries the age and sex structure of the population has altered. As long as a subsistence economy remained and disease was endemic, the population was a relatively young one. One of the noticeable population characteristics of the subsequent period has been the gradual ageing of the population. In 1792 the group over sixty-four years of age was distinctly smaller than that under five years old. In 1951, the comparable diagram for the whole of Kintyre indicates a reversal of this pattern, and likewise the group between forty-five and sixty-four now exceeds that between five and fourteen years old. So, proportionally, there are now more people in a retired or semi-retired position in the community, and the real agricultural labour force is smaller than the foregoing maps would suggest.

Until the end of last century there was a predominance of women, however slight, within the working age groups between fifteen and forty-four years of age. Again, in the twentieth century this pattern is reversed. Reasons suggested elsewhere for the excess of women over men in 1792 are not valid for the nineteenth century, for by 1841 there was no military reason for men being absent in considerable numbers as there possibly was in 1792 (Chapter 6). It may be that men were forced to work away from the parish due to lack of agricultural opportunities, as they were doing from Ardnamurchan during the same period (Chapter 9). Such lack of opportunity was an inevitable result

of the consolidation of holdings which had gone before. Today, in a smaller total population, it is the women who have moved to seek employment elsewhere, following a trend common among the women of the crofting communities farther north (see Appendix 6). In a rural community of family farms the opportunities for female employment are negligible. This is entirely a twentieth century characteristic, the pattern having been set by the national necessity for women to work outside the home during two wars.

The present circumstances of settlement are summarised in Fig.17. Settlement today is almost totally confined to the area below 250 feet and is concentrated in the low-lying plain of the southeast of the parish and in the major glens radiating from the village of Southend. The exceptions are provided by isolated sheep farms; one at the Mull of Kintyre lighthouse on the west coast, two in the northwest of the parish at the base of Cnoc Moy, and on the steep eastern coast at Sheanachie in Glen Hervie, and at Feochaig.

Apart from the village, and some tourist accommodation near to it, the settlement consists of substantial farm steadings, smaller steadings being found in Glen Breackerie and in the western districts generally where sheep farming is the chief occupation. Larger steadings reminiscent of Lowland areas like Ayrshire characterise the southeast and the Conie Glen, the dairying areas of the parish. The dwellings are now large stone and slate structures, and together with the associated offices, they frequently form three sides of an enclosed court-yard. As has been argued, this pattern dates from the first half of the nineteenth century (135:104-5). At the beginning of the 1800's most tenants were living in the part-derelict remains of the old runrig clachans. Their houses were described as badly in need of repair, and in some cases, irreparable (Argyll:Rosneath No.3, Report on the Duke's Property at Campbeltown and Southend, 1810, p.116). At little Polliwilline the houses and offices were built in a single long row, on Benton Polliwilline the houses were single-storied thatched structures (Ibid:92-3). The Duke's Chamberlain at this time was John Lorne Stewart, who, with his successor, introduced the Lowland type of steading to Kintyre (Kintyre Antiq.

Soc. Library No. KAS 250/30. Dugald Macintyre.Campbeltown Library). Improvement was well advanced under Stewart, for Smith in 1813 noticed farms "Between Campbeltown and Southend ... inclosed by ditch and hedge" implying that separate dwellings had already been established on the consolidated holdings of this area (250:27). In 1843, Kelly pointed to a social distinction in local housing in his parish (54:423). The landless families were still mostly housed in mud-walled thatched buildings, almost certainly in the remains of the old clachans, but the farmers (that is, tenants holding leases) were housed in well-built stone structures, though still roofed with thatch.

Peripherally to the distribution of modern settlement lie the areas of abandoned habitation. These are found in the upper reaches of all the glens except the Conie Glen, and along the west and east coasts of the parish. With exceptions in the Strone, Glenmanuilt and Borgadale Glens, all the abandoned settlements lie near or above 250 feet and associated with all of them are extensive areas of old cultivation rigs - the old infield and outfield of the runrig communities. Thus it is to the boundary area between the modern cultivable land and the hill grazing that we turn to seek field evidence relating to the form of settlements occupied before the mid-nineteenth century. Nine sites in these areas in Southend were visited the details of which are summarised in Appendix 3a, where photographs and sketch plans of representative examples are also included. The 'Innean' settlements, represented by Balmavicar, stand apart morphologically, and apparently typologically, from most other sites visited in the field. At Balmavicar the houses are smaller and narrower than the houses in other clachans in Southend, and occasional archaic features, such as rounded corners, are noticeable. In form the group of buildings is entirely amorphous, unlike the others which have their houses laid out on a linear or rectangular basis. The west coast settlements were cleared about 1816 or 1817, whereas every other site visited in the field appears in rentals later than this. It is suggested that the extant ruined settlements we see are divisible into two groups. There are sites, like Balmavicar, which were demonstrably occupied only marginally into the nineteenth century before being completely

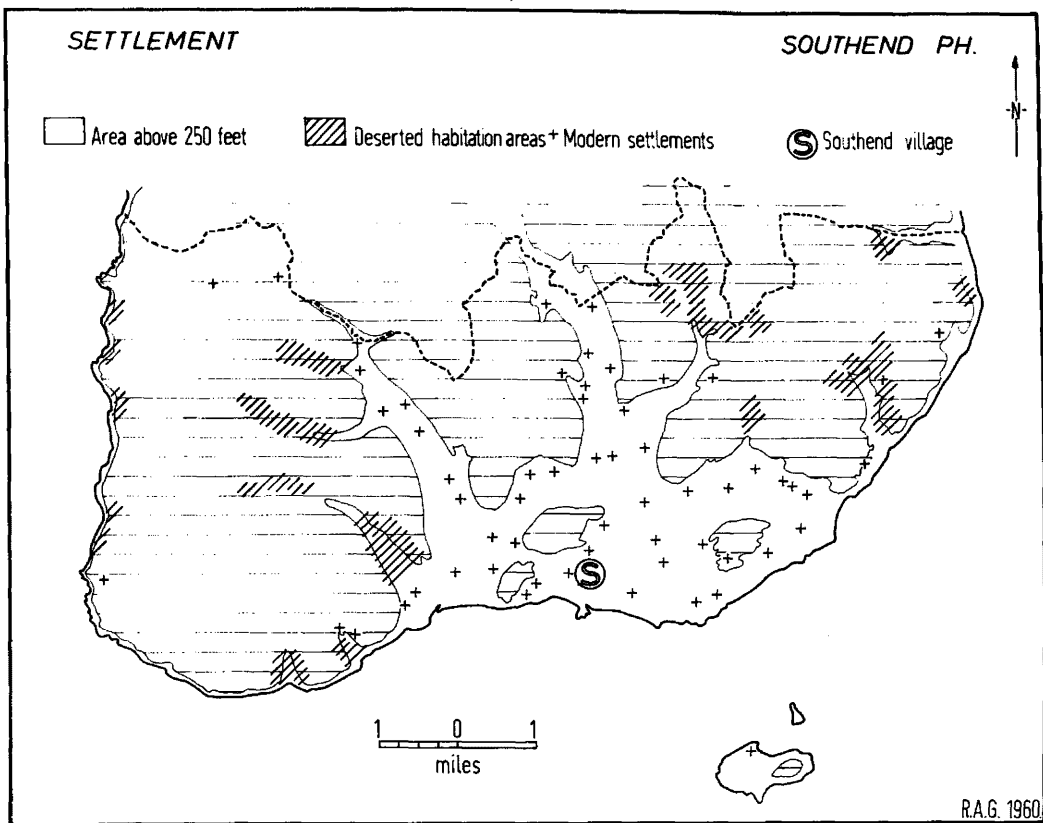


Fig. 17.

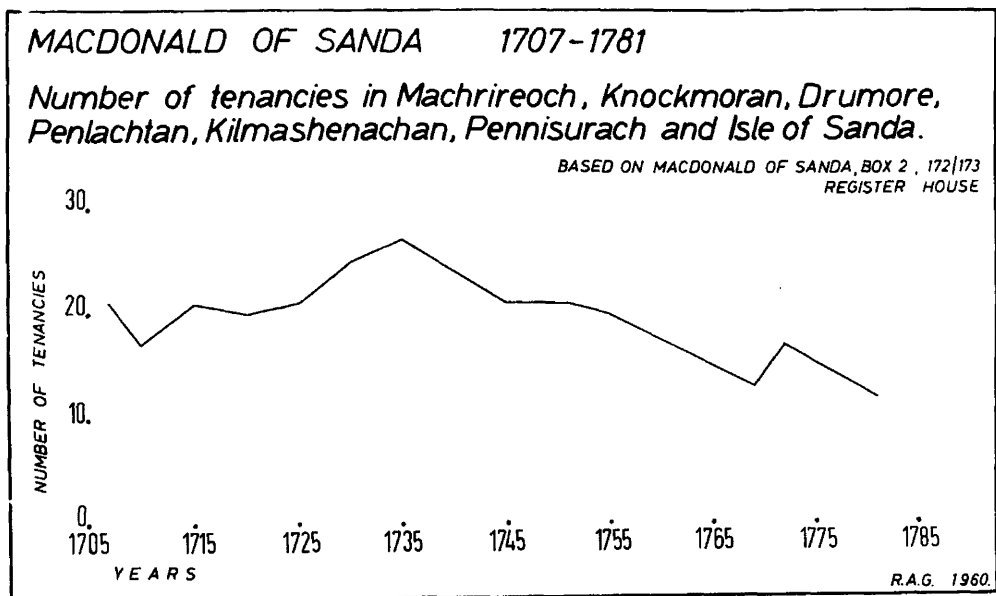


Fig. 18.

abandoned, and whose form may be typical of settlements of the later eighteenth century, and there are sites of more regular and substantial appearance which were occupied until much later into the nineteenth century. It can not, however, be proved that any ruined clachan in its present form is definitely earlier than 1800. All the sites examined on the ground were stone built, but there are many references, even into the nineteenth century, one of which has been quoted above, to suggest that the houses in the earlier clachans were built of impermanent materials.

Considering both occupied and ruined settlements, we see in the present settlement pattern two contrasting forms - the isolated farm steading dating from the mid-nineteenth century, and the ruined nucleations of smaller houses, generally without out-buildings, sited at higher altitudes similar to the sites from which and presumably over which the isolated farm steadings of today have evolved in the lower areas. The village of Southend provides something of a link, for it was laid out in its present form while clachan settlement still predominated in the parish, and it has remained, admittedly with altered functions, after the clachans have totally disappeared. The village now lives largely off a summer tourist trade and caters for the needs of some elderly retired people, as well as having one of the two parish schools, both churches, a post office, and some minor services. Most of the original trade occupations typical of the village at the beginning of the nineteenth century have been replaced by a motor garage which caters not only for motor cars but also for some servicing of agricultural machinery. However, in the modern period when rapid transport is the norm, Campbeltown, supplies nearly all the needs of the local rural community.

The gradual disintegration of clachan settlement, for there was no sudden change, may be gauged statistically by considering tenancy changes over a period of time. It is admitted that the number of lease-holding tenants in a clachan does not reflect exactly the size of the clachan, and that there was a time lag between the initial establishment of single tenancies and the final disappearance of clachan settlement with the institution of single-family steadings.

Allowing for this, changes in tenancies do indicate the rate at which clachan settlement disintegrated as rural values and practices changed through time. Even early on in the eighteenth century, tenancy changes were noticeable in some estates. Graphical analysis of the number of tenancies on part of the Sanda Estate in Southend, between 1707 and 1781, shows periodic fluctuations (Fig.18), but there was a general tendency for increase until the latter part of the 1730's, and thereafter gradual decline. Before 1735 population increase meant the gradual increase of clachan populations, and under runrig, room was made for an increasing number of tenancies by decreasing the size of each individual holding. The fact that the change takes place in the 1730's is suggestive of influence from the neighbouring Argyll Estates on which parallel changes were introduced about the same time or slightly earlier (Chapter 6). Thereafter, though the number of tenancies declined continually, except between 1770 and 1775, and the number of tenancies over the whole period was almost halved, it is unlikely that the clachans suffered an equal and immediate diminution in size. The drift from the land did not come until enclosure and drainage of land were well under way in the first half of the nineteenth century. But the basis for the ultimate decrease in clachan size, and the final dissolution of the clachans on the Sanda Estate, was inherent in the eighteenth century circumstances of that estate.

For the farms of the Argyll Estates in Southend, it has been possible to study the dissolution of the multiple tenancy over a period of about a century, including the critical period between 1790 and 1830. Four maps have been prepared from rentals, representing the number of tenancies on the various farms by graded, not proportional circles. These show the tenurial circumstances of the estate in the years 1768, 1792, 1818 and 1853-54. Changes which have been noted already reappear here, including the sub-division of Polliwilline and Kildavie between 1768 and 1792, and the disappearance of the west coast settlements before 1818 (Figs. 19 and 20). It appears that since the mid-eighteenth century there were few multiple tenancies in the western part of the parish. This has

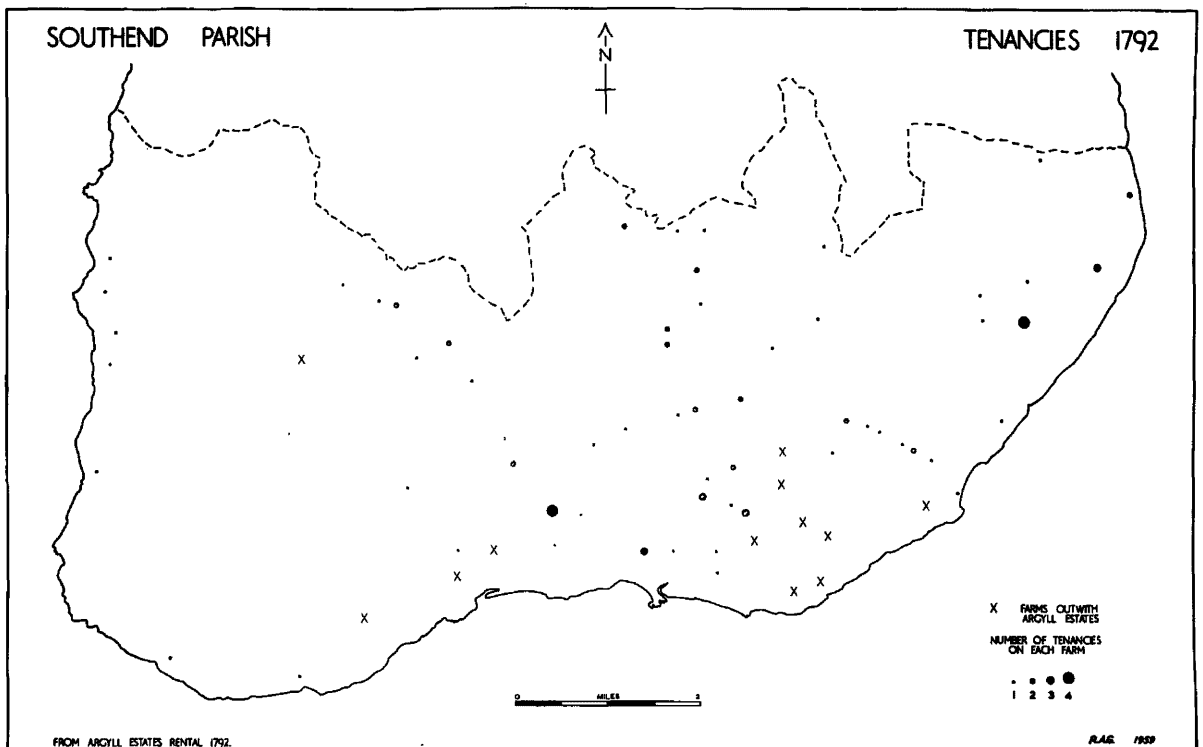
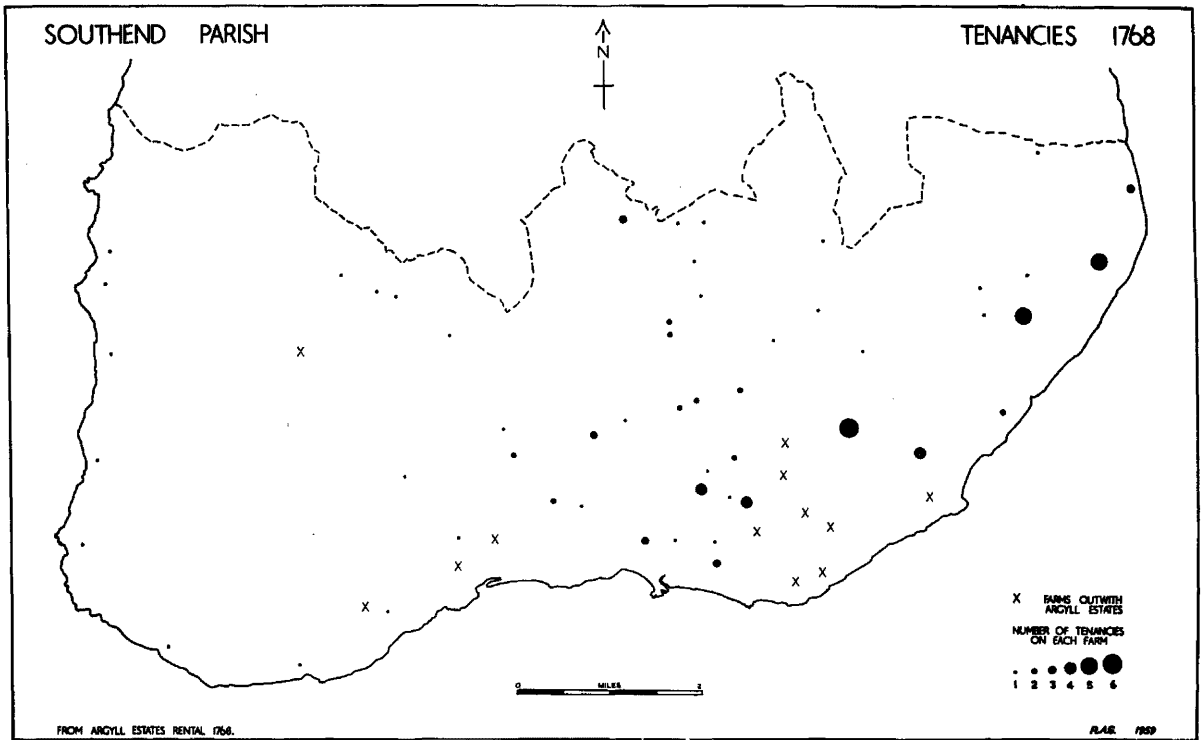


Fig. 19.

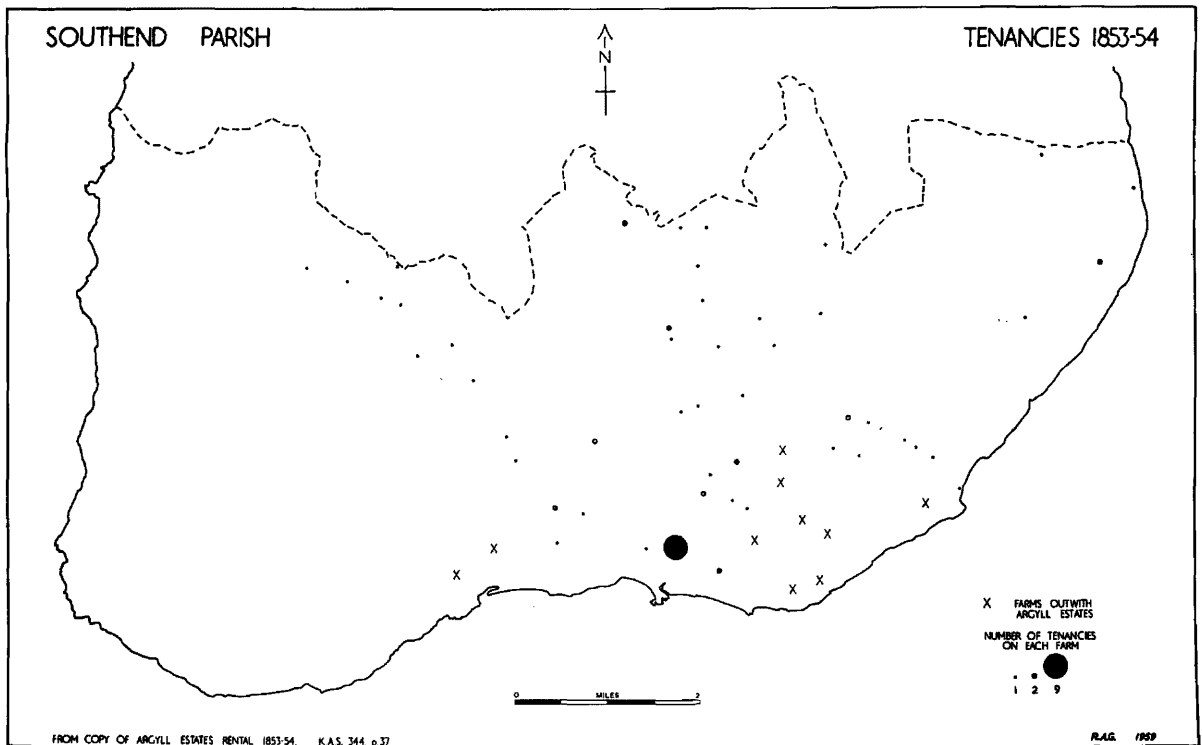
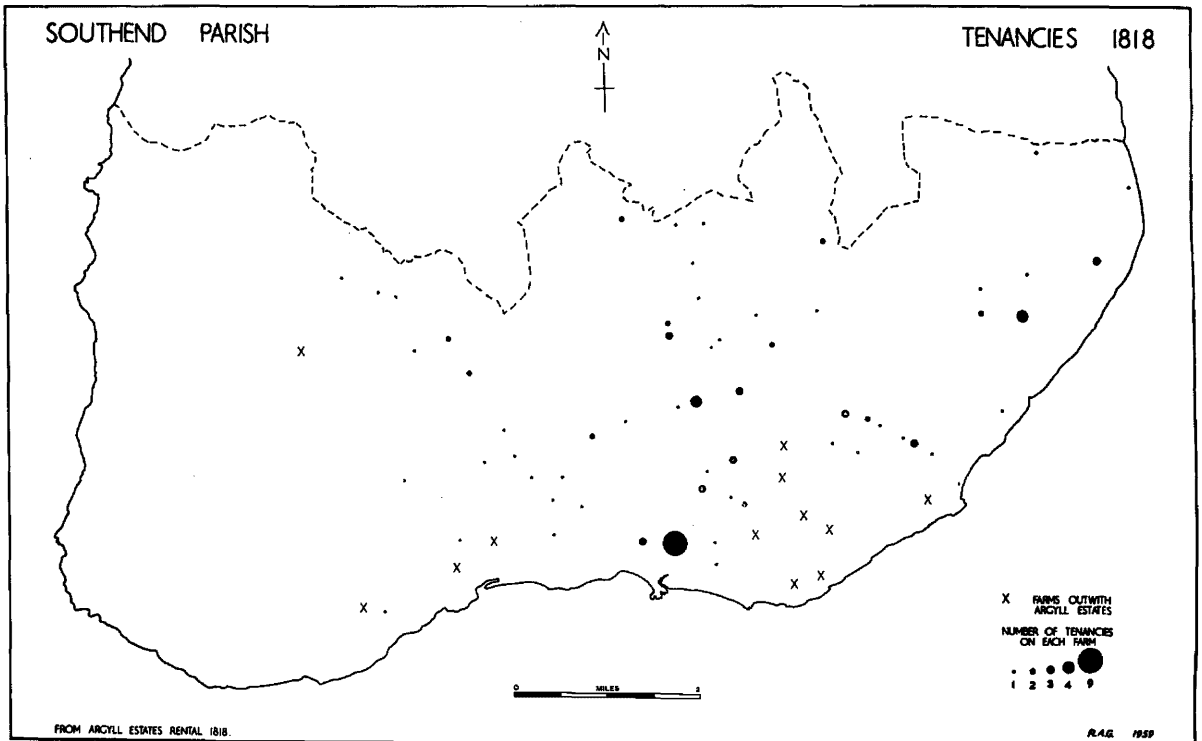


Fig. 20.

always been a pastoral area, unsuited to cultivation due to topography, but clachans did exist which housed communities consisting of a tenant and his family together with either relatives and their families, or cottar or servant families. In any of these cases it was only the tenant who was named in the rentals. Where double tenancies occurred in this western area, they consisted of brothers or other close relatives working and holding a single farm, though both were technically separate tenants.

It was in the arable areas of the southeast and the Conie Glen that the greatest changes in tenancies took place. Here, and in Glen Hervie and at Feochaig, up to six tenancies were common on farms, but between 1768 and 1792, the majority of these were reduced to double tenancies at most, except one in Glen Hervie which retained four joint-tenants. The final decline from double to single tenancies came between 1818 and 1853, and during this same period the whole of Glen Hervie and its tributary glens became a single tenancy in the form of a sheep farm. The other apparent change was the appearance of Southend village which included nine small-holdings and so appears on the maps showing the tenancy of holdings.

The conclusion to be drawn from these maps is that clachans decreased in size continually after 1750, but they persisted as a settlement form till after 1820 when, as has been noted, the single large farm-steading originated in the area. Though Clerk in 1878 was writing of the Laggan in Campbeltown Parish, his remarks were equally applicable to the arable dairying areas of Southend, when he said "This flat or plain is now highly cultivated, the system followed being much the same as in Ayrshire, with which it has fully as much connection as with the other portions of Argyllshire ..", and later, "The mode of management here is so nearly the same as in Ayrshire and other parts of the low country, that it is needless to go into any details" (91:42). In its dairying economy and in its settlement pattern, Southend became almost a part of Lowland Scotland in the Highlands, paralleling a geological distribution which provided part of the basis for the transformation of the rural landscape, once the necessary

circumstances existed within the human milieu.

If this pattern of change was typical of the southeast plain and the principal glens of the parish, Glen Hervie may be taken to represent the changes experienced in the minor glens, many of which were inaccessible, especially on the east coast, and also at higher altitudes in the interior of the parish. In these areas the sequence of events discussed for the west coast was also found, but at a later date (Fig.21).

Until after 1820 all of the clachans in Glen Hervie remained inhabited, though diminished in size from their maximum attained about 1800. There were seven groups of houses in the glen and its tributaries. Associated with these most of the land below 450 feet, except on very steep slopes, was cultivated in runrig. The only dykes were boundary dykes between the lands of each settlement and the head-dyke which in parts was missing. Occasionally there were sub-divisions, probably between infield and outfield land, and two of the clachans at least had small enclosures close to the houses. These were all feal dykes, and after a century under sheep they are often difficult to locate in the field.

The glen today looks almost desolate. Only at Glenhervie itself is there any extent of cultivable land, for it is a combined sheep and dairy farm. Sheanachie, the other settlement in the glen, is a sheep farm with little land for arable purposes attached. The old clachans are in ruins, the old arable land derelict with its drainage neglected and the tops of the rigs carpeted with bracken. A glen which supported possibly twenty families, admittedly in very different economic circumstances from those now acceptable, today supports two families. The change-over to extensive sheep farming took place between 1841 (Fig.15) and 1850 (Fig.20), and now the old arable areas provide only better-than-average grazing, used particularly in bad weather and in winter when the glen provides shelter for the sheep. To this period must be assigned the abandonment of the clachans in Glen Hervie.

Morphologically, all the ruined clachans are either linear or rectangular, suggesting that they date from the beginning of the

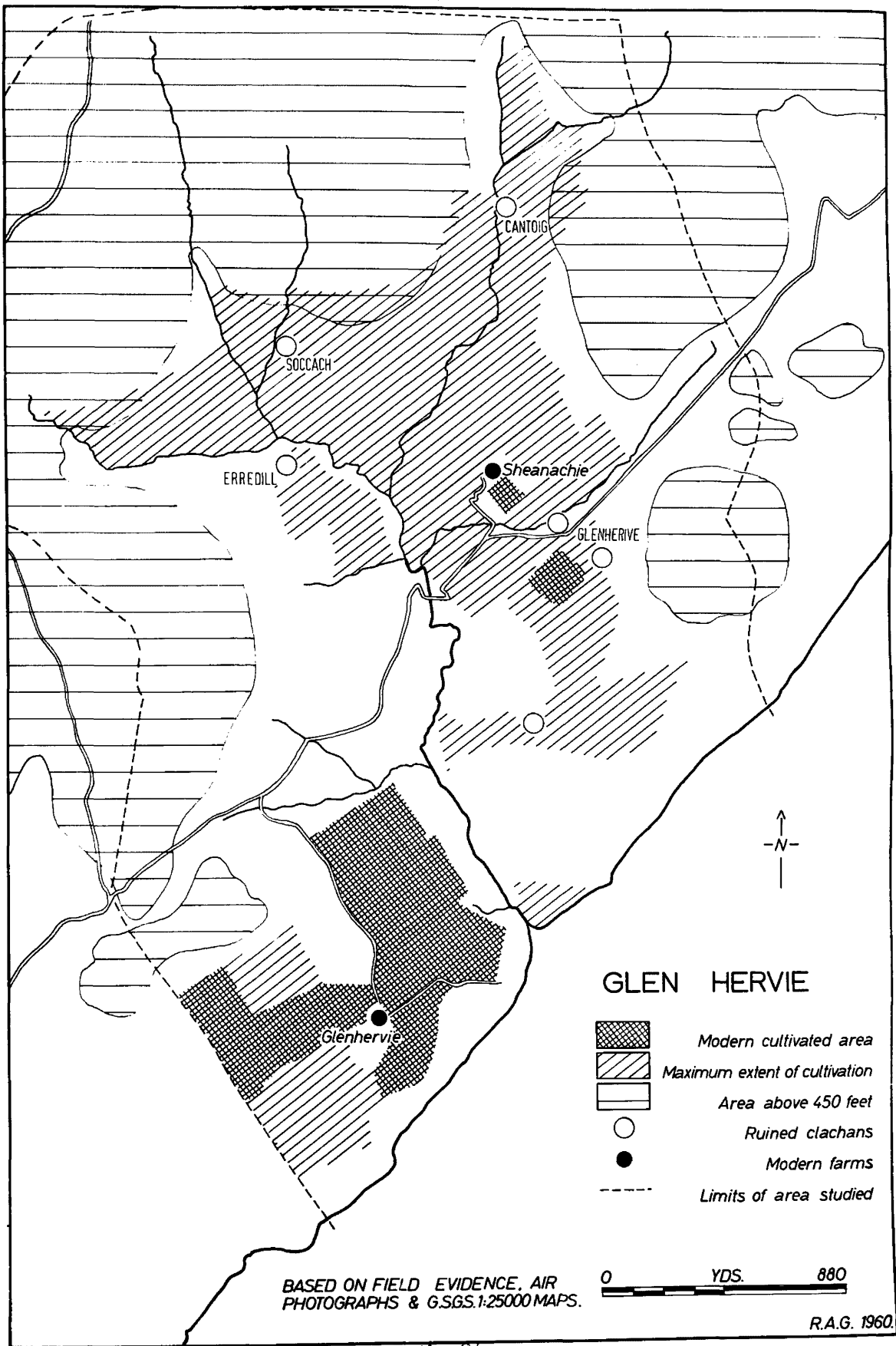


Fig. 21.

nineteenth century as their ruins stand (Appendix 3a, Fig.1.). Probably the ruins represent the maximum sizes of these settlements. Further evidence for this dating, or at least evidence which provides an ante quem non, is the fact that the distinctly rectangular site of Soccach had a lime-kiln associated with it. The burning of lime for agricultural purposes dates to the beginning of the nineteenth century in the area (see above). There is a possibility that Erredill also had a lime-kiln. These kilns may be distinguished from the smaller corn-drying kilns found on many ruined sites, by their size and often also by their better state of preservation and shape. However, confusion can arise, and in many cases it is impossible to determine, without excavation, which type of kiln existed.

Two distinct cultural landscapes are evident in Southend. These are partly complementary to each other. In each case the ultimate processes effecting changes are identical, but as these were applied to differing physical and human environments, the end-results have diverged considerably. In the lower fertile southeast plain and in the Conie Glen and Glen Breackerie, there has been continuity of settlement and a gradual evolution from joint-farm clachans in the early part of the nineteenth century to the modern isolated farmsteadings. This change has been an integral part of the emergence of dairy farming from a subsistence rural economy in the runrig period. In contrast to this gradual evolution, the changes have been much more sudden in all the settled areas above about 250 feet. The majority of communities in these areas seem always to have been small. The final abandonment of settlements and dereliction of what today is marginal land arrived with the introduction of sheep in large numbers. This occurred between 1800 and 1850 and brought the re-emergence of a class of substantial farmers holding large areas of land, but unlike their earlier counterparts, the tacksmen, they had no sub-tenants and were served only by a few full-time shepherds. The clachans were replaced by the steadings of the sheep farms, themselves smaller than the buildings of the dairy farms at lower altitudes, for sheep do not normally need to be housed. Many of the old settlement sites have been replaced by sheep fanks built of stones from the old houses.

These changes in settlement were interwoven with changes in population total and structure. Table 7 indicates that the drop in number of occupied houses came particularly between 1841 and 1891, the period to which the final dissolution of the clachans belongs. While settlement has contracted markedly, population contraction has been even more considerable. As rising standards of living have demanded, the number of people per occupied house in the parish has declined. It should be noted, however, that though the considerable decrease in population was a nineteenth century phenomenon, the significant lowering of the number of people per occupied house belongs to the twentieth century. In Southend, the changes in settlement and population, and the relationships between these changes, have not all occurred at the same time, or at the same rates.

The rental of 1769 shows that the town and lands of Inverness were held by seven joint-tenants, Ashbrooks and also the inn at Southend were held by a tackman who almost certainly had sub-tenants. Another tackman occupied the small mill farm of Berryhead with which we are here not concerned (Inverness: Record Book, 1st, 2). This is the position shown in the upper of the two maps, Fig. 22, the original of which ante-dated the 1769 rental and

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Chapter 8.

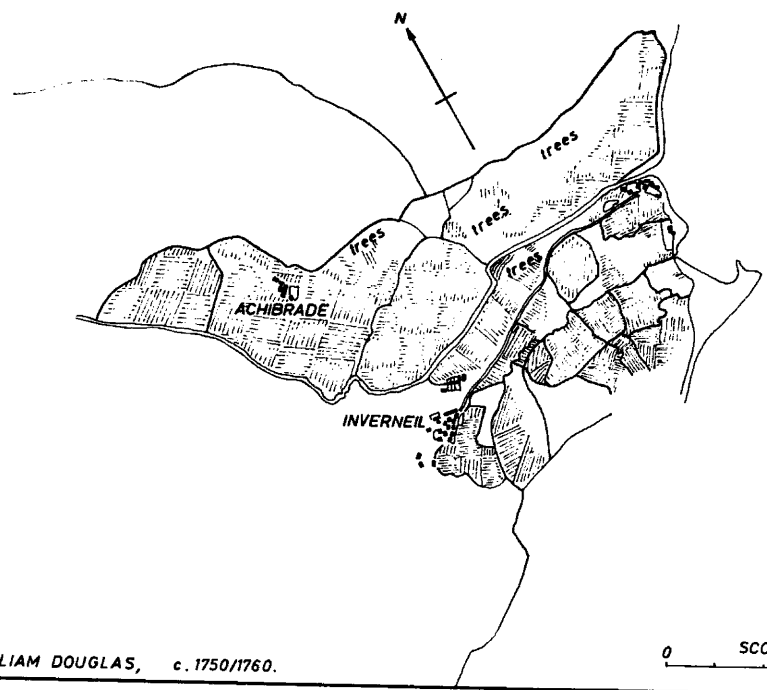
SETTLEMENT CHANGES IN KNAPDALE

As in Southend the evolution of the present rural pattern of the district of Knapdale involved changes which were evolutionary in character and others which were revolutionary. At least three distinct types of enclosure and settlement pattern are recognisable associated with different types of change in different periods.

The existence and planting of policies in the mid-eighteenth century has been discussed in Chapter 6. This movement continued into the nineteenth century when the example of Inverneil on Loch Fyneside in Knapdale is particularly well documented. The property was bought on behalf of Sir Archibald Campbell (as he later became) by his two brothers who acted as trustees while he was in India as an engineer with the East India Company, and later when he was a prisoner in America during the War of Independence. His brothers were resident in Argyll; one was tacksman of the sheep farm of Kilian south of Inveraray while the other was a lawyer in Inveraray. Inverneil was bought in 1772 from Wilson of Soonhope (Inverneil: Record Book, Folio 1st) who had come into possession about 1751 when it was listed in the Valuation of Argyll as the property of Sir James Campbell of Achinbreck. The Achinbreck family had possessed it for a considerable time, being mentioned as proprietors in a Teind Valuation Rental of 1629-30 (Inverneil: Copy of the Rental of the Parish of Kilvickocharmaig...).

A rental of 1769 shows that "the town and lands of Inverneil" were held by seven joint-tenants, Achbrade and also the Inn and its croft were held by a tacksman who almost certainly had sub-tenants, and another tacksman occupied the small muir farm of Derrymackmurchie with which we are here not concerned (Inverneil: Record Book, Folio 1st, 2). This is the position shown in the upper of the two maps in Fig.22, the original of which ante-dated the 1769 rental and was obviously handed over by Wilson when the Campbells purchased Inverneil in 1772. The three amorphous clachans are plainly seen and it appears that the original mansion house was immediately north of the clachan

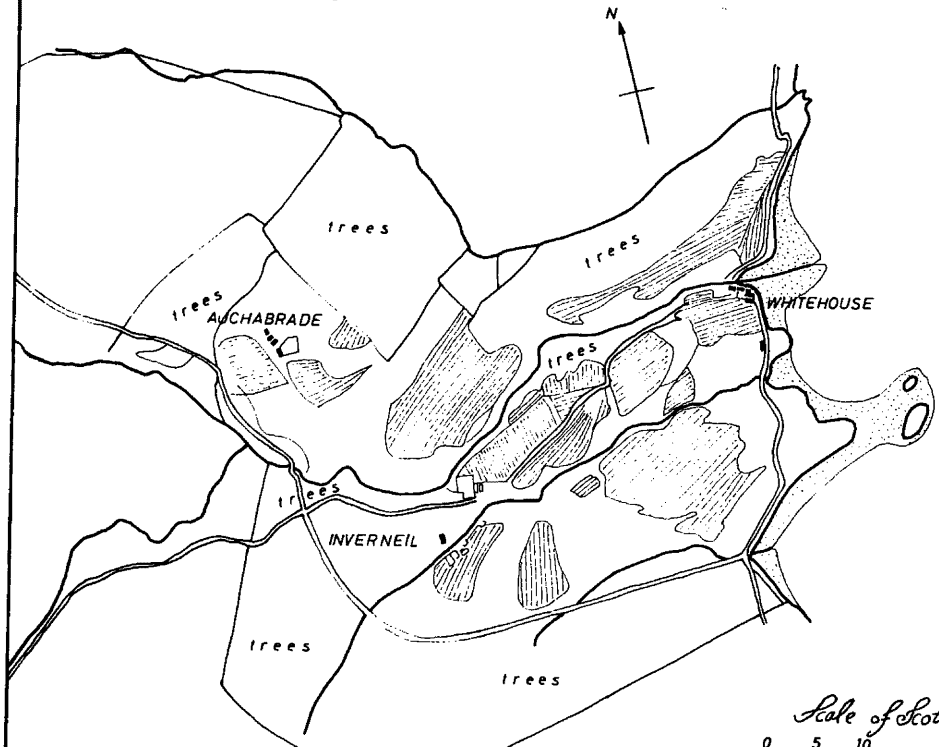
INVERNEIL c.1755



AFTER WILLIAM DOUGLAS, c.1750/1760.

0 SCOTS CHAINS 36

INVERNEIL 1776



AFTER TAYLOR & SKINNER, 1776.

Scale of Scotch Chains
0 5 10 35

R.A.G. 1960.

Fig. 22.

of Inverneil. The Inn was part of the unnamed cluster of houses which later sources name Whitehouse, at the mouth of the burn. The arable land was open and shown by Douglas in a conventional manner. Trees were few and confined to the area north of the burn. The road was not the modern one along the coast for the Tarbert-Lochgilthead road was not engineered till about the end of the eighteenth century (129:430). Instead, the main route between Campbeltown and Inveraray followed the drove route shown by Haldane (Fig.10). It crossed Knapdale from Loch Fyneside at Inverneil by the Inverneil Glen to Loch Caolisport at Achoishin. This is still the route followed to Kilberry, though the line of road past Inverneil itself was changed when the policies were planted. The 1769 Rental was by way of a summary. Each holding, or "acre" on the estate was separately named in the Rental for 1772 (Inverneil: Record Book, Folio 1st, 13). Though they were separately denominated, these holdings were worked in runrig and enclosure was unknown. From the names in the two rentals it would appear that tenancies changed hands relatively frequently (See Appendix 5). Between 1772 and 1773 there were changes in about half of the holdings in the three farms. Equally it is obvious that there were insufficient tenants to take up all the available land at the rents being sought (Inverneil: Record Book, Folio 1st, 124), which may be one reason why the new proprietors decided on a radical reorganisation of the glen.

Immediately after purchase Sir Archibald's brothers set about planning the "improvement" of Inverneil. "As this estate has been kept in very bad order by the late proprietor there is (sic) many things to be done upon it. There is a great deal of wood that ought to be enclosed as well as March Dykes to be built with neighbouring Heretors for which reason a ffactory ought to be granted by the Trustees to some person they can confide in so that he may set about the above Improvements in time and Secure this years Rent of the present possessors as most of them are in great arrears to Mr. Wilson who will no doubt see to get from them all he can now that he is about to leave them": so wrote the trustees to Sir Archibald in 1772 (Inverneil: Letter Book, Sir James Campbell Kt. 1771-1773,

letter dated 20/9/1772). The lands were relet to the original tenants in 1773, and also again in 1774 when a tenant was found for every holding. (Inverneil: Record Book, Folio 1st, 142).

The initiation of the improvements came about in 1775. The rental under tenants had been in the region of £110 per annum, but for 1775 the combined rental of Inverneil and Derrymackmurchie was only £13.5.0, "After the Removal of the Tennants and put under the Masters Stock". This rental was derived from the Inn with its acre and grass for two cows and a horse, and a cottage and potato patch with grass for a cow and a horse for each of two workmen, and the farm of Derrymackmurchie still set on a tacksman. A note was added at the bottom of the rental; "The tenants on the Lands of Inverneil and Achabraid was (sic) removed this year and a Stock of Sheep put upon the Hill and Breeding Mares upon the Low Ground and an Improver or Grieve appointed to Rear and Plant Nurserys and Improve the Low Grounds of both Farms - " (Inverneil: Record Book, Folio 1st, 190).

The eighteenth century cartographers, Taylor and Skinner, better known for their road maps of Scotland, were employed by Sir Archibald's trustees to survey the Estates of Inverneil and Knap as a preliminary to improvement. The Knap Estate was bought about 1774 or 1775, but certainly before the estates in North Knapdale were added to Inverneil. The map of Inverneil in 1776 (Fig.22) was completed immediately after the changes discussed above had been effected. Achbrade was shown as a clachan with a single stack-yard, but Inverneil now consisted of a single new house hard by the ruins of the old clachan. We thus have one of the infrequent instances in Argyll where an exact date can be put to the abandonment of a clachan. Inverneil was cleared, quite obviously from the foregoing rental and cartographic evidence, in 1775. Appearing in a 1774 rental, the tenants would have held customary rights until Whitsunday 1775, so that the clearance was probably undertaken in the summer of 1775. Whitehouse remained with its Inn and also the estate corn-mill. Taylor and Skinner's map suggests that some enclosure was under way, and a March Dyke had been built along the southern margins of Inverneil. The petition presented to the Sherriff Depute of Argyll in 1775 "respecting the

Shortening the March of Inverneil" had obviously been granted (Inverneil: Record Book, Folio 1st, 191). The map gave a more accurate picture of the contemporary arable area than did Douglas' map, and there had been no sub-division and enclosure of the inbye land. This came later, but the new griever had started planting trees on the south side of the estate.

The improvements proceeded gradually. In 1786 it was proposed to enlarge the area of land held by the Inn-keeper, or Change-keeper as he was called, "to enable him to have proper provender for travellers' horses (Inverneil: Letter Book, 26/8/1786-2/11/1787, 42-43). The following year it was decided that though a new Inn was needed at Inverneil "as being the best Division and most Central Stage on the Great Line of road from this (the letter was written from Inveraray) to Campbeltown", it would of necessity have to be a modest affair comparable in size with the existing establishment, for the traffic on the road did not warrant a large one (Inverneil: Ibid. m 68-69). Also in 1787, "The planting upon the Estate of Inverneil thrives now better than ever and is thickened Yearly with new plants of Ash, Oak and Sprush (sic) which is found to be better adapted to the soil conditions and more useful timber than Scotch fir" (Inverneil: Ibid.).

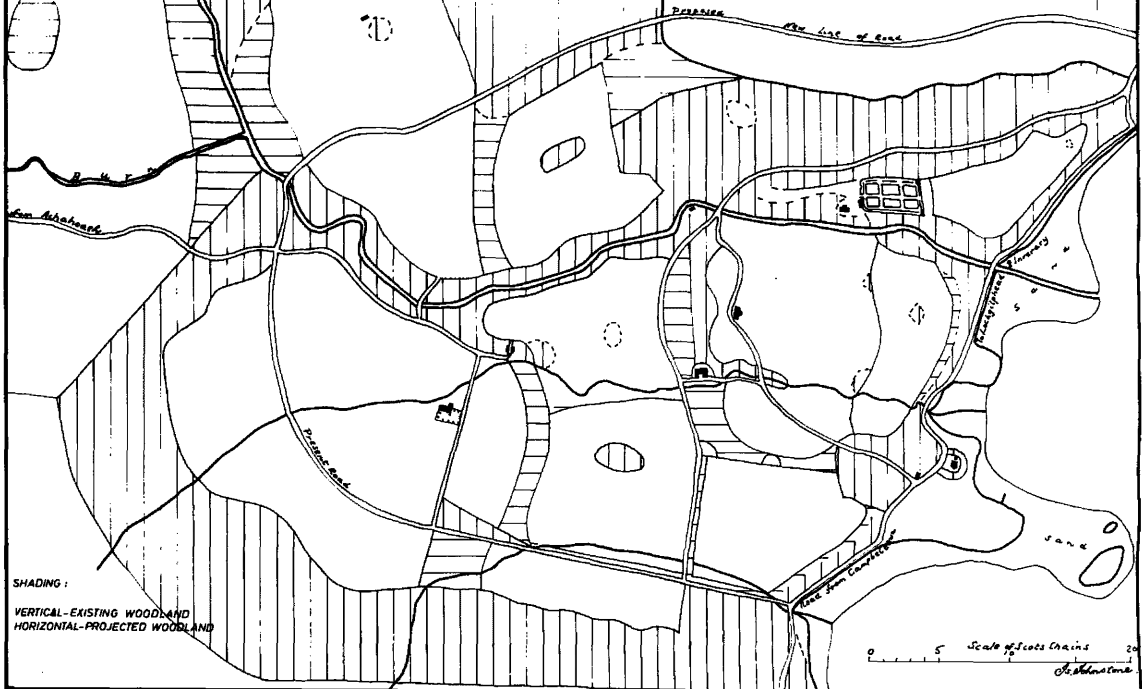
During the early 1790's many letters were written to the shepherd at Inverneil, who replaced the griever and acted not only as shepherd, but also as a ground officer, and even on occasion as a mason. In 1786 he had been sent a stallion to serve the mares of the tenantry of the Inverneil estates throughout Knapdale, and was given strict instructions that no outsiders were to be allowed this estate service (Inverneil: Letter Book, 14/10/1785-17/7/1786, 71-73). There was a conscious attempt at this time to breed, and improve the tenants' stock of cattle and horses. The shepherd acted as an agent for buying and selling produce and foodstuffs from and for the tenants of the farms, and he received frequent instructions to dispose of surplus hay and grazing land. In 1790 some land at Inverneil itself had been let to drovers, presumably to be used as a gathering ground for Kintyre, and Islay and Jura cattle, or for fattening young

beasts before the long trek to the Lowlands. Payment was expected promptly after what was described as one of the best cattle markets ever at Dumbarton in May 1790, where "All were sold by Thursday Night at any price the Drovers asked" (Inverneil: Letter Book, 11/1/1790-21/7/1791, 120-121). From these references it is obvious that the planting of the ornamental policies had not been completed, and equally the Inverneil shepherd was in a position of considerable responsibility, and even power, for his opinion on many subjects and people on the estates was frequently sought.

A plan for the improvement of Inverneil in 1827 makes it plain that even then the laird was not satisfied with what had been achieved, but comparison with the earlier maps shows that the face of the Inverneil glen had been revolutionised in the preceding fifty years, with the development of considerable plantings of trees, ornamentally planned but nevertheless of economic value, and the enclosure and sub-division of the arable land. The plan showed what was envisaged for the future (Fig. 23). House-building had been going on at Inverneil between 1793 and 1794 (Inverneil: Letter Book, 20/11/1792-5/4/1794) and it is probable that the present siting of Inverneil House dates from this period, though the present house is later in style. A mansion with ornamental gardens had been built by 1827 and woods screened it from the roads, but the modern line of the Kilberry road to the north of the house had still to come into being, as it was only projected on the plan. It was intended that the farm of Achbrade should disappear, but this never happened, the farm steadings remaining today. Otherwise, as comparison of the two maps in Fig. 23 suggests, most of the 1827 plan was completed during the nineteenth century, but recent wood-cutting has destroyed the "landscaped" nature of the original plantings. Departures from the original plan did occur, but these were confined to the minor access roads and pathways, and the suggestion that the Kilberry road should be removed from the centre of the glen to the northern hill slopes was implemented.

These changes at Inverneil have been considered in detail because they are so well documented and they may be taken as representative

PLAN
for
THE IMPROVEMENT
of
INVERNEIL
1827



MODERN INVERNEIL

Based on G S G S 1:25000 map
Sheet No. 23/70 SW

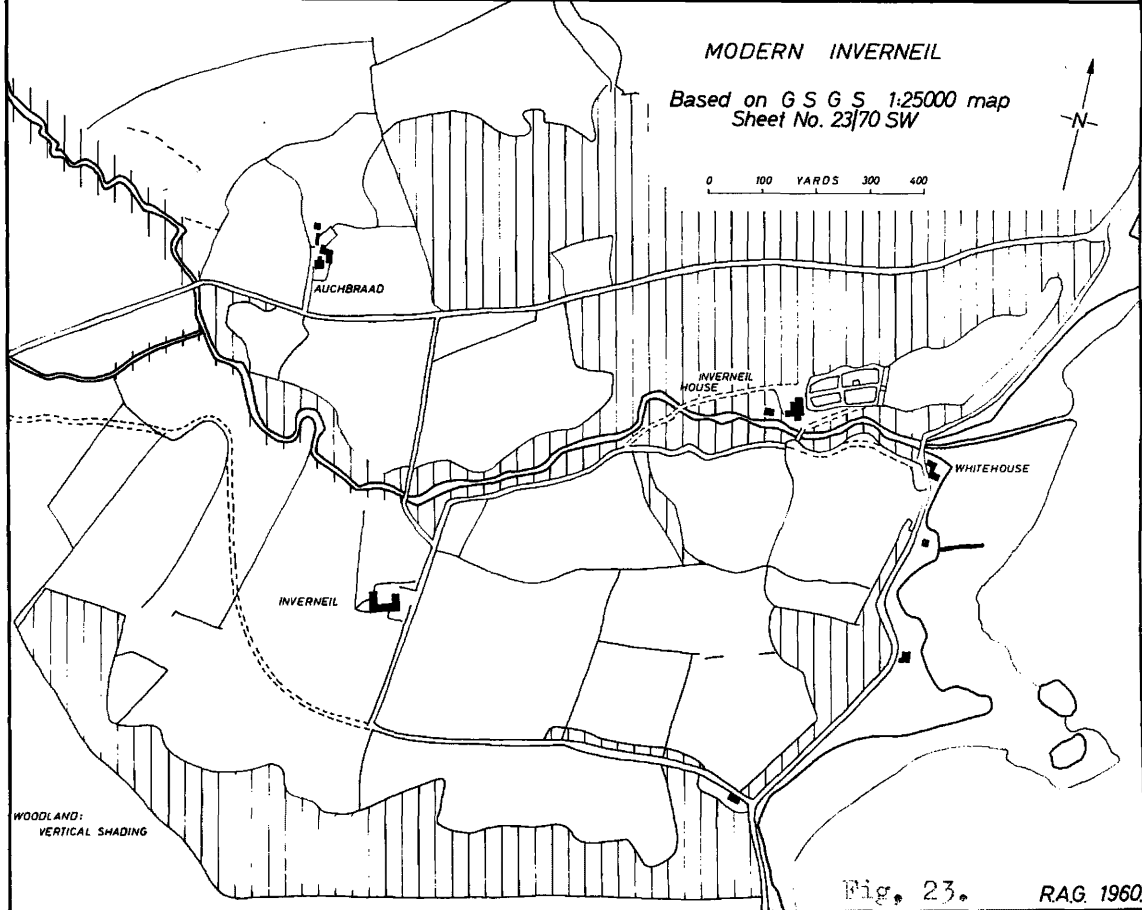


Fig. 23.

of the alterations entailed in the planting of policies everywhere in the county. The Inverneil example is not an early one, and it was more protracted in its execution than many, but the clearance of clachans involved is typical, and the earliest clearances and abandonment of clachan settlements were for this purpose. The fact that all the clachans on Inverneil when the alterations commenced were amorphous in form, suggests that this morphological type may be early, supporting the similar suggestion made for Kintyre clachans in Chapter 7. No trace of the clachan of Inverneil remains on the surface today, nor is it apparent from aerial photographs, but detailed exploration of the site, and excavation, might prove rewarding in attempting to discover the details of eighteenth century housing and settlement.

The change at Inverneil was sudden in the sense that a recognisable and distinct break occurred in the continuity of settlement in the glen, unlike the gradual changes which will be described elsewhere in Knapdale, and which typified the low-lying areas of Southend. At Inverneil, after the sudden break in 1775, a protracted formative period between 1780 and about 1820 produced a pattern recognisable in the modern landscape. Unlike some policies elsewhere, the changes were made not only in the name of beauty and as a show of wealth; the estate correspondence shows that the parks which were an integral part of the scheme were used in the rearing of cattle, horses and sheep. However, the majority of the old tenants had to leave, whither there is no record. A few remained as servants, with a cow's grass and a potato patch each, and living in cottages at Whitehouse near the Inn. They disappeared during the nineteenth century, because as the policies neared completion, employment possibilities at Inverneil diminished. The choice of Inverneil as the site for the erection of the policies and mansion was probably determined, partly at least, by its position on the route between the two contemporary urban centres. Relative accessibility to the centres of local social life was necessary, and Sir Archibald had instructed his brothers to purchase for him an estate on Loch Fyneside, the west coast of which was the physical

axis of the social life of the times.

Not far distant, on the Knap Estate in South Knapdale, which was also part of Inverneil's lands, we may study the effects of extreme isolation rather than accessibility on settlement. Stagnation is not too strong a term to use when talking of the Knap settlements. The old amorphous clachan of Ardnaw/Kilmory is immediately recognisable in the modern farm settlement and ruins on that site. Taylor and Skinner's map of 1776 (Fig.24) shows the two joint-farms of Ardnaw and Kilmory as they existed under runrig. The two clachans, though distinct, were separated only by the burn and morphologically may be considered as a single amorphous clachan. The arable land was unenclosed and each area of land had its separate name. Many of the names are obvious English translations of colloquial Gaelic field-names. The infield area was the "Winter-town" on the upper raised beach, an area of light and fertile soil, easily worked. This is the only area which is now cultivated. The "White Shore", as its name would suggest, was based on wind-drifted shell-sand blown over the lower raised beach and against the bluffs between the two beaches. Being liable to wind-blow, this was probably used periodically as outfield land. The "Shaun Larach" was infield, but inherently less fertile and poorly drained in comparison with the Winter-town. The other patches were all outfield used in some crude rotation which included a protracted period of fallow. They represented small pockets of fertility on otherwise barren rock-studded hill slopes. To the northeast was the neighbouring farm of Doide, also on the Knap estate, where a daughter clachan had hived off at some period before 1776 from the mother settlement, and set itself up on the periphery of the infield. In its rectangular form the daughter clachan contrasts with the original settlement which is an amorphous group of houses, but this is the only evidence to suggest that the origin of the daughter settlement was probably late.

In association with the houses in Ardnaw/Kilmory are small enclosures, or garths. There were five of these on the Ardnaw side, four of them intimately attached to houses. On the Kilmory side there

were four, all attached to houses. Also, there appear to have been more houses in each part of the clachan in 1776 than there were garths. A Rental for 1787 shows there were four tenants and one cottar in Ardnaw, and precisely the same in Kilmory. The suggestion made elsewhere that each tenant had a garth of his own may well have been true here, and it is worth noting that this correlation seems to be true throughout Knapdale, certainly on the Inverneil lands. The fact that there was only a single cottar per farm is interesting in view of frequent statements about the size of the cottar class by contemporary observers, and especially the ministers who wrote the Statistical Accounts of the 1790's. However, the single cottar mentioned in each case held directly of the proprietor in his own right, and there may also have been others holding from the joint-tenants, though this was expressly forbidden in the leases elsewhere on the Inverneil estates. The map of 1776 may give a more accurate assessment of the population than that derived from the 1787 rental.

Ardnaw/Kilmory has changed little over two centuries. Houses were replaced piecemeal as they became derelict and so the amorphous nature of the settlement was preserved. As late as 1880 all of the houses except one were thatched and built in black-house style. The number of tenants had increased to five in each case by 1840 (Inverneil: Test.Dat.Umql.Duncan Campbell, Scottish Record Office), but probably the cottars who had been paying rent direct to the proprietor earlier had become full joint-tenants. The Knap estate was sold in 1887, and so the documentary record ceases then, but comparison of a view of the site today with a photograph taken in the 1880's (Figs. 25 and 26) indicates how little change there has been in settlement form. The houses are now mostly derelict or in ruins, but one two-storey house and one converted black-house are still occupied. All of the buildings on Kilmory still roofed are used for storage and animals, but at least two were lived in till recently. Of the two occupied houses, one is inhabited by a single elderly woman, so that effectually a single family is now supported by the two farms. In 1891 (comparable with Fig. 25), Kilmory had three houses habitable, though one was unoccupied. The two occupied houses were lived in by



Fig. 25 Kilmorey Knap, c.1880.



Fig. 26. Kilmorey Knap, 1960.

The two views are approximately the same, the later one having been taken about 50 yards farther away. The views look south-east cross the clachan of Ardnaw/Kilmorey, on the Knap estate.

ten people, while on Ardnaw there was a single house lived in by a family of seven with four servants. In 1841, with five tenants on each, Ardnaw consisted of ten houses with forty-five people, and Kilmory had thirty-six people in seven houses. This community of eighty-one people included a mariner, a smith, a schoolteacher, two shoemakers and two linenweavers. These seven were probably all cottars, leaving the remaining ten houses to the ten joint-tenants of the two farms. The decline from eighty-one to twenty-one people in a quarter of a century after 1841 differs only in scale from the similar decline experienced elsewhere in Knapdale in this period. By analogy with the Ross estate (below) the greatest decrease was probably about 1850, and may have been triggered off by the famines between 1845 and 1848. The decline on the two farms was typical, moreover, for the population of the Knap estate as a whole fell from two hundred and twenty-six to fifty-two over the same period (C.E.B.: South Knapdale, 1841, 1871, 1891).

At Kilberry in South Knapdale there evolved a series of separate farms stretching from the shore across the raised beaches and up on to the hill land, based partly on a pocket of boulder clay. The resulting pattern of parallel strips is similar to that in many crofting townships which had their crofts permanently lotted, but the scale was different. At Kilberry each strip supported a complete joint-farm while each strip in a crofting township may be thought of as comparable with the holding of an individual tenant within such a joint-farm. The Kilberry example is the nearest approach I am able to find in Argyll to what Flatres termed "terres rubanees" elsewhere (125: e.g. Planche V). In the Glens of Antrim these have often been referred to as ladder farms, for each strip is sub-divided internally in ladder-like fashion. The first cartographic representation of these strips is on Langlands' map of "The District of Kantyre", completed in 1793. By then, the pattern so distinct on modern large scale maps was in existence. The farms of North and South Culghaltro, Fairfield, Kilberry, Dalcharn, Orangebay and Tiretigan were each established as a strip including elements of all the types

and qualities of land on the Kilberry estate. Laggan and Munichile remained muir farms and were only incidentally involved in the enclosure. A similar pattern of slightly smaller strips developed on the farms of Drimnamucklach, Cretshangan, Lerkbuy and Camra, north of Kilberry on a neighbouring estate (Langlands, Map of District of Kintyre 1793).

It is probable that these strips originated soon after 1770. A rental for 1768 shows that Toretigan became two separate farms in that year. The old North Town Toretigan became the new farm and clachan of Keppoch. The tenants of both Toretigan and Keppoch were given ten year leases, and "The Tennants of the 3 Mkld. of Keppoch are each according to their Tack allowed a deduction of 10.^{sh} 6 yearly for the first 5 Years for building their houses. Their Tack expires Whits. 1776" (Kilberry: Rental 1768). When the tack expired in 1776 Dalcharn was added to Keppoch, and these two became the strip-farm shown by Langlands as Dalcharn (Kilberry: Rental 1776). In 1775 we find an agreement between Campbell of Kilberry and two local dyke-builders for the building of stone march dykes about Kilberry itself, and also about Dalcharn, and mention is made of dykes then being constructed on Laggan (Kilberry: Agreement 1775 for Dykes). This plainly refers to the building of the dykes shown on the 1793 map. Also about 1766 or 1767, the six merklands of Kilberry became the two merklands of North Town and Fairfield, and the four merklands of Middle Town and Broom Park (Kilberry: Rentals 1766-1769), but there is only circumstantial evidence to suggest separate clachans for these farms. Ultimately, the joint-tenants were restricted to North Town, and Kilberry himself used, or let to tacksmen (Kilberry: Rental 1780), or let to steel-bow tenants (Kilberry: Rental 1773) with his own stock and crops, the old farm of Middle Town.

The period between 1760 and 1790 was one of considerable change on Kilberry. As the laird and his representatives became interested and actively involved in stock rearing and breeding, the lands were increasingly enclosed and sub-divided as above. Keppoch and Dalcharn, united in 1776, were divided into three separate farms in 1780.

Dalcharn consisted of one hundred and twenty and two thirds acres of "Flatt Land" within its head-dyke, and was divided into four tenancies, one of which was perforce held by the laird himself, because "Archd. Campbell late Tenant" had been "Impressed on board a Man of War". Keppoch was of similar size and also divided into four tenancies. The third part, Airdach, or High Field in English, had been the upper part of the original farms of Keppoch and Dalcharn, probably outfield land and high quality grazing capable of improvement. This was the area shown by Langlands above the existing road. It is worth quoting in full the Airdach portion of the rental, for it shows how these changes were taking place, and what was involved.

"High Field or Airdach a 3d of the 4 mkld of Keppoch and Dalcharn pays an Afterhand rent 1780 pr. Minnuts of a Tack

This farm contains of Arrable Land $135\frac{1}{4}$ besides Hill. I have agreed wt. Hugh Leatch for building his own Tenement of Houses as well as the Smiddy.

$\frac{1}{4}$	Hugh Leatch	£7. 2. 6
$\frac{1}{4}$	Neil Leatch	7. 2. 6
$\frac{1}{4}$	Dugald McMillan	7. 2. 6
$\frac{1}{4}$	Archd McMillan	7. 2. 6

As the Tennants in this Farm are to Build Houses and Flitt The Tennants of Keppoch having most of the wintertown & Land that was dunged or Manured as well as those of Dalicharn, 3 Persons Skilled in the Whole Farm that had formerly lived in that land in order to Compensate the Tennants of this Farm, thought that they should have a Certain proportion of Manure laid out for this year on their Land by the Tennants of Keppoch & Dalcharn to which the Tennants agreed as allow to pay for this year, 15 sh for each of the 4 Tennants of Highfield in the preceding proportions as marked in the Rentals, for each Farm viz Dalcharn each of 4 Tennants pays 5 sh this year & Keppoch each of the 4 Tennants 10 sh. & Kilberry 5 sh besides Comprisement for their Houses.

The Tennants to pay for the expence of Subdividing their Farms Whatever Kilberry lays out in Ditching or factoring them, 10 sh. yearly of an addition to each of the 12 Tennants Rents was

the sum thought of " (Kilberry: Rental 1780).

We see here the setting up of a new clachan, in the same way as Keppoch came into being in 1768. This creation of new clachans, as the joint-farms were sub-divided within the framework of estate policy, may be viewed as a parallel to a similar movement in Skye (217:56), and to part of McCourt's evolutionary and devolutionary sequence in Irish rural settlement (193:376).

These and other changes are implicit in Fig. 27 based on the Kilberry rentals. Between 1735 and 1780 there was considerable fluctuation in the number of tenants mentioned in the rentals for different farms. Particularly noticeable is the downward trend of Kilberry after 1770, as the laird took an increasing area of land into his own hands about the castle and enclosed it. Other fluctuations must be interpreted in terms of a shortage of tenants over the estate as a whole, especially before 1760. Tenancies were often vacant, or two were held by a single person. Under runrig this flexibility was possible for holdings were not lotted in consolidated units. In other cases tenancies were entirely in the laird's hands, sometimes because of failure to pay rents, or, as in Dalcharn in 1780 for even more tragic reasons. No evidence exists to indicate the abandonment of runrig during the period covered by the Kilberry rentals; indeed the increase in tenancies late on in Senegart suggests continued flexibility due to the persistence of the old common methods of working. We must assume that runrig disappeared from Kilberry after 1780, and with it clachan settlement. The present proprietor has told me that clachans remained till within the memory of a generation ago at Kilberry, and even still, the modern village of Kilberry reflects a social cleavage corresponding to the division between two of the old joint-farms. Rather than a village, Kilberry is now the modern successor of a clachan, without form, though it has certain local functions, like a Post Office. There is little doubt that in the rental for 1780 we see Kilberry's determination eventually to rid his estate of runrig and to institute lotted holdings, but there is neither documentary nor field evidence to suggest that this was completed till the nineteenth century.

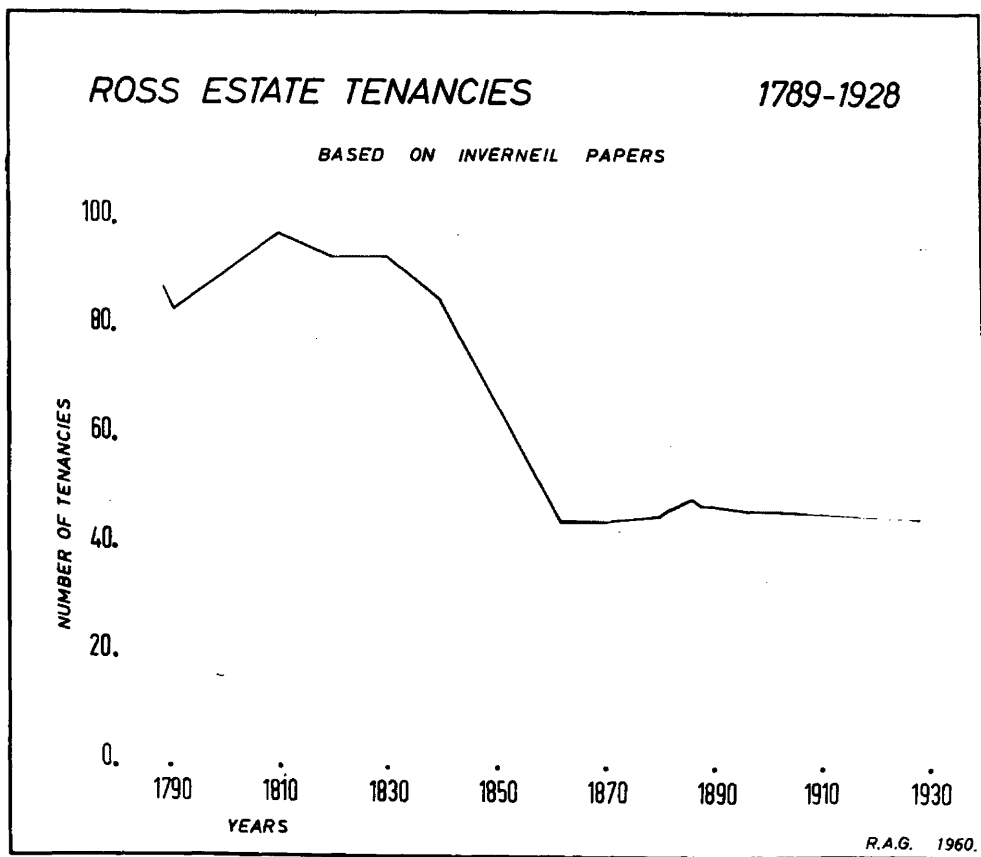


Fig. 28.

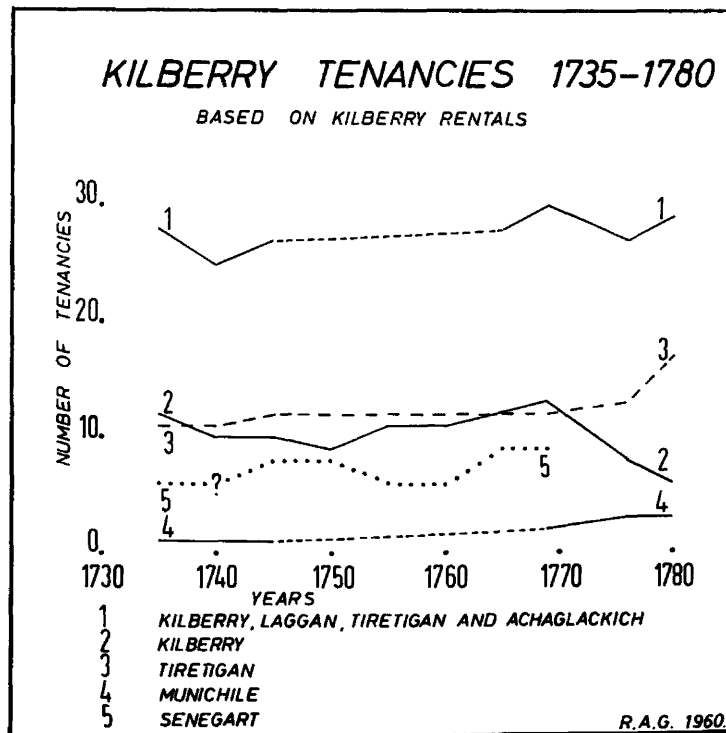


Fig. 27.

The Kilberry tenancy graphs show also that though over the estate as a whole the fluctuations in numbers of tenancies might not be considerable, this conceals significant changes in the tenancy position on individual farms. We are unfortunate in the Kilberry rentals, however, that they cease so early, and we must turn elsewhere in Knapdale to achieve a complete view of settlement changes over a lengthy period of time.

A more complete and extended tenancy graph is available for the Ross estate in North Knapdale (Fig.28). The Ross estate here implies the original estates of Ross, Taynish, Danna and Ulva, all of which were bought on behalf of Campbell of Inverneil between 1772 and 1779. Between them, these four accounted for more than three quarters of the Tayvallich peninsula. There was a slight upward trend in tenancies between 1790 and 1811 after which a level of about ninety-five tenancies was maintained until 1840 over the whole estate. Unfortunately there is no material available in the Inverneil Papers between 1840 and 1867, which would place more exactly the critical years in which the number of tenancies on the estate was approximately halved. A level of just over forty tenancies was maintained from 1867 till 1927 after which the estate passed out of the hands of the Campbells of Inverneil. The critical period lay between 1840 and 1867, when the decline in the number of tenancies started, accompanied by a drop in population. This was also the period when the amalgamation of farms began, a process of greater importance today.

For statistical purposes Tayvallich has been included with the Ross estate, but part of it belonged to the proprietor of Carsaig, a small estate in the middle of the peninsula. This will not invalidate any arguments. Tayvallich has always been a local service centre, and particularly an estate village. For practical purposes it may be included with the Ross estate as the latter was locally of overwhelming importance in both area and population.

Table 8

Ross Estate and Tayvallich, Population Densities, 1841-1960.

Year	Population	No. of Occupied houses	No. of persons per occupied house.	No. of persons per sq. mile.
1841	814	136	6.0	123.3
1871	421	78	5.4	63.8
1891	345	64	5.4	52.3
1960	107	46	2.3	16.2

N.B. Area for which last column is calculated is that given by Wilson, 1785 (Inverneil: Contents of Estates 1785).

Sources - Census Enumeration Books and personal enquiries.

It is clear from the figures that the discontinuity noted from the course of tenancies is equally apparent in population totals and densities, and numbers of houses occupied. However, there was a second major change in the past fifty years which, relatively, was of greater magnitude than that between 1840 and 1867. Between 1891 and 1960 population dropped by over sixty per cent and the population density was quartered. Equally it is to this second period that the decline in the number of people per house belongs, for the absolute rise in living standards is a relatively recent phenomenon. The changes in the nineteenth century were effected by the removal of complete households, and later migration from the peninsula reduced the size of the resident household rather than the number of occupied houses.

The distribution of population in the four years included in Table 8 is shown in Fig. 29. In 1841 the land was still held in runrig and the farm populations varied between seventy-five and eighty on average. It is unfortunate for the sake of the visual impression that on Danna the total for the three farms on the island could not be divided, but it proved impossible from the Census Enumeration Book to separate the houses of the three farms. In 1844 Rev. Mr. Maclachlan stated that "Many of the farms are let to three or four tenants, and as the land is cultivated according to what is called the runrig system, it is scarce possible to obtain unity of purpose ... The several possessions are generally

POPULATION DISTRIBUTION

ROSS ESTATE

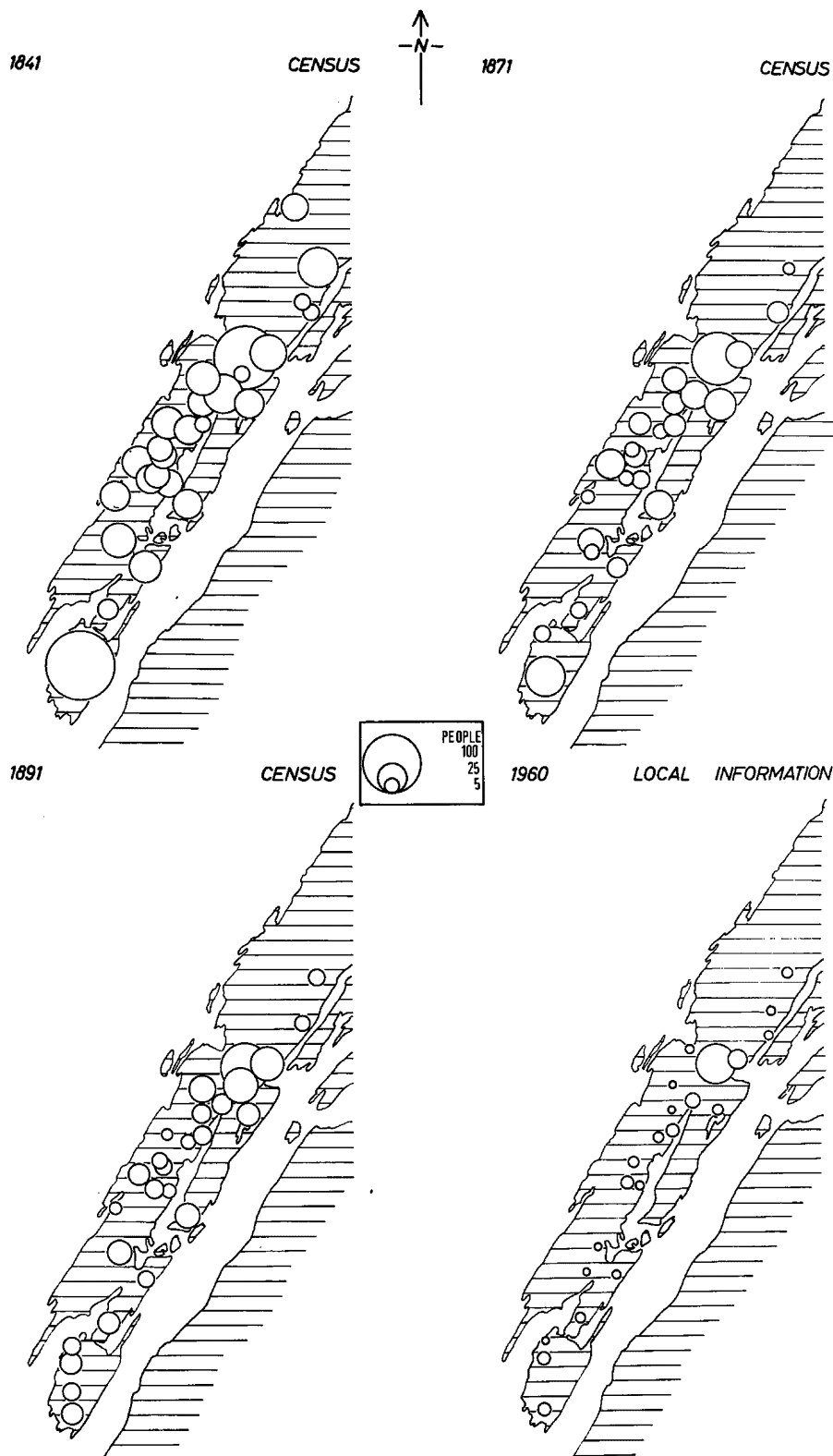


Fig. 29.

surrounded by stone dikes; but, although a few of the farms, which are under regular management, have their arable ground properly subdivided with stone fences, yet, in very many cases, these subdivisions are temporary erections to preserve the crops for a single season from trespass" (48:640). Yet this referred partly to an area described in 1797 as of excellent quality, where improvement might have been expected. "Could the soil and rocks, with which it is unfortunately interspersed, be separated, there would not perhaps be a more fertile spot in Scotland" (29:309).

By 1871 most of the farms had had their populations at least halved during the preceding thirty years. The only exceptions were on farms which in 1867 were described as still held in runrig and on which multiple tenancies continued to exist (Inverneil: Hosack's Valuation 1867). Even in 1891 these multiple tenancies with their larger populations remained. Rent collection lists show that Coishandrochaid, Dannanacloich and New Danna remained double tenancies till the end of the century, while on some other farms two brothers, or possibly a father and son, and their respective families, were held jointly responsible for a single tenancy. This occurred in Upper Fernoch and Mid Danna, and in New Danna three families occupied two tenancies during 1889 and 1890. The evidence suggests that runrig continued into the present century on the Ross estate (Inverneil: Rent Collection Lists 1889-97). In 1905, North Ardbeg, Coishandrochaid, and Dannanacloich were still double tenancies (Inverneil: Detailed Rental and Burden of Taynish 1905). A note was added to the 1905 rental that "the majority of the tenants have been either themselves or their parents on the estate for a great number of years", social conditions surely conducive to the retention of archaic methods and customs. As late as 1928 Dannanacloich was a double tenancy, and Barnashallog had reverted to this state with the addition of a cottar, or some other small-holder paying a nominal rent (Inverneil: Note of Gross Rental ... 1928). Until recently tradition was strong and innovations were only slowly accepted. After an initial burst of improving enthusiasm which lasted till about 1830, the proprietors

left their tenantry very much alone, and still the older folk retain memories of proprietors whose concern was to maintain the population of the estate rather than to amalgamate holdings. As under runrig, the raising of Highland cattle was the mainstay of the local economy until recently. In 1905 there was a single sheep stock on the estate, and even that was north of Tayvallich and numbered only two hundred and fifty animals (Inverneil: Detailed Rental and Burdens 1905). The contrast with South Knapdale was marked, for there in 1840 "The occupiers of land ... convert to sheep walks, and pasture for black cattle; and consequently the number of persons employed in agriculture is comparatively small" (49:264).

The final decline to the present population and settlement position took place between 1928 and 1945. Some men left the area to enlist in 1939 and their families moved also, so that houses either fell empty or were lived in by two or three persons only, and after 1945, there was not a comparable return. This period saw the amalgamation of a number of farms south of Tayvallich, one farm now consisting, effectively, of what constituted four separate holdings in 1905 or three farms in 1928. The amalgamation of farms started earlier, however, when between 1841 and 1871 North and South Scotnish became one, more recently to have Arinafadbeg added to them. During the same period Barbea Dunie on the Sound of Jura north of Ardnackaig and Carsaig was abandoned because it was too inaccessible. There are now no settlements west of the main watershed of the peninsula, except in the Carsaig-Tayvallich depression. The modern need for ready access to the one road which serves the peninsula, on the Loch Sween side, has become an over-riding factor in determining which settlements continue in occupation. The road ends on reaching the island of Danna where it deteriorates to a rough, unsurfaced and rutted track, and only New Danna, nearest to the road end, is now occupied.

The documentary and population evidence points to the continued existence of clachan settlement till at least the mid-nineteenth century. Until then the clachans were the dominant element in the settlement pattern of the estate, but not the sole element. Isolated houses, such as the laird's at Taynish, and the village and crofts

around Tayvallich Bay must also be considered, and so too, there were "mansion houses" in some of the clachans, like Dannanacloich and Old Ulva, representing the homes of the lairds from whom the Inverneil Campbells had purchased the various parts of the Ross estate. From leases at the beginning of the nineteenth century it is clear that these larger houses were divided into "flats" to house cottar families, the men of which practised various trades and crafts to serve the clachan communities. They were weavers, tailors, carpenters, and occasionally the flats were let to widows and dependants of deceased tenants at a nominal rent. These larger houses were integral elements of their respective clachans and were not free-standing.

Most of the clachans were amorphous in shape. Those shown by Wilson in 1786-7 were all of this nature (Map of Taynish ... 1786-7). On the ground today any sites there are certainly were amorphous, and the clusters small, seldom totalling more than five houses; but so few sites were finally abandoned till within the past three decades that few ruined clachans remain. Those examined in the field are summarised in Appendix 3a. No clachans on the Ross estate ever presented linear or rectangular forms, but house clusters on neighbouring estates have been examined, which, though small, numbering at most three or four houses, do appear to have been laid out regularly. Significantly the farms on which these existed were the property of Malcolm of Poltalloch who in the 1840's was carrying out extensive improvements elsewhere on his property and probably also in North Knapdale (45:562).

The decline of the clachans, and also the sudden decline of population in the mid-nineteenth century was initiated on an excessively high level of population by the famines of the latter part of the 1840's. There is no direct evidence to support this, but it is certain that population pressure on the Ross Estate was extreme by 1841 (Table 3). Comparison with Table 10 (below) shows that the Ross estate was relatively more overcrowded than was normal in the remainder of the parish. This was due partly to the policy of the lairds in maintaining a small-holding community comparable with

that under runrig, but was also occasioned by the rise of a large cottar and servant class which is adequately attested in the census returns of 1841. (C.E.B.: North Knapdale 1841). In many cases the number of occupied houses, or families, was as much as double the number of tenancies. This situation seems to have arisen between 1821 and 1841, for the leases at the beginning of the nineteenth century forbade more than the stipulated number of cottars per farm, which usually was one, sometimes two. The tenants had reason to respect the estate regulations in this matter, for towards the end of the eighteenth century the proprietor's agents had successfully completed a legal action against a tenant for sub-letting (Inverneil: Letter Book 14/10/1785-17/7/1786, 34, letter dated 28/1/1786). The normal joint farm, then, before 1821 consisted of four joint-tenants with a cottar, giving a usual clachan size of five houses (cf. Site 23, Appendix 3a). From the 1841 census the average for the estate as a whole was more than four houses per group, but less than five, but some houses undoubtedly housed more than one family. By 1871, the figure had dropped to two houses per group exactly, a figure which hides the extremes of the runrig clachans at the southern end of the peninsula on the one hand, and the many single tenancy, single house farms elsewhere on the other.

The exceptions in the settlement pattern of the estate were the village of Tayvallich and the Kintallin crofts on Tayvallich Bay (Figs. 30 and 31). The maps in Fig. 29 show a continual reduction in the populations of these two settlements, though proportionally not so considerable as in the clachans until the present century. Paradoxically, Tayvallich has expanded physically as its functions have changed and its population declined, and Kintallin has maintained its number of houses until the past decade.

Since 1750 at least, Tayvallich has been a local service centre or estate village, not directly concerned in agriculture. It is one of the few villages, as distinct from clachans, shown on Roy's Map in Argyll, and was then comparable with Clachan in north Kintyre, which also served local estates, especially that of Campbell of Stonefield. Proportionally the changes in population in Tayvallich



Fig.30. Looking south across Tayvallich, an estate village, and the focus of the Ross Estate.



Fig.31. The Kintallin crofts in the foreground came into being at the end of the eighteenth century to house estate workers and servants. Not quite contiguous with them is the village of Tayvallich across the small bay. Only half of the village belonged to the Ross estate. The Kintallin crofts were never lotted and their land is now derelict.

and Kintallin have not been so severe as on the farms of the peninsula, but the absolute decrease has nevertheless been considerable.

Table 9.
Population of Tayvallich and Kintallin.

Year	Tayvallich	Kintallin	Total
1841 ₁	115	36	151
1844 ₁	---	--	190
1871	83	21	104
1891 ₂	69	35	104
1960 ₂	45	11	56

1. Statistical Account (48:638).
2. Personal enumeration by author, May 1960.

If the figures for 1844 are to be relied upon, the population of the village was increasing remarkably rapidly, followed by an equally rapid fall to 1871, after which there was a levelling off until the twentieth century, when the total was halved. Many references in the Inverneil Papers show that Tayvallich catered for the needs of the area, for numbered among its residents were a doctor, a smith, an innkeeper, tailors, weavers and other tradesmen. The farms on the Ross estate were astricted to the inn at Tayvallich, and to the smithy there or at Coishandroichaid, whichever was the nearer. This was in addition to the more usual tie to the estate corn mill at Taynish (Inverneil: Leases of Taynish, Danna, Ulva, etc. 1800-1821).

Tayvallich's modern functions are different from those in the eighteenth and nineteenth centuries. It remains a local service centre for the greatly diminished population, but it is now equally important as a tourist centre, mainly for relatively wealthy holiday-makers who can afford to own a house here and live throughout the year elsewhere, usually in Glasgow. With the increasing amalgamation of farms, men who in the past would have been employed locally as agricultural labourers now work on a forestry scheme; but the numbers who can find employment locally are considerably less than before about 1930. The farming community for which Tayvallich originally catered has disappeared; cattle have been

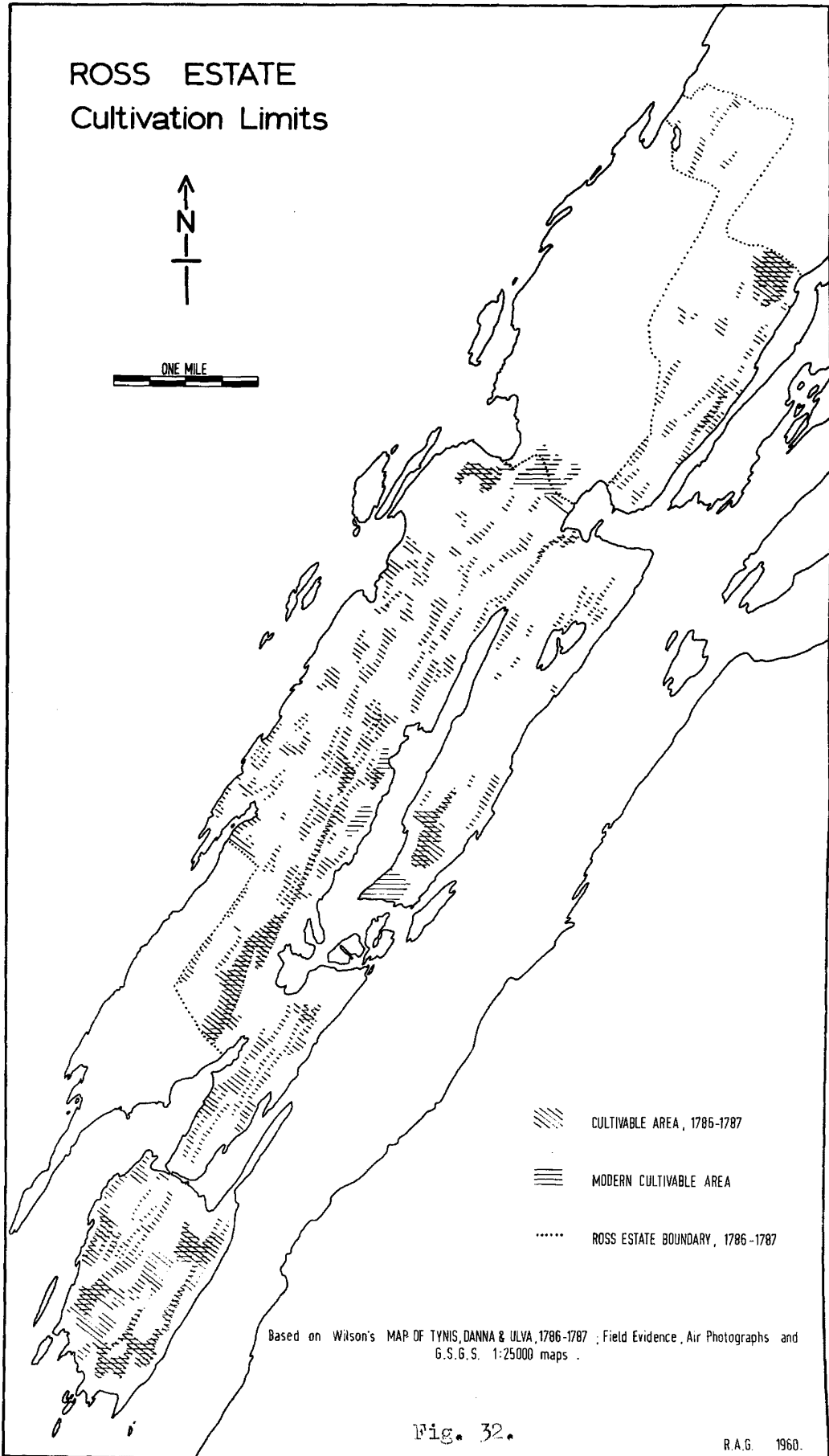
replaced by sheep; little land is now cultivated (Fig.32), and in the northern part of the peninsula more and more land is being planted by the Forestry Commission. However, in the past thirty years, holiday-makers, attracted by the scenery and solitude of Tayvallich within easy reach of the western industrial Lowlands of Scotland, have brought about an extension of the village along the shores of Tayvallich Bay towards Kintallin from the original clachan-like nucleus. The village becomes therefore more linear in plan, but it must never be thought of as comparable with planned estate villages erected elsewhere during the eighteenth and early nineteenth centuries. Tayvallich grew in an ad hoc manner and until recently resembled an over-grown clachan, but only morphologically, for in functional terms Tayvallich is a service centre with two churches, a Post Office, two shops and an automobile garage. The village has also extended westwards along the road to Carsaig Bay, where holiday houses have been built. Some of the holiday makers who have maintained the viable existence of the village have ultimately retired here, together with past residents who were forced to emigrate, or migrate to other parts of Scotland. This partly accounts for the unbalanced population structure so noticeable in Fig. 33.




Kintallin is separated from the village by about 100 yards where Leachy Farm has a frontage on Tayvallich Bay. Technically Kintallin is a crofting township, and as such is one of the few south of a line between Oban and Inveraray. In fact the township land is now derelict, potato patches only being cultivated. None of the tenants keeps stock; the last cattle were sold in May 1960. A neighbouring farmer is allowed the grazing of the township common, which is mostly scrub and rock, and he also grazes the half dozen crofts. But he does so on an entirely unofficial basis because the existing tenants wish to maintain their crofting status on account of the favoured position which crofters enjoy in relation to housing and rents. The tenants are either elderly and retired, or forestry or agricultural workers. The crofts came into existence about 1800 when part of the farm of South Scotnish was detached to provide small-

ROSS ESTATE Cultivation Limits



ONE MILE



-  CULTIVABLE AREA, 1786-1787
-  MODERN CULTIVABLE AREA
-  ROSS ESTATE BOUNDARY, 1786-1787

Based on Wilson's MAP OF TYNIS, DANNA & ULVA, 1786-1787; Field Evidence, Air Photographs and G.S.G.S. 1:25000 maps.

Fig. 32.

holdings, or "acres", for a number of estate workers and servants. The holdings were never intended to be economic or to entail much work for the tenants, nor were they properly lotted. Twelve two-roomed cottages were built under six roofs, originally thatched but slated in the nineteenth century. Since 1900 these have been converted to 6 cottages, two of which have had an upper storey added. The houses were situated along the roadside for convenience and laid out in a straight line. Only recently did the last of the estate workers for whom these houses were intended die, and all of the present tenants have had long and intimate connections with the Ross estate and its successor. Even yet, none of them has come from a farm outwith the old Ross estate in the peninsula.

The contraction in settlement and population has its visible effect in the retreat of the limits of cultivation (Fig. 32). Wilson's map of 1786-7 captured the effective maximum extent of cultivation, for comparison with air photographs and field evidence can add only minor areas of cultivated land, with one exception. Between Tayvallich and Carsaig drainage after 1790 allowed the utilisation of one of the more extensive cultivable areas in the peninsula. Today the only cultivated areas are either near to the axial road of the peninsula, or on the good limestone-based soils of the island of Danna. This distribution contrasts with the maximum, where every available spot was cultivated, even on steep slopes and reclaimed peat bog. The fragmented topography is reflected in the distribution of past cultivation, much of which was carried out by spade and caschrom. The latter was recorded as late as 1830 in North Knapdale (A Description of the Antiquities and Scenery of the Parish of North Knapdale. Archd. Currie, 1830:27). The local economy under runrig was more than self-sufficient, and in addition to the black cattle which were reared and sold to drovers, there was, on occasion, a surplus of oats and bear for export (Inverneil: Letter Book, 14/10/1785-17/7/1786, letter dated 5/7/1786).

"Their ordinary food consists chiefly of potatoes and fish, oatmeal and milk"; so wrote the parish minister in 1844 (48:639). If so, and the maximum extent of cultivation was attained before 1780,

there must have been more intensive use of the land thereafter to support the rise in population which took place. This argues some improvement in agriculture, possibly an abandonment of runrig in its original form. Probably the runrig mentioned just before 1870 was a fixed form in which there had been some consolidation of the individual lots in the joint-farms, and these lots were no longer reallocated periodically. Some improvement had been initiated on the old estate of Taynish even before it was bought for Campbell of Inverneil in the 1770's. Depositions were taken from the existing tenants after the estate was purchased, in order to ascertain what had been customary with respect to tillage and tenure, and in order that plans for the future might be made. Malcolm MacIntaylor, "Tenant in Barhormaid aged Seventy Eight Years or thereby a Widower", claimed "...That anciently in the parish of North Knapdale The Tenant was in use to have one third of his infield Ground lee each year but within these twenty five years a different rule has taken place and only one fourth of the Infield left lee each year of the Tenants removal, it being optional to the Tenant while in possession to plow up the whole yearly, if he chuses. That with respect to the outfields it is common to have three fifths thereof in tillage and two fifths lee and that the deponent was one of those comprisers who introduced the new practice with respect to the Infields; ..." (Inverneil: Rent Book of the Estates of Gigha and Taynish for the commencement of Lieut. Col. Arch. Campbell's Right1779). At the same time the amount of land each tenant or community of joint-tenants was permitted to cultivate to sow oats, bear, potatoes and lint-seed was strictly limited by the estate in the same way that the stock they were allowed keep was regulated by a souming. The mid-eighteenth century proprietors were obviously interested in the welfare of their lands. However, apart from the building of march dykes, by contract during the eighteenth century and as a condition of the leases during the first thirty years of the nineteenth century (Inverneil: references in various letter books and leases), there had been little or no enclosure on the farms of the Ross estate by the mid-nineteenth century.

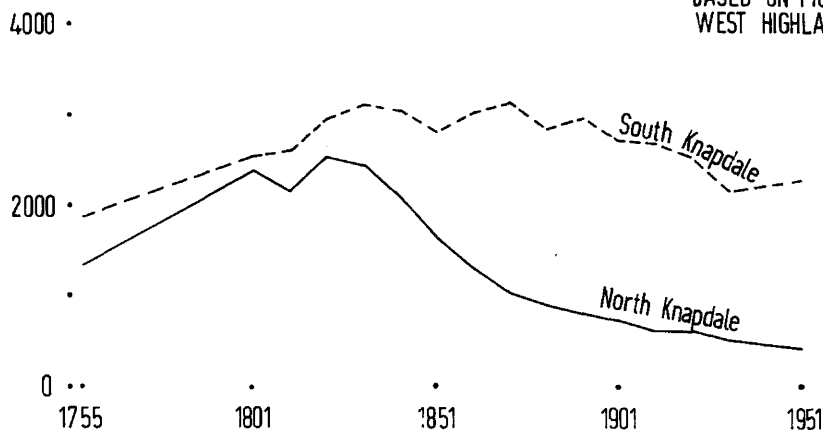
Agriculturally the peninsula is now almost derelict. Sheep have replaced cattle on many farms, forestry is encroaching on the north end of the peninsula, little land is cultivated, and some farmers even find it more economical to buy in baled hay from the Lowlands for their stock, than to try to save their own. The number of farm units has been about halved, some owners and tenants are absentees, and the only dairy herd maintained is on Leachy Farm.

The modern function of the area is largely as a place for retirement, and as a minor reservoir of rural labour, particularly for the Forestry Commission. As a result the population structure is unbalanced with more than half of the resident population over 45 years of age. The fact that this is a recent phenomenon is evident from Fig. 33, and as a result of local enquiries it may be claimed that the significant change occurred after 1930. The future prospects for this small community look bleak, with only a handful of children at school locally, and the younger elements in the working population almost totally absent.

The population graphs for the Knapdale parishes differ from each other, but only because South Knapdale includes the urban agglomerations of Ardrishaig and part of Tarbert Lochfyne, both of which increased their populations at the expense of the surrounding rural areas. For the whole of rural Knapdale, the North Knapdale graph may be considered as representative, with the proviso that the peak of population was probably reached sooner in the southern parish. The Ross estate did not attain its maximum population till after 1841, in contrast with 1831 for the whole parish of North Knapdale. This contrast within the area stemmed from two main factors. Malcolm of Poltalloch, and other Knapdale proprietors, initiated agricultural improvements and introduced sheep farming early in the nineteenth century (49:276) tending to decrease the numbers of resident tenantry. The contrast with the Inverneil lands, except Inverneil itself, was heightened by the policy of the Inverneil lairds of encouraging the continued existence of a large tenantry and multiple-tenancy farms. Runrig of one form or another lasted late into the twentieth century in the Tayvallich peninsula. This policy was followed to a dangerous

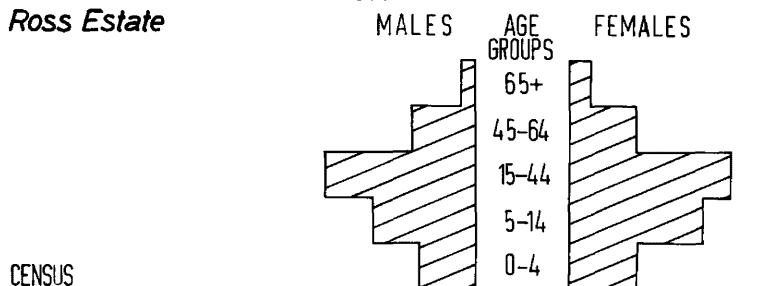
GROWTH AND DECLINE OF POPULATION **North & South Knapdale**

BASED ON FIGURES FROM
 WEST HIGHLAND SURVEY.

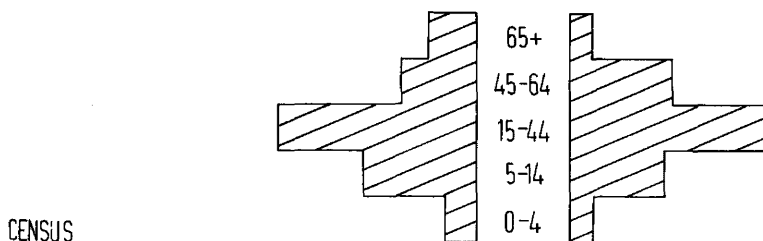


POPULATION STRUCTURE **Ross Estate**

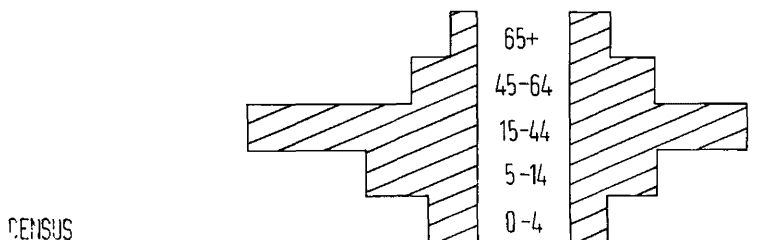
1841



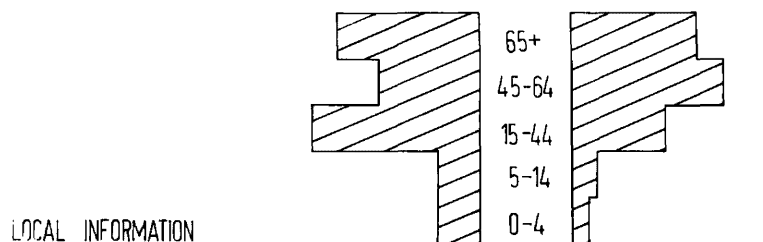
1871



1891



1960



20 15 10 5 0 0 5 10 15 20
 % OF TOTAL POPULATION

Fig. 32.

degree, for the sudden decline in population after 1841 argues hardship during the famine period when the people had come to rely too heavily on the potato. From the present point of view it is a tragedy that there are no estate records to cover this critical period.

The population total and density for North Knapdale also show that the Ross estate was exceptional. Table 10 should be compared with Table 8.

Table 10.
North Knapdale, Population Densities, 1755-1960.

Year	Population	Occupied Houses	People per Occupied House.	People per Sq. Mile.
1755	1369	310 ¹	4.4	33.3
1841	2115	386	5.5	51.5
1891	799	175	5.7	19.4
1951	440 ²	140	3.1	10.7
1960	415 ²	---	---	10.1

1. See Appendix 1.
2. Est. based on Electoral Register 1960-61 (E.R. + 28% of E.R.)

The decreases in the parish in general and in the Ross estate all occur at about the same times, but the extremes of the Ross estate were never reached elsewhere. However, the Tayvallich peninsula has always been more densely settled than surrounding areas and it was inevitable that the extremes would be experienced there (cf. Fig. 8). Today the density of population is still significantly above that for North Knapdale. By contrast, on the basis of the numbers of people per house, it appears that settlement has contracted more outside the Tayvallich peninsula.

The types of change illustrated throughout Knapdale demonstrate how the different attitudes adopted by the lairds must be considered as important factors in the development of the rural settlement pattern. Even on the lands belonging to a single laird, like Inverneil, modern differences arise based on the stage at which similar changes were initiated in different areas, and also based on the varying evaluation by the laird of the different areas of his estate. Inverneil itself was cleared and refashioned, in an almost revolutionary manner,

because it was in a suitable situation for the laird's house (and also because it was purchased first?), while the more inaccessible Knap and Ross estates almost stagnated and retained archaic customs and appearances into the present century. The sole difference between these two was that the inherent fertility of the Ross estate was sufficient to delay, but not to prevent the stagnation followed by dereliction caused by inaccessibility in the modern period.

At Kilberry, the modern landscape, especially the field pattern owes much to the local laird or his representatives, one of whom at one stage was Campbell of Knockbuy. Knockbuy was a kinsman of Kilberry's and lived through most of the eighteenth century (1693-1790). One of his grandsons later became the 4th of Knockbuy and 8th of Kilberry and so the two estates were later united. Knockbuy's influence on eighteenth century estate improvement in the county has already been shown (Ch. 6). At one period he administered Kilberry's lands, but in addition possessed farms of his own to the north and south of Kilberry. It is perhaps significant that it is on Knockbuy lands near Loch Stornoway in South Knapdale that I have found the most convincing evidence for a chronological background to distinctions in clachan morphology (see Fig. 7). At Achadh na h-Airde a linear/rectangular clachan appears to overlies an amorphous one, and both here and at Breac Bharr, the ruins of broad houses overlies the ruins of narrow houses. The significance of the second point is argued fully in Appendix 3d. It is sufficient to state here that the narrow houses are always found in amorphous clachans, but that the broad houses may be found in either morphological type of settlement.

Chapter 9.

SETTLEMENT CHANGES IN THE DISTRICT OF ARDNAMURCHAN.

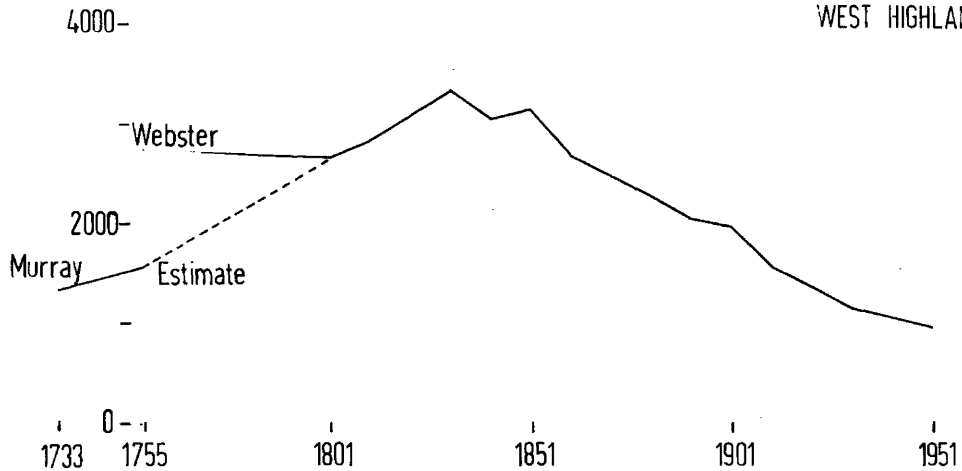
(a) West Ardnamurchan - The Kilchoan Area.

Conditions north of the Great Glen are markedly different from those south of the geological discontinuity. The north and west Highlands north from Ardnamurchan are pre-eminently the home of crofting, a way of life preserving much of the communal organisation, in theory if not in fact, of the runrig joint-farms of the eighteenth century, completely alien to the social and agrarian organisation of the medium-sized and large farms of the southwest and south Highlands. Yet in the mid-eighteenth century the circumstances of settlement and human landscape all over the Highlands were similar. The reasons for the present differences lie in the course taken by the changes in population and settlement over the past two centuries. In character these changes had much in common with those farther south, but they were introduced later in most cases, when the level of population had risen considerably above that in the eighteenth century, and when the pressure of this enlarged population on available local resources was so extreme as to deny to rural society the flexibility necessary to accommodate the changes successfully. Inevitable results were economic hardship for many, including landlords, and even starvation for some. Had there been no clearances of population in the northwest Highlands in the name of agrarian improvement, emigration would nevertheless have been unavoidable (252:166).

The maximum population of the Kilchoan area (which may be defined as the area from which the Kilchoan Church of Scotland congregation is drawn, and is approximately west of a line from Acarsaid to Glenmore Bridge) was reached in 1831 (Fig.34) and was maintained, with some fluctuations, till 1851. Thereafter population numbers declined rapidly and continuously, and even now this decline shows no signs of abating. It has been shown that Webster's estimate of the population in the mid-eighteenth century is incorrect (Appendix 1), and the estimate for 1755 which appears on the graph is based on Murray's figures for 1733, and on figures for 1760 and 1765 quoted in the

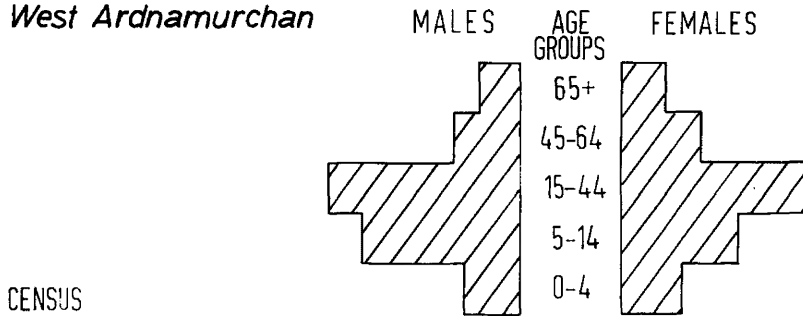
GROWTH AND DECLINE OF POPULATION Ardnamurchan

BASED ON FIGURES FROM
WEST HIGHLAND SURVEY.

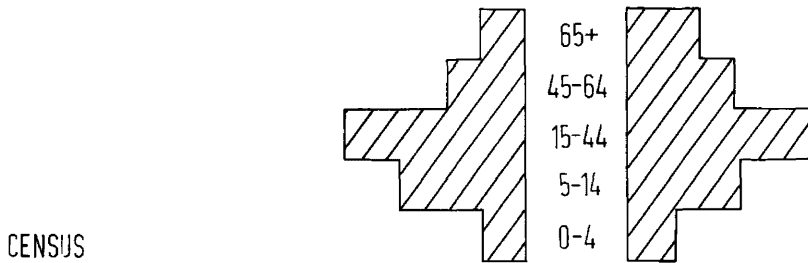


POPULATION STRUCTURE West Ardnamurchan

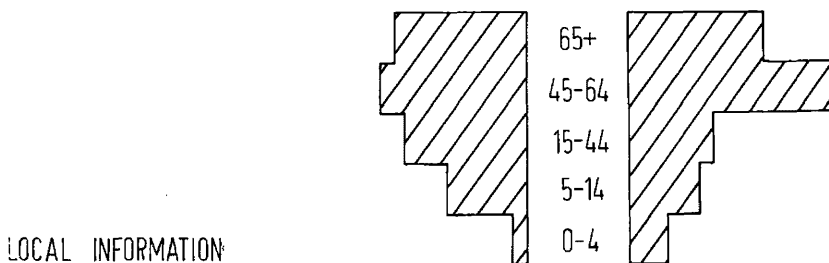
1841



1891



1959



20 15 10 5 0 0 5 10 15 20
% OF TOTAL POPULATION

R.A.G. 1960.

Fig. 3/4.

Statistical Account of 1798 (5:286-296). Growth of population was continuous and rapid until 1831 but the rate of growth varied, steepening after the pacification of the Highlands between 1745 and 1750, decreasing slightly between 1790 and 1811, and steepening again till 1831. The period of most rapid increase, 1745 to 1790, saw the rise to numerical importance of a cottar and crofter class in addition to the considerable numbers of joint-tenants which existed during the first half of the eighteenth century.

Population continued to increase until 1831 in spite of emigration which became increasingly important, numerically and socially, as the population level neared saturation in relation to local resources. The fluctuation between 1831 and 1851 must be regarded as a period of uneasy balance between resources and population, finally upset by the catastrophe of the potato famines between 1845 and 1848, as a result of which the small tenantry fell into arrears with their rents. This was the occasion of "The Report by Thomas Goldie Dickson ... in reference to the Arrears of Rent etc. due by Tenants on the Estates of Ardnamurchan and Sunart" completed on 11th February 1852, and included with the Riddell Papers.

Between 1790 and 1798 an estimated one hundred people migrated from the whole parish to the Lowlands in search of employment, while the average annual number of emigrants in 1790 and 1791 to America was eighty-four people, emigrating as families, not as individuals (5:286-296). In 1837-38, twenty families, which we may estimate at over one hundred people emigrated, most of them to Australia (35:148). The estate factor in 1834 was advocating the practical encouragement of emigration which he considered might be effected in two ways, "either by procuring their passage to America, or cancelling a portion of their arrears of rent, equal to their passage money" (Riddell: Factor's Notebook, 72-3), but this suggestion was not taken up till later. Dickson's Report of 1852 stated that many Ardnamurchan men went for a large part of the year to work in textile factories, or "Dyeworks", in Glasgow and Paisley, leaving their women and children to cope with their holdings. Others had taken up this work as a full-time occupation and moved from the parish (Riddell: Report 8). It was decided

that those who moved annually to work in this way and were in arrears with their rents should be moved out of the estate completely.

As the population level has fallen there has been a noticeable change in the age/sex structure of the resident population. In 1841 there was an excess of males, for some unaccountable reason in the second age group, but otherwise the age/sex structure was even, but the bulk of the population was in the age group between five and forty-four years. In spite of a considerable decline in numbers, the age distribution had altered little by 1891, but proportionally more older women existed. There had been a slight proportional decline in the youngest age group.

Within the twentieth century there has been a revolution in the age/sex structure of the population. Sixty-two per cent of the population is above forty-five years of age while only fourteen per cent is below fifteen years. This compares with thirty per cent and thirty-three per cent respectively in 1891, and twenty-three per cent and thirty-nine per cent in 1841. The ageing of the population has become so marked that population decline is certain to continue. The balance of the sexes is also uneven. Between five and forty-four there are fewer women than men, for many of the younger women are in employment away from home. Above forty-four there is an excess of women. Some older men still work outwith the parish, while the women have tended to return. The diagram for 1959 is comparable with that for many crofting communities and also displays characteristics in common with the diagram for Knapdale (Fig. 33). Physical isolation and lack of employment opportunities are responsible in both cases for this unbalance, and in Ardnamurchan as in Tayvallich the future prospects look bleak.

For Ardnamurchan there exist the earliest reliable population figures for any part of Argyll, in Sir Alexander Murray's survey of the estate when he purchased it in 1733 (232: census). His enumeration was completed before the rise of a large cottar population, and so the figures for 1733, and the distribution and density of population which they indicate, may be taken as typical of conditions under true runrig, when only communities of joint-tenants, or sub-

Table 11.
Kilchoan Area, Ardnamurchan, Population Densities, 1733-1959.

Year	Population	Occupied Houses	People per Occupied House	People per Sq. Mile.
1733	957	201 ¹	4.6 ¹	14.0
1841	1113	235	4.7	23.1
1891	776	168	4.6	16.1
1959	213	82	2.6	4.5

1. Families, and persons per family.

tenants under tacksmen, were involved (Table 11). With the rise to importance of cottars the population densities rose, but the number of persons per occupied house remained almost stationary till the present century. In fact, under runrig and clan society the population density was lower than at any time till after 1891. Comparison with Tables 7 and 10 shows that at every stage the population densities in Ardnamurchan were lower than in either Knapdale or Southend. However, if the figures were available to show densities per square mile of cultivable land and not of total area the maximum would be attained in Ardnamurchan where, proportionally, the farms were smaller in terms of inbye acreage and supported larger communities of joint-tenants, crofters and cottars. This distinction became increasingly apparent as the nineteenth century progressed, for crofting preserved large communities on some of the old joint-farms, compared with the one or two families on farms in Southend and in Knapdale.

The distribution of population in 1733 was concentrated in five main areas in joint-farms of remarkably even size (Fig. 35). On the south coast four communities were clustered together southeast of Ben Hiant, with a fifth, Glenmore, slightly farther east. West from Ben Hiant to Ormsaigbeg there were six separate farm communities. On the north coast, Grigadale and Achosnich formed one group, and Achnaha and Glendrian another. East of these, in the Achateny valley and east to the Swordle valley, there were seven clachan communities. In size the concentrations of population varied between extremes of two families with nine people at Faskadale, and ten families with fifty-five individuals on Achateny, but of the twenty-two clachans,

POPULATION DISTRIBUTION

WEST ARDAMURCHAN

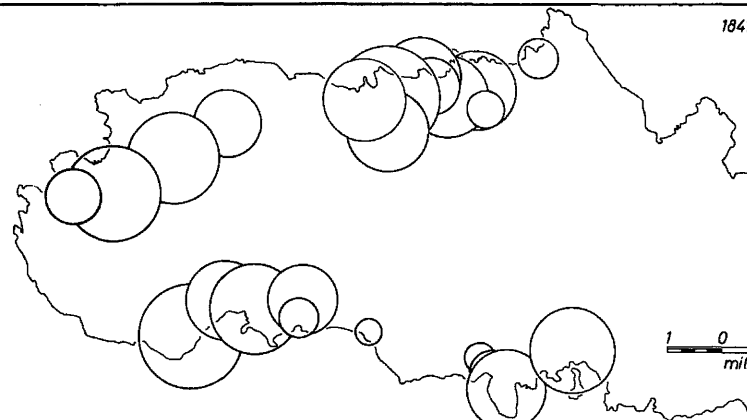
1733

MURRAY



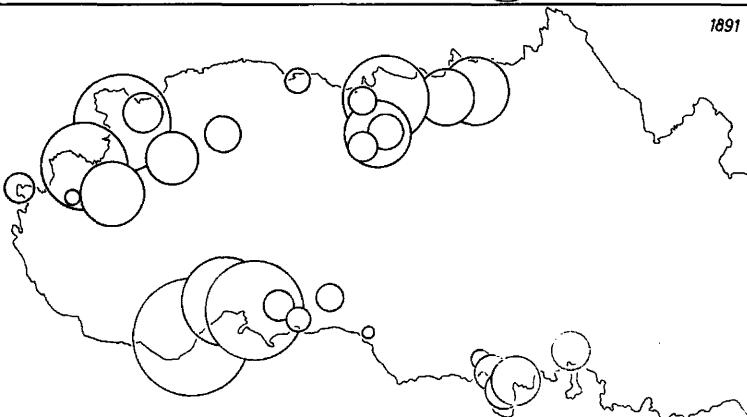
1841

1841 CENSUS



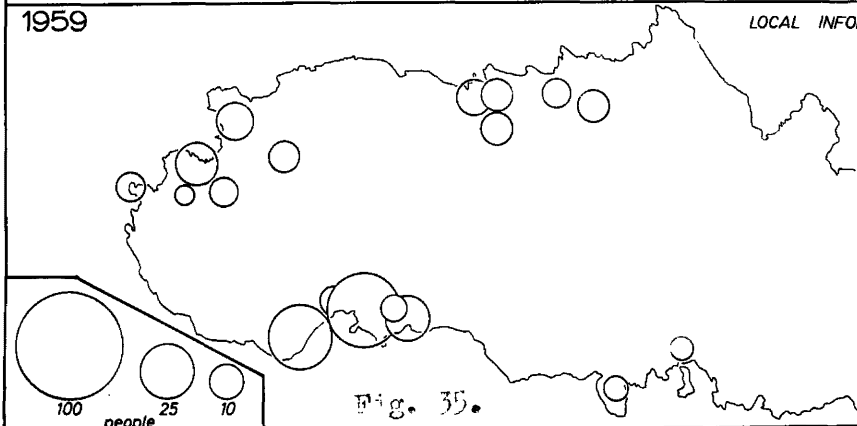
1891

1891 CENSUS



1959

LOCAL INFORMATION



eighteen had populations in the range of twenty-four to thirty-seven people, at an average of thirty people in six or seven families per community. This consistency contrasts with the later variations which developed in community sizes.

Change was late in coming. More than a century later, in 1841, the distribution of population had changed little with but one major exception. The four Ben Hiant townships, Tornamona, Bourblaige, Skinid and Corryvoulín, the first two on the east side, the others on the west, had been almost totally cleared. In 1834, the west side communities consisted of eight tenants each, with an unknown number of cottars. Figures are not available for the east side, but Bourblaige was probably the same size and Tornamona slightly larger, working on the analogy of the figures for 1807 (Riddell: Valuation of the Estate ... 1807, Factor's Notebook, 1834). The four joint-farms were cleared to create a single sheep-walk, and the mountain remains as part of Mingary farm, generally acknowledged to be one of the finest hill-grazings in the west Highlands. It is now used as an experimental farm under cattle, sheep and deer. The clearance of Bourblaige and Skinid was complete, but single cottar families lingered on in Tornamona and Corryvoulín till the end of the century (C.E.B.: Ardnamurchan 1841, 1891). The clearance of these farms may be placed fairly accurately in 1838, for this is the last year in which payments were made to poor and also in which people there paid fines to the parish for moral and other offences (Kilchoan Reg.: entries for 1836-39). The expulsion of at least thirty families from Ben Hiant inevitably swelled the populations of other settlements. Many of those evicted went to the Kilchoan area; others were accommodated in the Achateny-Swordle area where people were eventually forced to move to extreme sites, such as Elegidle on the north coast, and high up in the Ockle Glen. Appearing in the 1841 census, these were cottar settlements only do not appear in the estate records. They had disappeared by the time of the 1891 census.

It was inevitable that many had to emigrate or to remain as landless cottars, and by 1852 fourteen farms which in 1733 had supported ninety-four families, tenants or otherwise, accommodated

one hundred and twelve tenants and sixty-six cottars with their families. In the whole of the Ben Hiant area there were now two cottar families on land which in 1733 had supported twenty-eight tenant families, and the decline in numbers was from one hundred and twenty-nine to fourteen.

The clearance of Ben Hiant was but a beginning. The three Swordle townships, Swordlemore, Swordlechorach and Swordlechaol, are not mentioned in the Kilchoan Register after 1848/49. Dicksons's Report of 1852 claimed that "... the Tenants of the Farms of Swordlemore, Swordlechorach, Swordlechaol and Kilmory are so deeply in arrear that it is absolutely necessary that they be removed and the amount due by them realised by the sale of their stock" (Riddell: Report ... 1852, 5). The factor's view was that the people so evicted "may be able easily to shift for themselves" but the proprietor was not so optimistic, and the factor was ordered "to keep the matter fully before him" so as to avoid the risk, when removed, "of parties being left without the means of procuring shelter for themselves and their families" (Riddell: Ibid., 5-6). This eviction was soon after effected, for a later undated note, added to the 1834 Factor's Notebook reads, "Swordlechorach, and the two following farms (the other Swordles), have been relieved of the small tenants, and are now in the proprietor's hands" (Factor's Notebook: No. 43). Giving evidence before the Deer Forest Commission in 1894, James Nisbet, a crofter in Ormsaigbeg, who had been born in Kilmory, the only one of the four townships mentioned in 1852 which was not ultimately evicted, recalled the evictions from the three Swordles which he estimated at forty-two years previous to 1894, that is in 1852. He thought that there had been a total of twenty-two tenants, but Dickson's report showed nineteen tenants and ten cottars, while the 1841 census indicated thirty-one occupied houses. In 1894 there was a single tenant (7: Minutes of Evidence, questions 37067-37077), but the 1891 census showed six families, so presumably a fairly large labour force remained on the united farm, and in 1959 there were still three occupied houses, with seven people.

In 1841 the census listed sixty-eight people in thirteen houses on Glenmore, but in 1852 seven tenants and nine cottars were removed. The

cottar families alone numbered more than thirty people. At least four of the tenants found other quarters on the estate, including one in Ormsaigbeg and one in Achnaha (Riddell: Report ... 1852, Glenmore). The ease with which the surplus thus created could be absorbed into other communities was apparent to contemporary observers. "Even those farms which are let on regular Leases to a certain number of joint-tenants, are in many cases occupied at this moment by nearly double the number contemplated by the original arrangement. A father for example divided his half, fourth or eighth, as the case may be, with his Sons and Daughters, or perhaps with Strangers, and the consequence is, that the place becomes inadequate to the support of the number of men and beasts upon it. Hence the poverty and perpetual quarreling of the parties, and the deteriorated condition of the cattle. And both these evils are greatly increased by the absurd system of runrig, or alternate annual changing of the whole arable land of the farm among the different occupants of these joint holdings" (Riddell: Factor's Notebook, 56-58). The factor went on to point out that the larger tenants were equally responsible for over-crowding, for they allowed too many crofters on their holdings. (Riddell: Factor's Notebook, 59-60). The clearance of Glenmore was not complete. In 1891 there were still four families in occupation, representing a quarter of the total population half a century before.

These clearances put a considerable strain on the remainder of the estate. Many of the evicted were accommodated on other farms despite heavy outward migration from the parish.

Some of those removed from the Swordles went to Gorteneorn and Gortenfearna, west of Acharacle, on the Ardnamurchan estate but outwith the area here considered. Others went to the Kilchoan area where on the farm of Mingary the cottar dwellings of Tomachrochair appeared first in the 1850's. They numbered five houses with nine people in 1891, but by 1959 had decreased to two occupied dwellings with six individuals resident. In many cases the removals were occasioned, as far as the estate administration was concerned, by the inability of the tenants to pay their rents and the arrears which they had

accumulated as a direct result of the famine years between 1845 and 1848 and also a slump in cattle prices about 1850. The rent was paid largely on the proceeds of cattle rearing. When the price of cattle fell the estate turned to sheep rearing requiring proportionally fewer people on the land. The famines, of course, had been no respecters of persons, and the communities to which these unfortunate families moved were ill-equipped to receive them, adding to the strain.

In an attempt to accommodate some of the population rendered homeless by the clearances, the estate set up two new townships each consisting of very small crofts. The soumings of these crofts consisted only of two cows and their followers each, for it was intended that the crofters should earn their livings from fishing and estate work. Sanna came into being about 1850 with twenty two-acre crofts. The township was set up on an area of machair north of Achnaha. East of it was Lower Achnaha, later to become Plocaig. Some of the first of the Sanna crofters originated in the Ben Hiant townships, others in the Swordle farms, and a few had moved from the now over-crowded Kilchoan area. It was never intended that these new crofts, lotted from the first, should provide economic units, and the same applies to the other township of lotted crofts set up at Portuairk, about a mile west of Sanna on the north coast. Portuairk was set up on land which, as Bald indicated in 1806-7, belonged to the joint-farm of Achosnich, and today the two modern townships of Portuairk and Achosnich share a grazings clerk. Local tradition has it that the people were moved from the Swordles to Portuairk by boat in the autumn, and that they spent the first winter under their upturned boats in great hard-ship, for they had had to leave most of their potato crops in the ground at their old homes. They were unable to build houses till the following spring. The factor paced out the ten crofts irrespective of the varying quality of the land. With the crofts at Sanna, these seem to have been the first lotted crofts in west Ardnamurchan.

By 1891 considerable distinctions in community size had arisen. All the largest communities were now recognised crofting townships, following legal recognition given to the small-holders by the Crofters' Holdings (Scotland) Act of 1886. Apart from the lotting of Portuairk

and Sanna, runrig persisted in the west end. Traditional evidence maintains that Achosnich was lotted in 1902. The father of a present tenant there came into the township when individual crofts were in as many as sixty-three non-contiguous patches. Achnaha was not lotted till 1916, and Kilmory has still never been adequately lotted into consolidated units. There the crofts consist of two, and sometimes three non-adjacent patches. The lotting of Ormsaigbeg was earlier, however, for some individual crofts were shown on the earliest large scale O.S. maps surveyed at the beginning of the last quarter of the nineteenth century.

In contrast to these relatively large crofting communities which have persisted till today, the farms, Achateny, Mingary, Grigadale and Ardsalignish, have been established as such for at least a century. Mingary had two families in 1891, the others had one each. Although Ormsaigbeg remained the largest single community, Kilchoan was rapidly approaching it in size. There was a growing non-agricultural group of tradesmen and labourers centred there, and with the addition of an hotel and a store and post office, this is now the largest community in the west end.

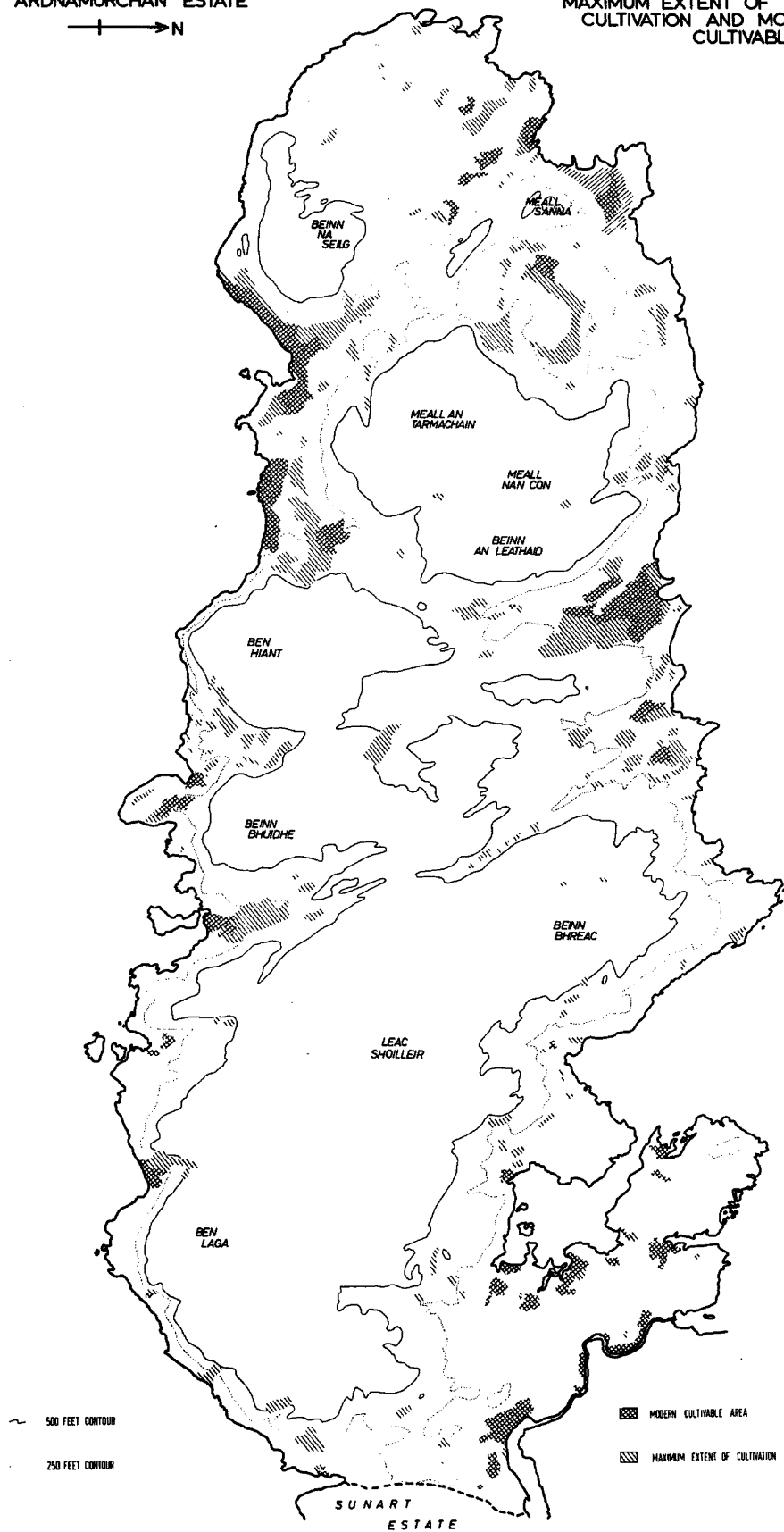
In the modern period, particularly since 1930, all of the community populations have decreased in size, while two have become totally derelict. Plocaig, originally Lower Achnaha, lost its last inhabitants a decade ago, but Glendrian, in which some of the crofts were certainly lotted by about 1875, was abandoned soon after 1894. In 1841 Glendrian had had thirty-nine people on eight holdings. The clearance was not sudden, but gradual. In 1852 there were still seven tenants and a cottar (Riddell: Report ... 1852), and in 1891 there were five occupied houses inhabited by nineteen people. The final clearance was in 1892 (7: Minutes, question 37450) though two cottars remained for some time afterwards. Glendrian was cleared to add to the hill grazings of Achateny farm and was put under a sheep stock. The remaining cottar families acted as shepherds, and finally left in the twentieth century and the settlement became totally derelict.

A consequence of the contraction of population was the dereliction of much of the previously arable area (Fig. 36). Bald's map of 1806-7

ARDNAMURCHAN ESTATE



MAXIMUM EXTENT OF
CULTIVATION AND MODERN
CULTIVABLE AREA



shows, with few exceptions, the maximum extent of cultivable land. As in Southend and Knapdale, we must therefore assume that the increase of population during the early decades of the nineteenth century was met by an intensification of agriculture on the area already taken in, not by the breaking in of new land.

The principal exceptions are at Sanna, where the modern township did not come into existence till mid-century, and the land was only partly cultivated by a farm denominated "Saune" by Bald, which also appears on Roy's Map in the mid-eighteenth century. In the 1751 Valuation it appears under the same entry as Achosnich and may have been a tacksman's separate residence. However, no mention of such a farm is made anywhere in the available estate records which, unfortunately, do not extend back beyond 1806. Apart from some minor areas of outfield cultivation in the west end, the major exception occurred outwith the area under consideration. Land was reclaimed from peat during the nineteenth century at Kentra and Newton of Ardtoe.

There never was any cultivation of consequence above 500 feet and without exception all of the cultivable area between 250 and 500 feet has reverted to grazing. All of the old arable areas associated with the now-ruined settlements lie derelict, except at Skinid on the experimental Mingary farm. Also, more than half of the arable land belonging to those farms where continuity of settlement has been maintained has gone out of cultivation. As early as 1838 "extensive tracts of outfield arable (were) relapsing into their original barrenness, in consequence of being included in pastures" (35:162).

This contraction in the arable area was taking place at a time when population pressure on the land was at a maximum, and when the main deficiencies of the area were listed as : "Injudicious distribution of the bulk of the people; the want of leases on the part of the small tenants; their holding their lands in common and not in separate lots; their constant practice of sharing their possessions with the married members of their families, to which no practical check has yet been given; the consequent inadequacy of the land by each family for its support" (35:153). Giving evidence before the Select Committee on Emigration in 1841, the parish minister who

had written the above words, again condemned runrig. "Holding farms in common is (a.) source of the evil of over-population. If the arable lands were to be divided that each had his own portion to labour, ... it would be a stimulus to industry, and to the improvement of lands" (1: question 455).

By 1840 there had been little or no enclosure, except on Mingary Farm (see Ch. 6). It had been suggested in 1807 that areas of more than four acres arable should be enclosed (Riddell: Valuation of the Estate ... 1807: Further Remarks). But this was not carried out, and even when the lotting of crofts was introduced in the mid-nineteenth century they were not enclosed from one another, for the township lands remained common for winter grazing purposes. The only real enclosure that has taken place has been on the farms. At Ardslnish, Achateny and Mingary there was some building of stone walls after 1850, but to a lesser extent on Grigadale.

The Deer Forest Commission, as a result of evidence taken locally, suggested possible extensions of crofting in Ardnamurchan (Fig. 37). These, however, were not acted upon and the present crofting areas are those shown on the Deer Forest Commission map. It was proposed that Grigadale farm should be added to the existing crofts at the Point of Ardnamurchan, particularly Portuairk, where there was inadequate common grazing, even for the two cows each crofter was permitted to keep. Achateny, Mingary and Glenmore were all suggested for the re-establishment of small-holder farming. Had these ideas been implemented, a distribution of population would have resulted similar to that of 1733.

The present circumstances of settlement are a function of the changes in population and tenure described above. The situation is summarised in Fig. 38. All of the farms show complete continuity in settlement from their joint-farm predecessors, so that the old clachans have been replaced by substantial farm steadings, built between 1850 and 1900 in most cases. Of the present crofting communities, most are successors of runrig joint-farms of the eighteenth century. In Ockle, Kilmory, Achnaha and Achosnich, a clachan form of settlement has persisted where lotting was a relatively recent feature. These are small townships averaging less than half a dozen crofts each. In

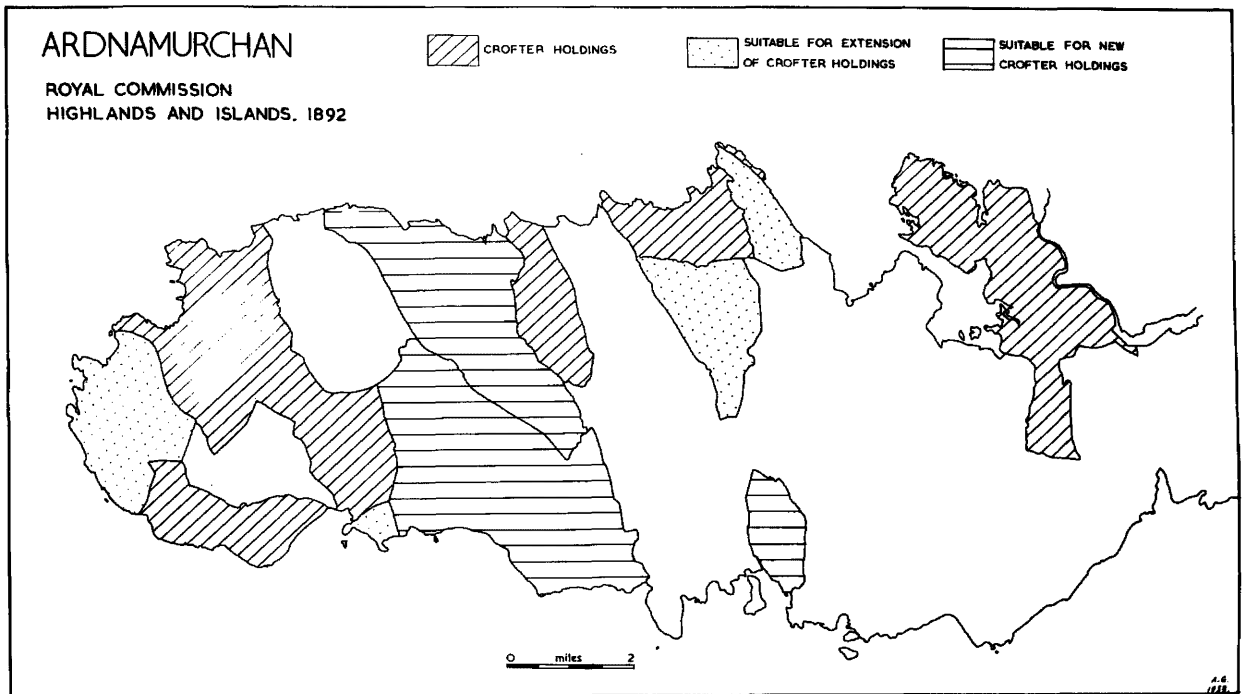


Fig. 37.

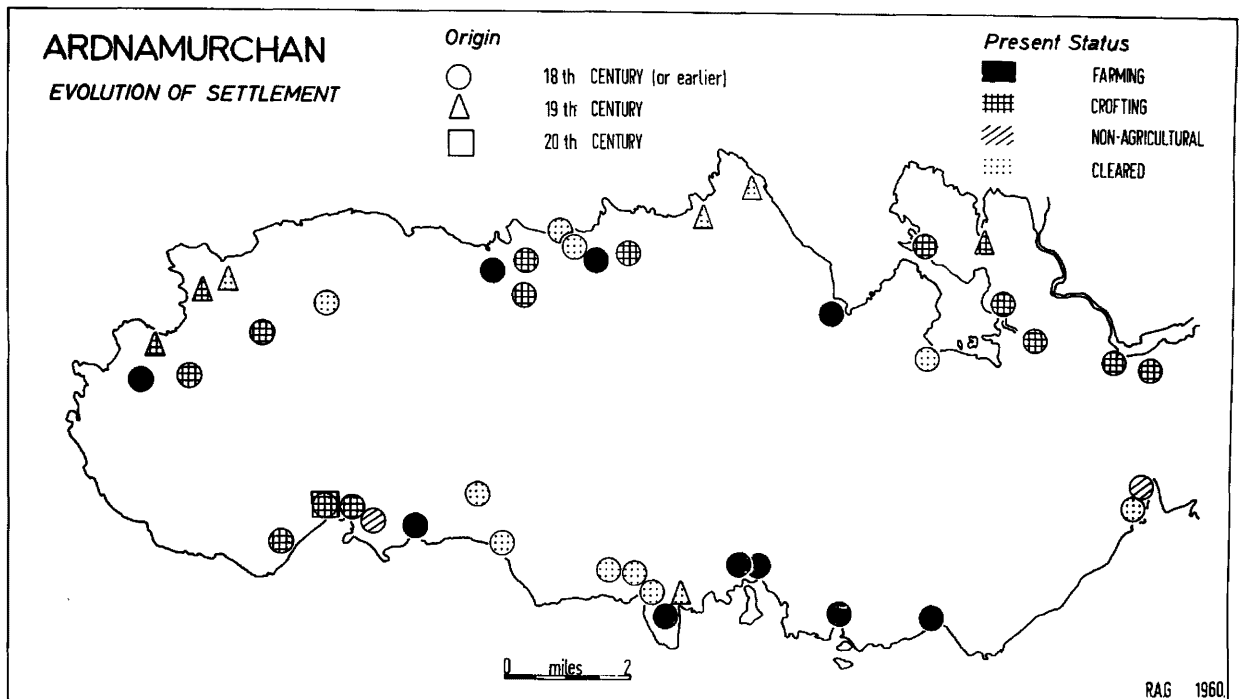


Fig. 38.

Ormsaigbeg, which is much larger, the crofts were lotted earlier and there has been a dispersal of the township dwellings on the individual holdings, producing a widely spaced linear settlement pattern along the township road. Morphologically the settlement is neither dispersed nor nucleated. In 1806-7 Bald showed a clachan towards the east end of the township lands, but apart from a more complex field pattern here which probably incorporates elements of the old settlement and its stackyards, none of the original clachan remains.

The townships which were set up in the mid-nineteenth century are laid out in parallel lotted strips of land, but the settlements are not necessarily similar to that of Ormsaigbeg which has this field pattern. In Sanna, both a clachan on the machair, and dwellings dispersed at the edge of the hill grazings, have developed. In Portuairk, the houses are all at the foot of the crofts, near the sea, and so a linear settlement resulted.

At Kilchoan there is the sole non-crofting settlement, interspersed with the ten crofts of Kilchoan township and the glebe. The composite settlement is formless and scattered, and it is possible to recognise only one influence consistently at work. The road has attracted houses to it, especially during the past two or three decades when old black houses have been replaced by new houses with permanent roofs. The only settlement which, in its modern form, might be claimed as of twentieth century origin is Ormsaigmore, which is a crofting resettlement. Originally a joint-farm it became a single tenancy in the nineteenth century, but was re-established as three larger-than-average small-holdings, each with its separate dwelling.

The Ben Hiant settlements were all amorphous clachans. They were large, but in all instances the dwelling and byre were under a single roof, and entered by the one door. Bourblaige (Fig. 39, see also Appendix 3a, Site 30) may be taken to represent these settlements. Examination on the ground has shown the accuracy of Bald's cartography at the beginning of the nineteenth century. Every field shown on the 1806-7 map is readily recognisable on the ground, and with only minor differences the ruins of the settlement he showed still stand. In association with all of the clachans Bald showed there were only one

BOURLAIGE , AFTER BALD

1806-7

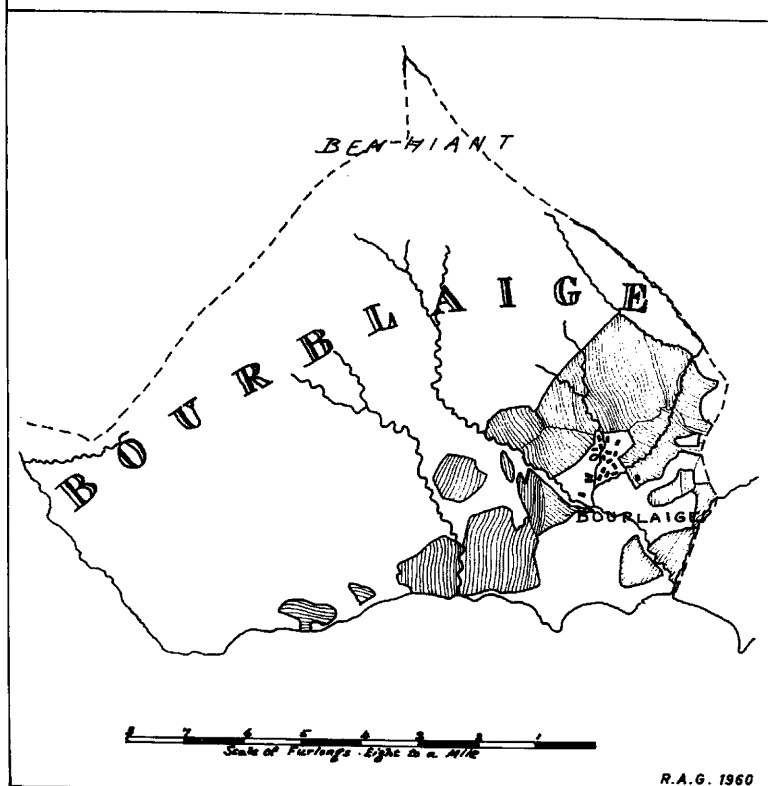
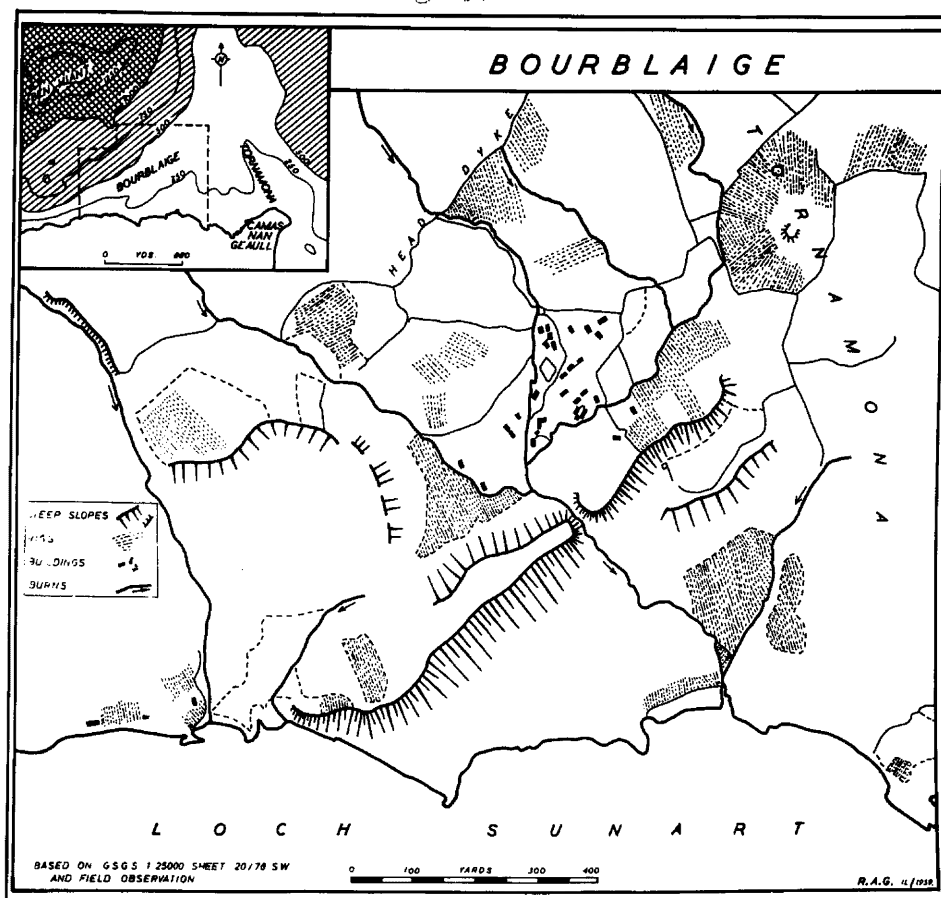


Fig. 39.



or two garths. Only at Skinid were there as many as four. But on none of the farms were there as few as four tenants, six was the usual number and some had more. Quite obviously these garths were used as communal stackyards, and the correlation of the number of garths with the number of tenants which seems to exist in Knapdale will not hold in Ardnamurchan. It is probable that it will not be found to hold anywhere north of the Great Glen in Argyllshire, for the Morvern clachans shown by Scott were similar to those in Ardnamurchan in 1806-7 (255: Fig.6). At Glendrian the ruined settlement is composed of two parts; an amorphous and earlier clachan lies to the northwest of a few lotted crofts with widely spaced houses in a linear pattern. The settlements in the northeast, at Acarsaid and Elegidle were amorphous house-clusters which came into being in response to nineteenth century pressure of population and clearances. Plocaig (Appendix 3a, Site 32), also nineteenth century in origin was originally known as Lower Achnaha and probably was initiated as a cottar settlement only. It was ultimately detached from Achnaha to become a crofting township in its own right. The settlement there was linear with a row of thatched black-houses backed by thatched separate byres. In some cases the house gables were only two or three feet apart, so compact was the group of structures.

As in the other areas of Argyllshire studied in detail, it would appear that the amorphous clachans were derived from the eighteenth century or earlier. Bald's map of 1806-7 shows no other settlement form in the west end. The only linear settlements, either the clachan at Plocaig, or the looser pattern of houses in the townships of Ormsaigbeg and Portuairk are demonstrably of nineteenth century origin.

In attempting an assessment of the modern social viability of the settlement pattern of west Ardnamurchan, caution is essential. In the field some of the habitable croft houses lie vacant. Those occupied do not necessarily house the people working the land with which the houses themselves are associated. Sub-letting of crofts, though surreptitious, is widespread and is a function of the uneconomic

size of the holdings in relation to modern living standards, of the age-structure of the resident population, and most important, of the employment opportunities or lack of these in the local community. It is impossible to assess the number of active crofters in a township on the basis of the number of occupied houses. This aspect of the modern settlement is true of not only west Ardnamurchan, but also the Crofting Region at large, and has been considered in greater detail in Appendix 6, where two of the townships in the west end are compared with others in the Hebrides. Study of the ratio of population to the number of occupied houses over a period of time is also necessary. It has been shown in all three areas studied that the number of people per occupied house did not alter significantly till the twentieth century, but in the past fifty years it has been as much as halved. The changes in population and changes in number of houses did not occur in step, and in one or two areas in the county, as new houses have become necessary, there has been a temporary increase in the number of occupied dwellings, in spite of continuous decline in the number of people. Consequently it is not valid to use settlement as an indication of the intensity of population distribution on a detailed basis, except for a single point in time, and only then when the relationship between occupied houses and population is known.

(b) Morvern.

In 1751 the Duke of Argyll possessed one hundred and fourteen of the one hundred and eighty-five penny-lands in Morvern, and along with his other estates a census of the Morvern farms was made in 1792. Comparison of the 1751 Valuation with the later census indicates no change in the Duke's possessions in the parish during four decades. The distribution of population shown in Fig. 40 recalls the 1733 distribution in Ardnamurchan. Despite a difference in the scale of the circles on the two maps, the larger size of the individual farm populations in Morvern is evident, but it must be remembered that the census was taken at a period of rapidly increasing population. Webster gave the population for the whole parish in 1755 as one thousand, two hundred and twenty-three. By 1793 it numbered one thousand, seven

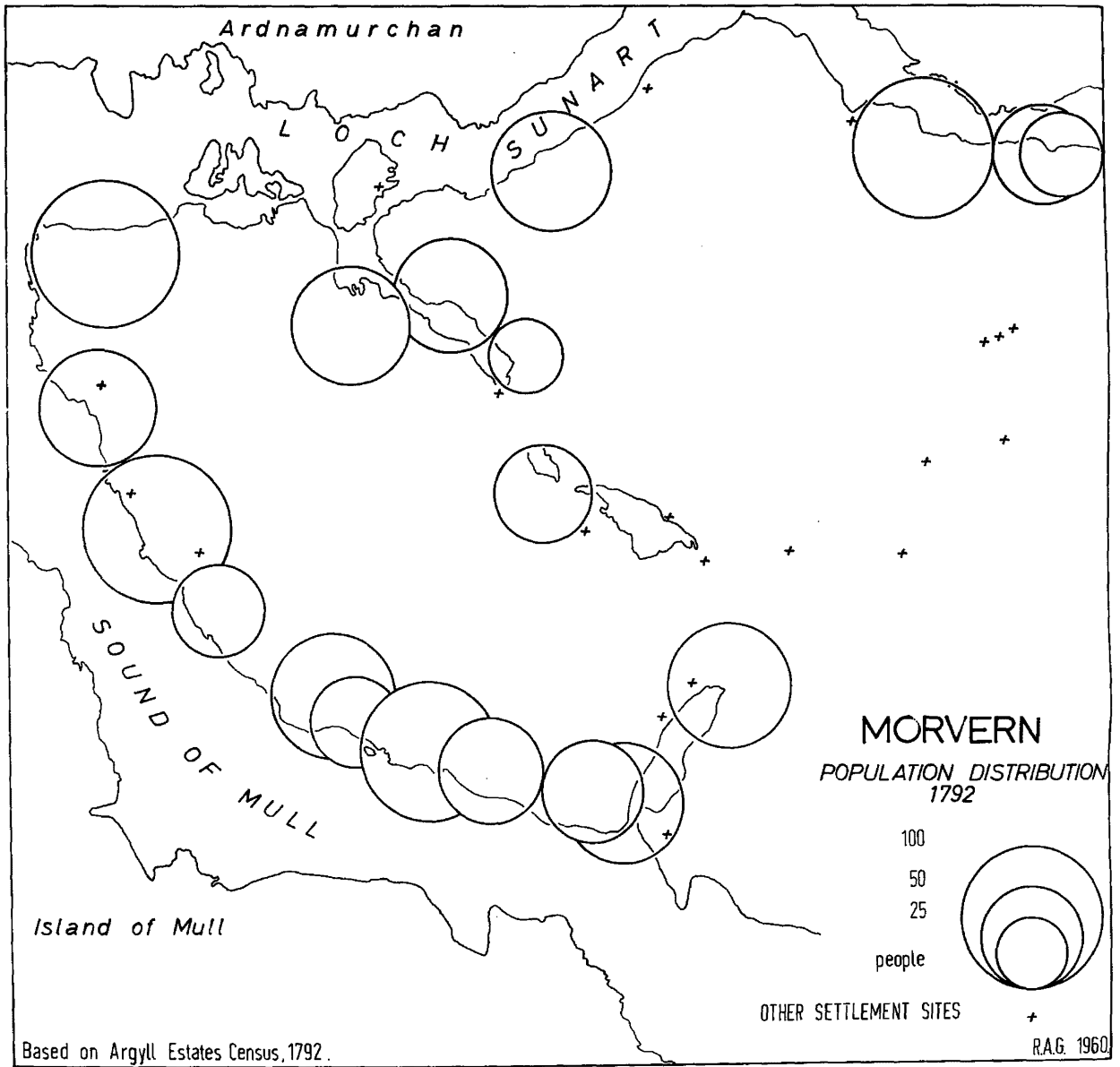


Fig. 40.

hundred and sixty-four, an increase of five hundred and thirty-one in thirty-eight years (16:270). In 1792 the land was still held in runrig, but a large cottar population had come into being, evidenced by the long list of specialised tradesmen given in the Statistical Account the following year. On average there was one male weaver for every two clachans, with a cowan, or house builder using the dry-stone technique, for every six settlements, which argues considerable impermanence in the dwellings of the period.

The smallest clachan on the Duke's farms numbered twenty-six people and the largest one hundred and eight. Twenty-two of the farms for which populations are given could muster one thousand two hundred and thirty-nine people, an average of over fifty-six each. The distribution of these communities was peripheral to the main hill masses of the parish, and confined to the steep slopes of the basaltic west end of the parish and the through valleys which connected Lochaline with Loch Sunart.

When the census was taken the Duke's farms in Morvern were held by the joint-tenants direct from the proprietor. Duncan Forbes of Culloden had been instrumental in 1737 in ridding the estates of tacksmen (Chapter 5). Clause (g) of the general conditions under which the tenants held their lands from the Duke read: "They are all bound to possess the Lands Sett to them with their own Stock & Servants and are on no account to Subsett under forfeiture of the possession of the Whole Tacklands or the part of them that has been so subsett" (Argyll: Rosneath No. 8, Minute Book of Conditions of Leases, 1787, 2).

There is, nevertheless, evidence to suggest that tacksmen continued to exist. The leases found with the minute book show only one or two tenants in each possession, except Killundine where there were seven joint-tenants. In view of the size of the farm populations, discussed above, unless there was an incredibly large servant and cottar class some sub-tenancy must have existed. John Campbell of Ardslygnish, which is in Ardnamurchan, was officially the tenant of Laudill, Camsalloch and Lurguoy (Argyll: Ibid., 47-8). On Lismore, Achindoun and Island of Bernera was let to a mainland laird, Mr. Campbell of Glenure "and his Subtenants" (Argyll: Ibid., 52).

Evidently tacksman and small laird could be one and the same person, and sub-letting to joint-tenants continued.

The 1751 Valuation contains thirty-nine entries for Morvern, with fifty-one separate farms or holdings. In 1794 the parish minister mentioned only thirty-two farms, seventeen of which were held by gentlemen tacksmen and mainly stocked with sheep, five others were let directly to shepherds and only ten were still held by communities of joint-tenants. We have seen that there was no significant alteration to the number of farms on the Argyll estates in the parish during this period, so the amalgamations must have been concentrated in the remainder of the parish, where "The method of uniting farms began long ago, and seems to be gaining ground in proportion to the avidity for high rents, and the rage for sheep stocks" (16:265). Thus wrote the parish minister in 1794.

In 1819 the Duke of Argyll sold his farms in Morvern to various proprietors (36:180), and this was the signal for the introduction of sheep farming on a large scale, at the undoubted expense of the local population. Many of the dispossessed tenants took up minute holdings in or near villages. Lochaline village with its non-agricultural functions dates from this period. Others were forced to migrate from the parish (36:186). In spite of this, the population continued to increase till 1831 when it totalled two thousand and thirty-six, but the rate of increase of the resident population had slowed down. In the thirty-eight years between 1794 and 1831 the increase was two hundred and seventy-two, compared with five hundred and thirty-one in the thirty-eight years before 1794. By 1841, however, the population was back to its late eighteenth century level. Thereafter the decline was rapid till 1881, and has continued to the present. Large-scale sheep farming, started in the parish outwith the Argyll estates before 1819, spread over the whole of the area soon after the sale of the Duke's lands. Its introduction was easily accomplished. "The tenure of land as held by the poorer classes is simple in the extreme, and their hamlets removable with as great ease" (36:185).

The parish minister, giving evidence before the Select Committee on Emigration in 1841, saw two related processes at work affecting

settlement and the distribution of population. The erection of sheep-walks caused depopulation in some areas, and so the people were forced to congregate in villages elsewhere where there was no steady employment (11: question 1067). The same man, two years later, wrote: "From the sub-division of property, the general appearance of the country is, to a certain extent, improved by increased attention, in the more cultivated parts, to a more judicious system of husbandry, the formation of planted and other enclosures; but, owing to the depopulation of some, and the over-peopling of other districts, and, among other causes, the great augmentation of rents, a corresponding improvement, to say the least, has not taken place in the condition of the inhabitants, nor are the disadvantages under which the parish was found to labour, to any extent remedied. There are yet no roads ... The "sheep system", however, operates, and will probably continue to do so, as a bar to agricultural and other improvements, and thus, under existing circumstances, there is little prospect of seeing the condition of the people greatly ameliorated" (36:194).

The parish was almost completely under sheep and deer by 1884. Evictions had been continuous throughout the period after the sale of the Argyll Estate farms. Between 1820 and 1830, twenty-five families on Ferinish, Mungastell, Barr and Innemore were removed, another forty-eight families left the estates of Acharn and Ardtornish between 1830 and 1840, about 1865 twenty-five to thirty families were evicted from Achabeg and Knock on the Lochaline estate, and the final removal of tenants took place at Drimnin about 1870 (5: Evidence, question 36138). Some of those evicted were housed as cottars and small-holders, principally in the village of Lochaline, but many were forced to leave the parish to find work in the Lowlands. Conditions in Lochaline village were grim. The houses were mostly one-roomed thatched structures, and some of the families in occupation of these diminutive dwellings took in lodgers (5: Evidence, qs. 36533-6). A pier was built at Lochaline for shipping stock out of the parish but this provided work for only a few because skilled labour was imported (5: Evidence, qs. 35545-8). It was probably the intention of the various estates that the evicted tenantry should subsist on small crofts along the shores.

In the eighteenth century most communities of joint-tenants had had at least one, if not two boats for fishing and for the carrying of seaweed for mamre (16:269), but this was only a part of the total clachan economy, and not a sole, or even principal means of subsistence. In 1883, Dr. Macleod said of the evicted tenants that they went "to occupy houses in wretched villages near the seashore, by way of becoming fishers - often where no fish could be caught" (213:184).

The population of Morvern now numbers only four hundred and sixty, which is only fractionally more than a quarter of the maximum and only a third of the mid-eighteenth century total. Much of the parish is State-owned and being planted under forest which provides some employment, while other work is available on local sheep and cattle farms, and in the sand-quarries at Lochaline where sand for building purposes is obtained from an outcrop of Mesozoic rocks trapped under the Tertiary basalts. The parish is almost non-crofting, with only a single township at Bunavullin consisting of ten crofts, though in 1948 there were only eight tenants (W.H.S.Cards:Bunavullin). The Index of Place Names for 1951 gave two hundred and thirteen as the population of Lochaline, almost half of the total population of the parish. The total has fallen so low that there is actually a shortage of labour for the employment available, an anomalous situation in the Highland area (W.H.S.Cards:Lochaline).

Appendix to chapter 9.

Population Densities, Distributions and Changes in Tiree.

Ardnamurchan is now only partially a crofting area; a number of substantial stock-rearing farms exists interspersed with the crofting townships. Morvern is almost non-crofting and more nearly than any other part of Argyll demonstrates the effects of whole-sale clearances. For purposes of comparison, this short appendix is designed to show something of the population changes in a wholly crofting area. There is only one farm in Tiree, the modern successors of the eighteenth century joint-farms being the crofting townships.

Population increased steadily until 1831, and thereafter declined (Table 12). The figures show a tremendous upsurge between 1787 and

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Table 12.
Tiree, Population Densities, 1755-1951.

Year	Population	Persons/square mile
1755	1509	51.1
1779	1881	63.8
1787	2304	78.1
1801	4001	135.6
1831	4453	150.9
1891	2452	83.1
1951	1219	41.3

1801, so much so that the estates censuses of 1779 and 1787 may possibly err on the conservative side. The distribution of the population in 1779 and 1787 is shown on Fig. 41. Both censuses were taken after crofts had been lotted about 1776 (158:67). These were possibly the earliest lotted crofts in the Southwest Highlands, and as we have already seen, not only in this but also in the early abolition of tacksmen by Forbes of Culloden in 1737, Tiree was ahead of the Highlands in general, agriculturally and socially. The island is relatively fertile, shell-sand having been blown over most of the island giving machair-type land and easily-cultivated flat or gently sloping surfaces. A much larger proportion of the total area is cultivable than is usual in Highland parishes, and the population densities are proportionally higher than in the three areas already studied. The changes in population between 1779 and 1787 were by no means evenly spread over all the farms. Two settlements decreased in size, though the decline in each case was small. The modern distribution of settlement is essentially similar to that of the eighteenth century, except that the numbers involved are smaller, and so the settlement might be considered to be less intense. The similarity in distribution over as long a period as two centuries since 1750 is in contrast to the changes in any area on the mainland of Argyll.

In Tiree, sub-letting of holdings by joint-tenants was forbidden as early as 1755 (5: Report, 386) and towards the end of the nineteenth century the Duke of Argyll suggested that "the overcrowding, and poverty which arose in Tyree, were certainly due to the abeyance into which the

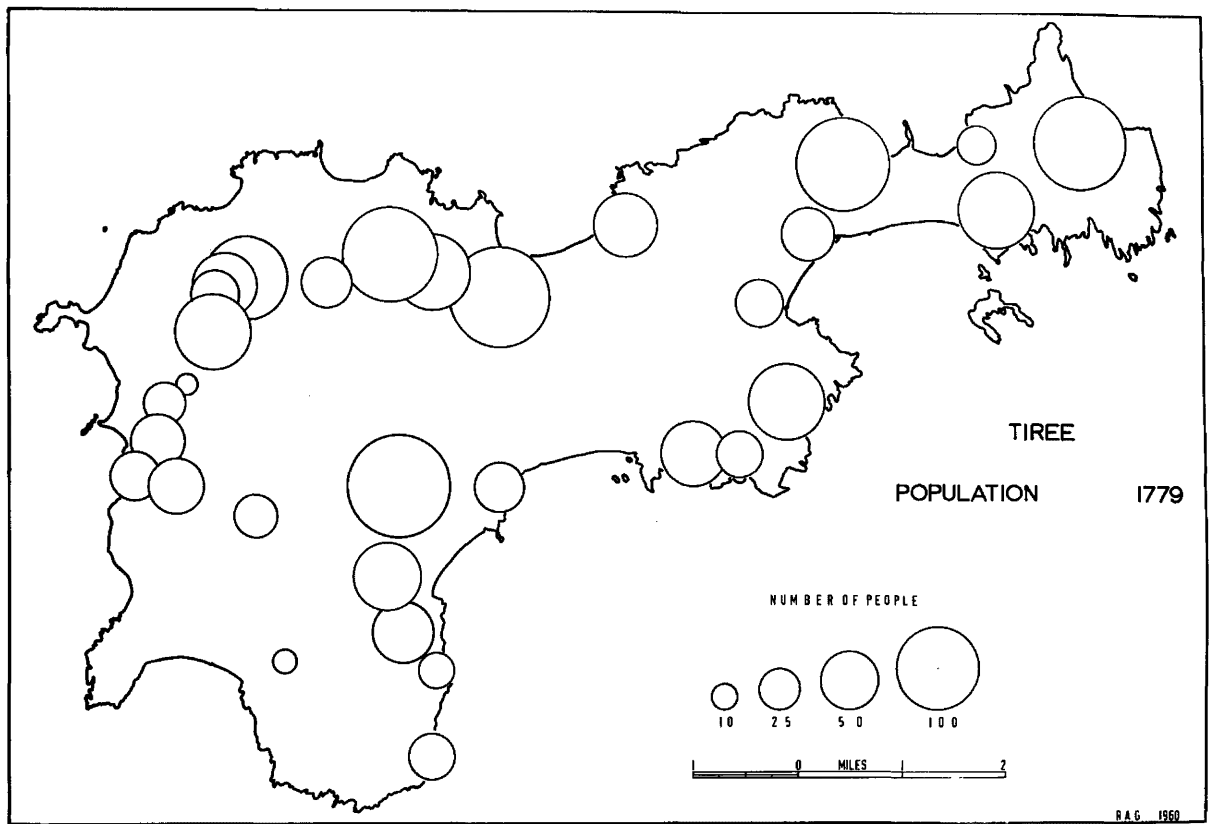
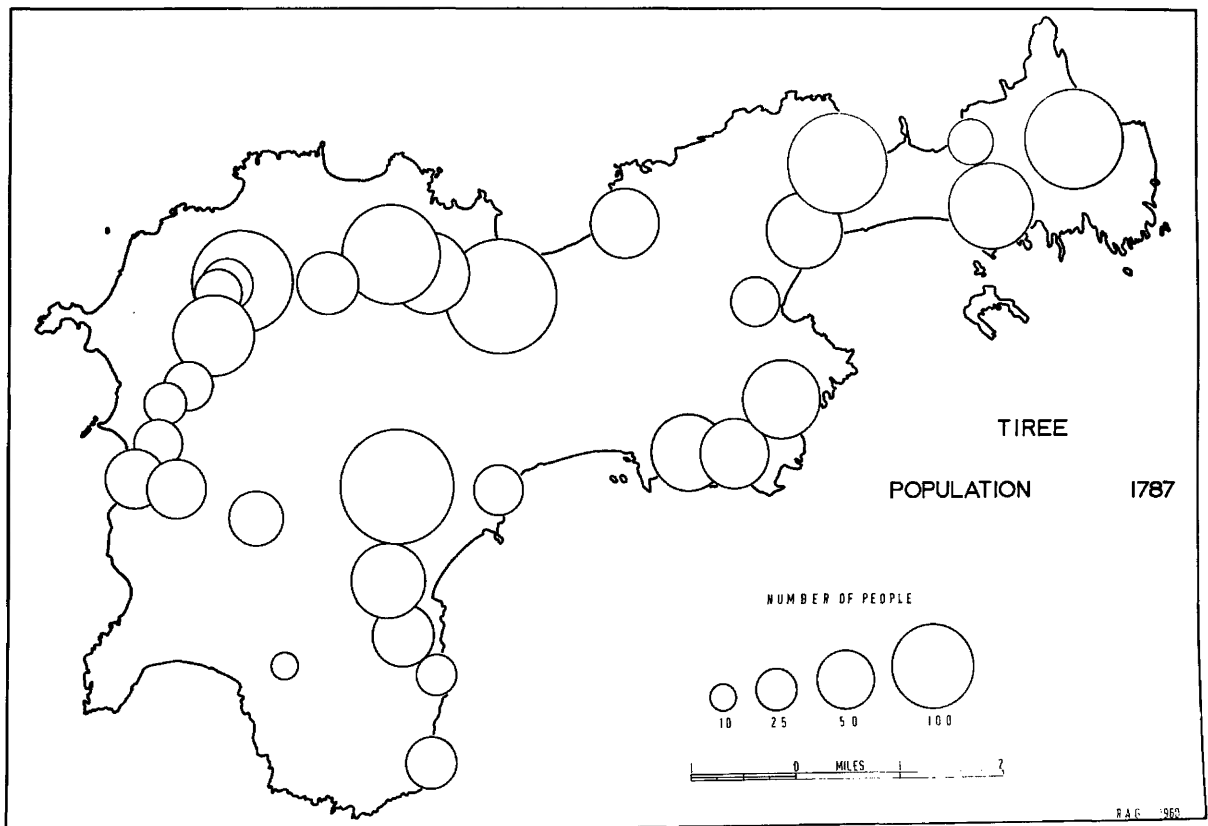


Fig. 41.



prohibition against sub-letting, and sub-dividing were allowed to fall, after the introduction of the potato and the kelp manufacture had blinded the eyes of both the proprietor and people to the precariousness of the abundance on which they relied" (5: Report, 286). As elsewhere there was considerable nineteenth century emigration from the island, but not to the extent experienced elsewhere. In comparison with most of the Crofting Region today, Tiree is fertile and supports a progressive community. With a thrice weekly boat service and an air service, the island is exceptionally well served in communications with the mainland. This, with the peculiar environmental circumstances, has fostered the acceptance of a specialised agricultural pursuit in the cultivation of spring blooms and bulbs for sale in industrial areas. The average croft size of twenty acres is in excess of the average holding size in other crofting areas. On the basis of the Fair Rents awarded by the Crofters' Commission between 1887 and 1912 the average rent per croft is £7.12.11, proportionally lower than in any similarly extensive crofting district in Argyllshire. The modern prosperity of the crofting community in Tiree, a result of kinder physical conditions and a wise estate policy in the eighteenth century, contrasts with the dereliction of much of west Ardnamurchan and similar areas, where a laissez-faire attitude by the proprietors and their agents in the past permitted or enforced the appearance of agricultural units too small ever to provide an adequate livelihood for a family.

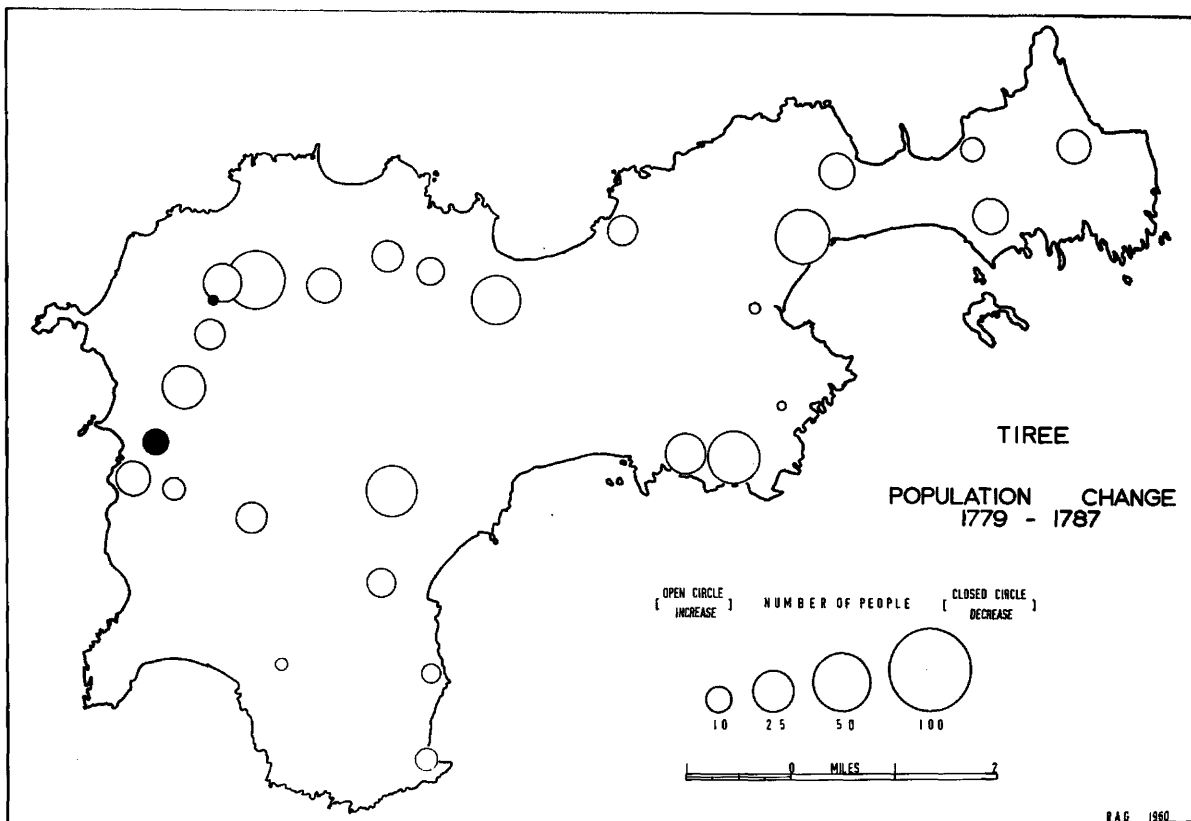
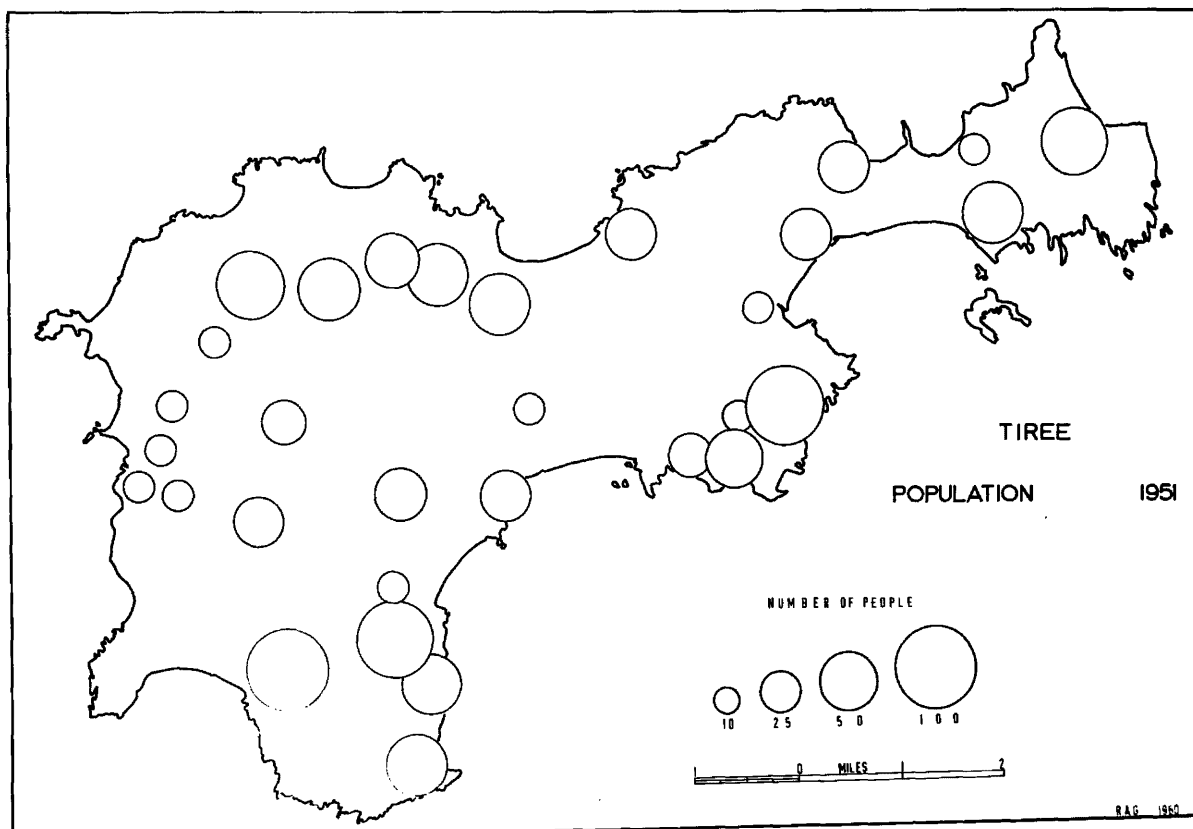


Fig. 42.



SECTION IV

THE NINETEENTH CENTURY

Chapter 10.

THE ABOLITION OF CLACHAN SETTLEMENT

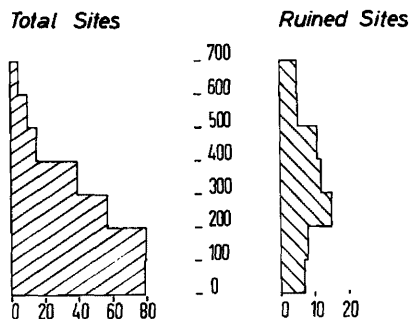
From the regional studies it is obvious that there has been considerable contraction in settlement since the mid-eighteenth century. Apart from well-documented examples such as those studied, there is little documentary evidence, and that largely indirect and inferential, dealing with settlement changes, particularly during the nineteenth century. Reliance must be placed on field and cartographic evidence. The dating of settlement changes in rural areas in Argyll is difficult and frequently depends on correlation with dateable changes in related phenomena. Nevertheless sufficient evidence exists to enable the broad outlines of settlement changes since 1800 to be drawn. The changes will be discussed distributionally in terms of settlement sites, and morphologically in terms of form and pattern.

A sample analysis of the changes in distribution of rural settlement in the county has been attempted. The sample used was that indicated by Roy's Map, and by comparison with modern maps and field evidence the present occupied or abandoned status of the sites has been determined. However it was possible to check only a small proportion of the total number of sites in the field. This analysis takes no account of settlements which were first utilised after 1750. From field work, sufficient knowledge exists to support the claim that later settlements are concentrated in the area below 250 feet and so the addition of these sites serves merely to consolidate the modern distribution of settlement which has emerged, and is emerging from changes wrought since the mid-eighteenth century in the pre-existing distribution of clachan settlement. Thus the conclusions to be drawn from the study of the chosen sample are of general application to the total settlement pattern.

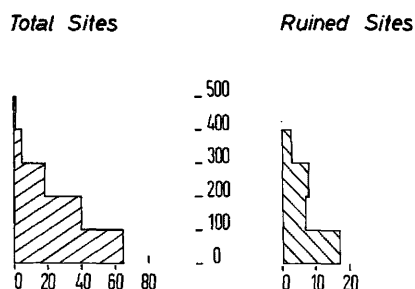
Fig. 43 was derived from a comparison of Roy's Map with 1:25,000 map sheets (see also Table 14, Appendix to the present chapter). The sites were grouped by modern parish areas and the percentage of the total now abandoned or totally ruined was calculated. At first glance the pattern which emerges is random and meaningless, but in view of the regional studies certain facts are apparent. The most considerable

HEIGHT FREQUENCY AND PERCENTAGE RUINED OF SETTLEMENT SITES

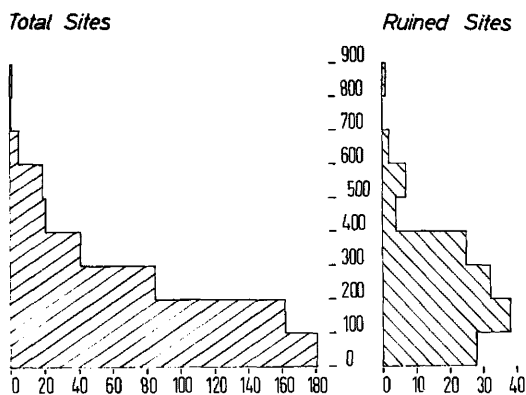
1 KINTYRE



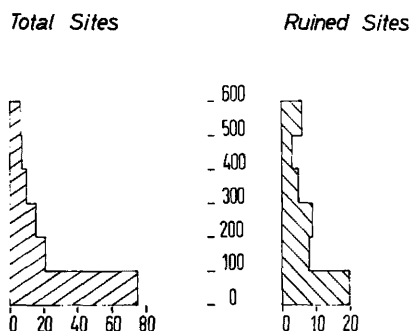
2 KNAPDALE



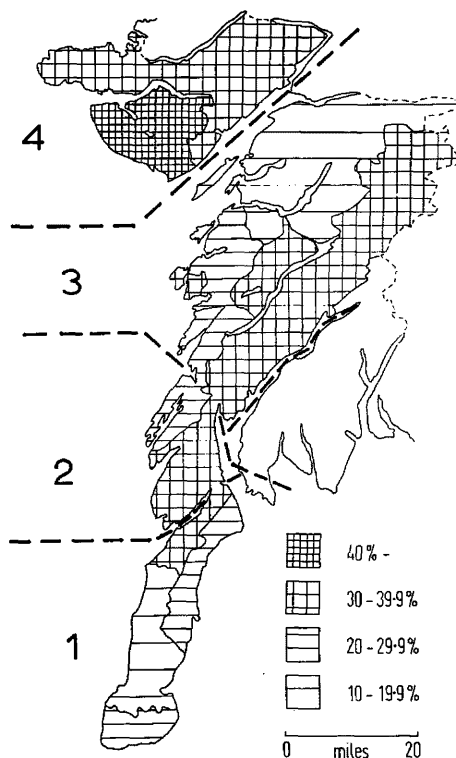
3 CENTRAL ARGYLL



4 ARDNAMURCHAN



RUINED SITES AS PERCENTAGE OF TOTAL SITES By Parishes



HORIZONTAL SCALES REFER TO NUMBERS OF SITES. NOTE DIFFERENT SCALES FOR RUINED AND FOR TOTAL SITES.
VERTICAL SCALE REFERS TO ALTITUDE IN FEET ABOVE ORDNANCE DATUM.
THE SAMPLE OF SITES HERE EXAMINED IS DERIVED FROM A COMPARISON OF THE MILITARY SURVEY WITH G.S.G.S. 1:25000 MAP SHEETS.

Fig. 43.

contraction has been in the parish of Morvern where clearances in the nineteenth century were more severe and widespread than in any other parish. In general terms, the whole area north of the Great Glen suffered more in this respect than did any area of comparable size in the remainder of the county. In Knapdale the distinctions drawn between North and South re-appear. There was greater continuity of settlement and runrig remained longer in North Knapdale, especially in the Tayvallich peninsula, than in South Knapdale where consolidation of farms and the introduction of large-scale sheep farming appeared before 1800. In Southend, where agrarian improvements were initiated before the appearance of sheep on a large scale, the contraction in settlement was less pronounced than in South Knapdale and confined to the upper ends of the glens and the steep east and precipitous west coasts of the parish.

The characteristics of South Knapdale were continued across West Loch Tarbert into Kilcalmonell and northwards along Loch Fyneside and across to Loch Aveside. Sheep stocks were introduced throughout this area, but the earliest clearances were for cattle breeding in Inveraray parish and at Minard. Sheep stocks were small, such as the 700 to 800 breeding ewes maintained on Kilian Farm between 1790 and 1793 (Inverneil: Kilian Farms Accounts). Relatively, the clearance of population and settlement necessitated by the introduction of sheep to this denser settlement was more severe than in Lismore and Appin and Ardchattan and Muckairn where larger stocks of sheep were introduced to an area of less dense settlement (cf. Fig.8). The northeast, with sparse settlement and where large sheep stocks were introduced about the beginning of the nineteenth century, was represented in this longitudinal area of thirty per cent to forty per cent ruined settlement in Glenorchy and Inishail.

Table 13.
Cattle : Sheep Ratios.

Parish	Statistical Account	New Statistical Account
S. Knapdale	1:3.5	
Glassary	1:4.0	
Inveraray	1:6.5	1:13.0

Few figures are available to show the increase in sheep and

decrease in cattle numbers in this area. Even by the 1790's regional differences were appearing. There were proportionally more sheep on upper Loch Fyneside than in Knapdale. In addition the ratio of sheep to cattle doubled in favour of sheep in Inveraray parish during the first half of the nineteenth century. In Glassary the first clearances were by local tenant farmers who started large-scale cattle rearing in the 1770's, but soon after Low Country sheep farmers were introduced by the proprietors bringing about further settlement clearance (24:655). These changes were locally variable. Within Glassary two proprietors refused to improve their estates by amalgamating farms, and so two districts remained thickly populated, and became increasingly so as their neighbours were cleared of the original clachan communities (24:658, footnote).

The only other area showing a similar decline in settlement was the parish of Kilbrandon and Kilchattan, where in 1750 the ratio of cattle to sheep was one to three (22:187). No comparable figure is available for the mid-nineteenth century, but in neighbouring Kilninver and Kilmelfort the ratio changed from one to four point six in 1794 to one to twelve point six in 1843 (21:320, 41:66). The low percentages recorded in Lismore and Appin, and Ardchattan and Muckairn are understandable only in terms of the sparseness of settlement in the mid-eighteenth century (Fig.8), because as elsewhere in the north and centre of the county the introduction of sheep in large numbers during the nineteenth century had an adverse effect on settlement. In 1793 the depopulating effect of the creation of sheep-walks in Ardchattan was commented on by Rev. Mr. Grant (18:178), and then too there were extensive sheep ranches in Appin (17:483). The situation on the much more densely settled island of Lismore (Ch. 6) differed from that in Appin, with thirty-six per cent of the 1750 settlements abandoned, in comparison with the sixteen point seven per cent for the parish as a whole.

The abandonment of settlement in Lorne was broadly comparable in extent with that in North Knapdale, and it is worth noting that here runrig was abolished very early in comparison with other areas of the county outwith the Argyll Estates (158:67).

The only area in which settlement was dense and population densities high at the mid-eighteenth century, and in which there was a small abandonment of settlement, was in south and central Kintyre. The lowest percentage of any parish occurs in Killean and Kilchenzie, where the settlement was and is largely on the raised beaches, with only scattered muir farms above 250 feet, but even here more than one in ten of the 1750 settlement sites went out of use. It has already been shown that agrarian improvements were initiated early and that these innovations spread thence to the remainder of the county (Chapter 6).

The contraction in settlement has not been evenly spread over the whole of the altitudinal range of settlement sites as it existed at 1750. The county was divided into four regions in which the altitudinal variations of settlement contraction appear to be significantly different from each other. These areas correspond with those used in Fig. 6, with which comparison should be made, but on the latter diagram Kintyre and Knapdale made up a single region for purposes of the mathematical summary of landscape. In interpreting the diagrams in Fig. 43 it should be noted that the horizontal scales are absolute, not percentage, and that the horizontal scale for ruined or abandoned sites is twice that for the total sites on Roy's Map. In the four areas according to the sample used, settlement is and was concentrated below 200 feet, but in both Kintyre and Central Argyll a significant proportion of the total settlement was found at higher altitudes, rising to 700 feet in Kintyre, and even higher in Central Argyll. The restriction of the suitable habitable area in Knapdale, especially North Knapdale, confined settlement to a peripheral and low-level distribution. In Ardnamurchan district, about half of all settlement is and was below 100 feet, and more than three quarters below 250 feet.

In Kintyre, Central Argyll and Ardnamurchan almost all of the settlement above 400 feet has been abandoned, and the same applies to the sites above 200 feet in Knapdale. Below these altitudes, differences emerge. The raised beaches in Kintyre maintained their dominance in the overall pattern, but above 200 feet the abandonment

of settlement sites since 1750 has been marked. In contrast is Knapdale, where the heaviest abandonment of settlement has been below 100 feet, but the distribution here is distorted by the densely settled Tayvallich peninsula where almost all the settlement has always been within 100 feet of sea-level. Again, in Central Argyll the raised beaches have lost less settlement than areas at higher altitudes, but thereafter abandonment becomes increasingly marked with each 100 feet of altitude. In Ardnamurchan the greatest absolute abandonment of settlement has been in the range of densest original habitation, but relatively, as elsewhere, the higher areas have suffered to a greater extent than the lower.

This analysis suggests two things. A relatively greater number of settlements at higher altitudes has been abandoned and their buildings become ruined, but the greatest absolute totals of ruined settlement sites, except in Kintyre, are at low level. Secondly, the denser the settlement in the mid-eighteenth century the less considerable has been the abandonment of settlement sites since, with the single exception of the island of Lismore. Superimposed on this, it is noticeable that the areas which underwent considerable and early agrarian improvement retained relatively denser settlement than areas like Morvern where runrig persisted, with a rising level of population till the second quarter of the nineteenth century. In this respect, the differing attitudes, policies and resources of individual lairds had important repercussions on the settlement pattern.

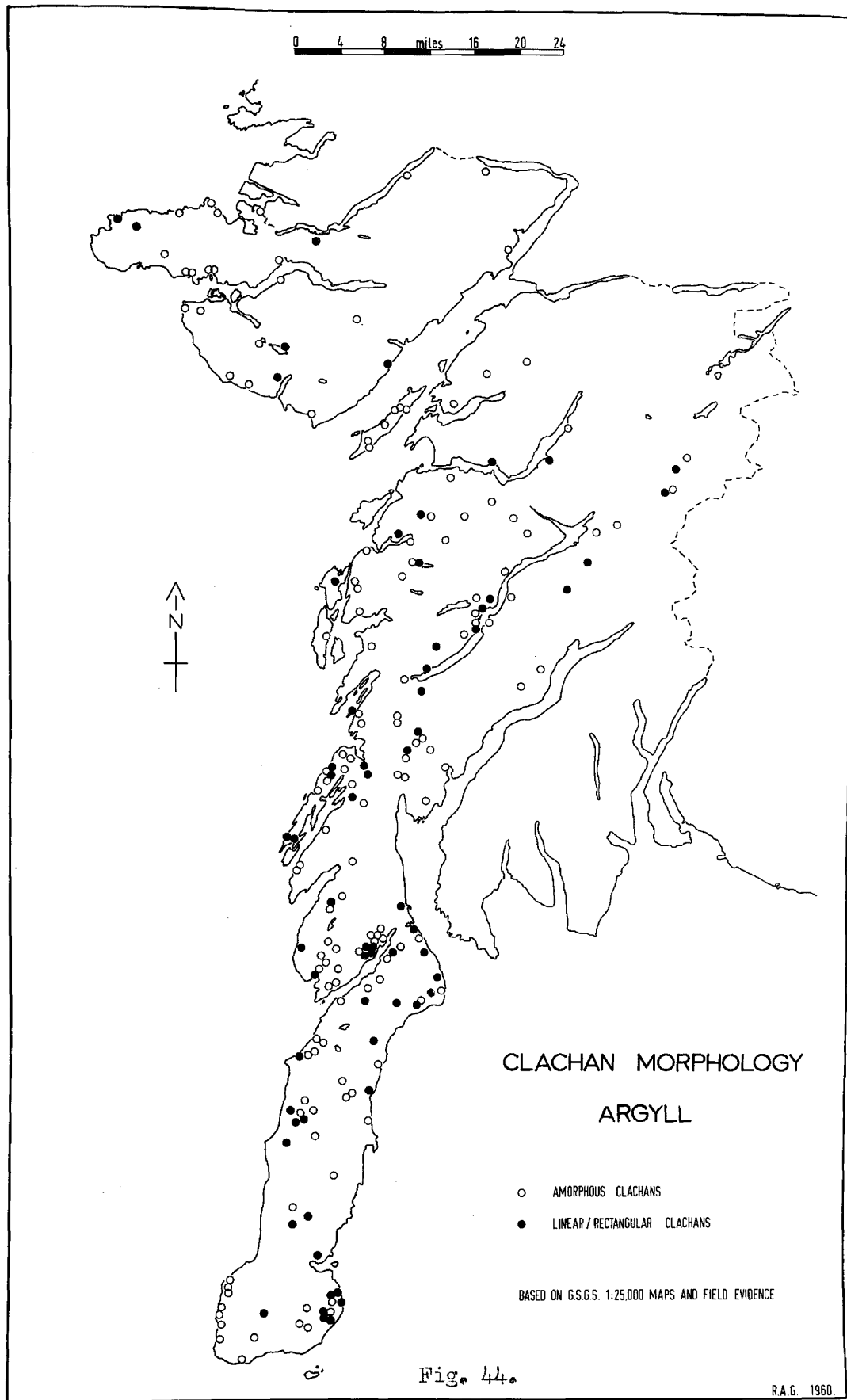
The contraction in the distribution of rural settlement in Argyll was an integral part of a settlement metamorphosis including also morphological changes. Clachan settlement gradually disappeared everywhere, but at varying rates. In Southend this change was noticeable early in the nineteenth century, or even earlier, but it did not appear till about or after 1850 in Knapdale and Ardnamurchan. In the 1790's in Saddell and Skipness the houses were still collected together in a cluster in the middle of the farms, which was considered a disadvantage (31:488). Further south in east Kintyre, there seem to have been small clachans in existence on the Carradale estate (Plan of Carradale Estate: Lewis D. Robertson, 1827), in the 1820's at a

time when there were about forty tenants on twenty-one farms. In South Knapdale the populations of eight farms totalled seven hundred and sixteen people between 1768 and 1784, but by 1796 these same farms could muster only two hundred and thirty-nine people (29:308-326). While clachans still existed they were clearly decreasing in size at the end of the eighteenth century. It is ironical that it was in the parish of Inveraray, where the Duke of Argyll resided, that clachan settlement seems to have lingered longest. In 1843 Kenmore had a population of one hundred and thirty-seven, Glaonary fifty-two, and Auchnangoul and Auchindrain eighty-six and seventy-six respectively (46:27). The 1841 Census listed sixty-five people in Auchindrain and seventy-four in Auchnangoul, and as late as 1891 there were still forty people resident in the latter. Both Auchnangoul and Auchindrain are still occupied, and retain their amorphous clachan form if one includes derelict houses and dwellings converted to use as stores and offices. Auchindrain was until recently a crofting township with lotted crofts, but is now worked as a single holding. Auchnangoul was never lotted and remained under joint-tenants until within living memory. It is now under sheep and included with the land worked on behalf of the Duke of Argyll, but the settlement will retain some of its original character, for four of the houses are to be renovated for the use of a grieve and labourers. The last of the original tenants, who had gradually accumulated all of the land of the farm as it fell vacant, died in 1959. (See Appendix 3a, Sites 28 and 29).

The disappearance of clachans was out of step with the decline in runrig. With a few notable exceptions runrig had disappeared by the mid-nineteenth century, but frequently the displaced tenant population became cottars and tradesmen initially, working for the few tenants of the now consolidated farms. In some places, as in Glassary, while one proprietor cleared the joint-tenants off his estate to create sheep-walks, his neighbour encouraged the continued existence of a numerous class of joint-tenants. Such anomalies were not finally rationalised till late in the nineteenth century, as in the Ross estate in North Knapdale.

Nineteenth century clachans were divisible into two clear morphological categories. There was the majority which maintained the amorphous form, typical of runrig, until eventually they were abandoned or disappeared in the rationalisation of farm steadings when the farms became single tenancies. Fewer clachans had a more orderly appearance on the ground, with their houses ranged in a single line, or in two lines either parallel or at right angles to each other. A few of these linear/rectangular sites were topographically determined, that is to say topography, due to available space, drainage and exposure, controlled the settlement form. One such was East Tarbert, a fishing settlement with little land attached. (Appendix 3a, Fig. 1). Where reliable dating evidence is available it has been shown that these linear/rectangular sites are of early nineteenth century origin, possibly later, but certainly no earlier. It has already been suggested that they are to be associated with the initiation of agrarian improvements (135:104), a thesis that finds support from analysis of their distribution (Fig. 44). In south Kintyre in every case they were on Argyll Estate farms; in Kilcalmonell and Kilberry, and also Saddell and Skipness they are found in areas owned by Campbell of Stonefield and Campbell of Knockbuy both of whom were vitally interested in agrarian improvement after 1750. In North Knapdale and Kilmartin these clachans are found on the lands of Malcolm of Poltalloch who was well known as an improving landlord in the early decades of the nineteenth century, but they are significantly absent from the Ross estate. Other occurrences were sporadic, and some, as in Ardnamurchan, were associated with the development of crofting communities with permanently lotted holdings.

There are two important gaps in the distribution of these "planned" clachans. South of the Great Glen and north of Loch Etive there are none, an area where the clearance of clachans was early following the introduction of large numbers of sheep, for instance in Appin by 1791 (17:483). Before 1800 there had been depopulation due to the creation of sheep-walks in Ardochattan (18:178). The other discontinuity in the distribution is more difficult to account for. No linear/rectangular clachans appear on upper Loch Fyneside, northwards from Inverneil.



This seems strange in view of the fact that both the Duke of Argyll and Campbell of Knockbuy had property here. A reason may be sought by viewing the area in relation to droving routes. Lying athwart the main routes to the Lowlands from Kintyre, Knapdale, and the islands of Islay and Jura, proprietors on this stretch of Loch Fyneside were well situated to take advantage of the trade in cattle. Campbell of Knockbuy experimented in cattle breeding, and in so doing took a gradually increasing number of the farms on his Minard estate into his own hands, rather than attempting a rationalisation of the joint-tenancies. The Duke of Argyll laid out extensive policies and a home farm in the vicinity of his castle and the burgh, both of which removed runrig communities. He also cleared Glen Shira and parts of Glen Aray to engage in stock rearing; the original intention was to raise cattle, but when the trade in cattle declined in the nineteenth century, sheep were introduced.

Certain elements of the runrig pattern of settlement have remained. Isolated examples of clachans like Auchnangoul do exist but as originally defined they are now functionally anomalous. Exceptionally, even runrig has remained in a fixed form, for instance at Keills in Jura. At Silvercraigs in Glassary (Fig. 45) on Loch Fyneside fixed runrig and lack of enclosure remain, but the settlement has dispersed from an original clachan to a number of groups of two or three houses each on the periphery of the inbye area (see Appendix 3b). In terms of siting, too, almost every modern farm in the county is the successor of a runrig clachan, so that the modern farms, together with the ruined clachans, represent the distribution of settlement at its maximum, but over-emphasised in the lower altitudinal ranges below 200 feet due to subsequently instituted habitation sites. Sometimes the modern farms incorporate the remains of clachan dwellings in the farm offices, for instance at Barrahormaid in the Tayvallich peninsula, but usually no trace of the clachan remains. The stones from the old dwellings have often been reused in making a sheep-fank. On Poltalloch lands many of the sheep-fanks which were built in the nineteenth century are on clachan sites. Apart from the matter of siting, little of the runrig settlement pattern remains today, and what does is anomalous and seems

destined to disappear in the next decade or two. In the early 19th century, the land was reorganised and consolidated, and the clachans that had been the focus of the early settlement were abandoned, the face of the country gradually changed. Enclosure and drainage were only part of the general improving process, but in terms of material remains in the modern landscape they are all-important. To judge from the evidence, the early 19th-century landscape was one of small, irregularly shaped, and low status, and the drainage and enclosure did not prevent the continuation of the old pattern of land use.



Fig. 45. Silvercraigs, in Glassary, part of which is shown above, is an anachronism in the modern landscape. With a known medieval reference, there has been a long continuity of settlement. It remains in a form of fixed run-rig, and is technically a crofting township. Part of the old infield, still unenclosed, is seen across the shrub-lined burn in the centre. The settlement of the township is fragmented, there being three small groups of houses scattered around the periphery of the inbye land.

more progressive elements of the wealthier propertorial class were able to engage in it on a considerable scale (20:268). There was still no enclosure in Galloway (27:441), nor anywhere in the county north of Loch Ertive, while the enclosure of low ground for successful grain growing was being advocated about West Loch Tarbert (30:50-51) and in Campbelltown parish (31:342). We have seen in the regional studies that in south-Kintyre enclosure was a necessary condition of

destined to disappear in the next decade or two.

As holdings were amalgamated and consolidated, and the clachans first declined in size, and were finally abandoned, the face of the countryside gradually changed. Enclosure and drainage were only part of the general improving process, but in terms of material remains in the modern landscape they are all-important. To judge from the Statistical, and New Statistical Accounts, drainage and enclosure did not proceed together. The drainage of large areas of land was not mentioned in any of the Statistical Accounts of the 1790's, though evidence has already been cited to show that it was being proceeded with in south Kintyre at this period. In 1843, much drainage had been completed, and was still being carried out in south Kintyre (54:413-436), but by now this activity had spread northward to Lorne where large areas were being drained systematically (43:528, 40:374, 45:562). Farther north, in Lismore and Appin, draining had been started not long before 1841 (37:246). However, much of Glassary was recognised in 1844 as being still in need of extensive drainage (44:700) and in Craignish a similar situation existed where "The system of agriculture which prevails among the smaller farmers, who hold the largest proportion of the parish, is still, with, in some instances, slight improvements, what was described about forty years ago in the former Statistical Account, as "the old system", and this fact assuredly exhibits no favourable view of it" (47:55).

Enclosure started earlier than drainage. In the 1790's land was being enclosed in Kilmore and Kilbride (23:131) and also in neighbouring Kilninver and Kilmelfort, especially on the low ground (21:322). It may be that this took the initial form of the building of march dykes between farms as in Kilmartin (25:106), and almost certainly only the more progressive elements of the wealthier proprietorial class were able to engage in it on a considerable scale (20:268). There was still no enclosure in Craignish (27:441), nor anywhere in the county north of Loch Etive, while the enclosure of low ground for successful grain growing was being advocated about West Loch Tarbert (30:60-61) and in Campbeltown parish (33:562). We have seen in the regional studies that in south Kintyre enclosure was a necessary condition of

the leases of the Argyll estate farms, and that in the Tayvallich peninsula march dykes between farms were being built about the same time (Chs. 7 and 8).

In spite of this activity towards the end of the eighteenth century, enclosure was still either lacking totally, or was inadequate in Southend (54:433), North Knapdale (48:640) and Glassary (44:700). While in Inveraray the fields remained mostly unenclosed (44:28) - and it is worth remembering that here also clachan settlement survived longest south of the Great Glen - on the west coast in Kilninver and Kilmelfort the improving process had gone so far as to produce a landscape and economy reminiscent of the contemporary Lowlands of Scotland (41:68).

In the face of these improvements during the last decades of the eighteenth century and the first half of the nineteenth century, it might be expected that an extension of the arable area, at the expense of moor and rough grazing, would have taken place. The evidence points in the opposite direction. Field evidence and cartographic sources for Southend, Knapdale and Ardnamurchan suggest that the maximum extent of cultivation had been reached by 1800, if not earlier. The extension of cultivation limits upslope was commented on in Southend as having occurred between 1750 and 1790 (34:364), and a similar increase in the arable area was reported from Kilmore and Kilbride (23:122). By the 1840's the limits of cultivation were receding downhill in Southend (54:420), and in Ardnamurchan there were "extensive tracts of outfield arable relapsing into their original barrenness" (35:162). Only in areas like Kilbrandon and Kilchattan, where there were industrially occupied small-holders in quarrying settlement was any waste land being reclaimed in the nineteenth century (42:76).

By the end of the third quarter of the nineteenth century the present enclosure pattern was largely in existence. Clerk in 1878 said of the Laggan in Kintyre; "This flat or plain is now highly cultivated, the system followed being much the same as in Ayrshire.." (91:42), and he was obviously impressed with the extent of improvement on the estate of Malcolm of Poltalloch. "Improvements have been effected on this estate, on a large scale, during the last sixty

or seventy years, including building, planting, draining and fencing.."In the valley of Kilmartin (and between there and Lochgilphead) many hundreds of acres have been enclosed and planted, and more still have been drained, sub-divided, and brought under cultivation. Almost every farm on the estate has now a substantial and commodious slated dwelling house and offices, and very superior workmen's cottages are rapidly replacing the old black houses" (91:44). Openfield and runrig lingered on, however, providing a contrast with the neatly enclosed, well cultivated fields of areas like the Kilmartin valley. Silvercraigs in Glassary, and the Island of Danna in Knapdale have both been mentioned as remaining in runrig at this period, but there were other instances, like Torinturk on Loch Nell in Lorne. In the same area Strontolier had been in a like condition till about mid-century when it was lotted by the proprietor in four separate holdings (91:53).

The modern enclosure pattern, the integral of piecemeal development over two centuries, is summarised in Fig. 46, which shows four of the classifiable elements in the total pattern. Over much of the county the field pattern is closely adjusted to minor topographic features. This is especially noticeable in physically fragmented areas like North Knapdale and Craginish, where the resultant pattern defies systematic description and analysis. An orderly pattern of large fields is possible only in areas of more or less extensive flat or gently sloping ground, usually reclaimed from peat moss or periodically inundated valley floors. Here a rectangular pattern of square or oblong fields has developed, the fields usually between three and six acres in extent, but sometimes larger. The supreme examples are on what were Poltalloch and Achinbreek lands between Kilmartin and Lochgilphead, west of Campbeltown burgh, and in the southeast lowland of Southend. Other isolated occurrences are found on Loch Fyneside, and on the west coast near Oban and on Seil Island, both on Breadalbane territory. No convincing examples are found north of Oban, but there a complementary distribution prevails in the form of narrow parallel strips, as found in many "linear" crofting townships where the

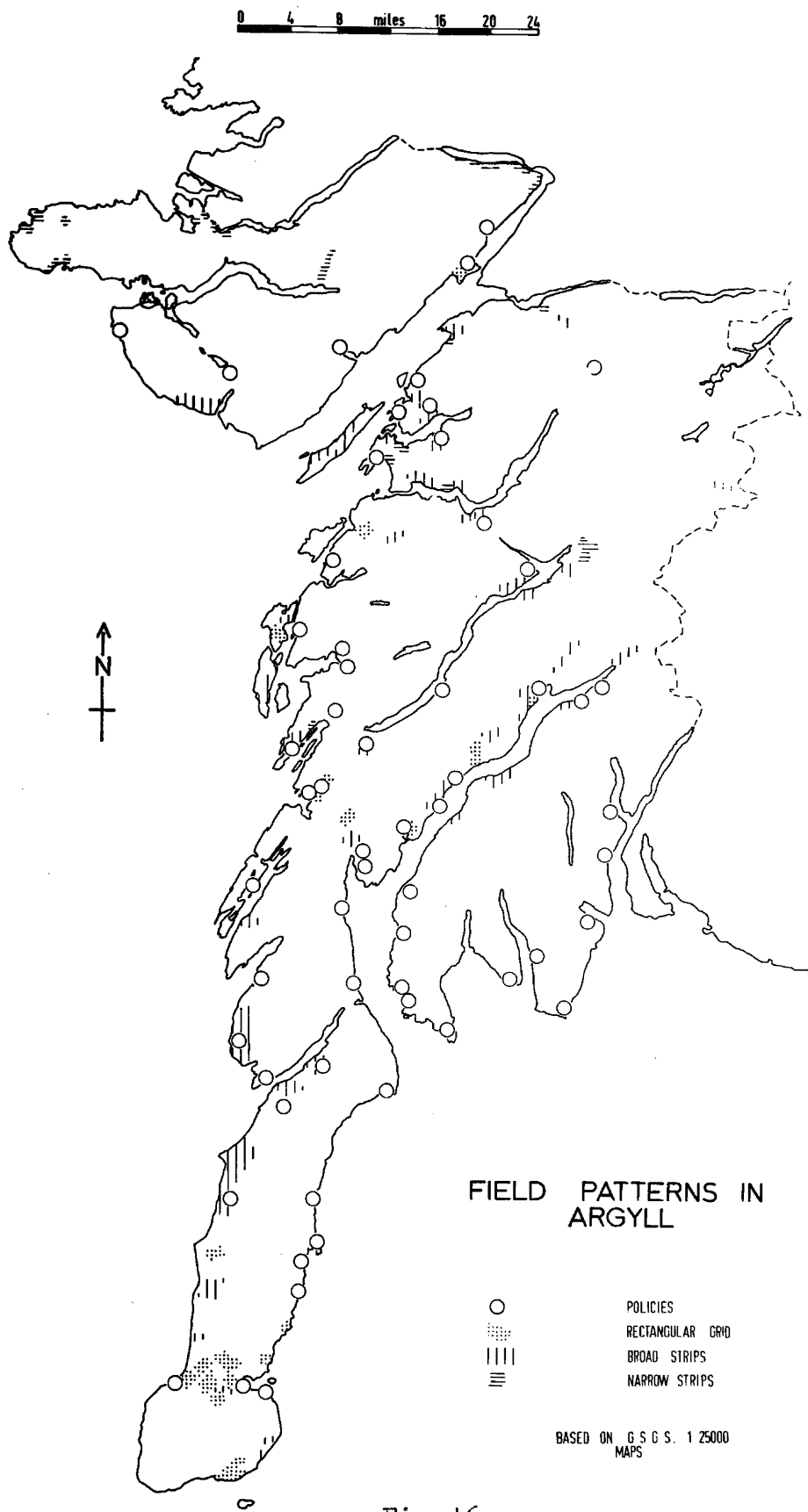


Fig. 46.

crofts were lotted. Apart from the isolated occurrence at Ardfern on Loch Craignish, the distribution of this second pattern is confined to the northern parts of the county; north of a line between Dalmally where there is a very fine example in the crofts of Stronmilchan, and Loch Etive. This pattern is always associated in the Highlands with crofting townships, where the individual croft-strips may be as small as one acre. In most cases the settlement has become dispersed, each house on its separate strip of land, with a single track serving the dwellings. Though the first lotting of crofts started in Argyll in 1776 in Tiree, on the mainland the earliest instance seems to have been in 1802 in Ardgour (154:56), while in Ardnamurchan the lotting of crofts did not take place till about or after 1850. It is likely that once the holdings were lotted enclosure followed soon after, though as in the Outer Hebrides this need not necessarily be the case.

Similar in principle but of a different scale are the broad parallel strips, enclosed from each other, found in many places throughout the county. Each strip is usually a whole farm, comparable with a single joint-farm as under runrig conditions, with its clachan. This pattern is now associated with totally dispersed settlement where single dwellings are only exceptionally found alongside a county or district road. The farms are usually of sufficient size (and social status?) to necessitate private access roads leading to the farm buildings. The appearance and dating of these broad strips at Kilberry has been discussed, where they apparently first appeared in the county considerably before 1800. In most cases enclosure of this form may be placed between 1800 and 1850, usually before the appearance of the narrower crofting strips in the north of the county. This form of enclosure, where internal division of the farm produces a ladder-like appearance, is understandable when it is realised that the old joint-farms, of which these were the successors, had land of all types within their undefined limits, so that on coasts the strips stretch from the shore to the hills behind, and in the major valleys from the river up the valley sides to the mountain grazings. Where, as in Argyll, the settlement pattern is peripheral, confined mostly to

the coasts and major valleys, such a pattern is almost inevitable if the farms are to maintain elements of all land types within their boundaries. It is especially well developed about Lochs Creran and Etive, upper Loch Awe side, Loch Fyneside, and on the coasts of Kilberry and west Kintyre.

The apparent emptiness of much of the northeast and north of the county with respect to enclosure is explicable against a background including the development of large sheep-walks in the nineteenth century. In such an extensive sheep rearing economy a well-developed field system is unnecessary, for the animals are allowed range the mountain grazings almost at will.

The remaining type of enclosure has already been discussed as it existed at 1750. The policies about lairds' houses were being developed in the eighteenth century, and as such were the first enclosure of any kind in the county. The distribution of the thirty-one examples in 1750 (Fig. 11) is still generally apparent (Fig. 46), but the total is now fifty-nine examples of varying sizes and degrees of elaboration. The distribution has been extended in three areas particularly; in Kintyre and about Lochs Melfort and Craignish where many proprietors of small estates laid out policies in the nineteenth century, and about the Linnhe Loch where proprietors of larger estates at the same time began to follow the example set by their counterparts farther south during the eighteenth century. Except for three new examples on Loch Fyneside, the distribution in Cowal remains unchanged which supports the idea that prosperity sufficient to allow the development of these ornamental landscape extravagances arrived earlier there than in any other part of the county of similar extent.

An integral and early element of the field pattern was the head-dyke. In some areas it was fully developed under runrig, and the later extension of cultivation during the latter part of the eighteenth century necessitated the building of newer head-dykes above the first. This happened in various parts of Southend, elsewhere in Kintyre and Knapdale, for instance at Kilberry, but not apparently in the north of the county. Discussing Kintyre in 1813, Smith claimed that "Fields, now covered with heath, and at a great height

in the mountains, retain still the traces of ancient cultivation" (261:311), so that the multiple head-dykes probably all belong to the eighteenth century. Robertson showed that on average the head-dyke is higher in Kintyre than in the remainder of the county (249:14), reflecting better soils and more gentle slopes, and the present author would add, earlier agrarian development. It would be unwise to claim that the total area below the head-dyke was ever continuously cultivated, for periodically cultivated outfield land was included. Nineteenth century recession of periodic or permanent cultivation was considerable; Robertson suggests that almost fifty per cent of the area below the head-dyke is now to be considered as rough grazing never cultivated, and that in total the extent of rough grazing now exceeds that of improved land by as much as eighteen-fold in Ardnamurchan, and fifteen-fold in Lorne (249:16).

Probably the most apparent indicator of previously cultivated but now derelict areas is provided by the incidence of bracken. The spread of this fern was a phenomenon of the past century particularly, occasioned by two principal and related factors. Bracken requires well-drained areas for luxuriant growth, and the dereliction of once cultivated areas provided a suitable habitat. Recession of cultivation limits started early in the nineteenth century, at the latest. Yet to explain the fact that bracken did not become widespread as a pest to the farmer till after 1850, it is necessary to recall that prior to that period, cattle were being maintained on the hill pastures and abandoned arable areas in greater numbers than during the second half of the nineteenth century. The importance of this lies in the fact that cattle keep bracken in check, provided it has not already been established, by eating the young shoots and trampling the more mature plants. When cattle were removed and the cattle to sheep ratio altered in favour of sheep, bracken spread rapidly because sheep are more selective grazers, eating only the smaller grasses, which favours the growth of the larger plants including bracken. The tragedy is that once established, the bracken becomes an ecological dominant and excludes, ultimately, many of the grasses sought by the sheep, by which time cattle are unable to cope with the height and density to which the

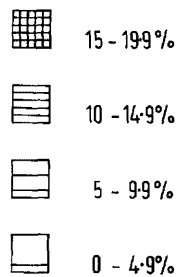
bracken has been allowed develop, and so vast areas of grazing are becoming well-nigh useless.

Concern was first being expressed about the spread of this weed of civilisation in 1837, when an essay was published purporting to show how bracken could be eradicated from pasture land. Then, presumably, the appearance of bracken in some areas was a matter of purely local concern (Trans. Highland and Agricultural Society of Scotland, 4th Ser., 19, 1837, p.167). Clerk considered bracken only a minor nuisance in 1878. "The bracken sometimes encroaches upon good pasture, but it can easily be pulled up by the roots, or cut down by a scythe or sickle". He went on to enumerate the economical uses of bracken, praising its qualities as a thatching material, as a bedding for animals, as a protection for potatoes in house or clamp, and even as a winter fodder for cattle and horses if cut early and dried (91:87). His optimism in keeping the weed in check has not been justified. The national extent of the bracken problem, and its seriousness, were demonstrated recently by Hendry (166:25-28), and in spite of considerable research into the possibilities of chemical eradication it seems that the only reliable method of removal remains a prolonged, labour-expensive programme of cutting and mechanical clearance. (68:32).

Fig. 47 is compiled from the parish totals of bracken acreage, based on the June 1957 Agricultural Returns. The author is indebted to Mr. Hendry of the Department of Agriculture for making these figures available. The basis on which the statistics were collected was inevitably subjective, for the areas concerned were not precisely measured, nor was any measure of the density of bracken on the infested areas possible. The decision as to what constituted infestation was left with the individual farmers concerned, but Hendry suggests that the figures give at least a broad estimate of the dimensions of the problem, and of its regional variations (166:25). Almost one sixth of all the affected farms in Scotland are in Argyll, and within the county more than a quarter of the total holdings are affected to some degree.¹ The parish distribution of the intensity of infestation in

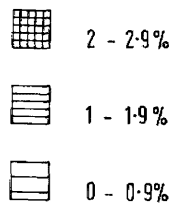
1. This should be compared with the figure of twenty-six per cent for the proportion of eighteenth century settlement which is now ruined or abandoned (Table 14).

PERCENTAGE OF HILL AND
GRAZING INFECTED WITH
BRACKEN. 1957.
by parishes



0 miles 20

PERCENTAGE OF CROPS
AND GRASS INFECTED WITH
BRACKEN. 1957.
by parishes



Argyll is considered here, for it may be correlated with settlement history, progress of improvement and recession of cultivation.

The areas of minimum infestation of hill and grazing are of two types. Districts with relatively large estates in the eighteenth century, like Kintyre and Loch Fynesside, show a minimum proportion of hill and grazing affected. Secondly, areas where crofting became an important social and agrarian feature and relatively large communities of small-holders were maintained, especially Ardnamurchan, have kept their hill grazings fairly free of bracken, for two reasons. Crofters tend to maintain a higher proportion of cattle to sheep than is normal in other agro-social systems in the county, and there has been less capital put into grazing drainage by crofting proprietors than by their counterparts elsewhere in the county, both of which are unfavourable to the spread of bracken.

The areas of greatest densities are found especially in Lorne, where the extensive Breadalbane territories were freely intermixed with small individually held estates. Runrig disappeared early on Breadalbane farms but it lingered late in the smaller estates where the development of agrarian improvement was piecemeal. Some proprietors turned early to sheep, others encouraged the late existence of communities of joint-tenants. Conditions such as these were ideal for the spread of bracken from estate to estate, ultimately irrespective of the prevalent agrarian and social conditions.

The infestation of the improved area of crops and grass is differently distributed over the county. The distinctions to be made are not very great, but Kintyre quite clearly is in a better position than the remainder of the county. The worst hit areas are Glenorchy and Inishail, where almost the whole parish went under sheep in the nineteenth century, and bracken spread from the grazings to the improved areas, and in Kilmore and Kilbride, where a combination of factors is to be held responsible. The extension of industrial occupations about Oban and in surrounding districts lessened dependance on the land encouraging the spread of bracken from hill grazings where sheep had become the dominant animals. The position has been aggravated in recent years by the establishment of stock markets in Oban, for much

land in the vicinity of the burgh is let to dealers who have little interest in maintaining the quality of the land as they use it only on a temporary basis.

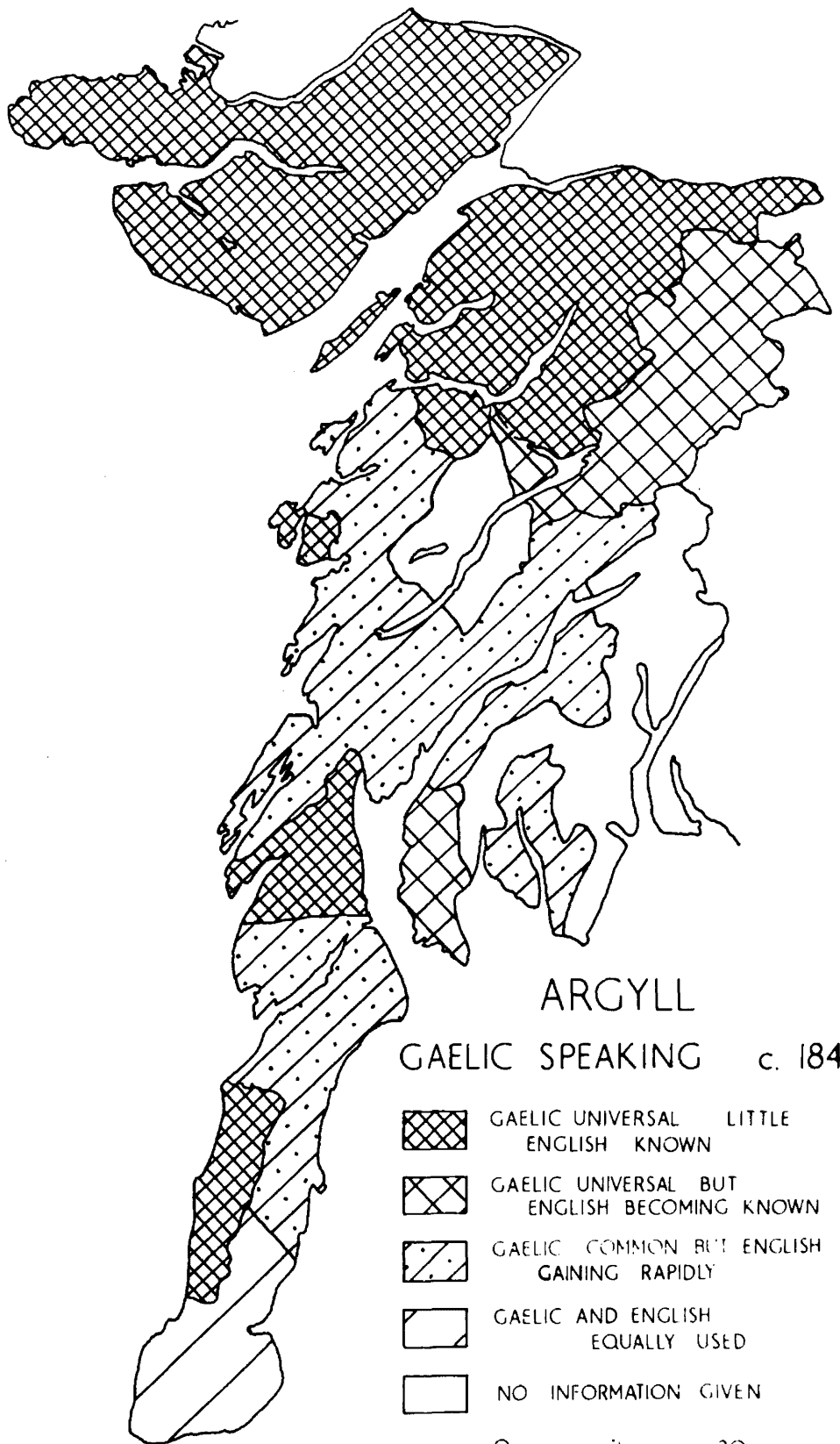
Bracken infestation appears to have been least severe where agrarian innovations were introduced early, in the eighteenth century, regardless of the fact that due to better drainage these areas are potentially more suitable to the growth of the weed. The rational, and not piecemeal improvement of these areas and their generally more favourable physical circumstances, led to the development of prosperous dairy and stock rearing farms, maintaining a suitable ratio of cattle to sheep on the grazings. The most severe infestation occurred in areas where topography and the distribution of estates were both fragmented, and where the development of agrarian improvement was haphazard and often late.

The area in which bracken is particularly found is the marginal strip between the modern improved area and the hill grazings which have always been under stock and never cultivated. In these areas the ruined clachans are found, for lower down, as in Southend, the settlement sites are still largely occupied today. There is a modern concomitance of bracken, ruined or abandoned settlements, and areas of abandoned cultivation. This is an area of cultural regression. Were it possible to produce a map of the detailed distribution of bracken in the county (which might be carried out using aerial photographs and considerable field observation), and also a detailed map of the distribution of ruined settlements, they would show a close correspondence.

If the rise of the bracken problem may be considered a physical expression of the decline in clachan settlement and its concomitant social and economic organisation, a cultural expression exists in the decline of Gaelic speaking in Argyll. The clachan was the home of a native Gaelic-speaking society, where Gaelic was the customary language, though experience in the Lowlands and abroad seeking harvest work or in the services had given to some a working knowledge of English. Until the Forty-Five, Gaelic was the customary language of all elements in Highland society, but during the eighteenth century the lairds and

remaining tacksmen became involved in a social life in which Gaelic had no part, and in which contact with the Gaelic-speaking lower orders of society became increasingly less common. Only in Campbeltown and Inveraray, the two urban centres with commercial and industrial functions, was English to be heard to any extent. The Statistical Accounts of the 1790's make no mention of language, and presumably Gaelic was universally used. But by about 1840 to 1845 English was becoming more commonly known to judge from the comments of the parish ministers in the New Statistical Accounts of the various parishes. Though their comments were rather subjective, they are divisible into four groups, forming the basis for Fig. 48. Only a very general pattern emerges, but it foreshadows the pattern of changes evident from a comparison of the later census statistics. South Kintyre, where improvement had been early, and where in Campbeltown there was the largest commercial and industrial centre in the county, had been most affected by outside influences and English was generally known, whereas in the north of the county, where outside contacts had been few, Gaelic remained the universal language and English was hardly known. The continued existence of almost exclusive Gaelic speech in Killeen and Kilchenzie, however, is difficult to understand, viewed in relation to the position of the parish close to Campbeltown and astride the main route between Campbeltown and Inveraray.

The census of 1881, the first in which data on the language situation were collected, showed that Gaelic speaking had largely disappeared from south Kintyre, and was probably only known by the older folk in the north of the peninsula, and by 1911 it had almost disappeared there too. The same was true in South Knapdale, but in North Knapdale, where we have seen that traditional customs and practices were retained till within the present century, more than seventy per cent of the population in 1911 were listed as Gaelic speakers. The language suffered relatively on Loch Fynesside, part of the route between Campbeltown and Inveraray, in comparison with the forgotten country of Loch Awe side, and much of the west coast. Gaelic remained the customary language in 1931 only north of the



Great Glen, and by this time only older folk elsewhere in the county knew it, except in the tiny, partly insular and very isolated parish of Kilbrandon and Kilchattan. By now the effects of the disintegration of the clachan communities and the appearance of isolated farms, so often occupied by Lowlanders or tenants of Lowland extraction, had had a drastic effect on the extent to which Gaelic was understood, let alone spoken. Only in isolated areas like parts of Loch Awe side and the west coast was a significant proportion of the population listed as speakers of the native language.

The concentration of remaining Gaelic speech in 1931 to the district of Ardnamurchan, is to be correlated with the development of small-holder or crofter farming in this area, to a greater extent than elsewhere in the county, for this agro-social system maintained an approach to the communal life and traditions of the clachans. Over the past three decades even this has disintegrated, and now in west Ardnamurchan only the older folk understand Gaelic, and they seldom use it among themselves. The fortunes of the Gaelic language in Scotland seem to have been inextricably interwoven with those of a viable small-holder system in the Highlands and Outer Isles.

Superimposed on these changes two other trends are evident. As MacSween noted (216:22), around urban centres outside influences are greatest. This is clearly seen in the parishes about Campbeltown, Inveraray, Oban, Ardrishaig-Lochgilphead and Tarbert Lochfyne. Also, the coming of the railway along Lochs Awe and Etive to Oban was instrumental in bringing to previously Gaelic areas the new language and its associated ideals and standards, different from those of the traditional folk life. The beginnings of the effects of better communications, in the broadest sense, were noticeable earlier, with the development of roads. "The new road ... was the beginning of things as they are now. Steamers, railways, tourists, school-masters, newspapers followed to play their part. The Highland chiefs and gentry soon came to abandon Gaelic for English, and to live south of the Highland line when they could" (273:73). In 1914 Professor Watson claimed that on the west coast of Scotland Gaelic was ordinarily used, but English was also known, while on the east coast English was

PERCENTAGE OF POPULATION ABLE TO

SPEAK GAELIC

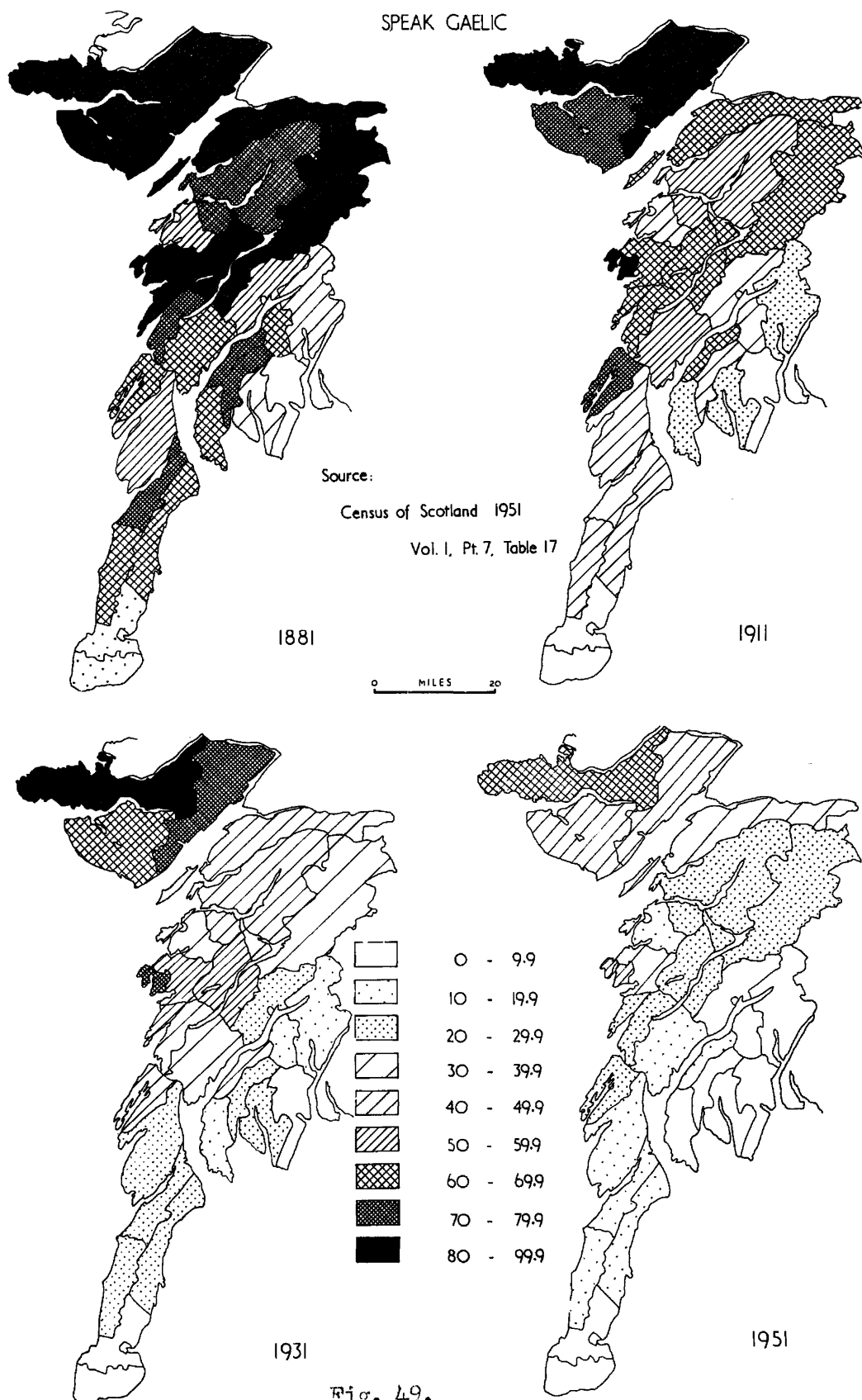


Fig. 49.

customarily used with some knowledge of Gaelic still in existence, especially among the older people. In the Hebrides, Gaelic was the rule (273:74). The position now is that each category has moved one region westward. On the east coast Gaelic is virtually unknown, on the west coast English is ordinarily used but a knowledge of Gaelic remains with the older folk, while in the Outer Hebrides Gaelic is the usual language in the home, but English is known, spoken and read by everyone.

The decline of clachan settlement and the way of life of which it was a part, was a phenomenon essentially of the nineteenth century, and there were only exceptional survivals of this form of settlement into the twentieth century. The present settlement pattern is dominantly one of dispersed farmsteads, with occasional small local service centres. Such a pattern is in sharp contrast with that described as the rule for the mid-eighteenth century, where clachans were ubiquitous and isolated dwellings almost unknown. It is the purpose of the last section to examine the modern pattern, and to show which of its elements are clearly referable to the pre-enclosure pattern.

Table 14.

Appendix to Chapter 10.

Sample of Clachan Settlement, from Roy's Map, by parishes, and percentage of these sites now abandoned or ruined.

Parish	Total number of sites.	No. of sites ruined, etc.	% of total sites ruined.
Ardnamurchan	55	20	36.4
Morvern	50	23	46.0
Ardgour	26	8	30.8
Lismore and Appin	60	10	16.7
Glenorchy and Inishail	57	18	31.6
Ardchattan and Muckairn	50	9	18.0
Kilmore and Kilbride	49	10	20.4
Kilbrandon and Kilchattan	11	4	36.4
Kilninver and Kilmelfort	42	12	28.6
Kilchrenan and Dalavich	53	20	37.7
Inveraray	48	15	31.3
Craignish	26	4	15.4
Kilmartin	39	8	20.5
Glassary	81	27	33.3

Table 14 Contd/..

Parish	Total number of sites	No. of sites ruined, etc.	% of total sites ruined.
North Knapdale	67	16	23.9
South Knapdale	64	20	31.3
Kilcalmonell	35	13	37.1
Saddell and Skipness	45	12	26.7
Killeen and Kilchenzie	55	7	12.7
Campbeltown	76	13	17.1
Southend	73	18	24.7
Totals	1062	287	26.1

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SECTION V

THE MODERN PATTERN OF RURAL SETTLEMENT

Chapter 11.

THE POPULATION BACKGROUND

With the exception of the parish of Kilmore and Kilbride, the population of the landward area of every parish under consideration was, in 1951, less than the maximum attained in the nineteenth century, and only five parishes have maintained totals above those of the mid-eighteenth century. These five, Kilcalmonell, South Knapdale, Kilmore and Kilbride, Lismore and Appin, and Glassary are hinterlands of urban centres, which lessened the population decrease relative to the other parishes, but did not arrest it. In their general trends over two centuries the parishes are divisible into five categories, as on Fig. 50. These correspond, either approximately or exactly, with the territorial divisions of Kintyre, Knapdale, South Lorne, the remainder of Lorne and the traditional district of Argyll together with the remainder of the county north of the Great Glen, and finally the district of Ardnamurchan.

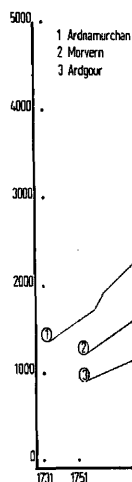
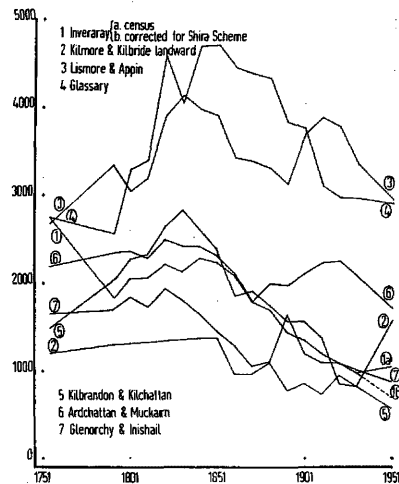
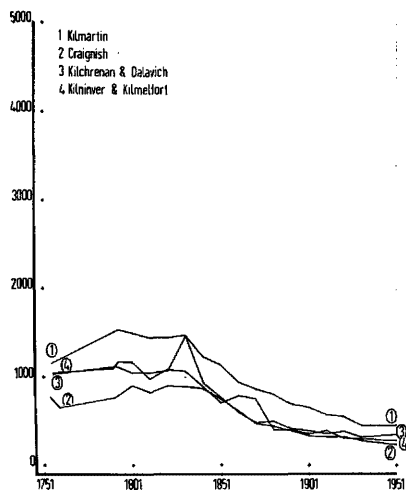
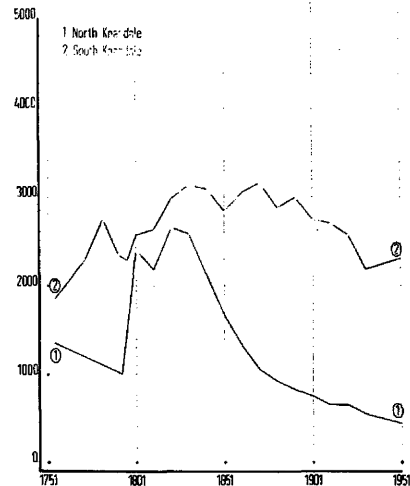
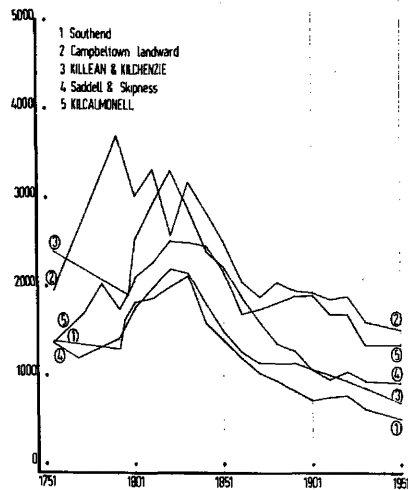
Throughout Kintyre the population maximum was reached by 1831 at the latest (Southend), but on average by 1821, and in Campbeltown landward as early as the turn of the century. In the rise to the maximum fluctuations are discernible occasioned by early emigrations and the development of the burgh of Campbeltown which was attracting rural population to urban pursuits.

In Knapdale, we have seen that the curve for North Knapdale may be taken to represent the rural parts of the whole district, for it is not possible to separate from the landward population of South Knapdale the urban totals for Tarbert Lochfyne and Ardrishaig. The difference shown between the two graphs of North Knapdale population (Fig. 50 and Fig. 33) is due to the fact that in the present case a figure from the Statistical Account has been used for the 1790's which suggests that there had been heavy emigration before 1800. However, the general pattern of a rise to a maximum before 1841 is clear, and there was an equally rapid decline thereafter. The trends are similar to those in Kintyre but there is a difference of almost a decade in the phasing.

The trends in the district of Ardnamurchan show similarities to

PARISH POPULATION GRAPHS

MAINLAND ARGYLL



BASED ON MURRAY, WEBSTER, STATISTICAL ACCOUNT,
NEW STATISTICAL ACCOUNT, WEST HIGHLAND SURVEY,
AND CENSUS OF SCOTLAND.

Fig. 50.

those in Knapdale, with a maximum soon after 1831. The decline thereafter has shown little sign of levelling off to the extent experienced in the south of the county, and the Ardnamurchan parish graph also shows that population continued to increase after 1831. Only emigration kept the total down. Clearances in Morvern were widespread after 1800, a feature seen in the graph of population. The depression after 1801 was caused by clearances outwith the farms possessed by the Duke of Argyll, and after 1831 the clearances on these farms too, were felt, after they had passed to other ownership.

The trends in South Lorne have been quite different. The increase in population during the eighteenth and early nineteenth centuries was not spectacular, possibly due to the early example set by the Earl of Breadalbane in abolishing runrig and joint-tenancies. The population maximum was reached at varying times in the different parishes, anywhere between 1800 and 1831. Thereafter till 1881 there was rapid decline since when the decrease has been slight and a stable level of population has been reached.

The trends in the remainder of the county are difficult to analyse, for it is not possible to extract the urban population from the totals for some of the parishes which consequently show increases later than in fact occurred in the purely landward areas. From the wholly rural parishes it would appear that the maximum population was reached about 1831, but the irregular nature of the rise to the maximum argues considerable emigration during the eighteenth and early nineteenth centuries, which already has been demonstrated from the remarks of contemporary observers. The decline from the maximum has been equally irregular, some parishes showing temporary reversals of the general downward trend about 1900. The introduction of afforestation schemes during the past fifty years in this area has brought at least a partial halt to the general decline (106:101). Even "accidental" increases appear due to the timing of the censuses in different years, and to various temporary large-scale undertakings requiring imported labour. Thus Argyll as a whole showed an increase of eight point four per cent between 1911 and 1921, because the 1921 census was taken during the holiday period, and in Glenorchy and Inishail a slight increase

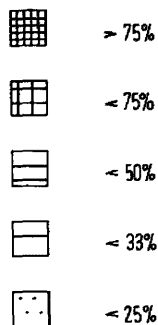
appeared due to the presence of road-construction gangs in the parish (233:286). The construction of the Shira Hydro-Electric scheme in Inveraray parish raised the 1951 total population, and so an estimate based on the excess of males in the landward part of the parish has been used to give a figure which indicates continuous population decline.

The present level of population which has resulted from these changes is best summarised in relation to the maximum population attained in each parish. Fig. 57 is based on the West Highland Survey but no allowances are made for urban, other than legally recognised burgh, populations which may be included. It is thus that Kilmore and Kilbride (Oban, and the new settlement of Dunbeg at Dunstaffnage, 106:101) appears as having the highest level of population in relation to the maximum, while it is bordered by parishes with now less than a quarter of their maximum. No consistent regional pattern results from this map, and it is only explicable in relation to the graphs of population change already demonstrated. North of the Great Glen, where a large small-holding population existed at the time of maximum population, there has been the greatest relative decline over a large area. Between half and three-quarters of the maximum has been maintained in large parishes where the population density was relatively low, even at the maximum, such as Lismore and Appin and Ardchattan and Muckairn. On Loch Fynesside one third to three-quarters of the maximum has been maintained, a distribution which parallels that of abandoned settlement (Fig. 43), but within this large category there is considerable variation from parish to parish. The pattern in Kintyre is distorted, for in Campbeltown, Kilcalmonell, and Saddell and Skipness, relatively higher proportions are recorded than in the two almost wholly rural parishes of Southend, and Killeen and Kilchenzie. This is due to the existence of Campbeltown burgh, Tarbert Lochfyne, and Carradale respectively.

The 1951 population relative to that of 1931 shows absolute increases in all of the parishes containing or near to urban centres, and also in Kilmartin, and Kilchrenan and Dalavich. Afforestation schemes must be held responsible for the increases in the two latter,

1951 POPULATION AS % OF MAXIMUM POPULATION

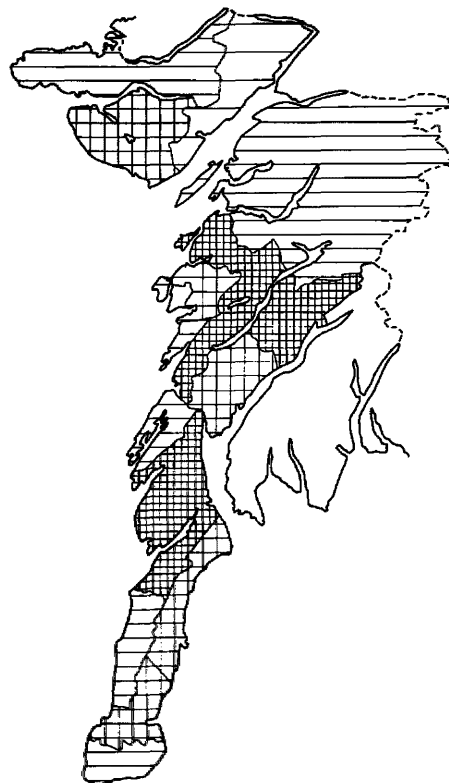
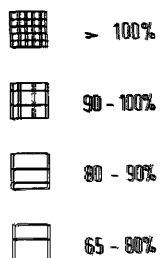
By Parishes



0 miles 20

1951 POPULATION AS % OF 1931 POPULATION

By Parishes



and also for reducing the rate of decline in other parishes like South Knapdale, North Knapdale and Glassary (106:101). The greatest relative decline has been experienced in Ardgour where there is a small total population concerned wholly in crofting and sheep farming, and also in Kilbrandon and Kilchattan where the disruption of social life and consequent outward migration has been severe due to the failure of slate-quarrying. A ten per cent to twenty per cent decline has been experienced in all of the crofting parishes in which the small-holding economy may still be said to exist in any form and where large-scale sheep-farming is, or is becoming important. Similarly, there has been a considerable decline in Southend; an increasing area is being put under sheep and the traditional dairying and stock-rearing economy is being increasingly restricted to the southeast of the parish.

As a result of these changes a sparse distribution of isolated farms is to be expected in most parts of the county, except where crofting communities remain. Only where afforestation schemes have been introduced or where local minor industries are thriving is a non-agricultural population and settlement to be expected. Apart from Inveraray a more intense distribution of settlement, particularly along main roads, is to be found in the vicinity of the urban centres. Of the existing nucleated rural settlements, those with a rapidly ageing population due to the collapse of local extractive industries seem destined soon to disappear, for the expense of maintaining or providing services for these non-viable communities can not be defended except on sentimental grounds. This is particularly true of the slate-quarrying settlements, where a large number of derelict and ruined dwellings is now the norm.

Chapter 12.

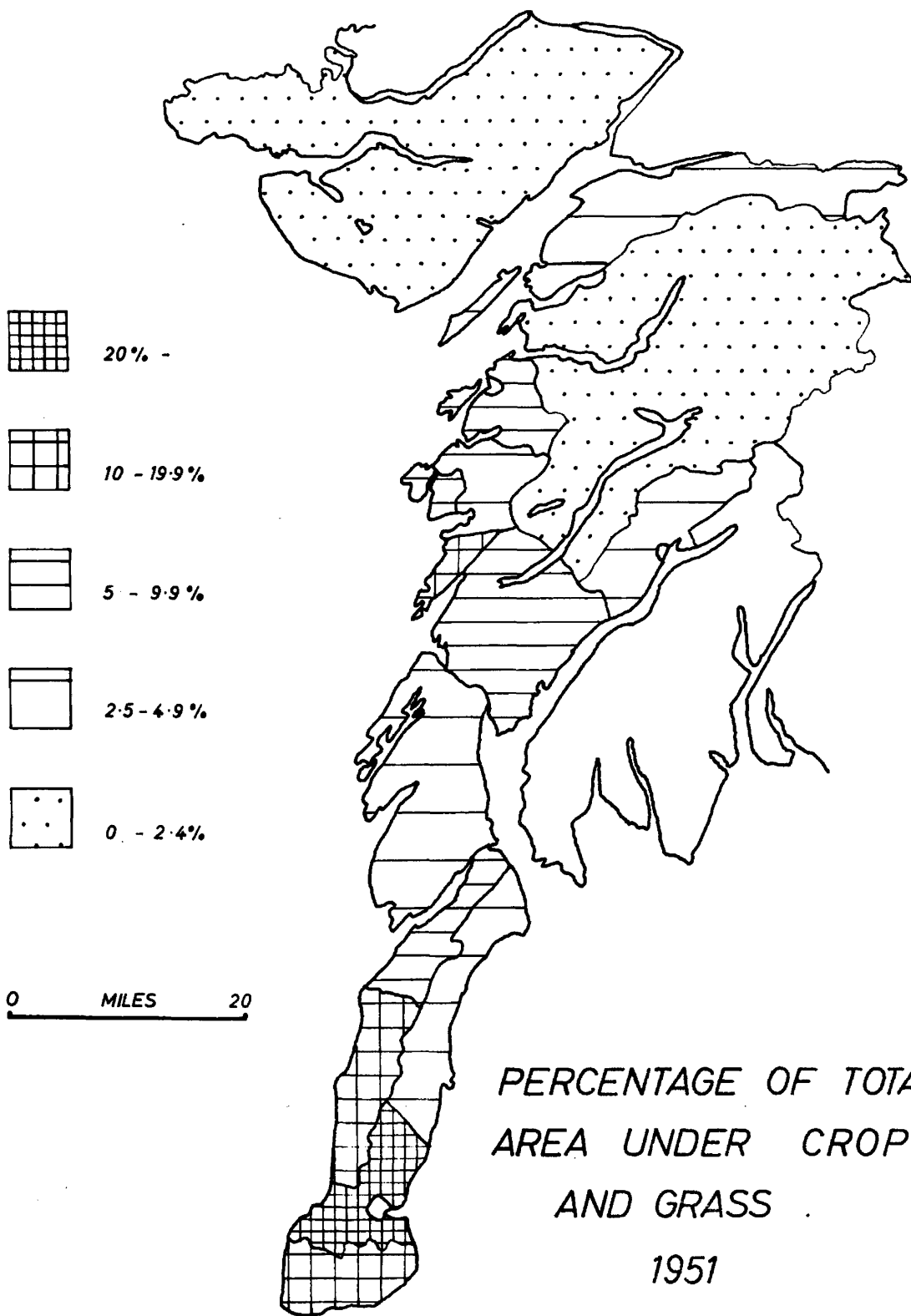
THE AGRARIAN BACKGROUND

The population maximum was attained after the limits of cultivation had been reached, and a contraction of the cultivated area from the extreme limit of the head-dyke had been initiated. Stevens showed that in certain Highland districts as much as fifty per cent of the area below the head-dyke may now be classed as rough grazing, never cultivated (263:50), but the extent to which this decline in the potentially cultivable area took place was determined by a variety of factors including the inherent capabilities of the land for economic crop-growing at any particular level of technical achievement, and the policies which had been adopted by local lairds throughout the period since the inception of agrarian improvement in the eighteenth century. However, the methods of cultivation had improved to such an extent that even though the cultivable area was restricted relative to the maximum, agriculture in the southwest Highlands south of the Great Glen was in a sufficiently prosperous condition to withstand the calamity of the potato famines of the 1840's. This was only a partial reason, however, for equally important were the considerable social and tenurial changes which had taken place in the rural community. The forces of depression, of which the potato famines were only a part, and which included a fall in cattle prices, the collapse of the kelp trade, the fluctuations of the fishing industry, except possibly in Loch Fyne, and the ever-increasing pressure of population on the land, hit the Highlands north and west of the Caledonian Canal, where as yet there had been little change, with unique and tragic force. By contrast, in the southwest Highlands the average farmer was a single tenant who "lived on a far higher level of comfort and security than (his) counterpart of a hundred years earlier" (155:367). Gray went on to explain that "such farmers had become fewer compared with the majority of wage-earners and cottars. But in expanding and intensifying cultivation they created an added productive power that helped to maintain those of less independent status" (155:367), and so the hardships of the potato failures were less severely felt by all classes of society south of the Linnhe Loch,

than in the small-holding region of the north and west.

Argyll today partakes of the true Highland characteristic of a low proportion of the total area under crops and grass, and of a zone of transition between this and Lowland Scotland where the reverse is true where a low proportion of the total area is to be classed as unimproved or unimprovable ground. Figure 52 is derived from D.O.A.S. statistics for 1951, and a consistent pattern emerges in the distribution of the improved area. Moreover this pattern is paralleled by what has already been adduced on the progress of agrarian improvement during the eighteenth and nineteenth centuries. In the broadest terms, the south of the county supports relatively more crops and grass than does the north. But superimposed on this there are some important regional variations. In Kintyre the richer south of the peninsula and the west coast raised beaches have an immediately evident effect, for in the relevant parishes more than ten per cent of the total area is under crops and grass, that is, represents improved ground. Indeed, Campbeltown parish, with more than twenty per cent improved, is more truly Lowland than Highland in character. The lowest percentage in the peninsula is found in the rugged, often steep-coasted and isolated parish of Saddell and Skipness which may thus be grouped with Knapdale and most of the county north of a line between Oban and Inveraray. In these areas sheep farming is now the predominant agricultural economy, and the only concentrations of purely agriculturally based population are in the form of run-down, often derelict crofting townships, where the houses and not the land are important in maintaining communities. Percentages of five and over are found in some of the west coast peninsular parishes, where agrarian improvement was introduced early on, though admittedly piecemeal, and where the proportion of relatively low to high ground is greater than in most west coast parishes. The densities of population in the past were considerable, as Darling showed in the case of Kilbrandon and Kilchattan during the second half of the nineteenth century (106:109).

The greater inherent agricultural potentialities of the south of the county are seen also in the densities of stock carried in the various parishes (Fig. 53). Relatively, the greater numbers of both



PERCENTAGE OF TOTAL
AREA UNDER CROPS
AND GRASS
1951

BY PARISHES

STOCK DENSITIES AND RATIOS

1911 & 1944

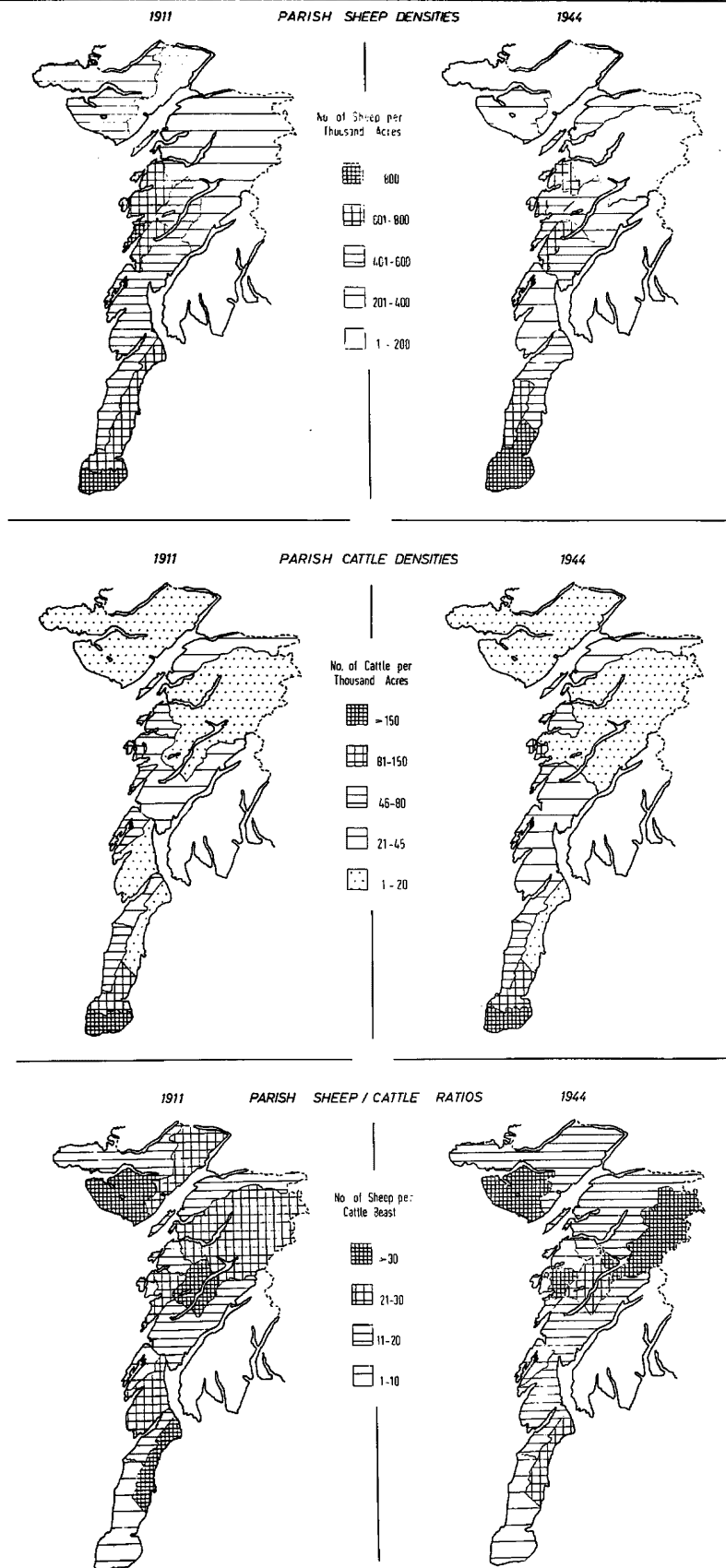


Fig. 53.

cattle and sheep belong in Kintyre. Sheep densities are as high as any in the county but the parishes are smaller than those of the northeast where greater absolute totals of sheep are maintained. Sheep densities are high also along the coast of Lorne. During the present century sheep densities have tended towards an overall decline, except in Kintyre where the core of high density established in Southend before 1850 has been extended farther up the peninsula. However, the more truly Highland Saddell and Skipness, in common with the remainder of the county, experienced decline.

The pattern of cattle densities is broadly similar, with highest densities in south Kintyre and along the west coast, though North Knapdale may here probably be included with the Lorne coastal parishes. Unlike the differences apparent in sheep densities in the district of Ardnamurchan, cattle densities are there uniformly at a minimum level. Only Lismore and Appin and Kilmore and Kilbride north of the Oban to Inveraray line, show cattle densities above the minimum category. Changes in cattle densities during the present century have been less marked than with the sheep densities. The position in Kintyre remains unaltered, and again Saddell and Skipness displays characteristics typical of the north of the county. Only in Knapdale has there been a significant change. The density of cattle has been raised in South Knapdale, where the over-emphasis on sheep had become acute, and dairying was added to the traditional beef-cattle rearing; but the position was reversed in the northern parish with the run-down of agriculture, amalgamation of farms and extensive depopulation, features particularly developed in the originally densely peopled Tayvallich peninsula. In North Knapdale cattle densities have declined.

Discussing some utilisation problems in the hill areas of Scotland, Macpherson considered the density of total stock, sheep and cattle, in terms of stock units (214: Fig.2). Though his map is based on 1957 figures, the general pattern which emerges for Argyll summarises for us the distribution of livestock in the county in a quantitative manner; but also, his map puts the county into its national setting in this respect. Total densities are greatest in south Kintyre and quickly fall off northward reaching low densities in the northeast

of the peninsula and in South Knapdale. Higher densities occur again in the fragmented Lorne coastlands and in North Knapdale, and these are continued through Kilmartin and Glassary to Loch Fyne.

Kintyre, except Saddell and Skipness, and the west coast of the county, belong to a region lying peripherally to the main mass of the Highlands where stock densities are low. The peripheral belt of higher densities, but varying widely from parish to parish, stretches all along the Highland line terminating in Caithness. The pattern in this region is similar to that of the Southern Uplands. An outlier of truly Highland low densities persists in Saddell and Skipness, South Knapdale and west Cowal.

The ratio of sheep to cattle has remained largely unaltered, the only general trend being a slight relative decrease in sheep. In the four ratio categories used in Fig. 53 changes are discernible in only eight parishes. The sheep numbers have declined relatively in Ardgour, Kilchrenan and Dalavich, Ardchattan and Muckairn, Craignish, Kilmore and Kilbride, and South Knapdale. In part this is due to afforestation schemes which reduce the available grazing area. The opposite trend, a relative increase in sheep numbers is seen in Saddell and Skipness, and Kilninver and Kilmelfort, and this in spite of absolute decreases in both sheep and cattle in both parishes. Generally speaking the highest sheep to cattle ratios are found in the north of the county, the lowest in Kintyre, North Knapdale and about Oban. Once again, the Loch Fyneside-Knapdale region emerges as a separate entity, in this case with medium ratios. Lastly, comparing the sheep to cattle ratio map in Fig. 53 with the incidence of bracken infestation as illustrated by the two maps in Fig. 47, the correlation of the two features receives general support distributionally.

Agriculturally Argyll as here considered consists of four regions. The district of Ardnamurchan and the northeast of the county, and to some extent the north Kintyre parish of Saddell and Skipness also, represents an area dominated by sheep farming with a low proportion of the total area under crops and grass. The opposite characteristics, a cattle-dominated economy with a relatively high proportion of the total area under the plough are typical of most of Kintyre, but

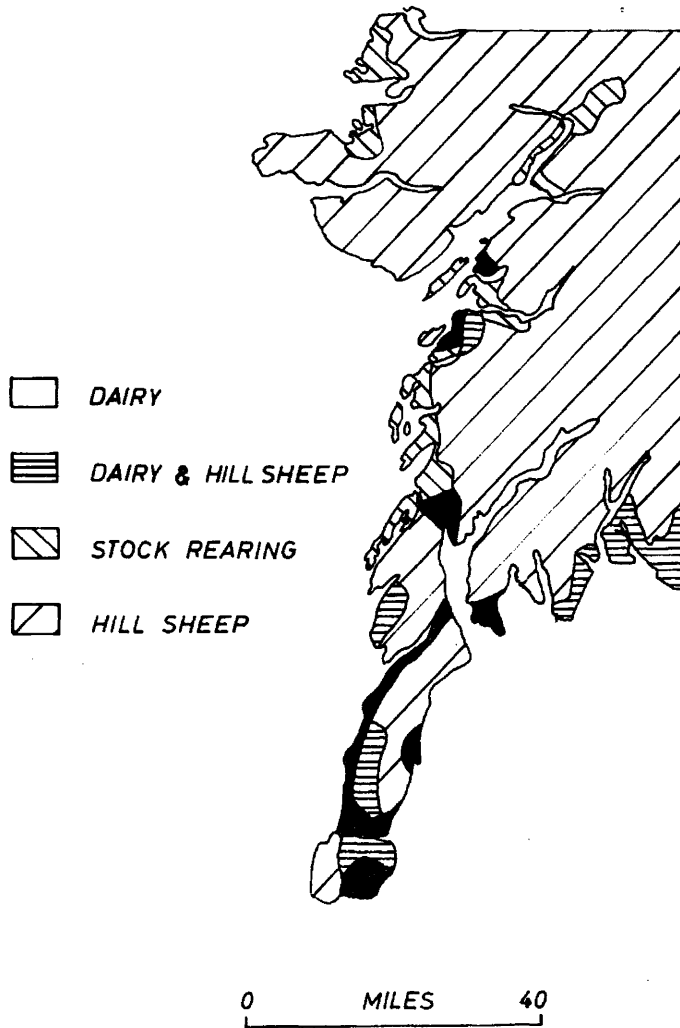
particularly Campbeltown and Southend. Loch Fyneside and South Knapdale constitutes a third region intermediate in character between the first two, but where the dominance of sheep seems to be waning, materially, in the face of pasture improvement and extensive afforestation schemes. The fragmented insular and peninsular west coast, from Loch Etive to Loch Caolisport in Knapdale, is a region unified by its apparent inconsistencies in regional distributions, a region where diversity of economy is especially marked from one small area to the next.

These regions are implicit in the map of predominant farming types published in 1952 (109: Maps) based on 1946 and 1947 statistics (Fig. 54). Fortunately this map, though of a generalised nature, is not over-simplified and distorted within a rigid framework of parish boundaries as have been the preceding illustrations. It suggests, however, that the Loch Fyneside-Knapdale region is similar in agrarian characteristics with the north and northwest, where hill sheep-farming is relieved only by dairying about Lochgilphead, and a mixture of stock-rearing and dairying in Kilberry. The Highland nature of northeast Kintyre is again clear, and the fragmented and diverse region on the west coast should probably be extended to Loch Greran and include also the island of Lismore.

This map (Fig. 54) was based only on returns from what the D.O.A.S. classify as full-time farms, the definition of full-time, spare-time and part-time being based on the number of man-hours per year actually expended in agricultural activities in connection with the holding. On this basis Ardnamurchan and Ardgour stand apart from the remainder of the county with more than eighty per cent of all holdings classified as spare-time or part-time concerns (109: Map 23). Such a definition demarcates the area where crofting agriculture is best developed in the county, for the crofting small-holdings do not in modern circumstances nearly approximate to viable agricultural units.

Crofting is not confined absolutely to the area north of the Great Glen. The wholly non-crofting parishes, according to West Highland Survey and based on 1948 conditions, are shown in Fig. 55.

PREDOMINANT FARMING TYPES



AFTER D.O.A.S. 1952.

R.A.G. 1960.

Fig. 54.

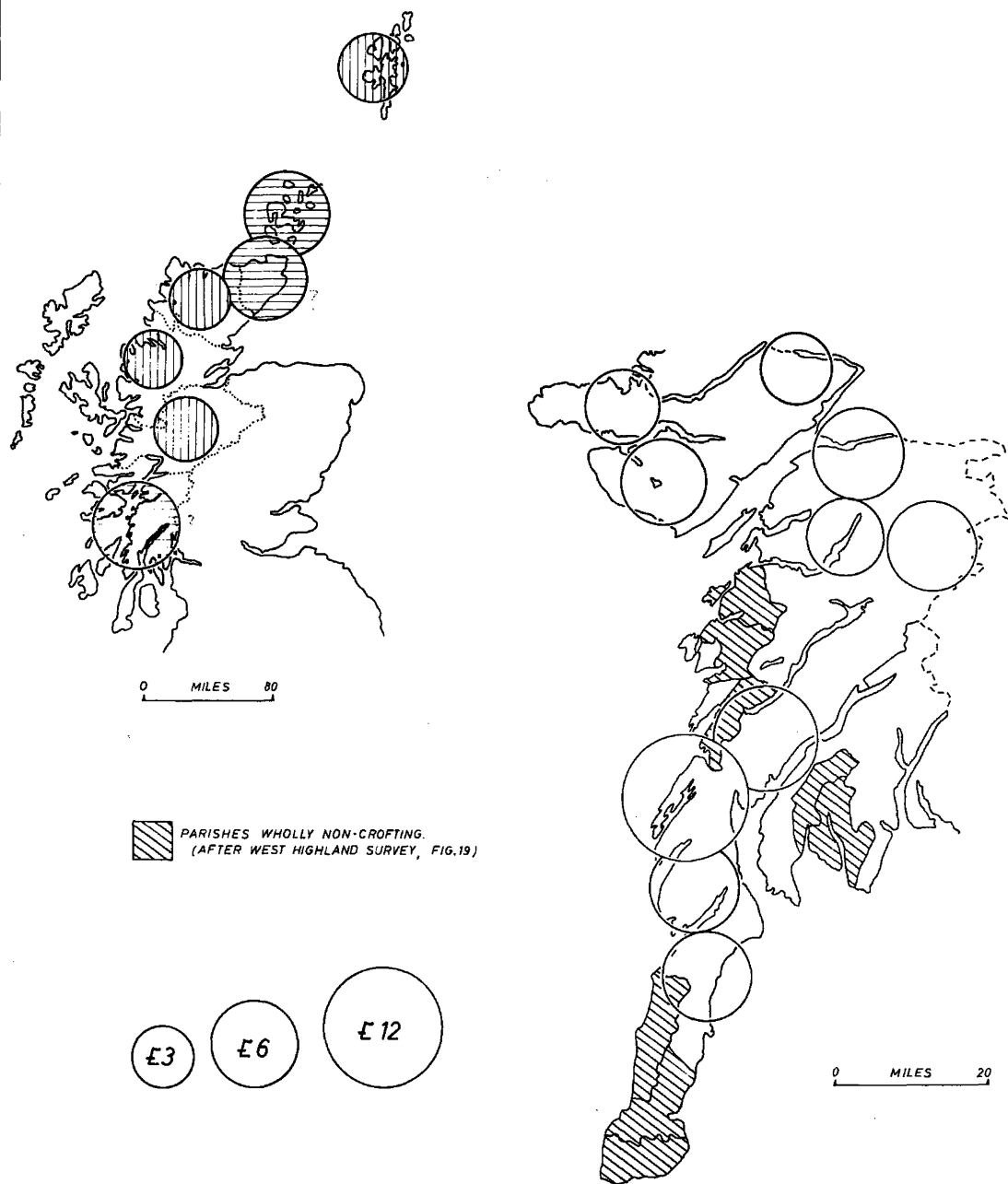
This map in conjunction with the figures in Table 15, points to certain regional differences in crofting within the county.

Table 15.
Fair Rents Awarded on First Application to the Crofters'
Commission, 1887-1912.

Parish	No. of crofts awarded Fair Rents.	Av. total inbye area per croft dealt with.			Av. Fair Rent per croft dealt with.
		Acr- es.	Roo- ds.	Perch- es.	
Ardnamurchan	200	4	0	30	£4. 7. 7
Morvern	19	3	3	11	6. 3.10
Ardgour	92	8	1	26	4. 3. 4
Lismore & Appin	73	8	1	7	7. 2. 0
Glenorchy & Inishail	9	5	1	0	6.13. 6
Ardchattan & Muckairn	69	9	2	11	5. 1. 8
Glassary	7	4	1	8	8.16. 9
North Knapdale	6	22	3	34	13. 8. 2
South Knapdale	9	4	2	28	6. 9. 1
Saddell & Skipness	5	9	1	8	6.14. 7

Three-fifths of all crofts on the mainland for which Fair Rents were awarded were north of the Great Glen (in Table 15, only those parishes with five or more crofts awarded Fair Rents are included). This may be considered a reasonable sample of the total. In fact, the number of legal crofts north of the Great Glen is three hundred and thirty-one (W.H.S. Cards), which compares with the total of three hundred and eleven in Table 15. The smallest crofts were quite clearly the north coastal ones, but larger size in itself was obviously not all-important, for the Fair Rents awarded show that the crofts north of the Inveraray to Oban line were considered less profitable and less able to support a relatively high rent than those to the south. The small number of crofts in the south of the county was relatively unimportant in the total pattern of holdings, and they existed in the form originally intended, as we saw in the case of Kintallin at Tayvallich (Ch. 8), that is, as part-time small-holdings for estate workers and others of similar social and economic status. Those in the northern part of the county were different. Often the direct successors of runrig joint-farms, the northern townships were intended to provide a full-time livelihood at a low level of material comfort for their occupants. This is an

*FAIR RENTS AWARDED ON FIRST APPLICATIONS TO THE CROFTERS
COMMISSION, 1887 - 1912 . Average Fair Rent per Croft, by Counties in
Scotland, and by Parishes with 5 or more Crofts in Argyll.*



BASED ON CROFTERS COMMISSION REPORTS, 1887 - 1912.

R.A.G. 1960.

Fig. 55.

important distinction for the southern townships with their large crofts have mainly disappeared, practically if not theoretically (106:151).

Argyll appears in its national crofting context in the other map in Fig. 55, and also in the figures in Table 16 from which the map is derived. The crofting counties fall into two groups in which the size of the crofts is of secondary importance relative to the value reflecting differing inherent potentialities in the croft land. Inverness, Ross and Cromarty, Sutherland and Shetland form the core

Table 16.
Fair Rents Awarded on First Application to Crofters' Commission.
County Averages. (1887-1912)

County	Total number of crofts dealt with.	Av. inbye area of crofts dealt with.			Av. Fair Rent of crofts dealt with.
		Acr- es.	Roo- ds.	Perch- es.	
Argyll	785	14	1	1	£6. 5. 5
Inverness	3992	13	3	35	3. 8. 6
Ross & Cromarty	4276	6	3	4	2.15. 3
Sutherland	2207	9	3	27	3. 3. 8
Caithness	1024	14	1	27	5.18. 1½
Orkney	872	22	3	31	6. 3. 2
Shetland	2081	15	2	29	3.17. 9

of the crofting region, none of these counties having had less than two thousand crofts for which Fair Rents were awarded, and none having had an average awarded rent per croft above £4. Argyll, with Caithness and Orkney, lies on the fringe of the true crofting region. None of these three counties had significantly more than one thousand crofts dealt with by the Crofters' Commission between 1887 and 1912, and the average rents awarded per croft worked out at close to, or over £6. In terms of crofting tenure Argyll compares favourably with the geologically non-Highland counties of Caithness and Orkney, but in these two the average croft enjoyed a much higher arable proportion of the total inbye area than did Argyll, more than two thirds compared with a half or less. In this respect Argyll more properly belongs with the remainder of the crofting region. These conclusions may be accepted with little reservation in a statistical sense, for the sample

of crofts presented in Table 16 based on the Crofters' Commission Reports represents approximately half of all the crofts in the Highlands at this period.

two best examples. The same may not be said of the so-called croft pattern. The dominant element in an croft sense is the single farm steadings and cottages over the rural area. There are now many more small service centres, some with minor industrial functions or an interest in the tourist trade. Forest nucleated settlements have come into existence due to the activities of the Forestry Commission. In addition, the urban centres in the county now number seven, for to Inveraray and Campbelltown have been added Perth and Lochfyne which has grown from a small village to a new town of Ardrish, Lochgilchrist, Oban and Kilmalea. Oban is a settlement of considerable antiquity, but it grew to its present size and regional importance after 1800, growth being accelerated especially with nineteenth century prosperity in the Highland industry of Loch Fyne. Ardrish owed its existence to the Oban railway and so originated after 1790. Lochgilchrist is of nineteenth century development also, though on the site of an older village. The town was created soon after 1790 as a trading centre for the Highland. Kilmalea grew to its present size as a result of the location of an aluminium refinery near the loch due to the local availability of hydro power in large quantity.

We are concerned with only two of the three basic elements in the present settlement pattern, the mostly rural core represented by dispersed farms, and small local service centres and industrial

Chapter 13.

POPULATION DENSITIES AND THE SETTLEMENT PATTERN

The eighteenth century settlement pattern was a relatively simple one. Clachans were ubiquitous, there were only two urban centres in existence, Inveraray and Campbeltown, and there was a minimum number of small local service centres, of which Tayvallich in North Knapdale and Clachan in north Kintyre were probably the two best examples. The same may not be said of the modern settlement pattern. The dominant element in an areal sense is the dispersion of single farm steadings and cottages over the rural areas, but there are now many more small service centres, some with minor industrial functions or an interest in the tourist trade. Recently some nucleated settlements have come into existence due to the activities of the Forestry Commission. In addition, the urban centres in the county now number seven, for to Inveraray and Campbeltown have been added Tarbert Lochfyne which has grown from a small village, and the new towns of Ardrishaig, Lochgilphead, Oban and Kinlochleven. Tarbert is a settlement of considerable antiquity, but it grew to its present size and regional importance after 1800, growth being associated especially with nineteenth century prosperity in the herring fishery of Loch Fyne. Ardrishaig owes its existence to the Crinan Canal and so originated after 1790. Lochgilphead is of nineteenth century development also, though on the site of an older clachan. Oban was created soon after 1790 as a trading centre on the west coast, while Kinlochleven grew to its present size as a result of the location of an aluminium refinery near the town due to the local availability of hydro power in large quantity.

We are concerned with only two of the three main elements in the present settlement pattern, the wholly rural ones represented by dispersed farms, and small local service centres and industrial villages. The rural nucleated settlements provide essential services for a surrounding community but may have added functions in the provision of homes for local forestry workers and quarry workers, or they may cater for a seasonal population of tourists. Indeed, few

of the villages in Argyll are uni-functional.

It is difficult to obtain reliable population statistics for these small rural nucleated settlements, for the censuses publish population figures only for civil parishes and legal burghs. One source does exist, based on the 1951 Census. The author is indebted to Dr. Caird for bringing the existence of the Index of Place-Names to his attention, and to the Registrar-General for permission to consult it. The Index lists all place-names in Scotland alphabetically, and gives the population totals where these exceed twenty-four. Care is needed in the use of this source, for it includes some place-names which do not refer to nucleated settlements, and often the definition of the precise area to which the name listed refers is far from clear. As an example, the figure for Tayvallich refers to the whole of the Tayvallich peninsula, and not solely to the village. Further, in the crofting districts such as west Ardnamurchan where townships and non-crofting nucleated settlements are contiguous, the two are not necessarily differentiated, nor is one township separated from its neighbours. Thus the total given for Kilchoan refers to the whole area about Kilchoan Bay, and that for Achateny includes the total population of the Achateny, Swordle and Ockle glens. However, with a comprehensive field knowledge of the various areas where difficulty is liable to arise, it is possible to interpret the figures given by the Index with reasonable accuracy, and this source provides a basis for the examination of the incidence and relative importance of nucleated settlement on a county basis, and possibly on a national basis also. The lower limit of twenty-five fails to take account of some very small settlements. Nucleations of this size should be thought of as comprising five to ten occupied houses,+ and since we have seen that the clachan of approximately this size has virtually disappeared, it is likely that the Index covers most if not all nucleated settlement

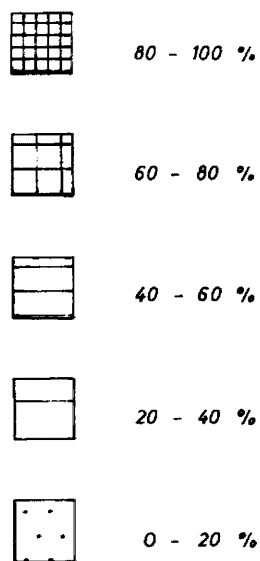
+ The overall number of people per occupied residential establishment, from the 1951 Census of Argyll, was 3.5, which suggests a mean size of 7.1 occupied houses for 25 people. (Census, 1951, Table I).

in 1951. In view of the clachan populations cited for the eighteenth century, (Table 4), the Index should show the existence of any viable clachans which still remain.

Fig. 56 was constructed using the parish population totals from the Census, and the nucleated settlement population derived from the Index. In the calculations the burghs were included, and consequently the highest proportions of the total population living in nucleated settlements are recorded in the parishes in which the burghs and towns are situated, with the notable exception of Inveraray where the exterior appearance of the burgh is deceptive. In terms of population Inveraray burgh is relatively small and less than sixty per cent of the total parish population lives in nucleated settlement. The lowest proportions are recorded in Southend where there is no occupation other than agriculture and the single settlement nucleation is of small size. In Saddell and Skipness the characteristics are similar to those in Southend and tourism is an important factor in the viable existence of nucleated settlements. The proportion is low also in Ardchattan and Muckairn, and Glenorchy and Inishail where the greater part of both area and population is concerned with sheep farming, and again in the small coastal parish of Kilbrandon and Kilchattan where the run-down of local extractive industries brought significant decline to the nucleated percentage of the total population. In Ardgour the existence of crofting townships might be considered to produce a high percentage, but the proximity of the parish to Fort William with its employment opportunities allowed the draining away of a large proportion of the population from the locality, and now the characteristics of the parish are a low level of population of which a low percentage lives in nucleated settlements or in crofting townships, and marked dereliction of croft land.

Medium percentages (forty per cent to sixty per cent) obtain in Killeen and Kilchenzie, in a belt of country from upper Loch Fyne to the west coast, in Lismore and Appin, and in Morvern. In the last named the total population is now so small that the village of Lochaline plays a relatively more important role than settlements of similar size elsewhere in the county, and at Drimnin there is a

*% OF TOTAL
PARISH POPULAT-
IONS LIVING IN AG-
GLOMERATIONS OF 25 OR
MORE PEOPLE IN 1951.*



0 MILES 20

CENSUS AND INDEX OF PLACE-NAMES, 1951.

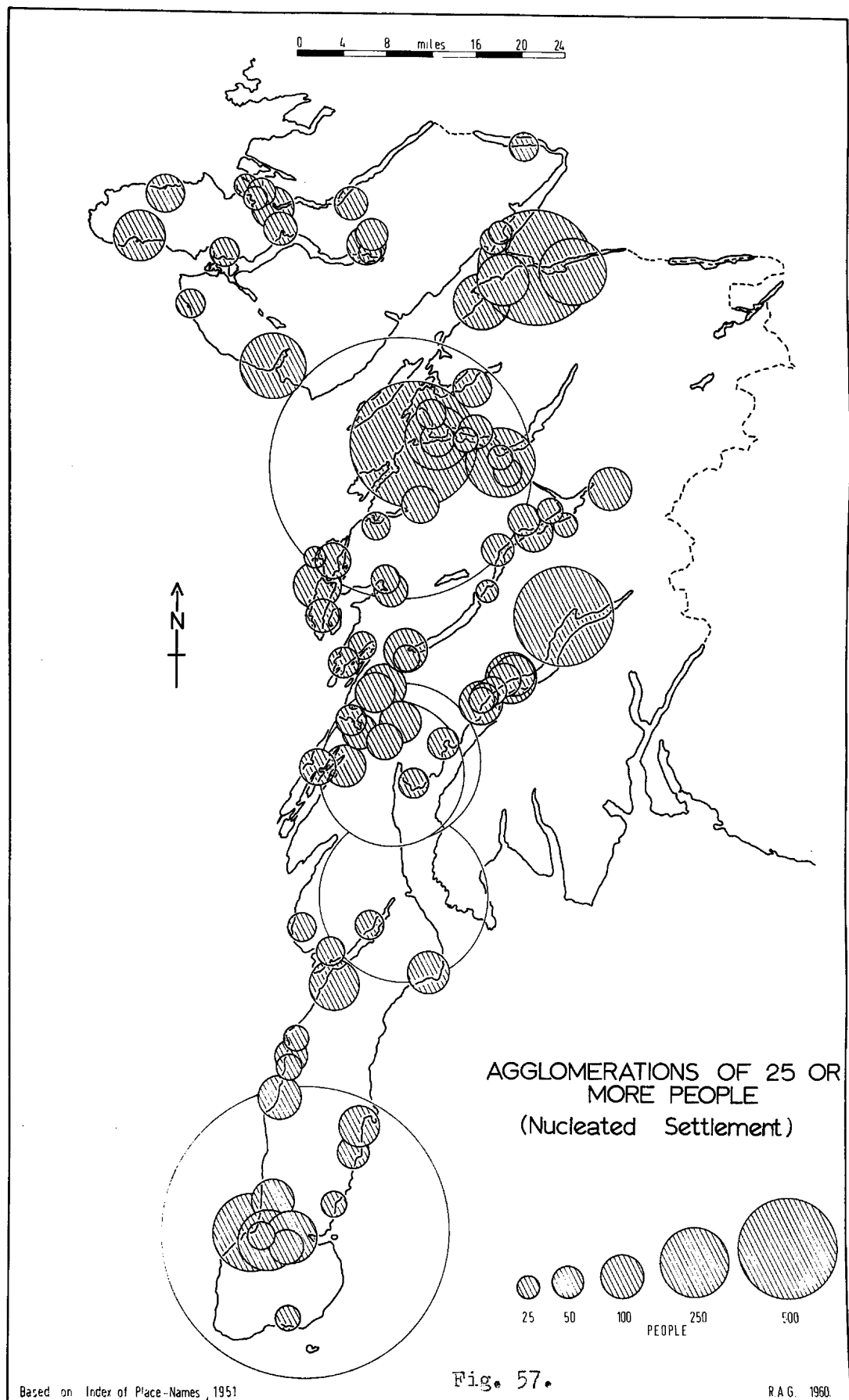
R A G 1960

Fig. 56.

subsidiary nucleation where the Oban to Tobermory boat makes its last mainland call on the outward journey. In Lismore and Appin the industrial centre of Kinlochleven, and the now decaying slate quarrying settlements about Ballachulish maintain a relatively high proportion of the population in nucleated settlements in an otherwise predominantly sheep-farming parish with dispersed settlement. Afforestation schemes, small industrial projects like the Barcaldine seaweed processing factory, and a prosperous sheep-farming economy combined to create the need for local service centres throughout mid-Argyll and Lorne. In Killeen and Kilchenzie four villages, in part eighteenth century estate villages, and in part over-grown clachans on prosperous raised beach farms, managed to maintain their identity into the modern period and are now having other functions added as Kintyre has become more popular during the past decade among Clydeside holiday-makers. These four combine to produce an atypically high nucleated population percentage for rural Kintyre.

Three parishes exhibit relatively high percentages, apart from those which constitute the hinterlands of urban centres. The existence of crofting townships, which on the statistical basis of the Index are nucleated settlements, exerts an over-powering influence on the distribution of population in Ardnamurchan, the most completely crofting parish on the mainland of Argyll. In North and South Knapdale the local urban centres of Ardrishaig and Tarbert Lochfyne make themselves felt, but so also does a number of smaller nucleations like Cairnbaan along the Crinan Canal. Some of the latter developed to serve canal traffic during the nineteenth century, and others have become recently significant as the homes of locally employed forestry workers. One of the machine-shop centres for the Forestry Commission is established in a disused prisoner-of-war camp at Cairnbaan. A completely new forestry village came into being on the east shore of Loch Sween at Achnamara.

The distribution and size of the individual nucleations appear in Fig. 57. Apart from the parish distribution already demonstrated, nucleated settlements are grouped in particular areas. The



concentrations in Ardnamurchan are a result of the existence ofcrofting townships. On Loch Leven and again about Loch Etive the concentrations of nucleated settlements are almost entirely due to the quarrying activities at Bonawe where granite is worked, and the slate quarries farther north. About Connel, however, many tourists find congenial surroundings in the summer and as so often now, tourism is one of the chief props of viable nucleated settlement. The nucleations in Kilbrandon and Kilchattan all owe their origin to slate quarrying, where the best known village is Easdale. On central Loch Awe side, the villages either serve forests and are of recent origin, or have deeper roots as service centres for rural communities. An example is Kilchrenan. The concentration of nucleated settlement centred on the west end of the Crinan Canal, stretching from Tayvallich to the southern extremity of Loch Awe, occurs for a variety of reasons. The extremely fragmented nature of the local topography ensured that even under the self-sufficiency of runrig there were many more small service centres than in other parts of the county. Some, like Tayvallich, were estate villages which grew organically, but Kilmartin, by contrast, was entirely rebuilt to a formal plan in the second quarter of the nineteenth century. "Instead of the rude and ill-assorted thatched cottages, all of which are now removed, the proprietor has put down substantial slated cottages, having garden and shrubbery ground enclosed and railed in for each, the whole having an air of neatness and comfort formerly unknown in this part of the country" (45:561). Included in this group also is Kilmichael in Glassary, now the home of forestry and agricultural labourers, and others working in Lochgilphead, but until the rise of Lochgilphead nearby in the nineteenth century it had been the most important village in the parish. As its name would imply it was an old religious foundation around which a small clachan, or kirk town to use the Lowland term, had grown, but it became an important estate village when the wealthy Campbell family of Auchenbreck made it their home (279: Pt.I). Its importance in the eighteenth and nineteenth centuries was more than local, for "here were the spacious fields where hundreds of native cattle were confined before

being driven by scores of drovers to the trysts at Falkirk and elsewhere" (279: Pt.I). The village supported two cattle fairs in the year, the important one in May and a subsidiary one in October (44:699). On Loch Fyneside there is a series of nucleated settlements between Furnace, which originated as an iron-smelting settlement, and Minard which grew to absorb surplus population removed from local estates towards the end of the eighteenth century. The series developed as first granite quarrying operations were started at Crarae, and later when the Forestry Commission started to re-plant large areas cleared of timber as a result of charcoal burning activities in association with the eighteenth century iron-smelting industry at Furnace.

South of Knapdale, the concentrations of nucleated settlement are less extensive, though the coal-mining and tourist centres about Machrihanish and Drumlemble provide a possible exception. In east Kintyre the only sizeable settlement is Carradale, set up as a fishing settlement after 1830, but now tourist functions are probably more important in spite of an extended pier provided recently for fishing boats. The other nucleated settlements are all local service centres, some of them direct survivals of pre-enclosure settlements, others like Southend village artificial creations of the nineteenth century. Today they provide centres for social, educational and religious activities, and little else, for most retail and commercial functions have been unsurped by the burgh of Campbeltown which is within easy reach of the whole peninsula now that good roads and fast transport both exist. Thus, apart from tourist functions, many of the nucleated settlements are in an obvious state of decay and serve merely as dormitories for people working in Campbeltown.

In form the nucleated settlements vary widely. Some, like Tayvallich, Lochaline and Kilchrenan are almost totally amorphous, recalling the form of over-grown clachans. There is, however, a modern centrifugal tendency towards dispersion from the original tight nuclei along the main roads. If this trend is continued linear villages will result. Others, like Kilmartin and Southend, were planned on formal lines, either as street villages or grouped about

a central focal point. Recent additions to these have not always been directly adjacent to the older buildings; in Kilmichael Glassary new County Council houses were erected away from the original settlement focus, and it is these which are shown in Fig. 58. The eighteenth century industrial villages like Furnace on Loch Fyneside generally adopted a clachan form, but their nineteenth century counterparts and successors, slate quarrying villages like Easdale and Ballachulish, developed a form wherein the dominant element is the row of small cottages, though apart from this there is usually no attempt at an overall plan (Fig. 59). This arose because the quarrymen's houses were very small and shared gables to save expense. Consequently rows of cottages arose, reminiscent of the miners' rows of villages in the Southern Uplands like Wanlockhead or Leadhills.

It will be obvious that most settlements are not uni-functional. Probably the sole exceptions are the slate-quarrying villages, and even at Easdale a small machine-tool works was set up during the 1940's due to the local availability of labour in a run-down industrial community and the strategic desirability of dispersal of industry at that time. (251:199-201). Most nucleated settlements act as service centres for large or small rural dispersed communities; some in appropriate areas have tourist functions; small industries like the processing of seaweed at Barcaldine, or the small coal-mine at Drumlemble provide slight diversity; but today the most important additional functions are those supplied by the Forestry Commission. From figures quoted before the Taylor Commission it would appear that Forestry activities are likely to keep most of the nucleated rural settlements in the county in existence in the foreseeable future, but few new settlements are destined to appear (12: Oral Evidence, 2, para., 3). Settlements like Achnamara in North Knapdale, owing their origin and present raison d'etre to the Forestry Commission are unlikely to be numerous.

For statistical purposes it is convenient to define the non-burghal population in two ways. In the following discussion, "rural population" refers to the total non-burghal population, that is,



Fig. 58. Kilmichael Glassary. Originally this was a small agricultural village, but now supports some local forestry workers. Good arable land in the Add valley (foreground) contrasts with the rugged but low hill grazings behind the village.

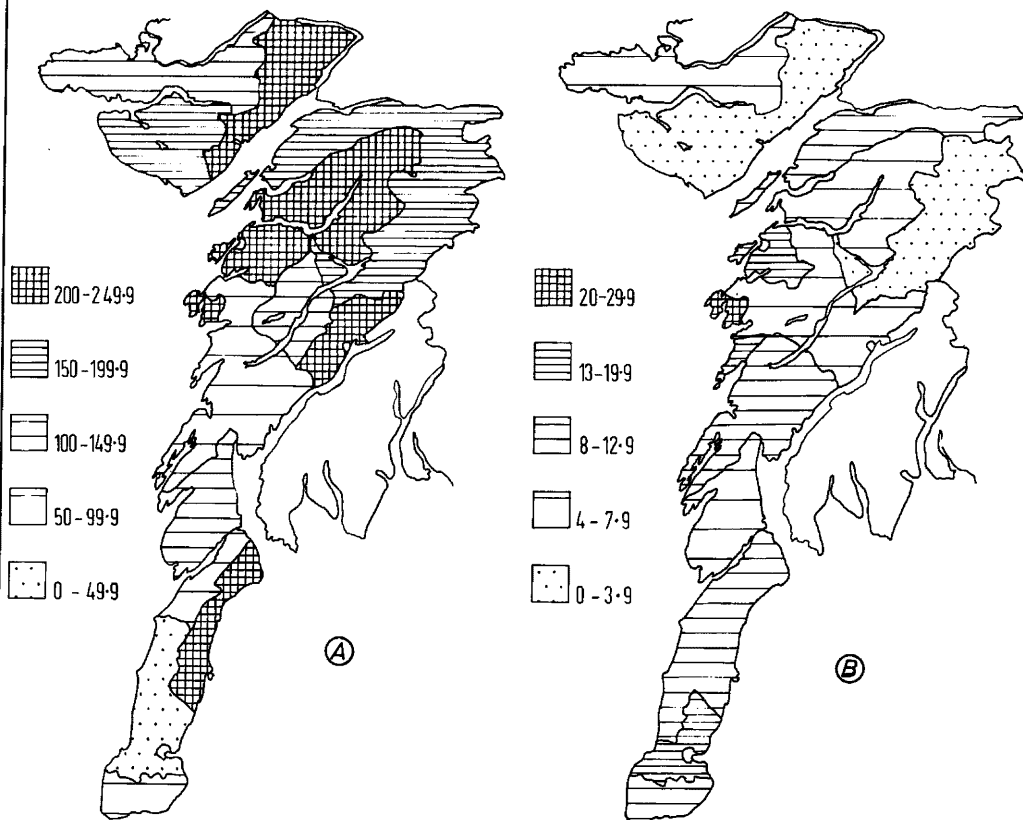


Fig. 59. The rows of small quarry-workers' cottages at Easdale typify many slate-working settlements in the county. Quarries are now largely abandoned and these settlements house an ageing population.

all rural population in both dispersed and nucleated settlement. Non-burghal population, however, has been further restricted to exclude nucleations of two hundred and fifty or more people, for settlements of this size invariably have industrial, commercial or tourist functions, in other words they are, strictly speaking, non-agriculturally rural. In terms of settlement, the other significant population density is that of "dispersed population", defined as that part of the "rural population" residing outwith nucleations supporting twenty-five or more people. The three maps in Fig. 60 are based on these definitions. The figures used, and the estimations and corrections necessitated, are detailed in a tabular appendix to the present chapter.

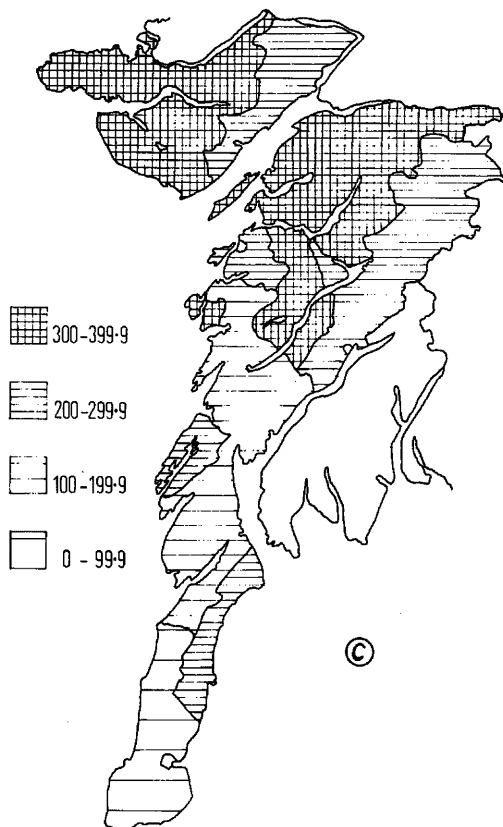
The densities of rural population per square mile of total (non-burghal) area (Fig. 60B) are lowest in the north of the county, and again in the northeast. Generally, the areas where sheep farming is carried on extensively exhibit low densities reflecting sparse settlement. Medium densities characterise areas with a diversified stock rearing economy, particularly Kintyre, North Knapdale and much of mid-Argyll. The highest densities of rural population are found in the small, fragmented, west coast parishes of Craginish, Kilbrandon and Kilchattan and Kilmore and Kilbride where there is greater diversification of activity, now and in the past, than in almost any other part of the county. Small industrial concerns based on local raw materials, like stone, slate and seaweed, are found intermixed with stock rearing and dairying, and as we have seen these areas support also a considerable village population in the total. The density in Lismore and Appin is affected by the industrial centre of Kinlochleven, and by the Ballachulish settlements.

Consideration of the rural population relative to the total area shows only the absolute distribution of population, and overcrowding on local resources is probably better estimated in terms of the distribution of the rural population relative to the area of crops and grass, which approximates to the immediately habitable area (Fig. 60C). The map as presented is not strictly valid, for to be so the various density shadings would be restricted to the



PARISH POPULATION DENSITIES, 1951

- (A) "Dispersed Population" per sq. mile of crops and grass.
- (B) "Rural Population" per sq. mile of non-burghal area.
- (C) "Rural Population" per sq. mile of crops and grass.



plotted area of crops and grass in each parish, but on maps of this scale, and with such a small proportion of the total parish areas involved in many cases, it would be difficult to identify regional distinctions in rural population density. This same criticism must be levelled at Fig. 60A, but in both cases the application of the shadings to the total parish areas is defended on the practical grounds of ease of identification. No harm results so long as it is remembered where, in the different parishes, the areas of crops and grass are located. From what has been said in earlier chapters it will be realised that except in south Kintyre this improved land is distributed peripherally to the hill and mountain masses of the county.

A very different pattern emerges immediately the density of rural population relative to the area of crops and grass is considered. The highest densities now typify the north of the county, the lowest all of Kintyre except Saddell and Skipness. The pattern is to be interpreted in the light of Fig. 52, for to some extent it reflects the distribution of the area of crops and grass. However, the crofting region of the county, together with North Knapdale where a pattern of smaller-than-average cattle-rearing farms emerged at a late date as a result of the policy of the proprietors in the nineteenth century, both emerge with high densities due to the small size of individual agricultural holdings. Thus the absolute sparseness of population suggested by Fig. 60C now turns to relative overcrowding on local resources and the habitable area. Kintyre as a whole has a higher overall density of rural population than the north of the county, but relative to the area of crops and grass, the population is distributed more sparsely than in the remainder of the county. This is accounted for by the much higher proportion of the total area in the peninsula to be considered as improved, than is true elsewhere.

To assess the intensity of rural dispersed settlement, it is necessary also to consider the density of dispersed population per square mile of crops and grass, but allowance must be made for the crofting townships, which, on the statistical basis used, are considered

as nucleated settlements. In fact the crofting areas, with township settlement, now (Fig. 60A) show a relatively low density of population, but the sheep-farming areas, with little nucleated settlement, and a small area under crops and grass all have higher densities than those which typify the mixed stock rearing, and the dairying areas. Thus it would appear that where the immediately habitable area is restricted population density is high and thus settlement relatively dense, in contrast with the more fertile areas of less restricted area, such as the Laggan and the western raised beaches of Kintyre, where a lower density of population would argue a less intensive scatter of isolated dwellings. The argument, however, is conducted on a relative basis and in fact the intensity of rural settlement in Kintyre is as great as in any other part of the county, and greater than in most. As Stevens pointed out, population density analyses of this form deal with a large number of variables, such as the relative potentialities of improved land in different areas, and the virtual impossibility of determining the absolute value of improved land in any one place, let alone the value relationship between improved and unimproved land (263: 28-9). In a diverse area like Argyll, where extensive areas of improved land exist in one area, and almost none in another, there is no simple method of assessing the density of settlement and population on the ground in a realistic fashion. In the final analysis judgement must be based on all available counts of population density, and on subjective impressions gained in the field. Such has been the basis for the discussion of dispersed rural settlement which follows.

The dispersed settlement of the county consists of farm steadings of varying size with a smaller number of cottages, originally occupied by agricultural labourers but now often occupied by older retired people. Most farms in the county are operated by a single family, because mechanization has decreased the necessity for a large class of agricultural labourers. The chief exception to this general distribution occurs in the vicinity of the burghs, especially Campbeltown and Oban, where a more intensive scatter of isolated dwellings housing people who work in the urban centres developed

over the past half century.

It is possible to distinguish two elements in this distribution of isolated dwellings. In the dairying areas of Kintyre, and between Lochgilphead and Kilmartin, the farm steadings are large, with considerable offices, though the farms themselves tend to be on or below the county average size, unless a sheep stock is maintained in addition to the dairy cattle. This results in a relatively denser scatter of farm steadings over the inbye area, than in the hill sheep farming areas, such as the northeast of the county, where the steadings are restricted in size and often considerable distances apart. In the southeast corner of Southend and in the Laggan, where dairying is dominant, the dwellings are seldom more than half a mile apart and often much closer together. In sharp contrast in Glenorchy or Ardchattan the sheep farms are often more than a mile, and sometimes as much as five miles distant from each other.

These farm dwellings and offices in their present form seldom originated more than a century ago, but even in that time considerable changes have been wrought. In the Tayvallich peninsula for instance, a high proportion of the farm steadings is now obsolete, because within the past three decades there have been some amalgamations of holdings. The present population of the area might well be maintained in a much less dense scatter of single dwellings than actually exists. This is true in other areas too, but it is noticeable that all the instances found are in areas where isolation, or fragmentation of local topography have imposed an inflexibility on the local rural economy. These are almost all stock-rearing areas which have been unable to adapt to changing markets, in the way that more ideally sited farms, on more fertile land have changed their emphasis from beef to dairy cattle, or vice versa, as occasion demanded. The consequent inflexibility has produced stagnation in a social sense, with heavy outward migration of people during the past three or four decades.

This unsuitability of the modern rural settlement pattern is repeated in crofting areas. In the townships, as already observed,

the settlement may lie anywhere on a continuum of which the extremes are absolute dispersal of settlement (but in a density unknown in farming areas), and complete nucleation. The pattern that seems to emerge is that townships of early origin tend to maintain nucleated settlement, unless the number of crofts is large and they have been lotted when in all probability the dwellings have been moved on to the individual inbye holdings. Townships of nineteenth century origin usually have an extended linear pattern of dwellings along the township access tracks, or random dispersal of the dwellings over the crofts. In modern circumstances the crofts are invariably too small, and the local employment opportunities too limited to maintain economically the total population for which these townships either were initially intended, or for which they now represent home. Emigration, seasonal migration in search of employment, and an aged population structure are all characteristics of modern crofting communities in Argyll. As a result, the present distribution of dwellings in these townships is more than liberal, and many perfectly good houses are rapidly falling into disrepair. Once again the modern settlement pattern is anachronistic in relation to the prevailing economic and social conditions. Crofting settlement as it now exists can only be defended in terms of maintaining houses in the Highlands for the older people in a population group of which the younger elements are in employment outwith the Highland area, and who look on their Highland homes merely as a place for periodic visits during their working lives and for retirement on a minimum financial outlay.

In most areas where hill sheep farming and dairy farming are successfully established the modern distribution of dispersed settlement is viable, and unless considerable changes were to occur in the national economy, demanding a complete re-organisation of rural society, the present pattern could not materially be bettered. It has developed as the result of a lengthy and empirical process of change, following changes in both local and national economy and society. It is perhaps inevitable that the settlement pattern should lag slightly behind the times, for the capital outlay in farm buildings

and rural dwellings generally is at any stage considerable, so that despite even slow changes in economic and tenurial conditions rural settlement may not be replaced till it has depreciated beyond redemption, not in terms of cash, but in terms of habitability. This "law" may be seen operating at all stages in the development of the settlement pattern. In the regional studies we noticed that the disintegration of the clachans lagged behind the abolition of runrig during the late eighteenth and nineteenth centuries. Equally, in modern Argyll when crofting is obsolete as a rural economy, crofting settlement remains.

Implicit in the acceptance this principle in the study of rural settlement is the idea that we may recognise elements of earlier patterns in the modern settlement distribution. This suggestion is not new to geographers, who regard not only rural settlement but the whole landscape as a palimpsest on which earlier chapters, themselves a result of long development, have been imperfectly erased in the creation of the modern scene. The present settlement of Argyll is no exception to this. Most farm steadings are sited identically with runrig clachans, the additions being on areas reclaimed from moss or moor after the abolition of runrig. The choice of Campbeltown in the early seventeenth century as the site for an important urban centre remains valid, but not so Inveraray, which exists now in an ossified form. Inveraray's earlier administrative position in the county was ensured by the Argyll family whose influence in practical terms has waned, in common with that of most of the landed families in the southwest Highlands. Ironically, the lid was placed on Inveraray's coffin by the Duke of Argyll himself in the 1790's when he recognised the need for Oban on the west coast, and feued land there for the building of houses (23:135). Inveraray exists on its past, as an historic burgh, a planned town of the eighteenth century and the seat of the ducal family. Oban lives very much in the present, an essential link in the chain of communications between the Lowlands of Scotland and the Hebrides.

Occasionally settlement has lagged so far behind social changes that clachans still exist. The finest example is Auchnangoul in

Inveraray parish, but its obsolescence is advertised by the fact that only two of its dwellings now stand occupied, one of which, with all the unoccupied houses in the group, has been condemned by local government authorities. Such examples are exceptional, and with circumstances like those at Auchnangoul, are destined to disappear very soon. The only other examples with which the author is acquainted in Argyll are in Knapdale, Kilbrandon and Kilchattan, and Ardnamurchan.

These are not the sole survivals from the runrig settlement pattern. The settlements which were noted as exceptional in 1750 (Chapter 6), the few local service centres and unplanned estate villages, remain with us today. Some such as Tayvallich are little altered in form, others like Kilmartin were replanned on the same sites. However, it must be stressed that these were exceptional in the mid-eighteenth century settlement pattern, even though they are no longer to be classed as such for their number has been augmented in the intervening period. What was ubiquitous, the runrig clachan, has virtually disappeared and has no place in the modern settlement of Argyll.

Table 17.
Appendix the Chapter 13.

Parish Rural and Dispersed Population Densities, and Percentages of Total Population in Nucleated Settlements.

Parish	A	B	C	D	E
Ardnamurchan	109,402	1,677	948	660	948
Morvern	90,736	882	460	252	460
Ardgour	90,599	840	371	108	371
Lismore & Appin	92,657	2,904	3,014	1,217	1,409 ¹
Ardchattan & Muckairn	144,940	3,099	1,710	654	1,503
Glenorchy & Inishail	146,628	2,014	881	256	838
Kilmore & Kilbride	29,503	1,968	7,808	7,161	770
Kilchrenan & Dalavich	45,953	680	349	196	349
Kilninver & Kilmelfort	31,791	1,093	279	139	279
Kilbrandon & Kilchattan	13,384	1,217	574	148	574
Craignish	9,284	1,260	235	82	235
Kilmartin	25,104	1,909	460	275	460
Glassary	60,234	4,102	2,914	2,485	1,102 ²
Inveraray	46,887	1,370	1,381	587 ³	528 ²
North Knapdale	26,286	1,180	440	315 ³	440
South Knapdale	73,852	2,989	2,330	1,631	828
Kilcalmonell	28,140	2,289	1,364	1,107	482
Saddell & Skipness	46,888	2,081	932	220	932
Killeen & Kilchenzie	42,173	6,765	705	299	705
Campbeltown	44,266	10,836	8,744	7,903	1,277
Southend	30,081	4,929	522	31	522

- A. Total Parish Area, in acres, less burghal areas estimated for Campbeltown, Tarbert, Ardrishaig, Lochgilphead, Inveraray and Oban. 1951 Census.
 - B. Area of Crops and Grass, in acres. D.O.A.S. statistics, 1951.
 - C. Total Parish Populations. 1951 Census.
 - D. Total Parish Nucleated Populations. Index of Place-Names, 1951.
 - E. Total Rural Parish Populations, excluding settlements with 250 people or more, which are Campbeltown, Machrihanish, Tarbert, Ardrishaig, Lochgilphead, Inveraray, Oban, Dunstaffnage, Taynuilt, Ballachulish and Kinlochleven.
1. Figures corrected for Kinlochleven Reg. Dist., which exceeds the urban area.
 2. Figures based on a correction to allow for Hydro Scheme construction - estimate based on Table 5 of Census, where excess of males for Inveraray landward is calculated at 350.
 3. Index of Place-Names corrected for Tayvallich.

Table 17. Contd/...

Parish	F	G	H	J	K
Ardnamurchan	288	69.6	109.9	5.5	361.8
Morvern	208	54.8	150.9	3.2	333.8
Ardgour	263 ₁	29.1	200.4 ₁	2.6 ₁	282.7 ₁
Lismore & Appin	885 ₁	40.4	195.0 ₁	9.7 ₁	310.5 ₁
Ardchattan & Muckairn	1056	38.2	218.1	6.6	310.4
Glenorchy & Inishail	525	29.1	166.8	3.7	266.3
Kilmore & Kilbride	647	91.7	210.4	17.2	250.4
Kilchrenan & Dalavich	153	56.2	144.0	4.9	328.5
Kilninver & Kilmelfort	140	49.8	82.0	5.6	163.4
Kilbrandon & Kilchattan	426	25.8	224.0	27.4	301.9
Craignish	153	34.9	77.7	16.2	119.4
Kilmartin	185	59.8	62.0	11.7	154.2
Glassary	429 ₂	85.3	66.9 ₂	11.7 ₂	171.9 ₂
Inveraray	444 ₃	42.5	207.4 ₂	7.2 ₂	246.7 ₂
North Knapdale	125 ₃	71.6	67.8	10.7	238.6
South Knapdale	699	70.0	149.7	7.2	177.3
Kilcalmonell	257	81.2	71.9	10.9	132.7
Saddell & Skipness	712	23.6	219.0	12.7	286.6
Killeen & Kilchenzie	406	42.4	38.4	10.7	66.7
Campbeltown	841	90.4	49.7	18.5	75.4
Southend	491	5.9	63.8	10.8	67.8

F. Total Parish Dispersed Populations, omitting agglomerations of 25 or more people.

G. Nucleated as Percentage of Total Population.

H. Dispersed Population per square mile of Crops and Grass.

J. Rural Population per square mile of Non-Burghal Area.

K. Rural Population per square mile of Crops and Grass.

1. Figures corrected for Kinlochleven Reg. Dist., which exceeds the urban area.
2. Figures based on a correction to allow for Hydro Scheme construction - estimate based on Table 5 of Census, where excess of males for Inveraray landward is calculated at 350.
3. Index of Place-Names corrected for Tayvallich.

SECTION VI

CONCLUSIONS

Chapter 14.

REGIONAL DIFFERENTIATION IN THE SOUTHWEST HIGHLANDS.

It was stated at the outset that the principal aim of this thesis is to demonstrate the disintegration of clachan settlement and the extent to which elements of the pre-enclosure settlement pattern are recognisable now in the southwest Highlands. In studying the available evidence relating to settlement, certain regional variations and distinctions have become apparent, but at times only implicitly in the arguments presented. It is the purpose of this short chapter to crystallize some of the cultural criteria on which a system of regions in this part of the Highlands might be built, and to show the variations of these criteria over the area studied.

Four main regions have become apparent in the twenty-one parishes under consideration. Each has certain fundamental physiographical characteristics unique to itself, and these to some extent must have conditioned or modified human action and response through the course of time. However, this physical background is here taken as granted and reference to it will be solely implicit or incidental. Since all the available criteria on which a valid differentiation of regions would be based are not here discussed, no map of these regions is presented. Furthermore, for purposes of description and analysis the regions are considered as constituted of complete, or almost complete parishes grouped together; but parish boundaries being what they are, the discussion which follows must not in any sense be regarded as a final regional analysis.

The first region forms the short limb of what was described as an inverted L-shaped area formed by the twenty-one parishes. It lies in the north of the county, straddling the Great Glen. Physically, this region is difficult of access, routes are circuitous and peripheral to the extensive hill and mountain masses, and settlement is and always has been sparse and wholly peripherally distributed. The region consists of all the parishes west of the Great Glen, Lismore and Appin, Ardochattan (but not Muckairn which lies south of Loch Etive) and Glenorchy (but not Inishail which lies south of the Pass of Brander). By the mid-eighteenth century there had been little

or no enclosure and the enclosure pattern today is unique in the county in including almost all of the narrow croft-strips. Economically the region is typified by a mixture of hill sheep farming and crofting agriculture, and as in the crofting districts farther north there is a greater survival of Gaelic speech than outwith the Crofting Region. The Great Glen provides a possible sub-division, for west of it the emphasis is on crofting, east of it sheep farming is dominant, but in both areas extensive plantings of trees are being carried out by the Forestry Commission. In the past industrial extractive activities were important. These proved uneconomic in the present century, adding to already difficult employment problems.

The second region might be termed, loosely, Loch Fyneside, though it stretches west to include Loch Awe and south to incorporate north Kintyre. The parishes included are Inishail, Kilchrenan and Dalavich, Inveraray, Glassary, South Knapdale, Kilcalmonell, and Saddell and Skipness. Here again, the settlement pattern is peripheral, but denser than in the first region, especially along Loch Fyne itself north from Lochgair. Communications are relatively easy in a longitudinal direction, but transverse travel is difficult. As a result Loch Awe side is remote and socially stagnant. Topographically the region is more subdued than the north of the county with altitudes seldom in excess of 1500 feet, but there are fairly extensive peat-covered flats at 800 to 1000 feet, so that mountain pastures have always been important. Almost all of the mid-eighteenth century enclosure of the county was in this region of fairly small, though frequently severely fragmented estates, but improvers were early in the field and innovations and experiments were made almost contemporary with those in Kintyre in the 1730's. The earliest clearances, for cattle, were here and were followed by some of the earliest clearances for sheep anywhere in the county. Today the economy is a mixture of sheep, and hill cattle rearing, with little arable agriculture apart from the dairying near Lochgilphead. Considerable areas are being appropriated by the Forestry Commission for afforestation, which has brought about limited employment opportunities to counteract the

failure of earlier industrial activities, and the depression in modern agriculture. Topography has modified the development of the enclosure pattern into one of dominantly broad parallel strips, but other types of enclosure do exist. This region contains four of the urban centres of the county, but neither of the two largest. Probably it has as well balanced a settlement pattern as any other part of the Highlands, but suffers from the chronic lack of employment so widespread north of the Highland line.

The west coast of the county, from Loch Etive to the Point of Knap, provides the third region, and one in which the truth of the geographical cliché, "unity in diversity", is amply exemplified. The parishes included are Muckairn, Kilmore and Kilbride, Kilninver and Kilmelfort, Kilbrandon and Kilchattan, Craignish, Kilmartin and North Knapdale. Altitudes are seldom greater than 1500 feet, but the relief is considerable due to extreme physiographic fragmentation. The settlement pattern has alternated between areas of maximum intensity, and areas almost completely devoid of habitation, alike at present and when clachans were ubiquitous. In toto, the settlement pattern may be considered more than peripheral, for many minor glens were intensively settled in the eighteenth century. The course of change over two centuries has varied widely. On Breadalbane lands runrig was abolished before 1800, whereas a fixed form of runrig lasted into the present century in parts of Knapdale. The field pattern is diverse, and due to the accidented nature of the topography no single element is dominant. All types of enclosure are developed over restricted areas. The modern agrarian economy is the most diverse in the county, including dairy farming, the rearing of beef cattle on hill pastures, the rearing of sheep in large numbers, and even market gardening in the vicinity of Oban. Unfortunately, due to the haphazard way in which agrarian changes operated during the eighteenth and nineteenth centuries bracken infestation is a more severe problem here than in any other part of the county, and possibly than in any other part of the west Highlands (166: Map). Due to the existence of extractive industry in the past, and to the small local industries like the processing of seaweed at Barcaldine, rural nucleated settlement represents a significant

proportion in the total pattern, though this pattern is changing. Villages like Easdale are rapidly becoming derelict, and in the southern part of the region only afforestation operates to maintain people in the rural areas.

The last, and possibly the most distinct region, is south and central Kintyre, represented by the parishes of Southend, Campbeltown, and Killeen and Kilchenzie. Raised beaches exert a more noticeable effect on rural settlement siting than in any of the other regions. The human potentialities of the physical environment are greater than elsewhere, and agrarian changes first appeared in Kintyre, to spread to the remainder of the county. The seventeenth century Lowland plantation of Kintyre, and the overall dominance of a single proprietorial family in such a densely peopled area were unparalleled elsewhere. The initial changes wrought by the Argyll family on their Kintyre estates were tenurial and social, and were not immediately represented in the landscape, so that by 1750 there was still little enclosure in the peninsula. However, the early inception of change allowed to the rural society more time to adapt before the population maximum was attained, even though that maximum appeared earlier than elsewhere in the county. Consequently the minimum proportion of eighteenth century settlement sites now abandoned is found in south and central Kintyre, and, as a concomitant, bracken infestation is a less serious problem than in the other three regions. The early disappearance of clachan settlement is reflected also in the minimum percentages of the population recorded by the censuses as Gaelic speakers, from the mid-nineteenth century on. The sheep to cattle ratio is at its lowest in the county, but the densities of both sheep and cattle on the grazings are here at their highest. A thriving dairying economy supplies a creamery in Campbeltown. The farms are almost all family concerns, and there are few rural industries to warrant the existence of rural nucleated settlements, which consequently are few and associated mainly with tourism. At the same time, the density of rural population is at a maximum, but with a high proportion of crops and grass to total area, the density of rural population per square mile of improved land is low.

One of the factors underlying the individuality of these regions has been the different course and timing of agrarian innovation and concomitant changes in the social sphere in each area. If these changes had been initiated as early as 1730 in Ardnamurchan, or as late as 1830 in south Kintyre, when in each case the level of population was very different, the modern landscape and rural society would undoubtedly have varied widely from those now in existence. This is not say that a dairying economy on the lines of that prevalent in Kintyre could ever economically have been supported in Ardnamurchan, for the fundamental and varying human potentialities of the physical environment are not to be denied. Equally it would be unwise to over-stress the physical factor, for the pattern of estate ownership, and the individual aspirations and experience of the various lairds were fundamental to the development of the modern scene.

Chapter 15.

SOME GENERAL CONCLUSIONS.

1. In the southwest Highlands modern settlement distribution is only explicable in terms of development from the distribution of clachan settlement in the eighteenth century. Most farms today occupy the sites of earlier rural nucleations of settlements, and so the general distribution of settlement has remained largely unaltered, except for a contraction downslope from the maximum limits attained during the second half of the eighteenth century. The dereliction of the higher habitable area has not been spread consistently over the area studied, for the extent to which clachans were abandoned depended on the manner and timing of the spread of agrarian and social changes. These spread from Kintyre along Loch Fyneside, and thereafter penetrated only slowly into the north and west. Other things being equal, the areas to which change came latest have suffered the greatest subsequent abandonment of settlement sites.

2. In form, modern settlement bears little relationship to the dominant morphological type of two centuries ago. Clachans have been replaced by isolated farms, but to serve these, there are now in existence more local service centres than in the past. This came about as local self-sufficiency disintegrated after the abolition of runrig. Only the exceptions in the mid-eighteenth century pattern of rural settlement, that is the few villages of local importance, are recognisable in modern settlement. With few exceptions, clachans have disappeared.

3. All the available evidence points to the maximum extent of cultivation having been attained while clachans still existed as viable settlement and social entities, and before runrig had been abolished in most areas. This conclusion for Argyll finds support farther north in the Highlands in MacSween's study of North Skye. Recession from the maximum limits of cultivation started as early as 1770, and soon after 1800 was general. This argues a considerable intensification of agricultural yields as the arable area contracted, to support a population which continued to grow till after 1830. It

has also been demonstrated by Gray that there was a decline in real income during this same period over much of the Highland area, and that living standards consequently fell (156: 47-63).

4. Probably the single most important factor in the development of the modern rural landscape was the attitudes adopted by different proprietors, especially between 1750 and 1850, in different parts of the county. Modern prosperity and modern rural slums are not due solely to the potentialities inherent in the physical attributes of the various regions, but also to the extent to which these potentialities have been developed by different individuals. Only thus may the considerable differences between adjacent localities be explained. It is as relevant to the historical geographer, or student of settlement, to study the social background and accumulated experience of men like Campbell of Knockbuy, and the Dukes of Argyll, as to analyse the distribution of raised beaches or of drift deposits. In this respect, Argyll is very much one of the Atlantic Ends, for Flatres arrived at a similar conclusion working in other Celtic countries of the west (125:573).

5. Clachan settlement in the eighteenth century appears to have consisted almost exclusively of amorphous, closely-grouped clusters of dwellings. Morphological distinctions in clachans became recognisable only after agrarian improvements are known to have been introduced. Though there is no direct evidence in support (but see Appendix 4), it would seem that the linear/rectangular clachans were a concomitant of agricultural and tenurial changes, introduced in the second half of the eighteenth century.

6. Lastly, work in Argyll has shown that the traditionally held and often emotionally presented picture of settlement changes in the Highlands needs considerable revision. Cruel clearances such as those in Sutherland are not to be denied. That they occurred is a matter of historical fact. But to extend the idea of clearance as it refers to Sutherland indiscriminately to other parts of the Highlands, as Mackenzie did in his *History of the Highland Clearances* (204), is patently absurd. Indeed, in Argyll, the proprietors of the largest estates seem to have done all in their power to ensure that their

tenantry did not suffer as new ideas and techniques were introduced. If living standards were ever to rise above a simple, and one might add dangerous subsistence level, migration from rural areas was inevitable. Over much of the southwest Highlands the wise policies adopted by the lairds before 1800 paid handsome dividends, even to the tenantry, for there is little or no material evidence to indicate excessive hardship south of the Great Glen during the difficult period of the mid-nineteenth century.

Apart from these conclusions of a general nature, other more specific ideas have been developed relating to topics incidental to the central theme of this thesis. These, together with a discussion of the value of some of the sources which have been used, are presented as a series of appendixes. Appendixes 1 and 2 discuss the value of sources used, Appendix 3 deals with topics relating to clachans, Appendix 4 is a study of population and society in Kintyre between 1750 and 1800, Appendix 5 demonstrates hitherto unknown social aspects of early nineteenth century rural settlement, and Appendix 6 is a study of the role of sub-letting in modern crofting communities, which is important in assessing the viability of modern settlement in these areas.

SECTION VII

APPENDIXES.

LIST OF APPENDIXES

- No. 1. On the Accuracy of the Military Survey of Scotland, and of Webster's Enumeration of 1755.
- No. 2. The Value of Collections of Highland Estate Papers for the Historical Geography of Settlement.
- No. 3. Contributions to the Study of Clachans in Scotland.
(a) A Gazetteer of Clachan Sites Visited in Argyll.
(b) On the Terminology Involved in the Study of Rural Settlement in Scotland.
(c) The Origin and Antiquity of Clachan Settlement in Scotland: Some Suggestions.
(d) The Peasant Houses of the Southwest Highlands: Distribution, Parallels and Evolution.
- No. 4. Settlement and Population in Kintyre, 1750-1800. Published: Scottish Geographical Magazine, Vol. 76, No. 2, September, 1960, pp. 99-107.
- No. 5. Mobility of Tenants on a Highland Estate in the Early Nineteenth Century. Accepted for publication in a forthcoming issue of the Scottish Historical Review.
- No. 6. The Role of Subletting in the Crofting Community. Accepted for publication in a forthcoming issue of Scottish Studies.

No. 1.

ON THE ACCURACY OF THE MILITARY SURVEY OF SCOTLAND, AND OF
WEBSTER'S ENUMERATION OF 1755.

Accepting that the two basic sources for the historical geography of mid-eighteenth century Scotland are Roy's Map and Webster's Enumeration of 1755, it would be unwise to assume blindly that these two are either necessarily consistent within themselves or wholly accurate. One outcome of part of the work for this thesis was an attempt to assess the accuracy of these sources in the area under consideration, and there have arisen out of this attempt conclusions which may well have a wider application than merely to the county of Argyll.

If there is to be any means of checking the accuracy of Roy and Webster, an independent and reliable third source is necessary. This is supplied by the Valuation of Argyll in 1751. It was a published valuation, and so it is unlikely that any proprietor could have omitted a farm, joint-farm or other possession without some protest being registered by his neighbours, though the actual valuation quoted in any particular case may be open to question. In a private communication, Mr. Cregeen tells me that Campbell of Knockbuy does not appear to have given a valuation in accordance with statements immediately prior to, and subsequent to 1751 which appear in the Knockbuy Rentals. Such may be the case with other estates. The Duke of Argyll possessed exactly half of Kintyre in terms of number of possessions, but the money valuation quoted is only 41% of the total for the area (135:99). Many of the possessions involved were on the best land of the peninsula (135:102), which leads one to suspect that either the basis of valuation varied from one estate to the next, or that some proprietors may not have been strictly honest in returning valuations of their property. For present purposes, however, it is sufficient to note that the Valuation, in all probability, gives an accurate assessment of the number of possessions in existence in the different parishes at the mid-eighteenth century. Remembering that at this period the joint-farm settlement, or clachan, was the dominant settlement form,

the Valuation gives therefore an estimate of the number of settlements.

Roy's Map does not show contemporary parish boundaries, but comparison with modern maps makes it possible to count the number of settlements shown in each parish. It says much for the veracity of the Valuation that in no parish examined were there fewer settlements indicated by it than by Roy. It is inconceivable that the Valuation would show too many settlements, for on it were based various assessments and taxes, and consequently no proprietor would wish an over-valuation of his property.

Using the two sources for settlement, the accuracy of Webster's population figures may be investigated. The check can not, from its very nature, be completely accurate, but it is possible to indicate where Webster's figures appear to be badly at fault. Such reservations on Webster are not necessarily new. Webster himself suggested that the figure for Ardnamurchan was incorrect, but he implied an under-estimate of the population, whereas in fact the figure he gives is about 170% of the actual total. (177:33, footnote). Later, Rev. Mr. Campbell commented on this same exaggeration (15:286).

The examination of Webster involves counting the number of houses shown by Roy, and using this to derive the number of people per house in each parish at this period. Admittedly Roy shows settlement in a diagrammatic way. This could be demonstrated by comparing either contemporary estate maps, or field evidence, with what Roy shows of settlement form, and even exact site. Nevertheless, Roy appears to have recognised an average settlement size varying between 4 and 6 houses per clachan, and totalling the houses over an area as large as a parish it is believed that a reasonable estimate of the number of houses involved is obtained. It will also be demonstrated that Roy suggests a slightly smaller settlement size in the south of the county, than in the north and northwest. This is in accordance with what evidence has been adduced from contemporary sources, particularly estate papers, on this point. It is possible to get a slightly different number of houses per settlement for each parish and this may be used as a factor for use with the Valuation wherever Roy is known to be badly at fault.

Contemporary sources such as Murray for 1733 (232: census) and the Statistical Accounts for the 1790's frequently give population figures and numbers of families in each parish. From these a crude estimate of average family size may be obtained which seems comparable with the figures of people per house for the 1750's, and which may be used as an independent check on the latter. Admittedly in such an estimate of family size it is impossible to allow for the elderly, either living alone as cottars, or living with younger families, and consequently the figures must be treated with reserve. It would appear that this group in society was not relatively of importance numerically in the later eighteenth century, and even in the early nineteenth century, certainly in Kintyre (135: Table 1). This contrasts markedly with the position later in the nineteenth century when the cottar class was of great importance, particularly in the crofting districts. It appears valid to use a factor derived from Roy for the average settlement size with the figures obtained from the Valuation, because, with a single exception (Kilchrenan and Dalavich) where Roy is incorrect it appears to be in terms of number of settlements rather than in size of settlement.

From the independent sources mentioned above, figures between 4.0 and 6.0 are possible for average family size, and allowing an average of one family per house, the figures obtained from Webster, and Roy or the Valuation should fall within this range if all the sources are accurate. In fact, some areas had more than one family per house, so that the acceptable range of figures should be increased upwards slightly. To give a reasonable margin for any doubt, the range used here is 4.0 to 7.0, before either Roy or Webster may be called in question, on this evidence alone.

The sources are examined parish by parish, and the nearest contemporary references to family size are quoted for comparison where appropriate. The details are summarised in tabular fashion. It has not been possible to examine the Parish of Kilbrandon and Kilchattan adequately, for a large proportion of it is insular and the Military Survey was confined to the mainland. Webster gives 1492 people for this parish and the Valuation lists 29 possessions. Using a multiple

of 5 with the Valuation, a figure of 10.3 people per house is obtained. This is so far outside the range of 4.0 to 7.0 that it is almost certain that Webster is at fault, unless there were considerably more than one clachan per joint-farm, a suggestion for which there is no evidence to hand. Webster here appears to have given as great an over-estimation of the population as he did for Ardnamurchan.

In the parishes where an urban centre is involved, adjustments have been made to allow for the impossibility of counting dwellings in the burghs from Roy, or possessions from the Valuation. The parishes concerned are Campbeltown, Kilcalmonell and Kilberry (Tarbert Lochfyne) and Inveraray. All of the adjustments made to Webster's figures, including those due to later boundary changes, are noted and fully explained.

One remaining point needs explanation. The possessions in the Valuation include mills as separate entities, for often there was a separate mill clachan or "Milltown". On the other hand, crofts, unless entered separately in the Valuation, have been counted together with the farm with which they were associated. Such crofter families were largely dependent on the joint-tenants and usually lived with them in the clachan. Occasionally, a croft became a separate possession, with its own settlement, and was included separately in the Valuation. For the purposes of the calculations below, these have been counted as autonomous possessions. This procedure will also allow for the few non-farming settlements which existed and which may not be accounted for by using the Valuation alone.

Ardnamurchan.

In Ardnamurchan Webster includes the whole parish, partly in Argyll and partly in Inverness. Consequently estimates based on Webster are made for the districts Ardnamurchan and Sunart in Argyllshire. Murray in 1733 gives 1352 people in 278 families (4.9 people per family) for the Argyll part of the parish (232: census). Webster, for the whole parish gives 5000 people but adds the note "The number of inhabitants cannot absolutely be depended on nor is it known whether those employed about the Mines of Strontian generally about 5, or 600, are included in the 5000." Obviously he considered 5000 an underestimate.

In 1765 there were 3501 people in the whole parish, and 2712 in the Argyll districts, and in 1795 the figures were 4542 and 2552 respectively (15: 286-296). Using the 1765 proportions, the Argyll districts should have had 2712 people in 1755, or 2809 using the 1795 proportions. The average of the two estimates above for 1755 is 2760 people, and it is interesting to note that West Highland Survey used 2750 as an estimate in their calculations (106: Chapter III and Table 3).

All available population figures for the eighteenth century, except Webster, were graphed, and from the graph an estimate for 1755 of 1580 people was obtained. Also, using average rates of increase of population calculated from the available figures, and applying these, a second population estimate of 1656 was arrived at.

Roy's Map gives 57 settlements and 309 houses (5.4 houses per settlement), and the Valuation mentions 59 possessions. Thus in number of settlements, Roy appears to be accurate.

If, then, an estimate based on Webster is used, say 2760, when divided by Roy's houses, a figure of 9.0 people per house is derived, which is outwith the admissible range. The personal estimates of 1580 and 1656 produce figures of 5.1 and 5.3 respectively, both well within the range. They also compare favourably with figures of people per family of 4.9 in 1733 (232: census, derived), and 5.3-5.6 for the different districts of the total parish, Argyll and Inverness, in 1795 (15: Table, derived).

Webster is grossly inaccurate for Ardnamurchan. The true figure for the Argyll districts is of the order of 1600 people, while an estimate based on Webster exceeds this by approximately 70%.

Morvern.

Webster here gives 1223 people, Roy marks 48 settlements with 260 houses (5.4 houses per settlement) while the Valuation lists 54 possessions. From Webster and Roy a figure of 4.7 people per house is obtainable, well within the acceptable range. In 1793 there were 1764 people and 384 families, an average of 4.6 people per family (16: 270). Both sources appear to be accurate in Morvern.

Ardgour.

This parish did not come into being until the end of the nineteenth

century, being then created from the Kingairloch district of Lismore and Appin together with the Argyll-shire district of the parish of Kilmallie, the remainder of which is in Inverness-shire. Using the West Highland Survey estimate based on Webster of 901 people (106: Ch.III, Table 3), 6.0 people per house lived in the 150 houses Roy shows in 25 settlements (6.0 houses per settlement). The Valuation lists 31 possessions. These figures are consistent, and there seems no reason to doubt the accuracy of either source, or of the West Highland Survey estimate.

Lismore and Appin (including Kingairloch).

Webster gives 2812 people and Roy 65 settlements with 355 houses (5.5 houses per settlement). However, the Valuation lists 89 possessions, so Roy appears to under-represent settlement. If Webster's figure is divided by 5.5 times the number Valuation possessions, a figure of 5.8 for the number of people per house is arrived at which is believable, unlike the 7.9 obtained using Roy. It is suggested that Roy only is at fault here, indicating too few settlements.

Ardchattan and Muckairn.

For 1755 Webster gives 2195 people in the parish. The Valuation lists 98 possessions, while Roy marks only 51 settlements with 242 houses (4.7 houses per settlement). Regardless of Webster, Roy under-represents settlement in terms of the number of sites. 4.8 people per house may be obtained by multiplying the Valuation possessions by 4.7, the factor derived from Roy above, and dividing Webster by the result. This figure is well within the allowable range, but if Roy is accepted blindly, 4.8 is replaced by 9.1 people per house.

Glenorchy and Inishail.

Both sources appear to be accurate. Webster gives 1654 people, Roy 332 houses in 64 settlements (5.2 houses per settlement) and the Valuation mentions 69 possessions. 5.0 people per house is derived from Roy and Webster. These figures are consistent.

Kilchrenan and Dalavich.

Webster gives 1030 people; Roy marks 50 settlements with 351 houses. This gives 7.0 houses per site which is the highest figure of any parish studied. The Valuation enumerates 48 possessions. Thus the number of

settlements Roy marks seems to be accurate. Accepting Roy and Webster, 2.9 people per house is the figure achieved, which is below the allowable range. If, however, we allow 5 houses per site, 2.9 becomes 4.1. This suggests that Roy, while giving the correct number of settlements, otherwise over-represents settlement and that Webster is essentially accurate. In support of this, there were 4.1 people per family in 1792 (20:271, derived).

Kilmore and Kilbride.

Webster gives 1200 people and Roy 296 houses in 56 settlements (5.3 houses per site), while the Valuation suggests the existence of 60 settlements. 4.1 people per house in the 1750's may be derived from these figures, which compares favourably with 4.6 people per family in 1831 (43: 527, derived).

Kilninver and Kilmelfort.

Webster: 1045 people; Roy: 256 houses in 41 settlements (6.2 houses per settlement); Valuation: 45 possessions. Roy possibly shows too many houses, but the figures otherwise are consistent in giving 4.1 people per house. In 1793 there were 5.7 people per family (21: 319, derived). If we allow 5.5 people per house in the 1750's, and can accept Webster and the number of sites Roy marks, 6.2 houses per settlement are replaced by 4.6 houses per site.

Craignish.

Here Webster gives 769 people and Roy 160 houses in 24 settlements (6.7 houses per site). The Valuation suggests 28 settlements. These figures would give 4.8 people per house. In 1791, there were 770 people in this parish, 294 of whom were married. This gives a crude estimate of 147 families, and therefore 4.4 people per family (27: 440), a figure comparable with that derived for the 1750's.

Kilmartin.

In Kilmartin the available figures all seem consistent. Webster allows 1150 people, Roy marks 214 houses in 40 sites and the Valuation lists 56 possessions. Thus Roy possibly under-represents settlement, but accepting his figures for the purposes of argument, a figure of 5.4 people per house is comparable with 5.7 people per family in 1795 (25: 96-7).

Glassary.

Here Roy seems to be at fault. Webster enumerates 2751 people, Roy's Map shows 74 sites with 363 houses (4.9 houses per site) and the Valuation suggests that there should be 98 settlements. Accepting the figures as they stand, 7.6 people per house is outside the allowable range. Using 4.9 as a factor with the Valuation, 5.7 people per house is more realistic, and agrees closely with 5.8 people per family in 1794 (24: 656, derived). Thus the Military Survey is low in terms of settlement sites, but apparently accurate as to the average size of settlement.

Inveraray.

Webster gives 2751 inhabitants in 1755. Due to the presence of the burgh it is impossible to count the total houses from Roy. Consequently some estimate of the number of houses in the burgh is needed, or, alternatively, an estimate of the landward population would suffice. A minimum of 120 houses may be obtained for 1746 (221: 55-58). Together with the houses for the landward area as shown by Roy, this gives 7.6 people per house, which is too high.

Roy's houses number 243 in 51 settlements in the landward area. Using the proportions suggested for 1792 (26: 293), there were 1155 people in the landward area in 1755, but, there was a decline in total population between 1755 and 1792, which probably was more severely felt in the landward area than in the burgh, and this in spite of the burgh being removed from a site approximately where the present castle stands to the present site to the south. To allow for this differential decline, half of the calculated decrease for the burgh between 1755 and 1792 was added to 1155 to give an estimate of 1422 people in the landward area in 1755. Using this with Roy's 243 houses a figure of 5.9 people per house is derived, which falls squarely within the acceptable range, and is comparable with 5.5 people per family in 1811 (46: 27). If we can accept the estimates outlined above, both Roy and Webster appear to be accurate. As the Duke of Argyll owned so much land in the immediate vicinity of Inveraray, it is likely that his possessions here were not adequately differentiated in the Valuation, which could account for only 36 possessions being noted.

North Knapdale.

The figures here are quite consistent. Webster gives 1369 people, Roy 310 houses in 65 sites (4.8 houses per site), which allows 4.4 people per house. The Valuation lists 64 possessions.

South Knapdale.

Webster gives 1292 people and Roy's Map 141 houses in 35 sites (4.0 houses per site). The Valuation however lists 50 possessions, suggesting that Roy under-represents settlement. Using the Valuation and 4.0 houses per site, 6.5 people per house is obtained, but as this is likely to be a minimum figure (because the Valuation estimate of settlement is used) and it is not much below the upper limit of the acceptable range, a little doubt remains as to the accuracy of Webster. It is possible that Webster over-estimates population slightly. The population graph also suggests that Webster may be slightly high (Thesis Fig. 50). In 1796 it is possible to calculate the number of occupied houses from a list of resident heritors, tenants and cottars in the Statistical Account. The total is 261, with a population of 1524 (29: 308-326), which gives 5.8 people per house. This also suggests that the figure derived for the 1750's is slightly high and reinforces the impression that Webster, as well as Roy is at fault.

Kintyre.

The peninsula of Kintyre is more difficult to examine completely. Confusion in the method so far followed is caused by the fact that the Valuation uses groupings of the pre-Reformation parishes different from the combinations which make up the later civil parishes used by Webster and which were adhered to in calculating settlements and houses from Roy's Map. It is convenient, therefore, to consider the peninsula under North and South, the latter comprising the parishes (civil) of Campbeltown and Southend, the former the remainder of the peninsula together with the district of Kilberry in Knapdale. Kilberry, it will be recalled, was originally part of the parish of Kilcalmonell and Kilberry, but in the late nineteenth century became part of the modern parish of South Knapdale.

North Kintyre.

The Valuation lists 156 possessions, while Roy indicates 166

settlements. On this basis alone, Roy seems to be accurate. Not allowing for Tarbert Lochfyne, Roy shows 653 houses for the area, and Webster totals 5685 people, which gives 8.7 people per house. Even the addition of Tarbert, which was small, could not depress this figure sufficiently to bring it within the acceptable range, working on a population of more than five and a half thousand people. If Roy is essentially correct, and there appears to be no reason to doubt this, Webster is at fault in some or all of the three parishes involved. Looking at the figures based on Roy and Webster alone, there is little reason to doubt the inaccuracy of Webster in Kilcalmonell and Kilberry and in Saddell and Skipness if the accuracy of Roy, as suggested above, is acceptable, but considerable doubt must remain in the case of Saddell and Skipness where the figure of 7.1 people per house is outwith the acceptable range.

South Kintyre.

Southend.

In 1755 Webster gives 1391 people and Roy's Map marks 218 houses in 66 sites (3.3.houses per site). This would give 6.4 people per house, which is acceptable, but rather high. Field and other evidence has shown at least another 18 sites not indicated by Roy, which, allowing 3.3 houses per site, gives a total of 290 houses and 5.0 people per house. Webster thus appears to be accurate. (It is interesting to note that even using the uncorrected estimate of settlement from Roy there is no reason to doubt the validity of Webster's population total. This suggests that the range of 4.0 to 7.0 people per house is, at least at the upper extremity, sufficiently wide to allow for contingencies of this nature).

Campbeltown.

Using the 1791 proportions of population in the burgh and landward areas of the parish (33: 545), there were in 1755, 2217 people in landward Campbeltown. Roy's Map shows 260 houses in 71 sites for the landward area. Together with the Southend figures, there were 478 houses in 137 sites shown on Roy's Map, or, allowing for the correction in Southend, 550 houses in 155 settlements. The Valuation lists 186 possessions. Even after the Southend correction, Roy still appears to

be low, suggesting that settlement is under-represented in Campbeltown as well as in Southend. Using the Valuation possessions, less the corrected number of settlements in Southend, together with a houses per settlement factor of 3.7 derived from the Campbeltown figures for Roy's Map, a figure of 5.8 people per house is obtained, suggesting that Webster's total is valid.

Summary and Conclusions.

The figures used or derived, or estimates or corrections based on them, are given in Table 1 by way of summary. The figures in brackets are uncorrected, and based on or derived directly from the three sources used.

Some conclusions about the accuracy of The Military Survey of Scotland (Roy's Map) and Webster's Enumeration may be drawn from this discussion. These may have a wider application than merely to Argyllshire.

1. Webster's population totals, on a county basis, are probably essentially correct, particularly in a large county such as Argyll. On a parish basis, however, the figures may be incorrect, even drastically so as in Ardnamurchan. It would appear that where the figures are wrong, consistently they are high.
2. Roy's Map is a much less satisfactory source. Accepted at face value, it is misleading. Representation of settlement is diagrammatic, the number of sites shown is often incorrect and then usually low, and the total number of houses shown in any parish may occasionally be incorrect, either too high or too low. Even the location of settlement, in an exact sense, may not be relied upon: it proved almost impossible to correlate what settlement Roy's Map shows in the Conieglen in Southend Parish, with what other sources and field evidence indicate existed in the mid-eighteenth century. Occasionally settlements were omitted, such as Auchnangoul, $4\frac{1}{2}$ miles south of Inveraray on Loch Fyneside. Generally Roy is accurate along the coasts and where there was a concentration of settlement, but inland and where settlement was sparse the landscape is poorly portrayed. This may have been due, in part, to inaccurate compass traversing, which undoubtedly brought considerable distortion to the final map, for no rigid topographic

Table 1.

Average settlement size and average number of people per house, c.1750-1755. Based on Military Survey of Scotland, Webster's Enumeration of the Population, 1755, and the Valuation of Argyll, 1751.

Parish or District	A.	B.	C.	D.	E.	F.
Ardnamurchan	1600(2760)	57	309	5.4	59	5.2(9.0)
Morvern	1223	48	260	5.4	54	4.7
Ardgour	901	25	150	6.0	31	6.0
Lismore & Appin	2812	65	355	5.5	89	5.8(7.9)
Ardchattan & Muckairn	2195	51	242	4.7	98	4.8(9.1)
Glenorchy & Inishail	1654	64	332	5.2	69	5.0
Kilchrenan & Dalavich	1030	50	351	5.0(7.0)	48	4.1(2.9)
Kilmore & Kilbride	1200	56	296	5.3	60	4.1
Kilninver & Kilmelfort	1045	41	256	6.2	45	4.1
Kilbrandon & Kilchattan	1492	-	---	5.0	29	---(10.3)
Craignish	769	24	160	6.7	28	4.8
Kilmartin	1150	40	214	5.4	56	5.4
Glassary	2751	74	363	4.9	98	5.7(7.6)
Inveraray	1422	51	243	4.8	36	5.9
North Knapdale	1369	65	310	4.8	64	4.4
South Knapdale	1292	35	141	4.0	50	6.5(9.2)
North Kintyre	5685	166	653	4.0	156	---(8.7)
Kilcalmonell & Kilberry	1925	56	247	4.4	---	---(7.8)
Saddell & Skipness	1369	46	192	4.0	---	7.1
Killean & Kilchenzie	2391	62	226	3.6	---	---(10.6)
South Kintyre	3608	155(137)	550(478)	3.5	186	6.6(7.6)
Campbeltown	2217	71	260	3.7	---	5.8(8.5)
Southend	1391	84(66)	290(218)	3.3	---	5.0(6.4)

- A. Webster; population, 1755.
- B. Roy; no. of settlements, c.1750.
- C. Roy; no. of houses, c.1750.
- D. No. of houses per settlement, c.1750-55.
- E. Valuation; no. of possessions, 1751.
- F. No. of people per house.

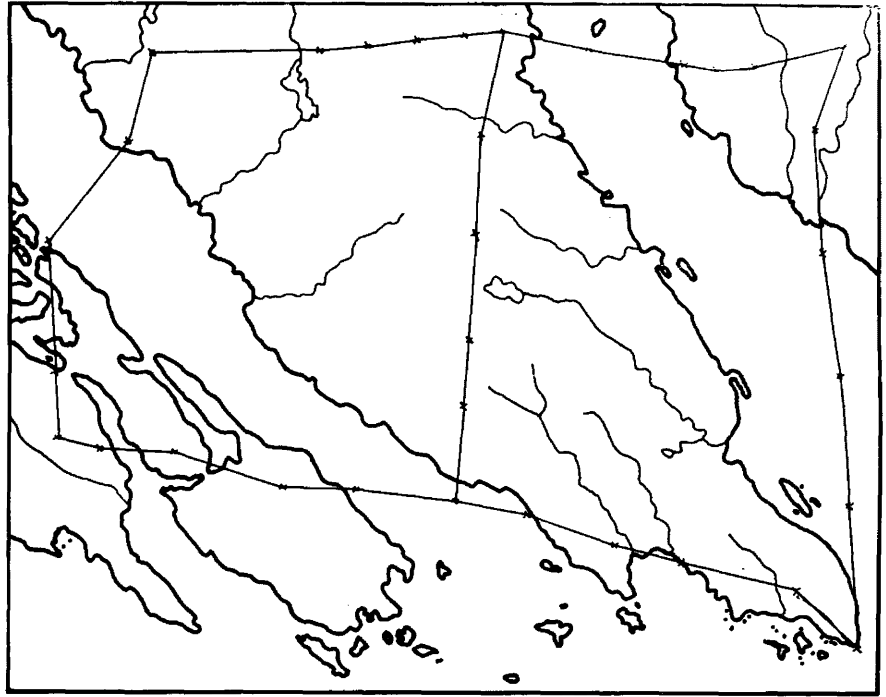
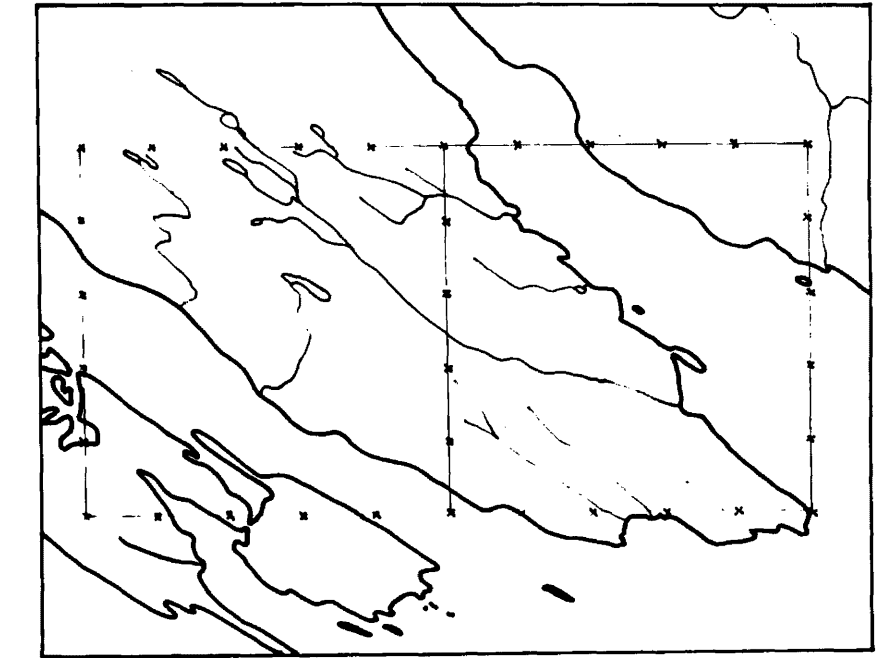
Note: In every case, the most reliable figure is given, whether this be direct from Webster or Roy, or an estimate based on them, or derived from them with the aid of other sources of information. (The figures in brackets are the crude figures derived directly from Webster and Roy, where one or both of these sources appears to be incorrect. These figures are provided for comparison). Details of all calculations made are included in the preceding discussion, and are not repeated here as footnotes.

control was maintained. Distortion over relatively small bodies of water, like Loch Sween, can be considerable (Fig. 1).

These criticisms are not intended to detract in any way from what remains a remarkable achievement for the period with the resources and techniques available. On the credit side it would seem as though tacit recognition was given to an average settlement size over particular areas, despite the diagrammatic representation of the clachans. This varied from a minimum of about 3.5 houses per clachan in the south of the county, to a maximum of the order of 5.5 in the north and northwest. Knapdale and Loch Fyneside had average settlement sizes between 4.0 and 5.0, an interesting conclusion in view of the statement by Rev. Archibald Campbell in 1793 that at the end of the eighteenth century "the generality of farms are possessed by four tenants" in North Knapdale (28, 261-2). In Kintyre, the relatively low figures of 3.5 to 4.5 houses per settlement are understandable, in view of the early agricultural innovations in this area introduced by the Duke of Argyll or his agents, which inevitably affected the settlement of the area, especially in the southern part of the peninsula (135: 103, 106).

DIS TORTION ON ROY'S MAP

ADJACENT 5 KM. SQUARES



O.S. 7th. SERIES 1956

ROY'S MAP c.1750

A.G. 1958

Appendix 1, Fig. 1.

No. 2.

THE VALUE OF COLLECTIONS OF HIGHLAND ESTATE PAPERS FOR THE
HISTORICAL GEOGRAPHY OF SETTLEMENT.

The value of collections of estate papers dealing with the Highlands for work in historical geography is largely an unknown quantity. So little work has been done on problems in this large field, and none that the author could find published, that it is worth considering briefly the conclusions to be drawn from experience of using the sources for Argyll.

Collections of estate papers are divisible in many ways. Access to the sources is of vital concern. An inventory of all known collections is held in Register House in Edinburgh, but there are still many in private possession of which nothing is known. Many of the valuable collections are in private hands, such as the Argyll Papers at Inveraray Castle (part of this extensive collection is on loan to the Royal Burgh of Campbeltown), or the Inverneil Papers in the possession of J. L. Campbell on the Isle of Canna. Provided permission to study such sources may be obtained, study will involve a certain amount of travelling, unless permission to borrow is granted. The present writer was extremely fortunate in being given on loan the Inverneil Papers, and a microfilm and photostat copy of this collection now rests in the Library of Glasgow University. The Inverneil originals were consequently studied over much of the winter of 1958-9 in Glasgow. Smaller collections like the five volumes of Kilberry Papers and the two volumes of Knockbuy Rentals may also remain in private possession.

Other collections have found their way to a central archive in the historical department of Register House in Edinburgh. This department holds both large and small collections, from the two volumes of rentals, and writs, correspondence, genealogical papers and some miscellaneous items of the Macdonald of Sanda collection, to the enormous group of Breadalbane Papers which deals with large areas of Perthshire and Argyllshire.

At the outset of the present work it was not known which elements in these collections would provide the necessary data on settlement. A priori, it would seem that rentals and leases are the most obvious

sources. The results embodied in this thesis are therefore very much a matter of trial and error, and as such might conceivably serve as a guide for future workers in this and similar fields. From a geographical standpoint it was desirable to obtain material dealing with as wide an area as possible, and from as many different estates as possible. It was clear from other sources, such as the Statistical Accounts that conditions could vary markedly within quite small areas. For this reason, mainly, it was decided not to attempt to work exhaustively through either the Argyll or the Breadalbane Papers, even could unrestricted access to the former have been obtained. In the event, a selection of the Argyll Papers, dealing essentially with Kintyre and incidentally with Morvern and Tiree, was found to have been given on extended loan to the Royal Burgh of Campbeltown. Through the good offices of residents in south Kintyre access to these was granted, and they were studied in the County Buildings in Campbeltown. It is important that one point be made clear in this connection. Some of the conclusions based on this selection of a very large body of papers may not be entirely valid, and might well be qualified from other material in the same collection not available in Campbeltown. In view of the time available, if any work were to be completed in the field or on other sources, it was decided not to follow up an initial enquiry about access to the remainder of the papers. However, Mr. Eric Cregeen, working on certain aspects of the economic and social history of Argyll was given access to other sections of the Argyll Papers, and figures from the 1779 Estates census were obtained from him. The author was glad, in return, to be able to supply him with some source material from the papers in Campbeltown and from the Inverneil Papers.

The time element also precluded examination of the very extensive body of Breadalbane Papers in Edinburgh. This was not only on account of the extent of the collection, but also because they are not yet properly indexed. Malcolm Gray, in his work on the Highland Economy between 1750 and 1850 drew upon this source, and so at second hand it is possible to include some observations on Breadalbane territory.

It is unfortunate that time did not permit examination of the

large bodies of papers, for here particularly there is continuity in documentation available. The smaller set of Inverneil Papers contains no material over the critical period in the middle of the nineteenth century when the number of tenancies on the estate was halved (Thesis Fig. 28). Extensive estates like those of the Dukes of Argyll are generally better documented than the smaller ones. There are almost complete sets of rentals and leases in the Argyll Papers dealing with Kintyre which provide continuity over very long periods. Presumably the smaller estates were unable to afford the clerical staffs necessary to keep records in order. The small collections are therefore only well documented during the eighteenth and early nineteenth centuries, the period of intensive agricultural improvement when the lairds themselves were vitally interested in the condition of the land and tenantry of their estates. This is suggested by the Kilberry Papers and Knockbuy Rentals, and Campbell of Canna has told me precisely the same about the Inverneil estate during the nineteenth century.

If continuity in documentation has to some extent been sacrificed in this thesis, it has been for the sake of the maximum areal coverage possible with the resources of time and transport at the disposal of the author. Papers were consulted dealing with south and north Kintyre (Sanda, Carskey (published) Argyll and Stonefield), Knapdale, North and South (Inverneil and Kilberry), Lochfyneside (Knockbuy and Kilian Accounts, Inverneil), Morvern and Tiree (Argyll) and Ardnamurchan and Sunart (Riddell).

The content of collections of estate papers varied considerably. The most complete collections include rentals, leases, accounts, correspondence, both private and estate, valuations and taxation assessments, censuses, estate surveys, plans and maps, legal documents such as writs and sasines, bills of sales, lists of defaulters against estate regulations, factors' notebooks and journals, day-books and many other items. The value of what have been found to be some of the more important items for settlement studies is now considered.

1. Rentals and Leases.

These give information on the tenancy of farms, cottages, crofts

and other possessions. They constitute one of the major sources from estate papers for the study of settlement. The information they give is usually of an indirect nature, but it is often possible from them to date the rise or decline of individual settlements, and to estimate their sizes. Occasionally as in North Knapdale (Appendix 5, Fig. 1), it is possible to get behind the physical existence of the house-clusters and learn something of social conditions and movements. This, truly, is clothing the bare bones of settlement with the flesh of humanity. Rentals and leases give no information on the form and pattern of settlement, but can tell of its distribution. To gain the maximum information from them, a long run of either or both is highly desirable, for then changes are readily apparent. A single lease or rental is of limited value by itself, and likewise a run of leases or rentals takes on added significance if it can be compared with a comparable run from a neighbouring estate. This is clear in comparing rentals from south Kintyre (e.g. Sanda) with those for South Knapdale (Kilberry) and again for North Knapdale (Inverneil).

2. Accounts.

These are of more limited value. While they give information about local society, and even custom, they serve only to supplement, not to complement other sources in the study of settlement.

3. Valuations and Censuses.

These serve to complement rentals and leases. They often give a very complete picture of a particular estate or area at a certain date. As they occur infrequently in estate material, unlike the official decennial censuses, they must be used carefully in conjunction with other sources. They give little idea of changes taking place, though these may be inferred, as in the case of the 1779 Census of the Argyll Estates in Kintyre (135: 105-6). Detailed information about age structure and distribution of population is often available, and thus indirectly there is information on size and location of settlements.

4. Estate Maps and Plans.

Estate cartography was frequently undertaken when changes were envisaged, so that an accurate assessment of the status quo might be

obtained, and so that detailed plans for future development might be formulated. This was the case with the planting of policies at Inverneil (Thesis Figs. 22 and 23). As sources they speak for themselves, and their value has been commented on in Lowland areas by Third (267: 83-93, 268: 39-64) and Lebon (185: 104-9). It would be superfluous here to add anything to what Third, in particular, said about the value of estate cartography.

5. Correspondence.

The correspondence included with estate papers falls into two categories. Of most use are letters dealing with the day-to-day administration of estate affairs. Occasionally they give an insight into the minds of those in authority and help account for changes taking place. Secondly there are letters of a personal or social nature and others dealing with purely financial affairs and legal matters, which may be of value to the economic or family historian, but are of little assistance in the geographical study of settlement. For the historical geographer, estate correspondence is frequently so bulky, in content, that examination of it at length is time wasted in relation to the return of useful material. The 17 volumes of Inverneil correspondence yielded disappointingly little for the present study. The sole exception were letters from the proprietor's agents (his brothers) to people such as local schoolmasters and ministers, and occasional influential tenants who were literate, concerning local estate administration and occasionally the social life of the community.

6. Other Sources.

The most important among these are the factors' notebooks. These include jottings about rent payments, the progress of improvement, and side-lights on individuals in the local population, their character and status in the community. For settlement, they are of little value on their own, but taken in relation with leases and rentals they are a most important supplementary source.

Legal documents are usually related to ownership, extended tenancy and financial matters. They are of relatively little value for detailed settlement studies. However, prior to the eighteenth century these often form the bulk of the estate material available, and if anything is to be

learned about the origins of eighteenth century rural settlement, they must be examined exhaustively. There are other infrequent sources which deal with this early period but they are seldom found among the private estate papers. An example are the legal rentals of parts of Argyllshire included in the Exchequer Rolls of Scotland for 1505 and 1541 (208: Ch. 1, *passim*). The research worker dealing with this aspect of rural settlement will need palaeographical training and a knowledge of Latin, as well as a grounding in physical and settlement geography.

The circumstances of any particular research project are inevitably, and by definition, unique. If the experience of the author in dealing with Argyll from 1700 onwards is of any value to other workers, it has been to show that runs of rentals and leases, estate maps and plans, valuations and censuses, and factors' notebooks are likely to be the most profitable sources for the study of settlement distribution and change. The value of the different elements in estate collections is a function of the time available for study, the object of the study, and of the other sources available, and in this respect every research project in this large field must be treated on its own merits. Little or no difficulty was experienced in the reading of manuscript estate material after about 1700, but the examination of documents from periods before this would require some palaeographical training. Like all generalisations, there are exceptions to this. Some earlier documents are easily read, and others as late as the middle of the eighteenth century prove difficult.

No. 3.

Contributions to the Study of Clachans in Scotland.

- (a) A Gazetteer of Clachan Sites Visited in Argyll.
- (b) On the Terminology Involved in the Study of Rural Settlement in Scotland.
- (c) The Origin and Antiquity of Clachan Settlement in Scotland: Some Suggestions.
- (d) The Peasant Houses of the Southwest Highlands: Distribution, Parallels and Evolution.

(a).

A GAZETTEER OF CLACHAN SITES VISITED IN ARGYLL DURING THE PERIOD OF STUDY, 1958 TO 1960.

The thirty-three sites included in this gazetteer are those which were visited in the field, and on which extensive notes were made. Other sites were visited and undoubtedly assisted in the formation of conclusions presented in the thesis, but for various reasons, including poor state of preservation and the time element involved in the detailed examination of a site, they were not recorded in sufficient detail to warrant inclusion here. The descriptions given are purposely abbreviated, but give the maximum detail possible, short of a very detailed site plan and description. Rough measurements of the majority were made with short steel tape and by means of pacing. About half of these sites were measured sufficiently to give a site plan, but only four of these are included here, all of the linear/rectangular type, and all from Kintyre. Cartographic representation of amorphous clachans will be found in the chapters on Knapdale and Ardnamurchan, from contemporary maps and from field evidence. Photographs of eight sites are given, though many more were recorded in this way. Photographic record is not entirely satisfactory on its own, and is entirely useless once the bracken is up if the ruins of the clachan are low and close to ground level. Consequently it was found that the best period for field work is April, May and the first half of June. The ideal record of clachan sites would be from low-level aerial photographs taken either before the bracken rises, or in winter with a slight dusting of snow on the ground.

If the study of settlement evolution in rural Scotland is to make any headway and cut back the headstart enjoyed by the study of this topic in Wales and Ireland, large scale exploratory surveys in the field, such as that on which the present contribution is in part based, must be undertaken alike in Lowland and Highland areas. Such surveys must also go hand-in-hand with the intensive study, and excavation, of selected sites, as that at Lix in western Perthshire under the direction of Dr. Fairhurst. Here, the present writer was

priveleged to follow up earlier excavation experience dealing with this type of problem at Murphystown in Co. Down (71 and 72: passim). Excavation of carefully chosen sites in Scotland is of vital importance, for it would appear that only in this way will anything be learned of pre-eighteenth century domestic settlement, in view of the lack of literary sources, and the apparent lack of convincing field sites from this period.

The two sites in Inveraray Parish included in the gazetteer are still partially occupied. For this reason they were not fully examined or measured in the time available, but brief descriptions have been included. It is felt that these two clachans, together with Ardnaw-Kilmory in South Knapdale, portray more adequately than any words the personality of the clachan, in spite of the advanced state of decay in which they now exist. These three are something entirely alien in the modern rural landscape, and serve to remind us of the intense conservatism of the rural community.

Clachan Sites Visited and Recorded.

PARISH OF SOUTHEND.

1. BALMAVICAR. N.G.R. NR592095. 400-450' a.s.l. 1 mile north of Mull of Kintyre Lighthouse, on west coast. Site is restricted and topographically difficult and fragmented. Houses are sited on small level patches about Balmavicar Burn, close to a more recent sheep-fank. Aspect is westerly; only shelter available is from easterly winds. Amorphous clachan of 4/5 houses, not all necessarily contemporaneous. In one case two houses have a common gable with doors and windows facing the burn and northward. Other houses are free-standing; doorways not always clear. Traces of cultivation all about site up to head-dyke at 700-750' a.s.l. about 150 yds. above the site. Stone-roofed well. Corn-drying kiln. House walls are c.2½' thick, drystone, 2 facings with rubble filling; standing to 4½-5' in places. House dimensions average 20' x 8'. One exception with opposite entrances and rounded corners is 25' x 14½'. Unlikely there were ever more than 5 families. Cleared in early 19th century when the Mull was converted into a sheep-run. Sheep-fank was partly constructed of material from the houses and is still in use. (Figs. 2 and 3.).

2. CANTOIG GLEN. N.G.R. NR751130. 350' a.s.l. In a glen tributary to Glen Hervie on the east side of the parish. Site is on a river terrace remnant in the Cantoig Glen. Sheltered from all sides.

Linear/rectangular clachan, partly fragmented. Stone-lined well. Corn-drying kiln, built into hillside. Walls 2' thick, drystone. Mainly footings and bottom courses remain. Houses: (a) 12' x 10'; (b) 33½' x 13½', 17' x 15', 15½' x 15', 24½' x 15', 9' x 13', two free-standing annexes 7½' x 12½' and 12' x 12'; (c) 21' x 13', 21' x 13'; (d) polygonal structure with single structure 12' x 9½'. Houses all probably contemporaneous, numbering 2/3. (Figs. 1 and 4).

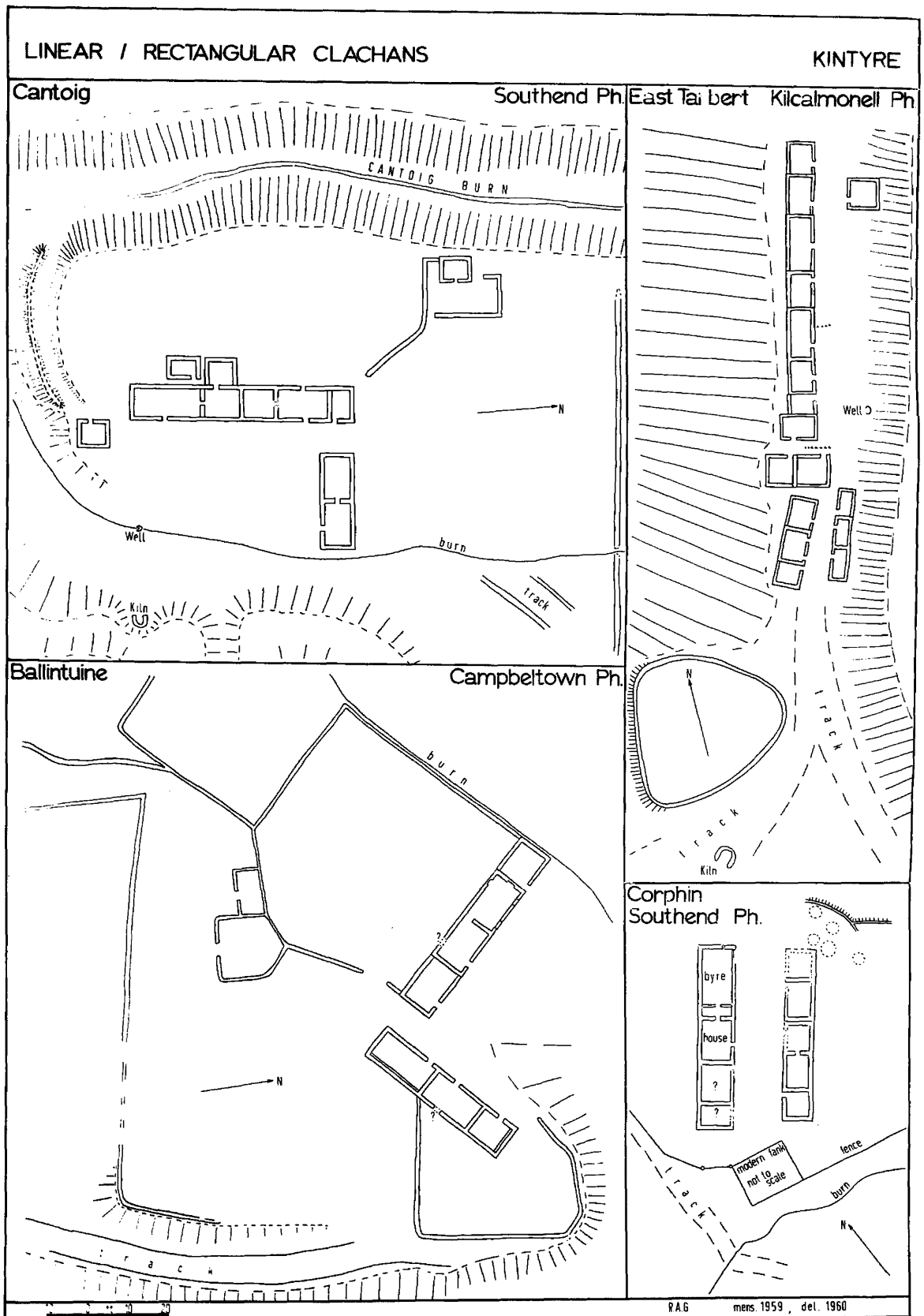
3. CORACHAN BURN. N.G.R. NR722112. 475' a.s.l. On the south slopes of Tod Hill. Immediately southeast of a col above the burn which flows in a juvenile valley. Gentle slope to southeast. Aspect is south/southeast, not particularly sheltered. A small linear clachan of 2/3 houses, in very badly ruined state. Possibly a kiln. No trace of well, nearest stream is about 100' below and 400 yds. away. Much evidence of past cultivation in vicinity, all now hill grazing. Earth-banked rectangular enclosures immediately to north.

4. CORPHIN. N.G.R. NR768147. 200' a.s.l. Sited on a level restricted bench on east coast of Southend Ph. overlooking Firth of Clyde. Easterly aspect. Linear/rectangular clachan of 4/5 houses. Houses all rectangular, one straight gable standing. One line of structures 15' wide, lengths 11½', 19', 20½' and 34'. Second line of structures 11' wide, lengths 12', 17', 13', 18', and 11½'. The last 2 seem to have been a unit for a double gable separates them from the other 3 in the line of 5.5 sub-circular stack-bases in a partly revetted and enclosed stackyard to southeast of houses. Byre drain through one gable. Stream immediately to west, no kiln found. Roads, modern and old above. (Fig. 1).

5. GLENHERIVE (?). N.G.R. NR752117. 320' a.s.l. On east side of Glen Hervie on the east side of the parish. Site is on a gentle badly-drained slope. Well sheltered all round, general aspect is westerly. A linear clachan of 4/5 houses, number uncertain. Houses all face east except one with west-side entrance. All are 12' wide and lengths are of two sizes, 12'-17', and 23'-25'. Many traces of old cultivation in area. (Thesis Fig.21).

6. GLENMURRIL. N.G.R. NR753152. 235' a.s.l. Site is on a terrace remnant on the south side of the Balnabraid Glen where the tributary Glen Murril joins. On the east side of the parish. Northerly aspect but sheltered from all directions by the depth of the glen. May have been a linear clachan but only a single structure remains. Site now a sheep fank. Some old enclosures with rigs. Only measurements made were widths, 13', and lengths of 11', 25' and 30'.

7. SOCCACH. (?) N.G.R. NR745128. 380' a.s.l. Site is in damp peaty conditions at the facet-end of Glen Hervie, immediately east of the Soccach Burn. The aspect is southerly with fairly good shelter, except from southeast. A linear/rectangular clachan of possibly three houses. Widths are all 11'. Lengths of 8', 11', 13', 14', 16', 23' and 4'. The last was probably a peat store and may never have been higher than one or two courses. Kiln on slope below the clachan, probably for corn-drying. (Thesis Fig.21).



Appendix 3a, Fig. 1.



Fig. 2. View northwest across the Balmavicar Burn. The clachan site is south (i.e. immediately forward) of the modern sheep fank. Small patches of old rigs occur below the settlement site.



Fig. 3. View west across Balmavicar. The amorphous character of this badly-ruined site is clear.

8. ERIDALL (?). N.G.R. NR744124. 275' a.s.l. On a river terrace remnant on the west side of Glen Hervie. This gives a flat dry site in otherwise boggy conditions. A subrectangular clachan with possibly 5 houses. The aspect is generally easterly with good shelter from all points. Corn-drying kiln. Many traces of cultivation rigs in area. Houses all were exactly rectangular with walls 2' wide. Each house seems to have had two chambers or rooms. Widths 13'-15' and lengths 6'-17', and 22'-34'. (Thesis Fig.21).

9. ----(?)---- N.G.R. NR752121. 350' a.s.l. Site is on a badly-drained gentle slope on east side of Glen Hervie in east Southend. Aspect is northerly but site is fairly sheltered. Rectangular clachan with possibly 5 houses but difficult to decide in the field. The group forms two sides of a square with corn kiln in opposite angle of square. No well found. Houses are all rectangular with 2' thick walls. Widths, 11'-12', lengths, 11'-18' and 24'-26'. 2 of the houses appear to have three rooms each. There is also beside the road to the north of this group a single 2-roomed house, seen in the field; and across the road there were seen on aerial photographs some more similar houses (possibly three), not located on the ground. (Fig. 21).

PARISH OF CAMPBELTOWN.

10. BALLINTUINE. N.G.R. NR764160. 330' a.s.l. The site is on a slight bench on the hillside overlooking the Firth of Clyde on the east side of the Mull of Kintyre. There is a steep drop to the modern road below the site. The aspect is northeasterly with shelter from the south and west. A rectangular clachan with 2/3 houses, one of which appears much later than the other and has upstanding walls and gables. There is a system of earth-banked enclosures on the slope above the group of houses to the south. The remains of an old track leads to the cluster. Well-preserved house stands almost complete except for a roof, 15' wide and 4 chambers of 18½', 25', 24' and 25'. Remainder badly ruined but shelf-type feature along one wall and one gable, 1'3" wide and 1' high. 14½' wide and lengths of 31', 28' and 17½'. (Fig. 1).

11. BALLYVRAID. N.G.R. NR752156. 350' a.s.l. Site is on a well-drained flat (terrace ?) on the north side of the Balnabraid Glen, opposite No. 6 above. The aspect is southerly with good shelter from all points. A sub-rectangular clachan of possibly three houses. The site is now used as a sheep-fank and thus is very badly ruined. One structure remains fairly well preserved. Widths of 13'-16' and lengths of 10'-26'. One stack-yard with six stack bases. No well or kiln found. An old field system with rigs is clear on the hillside behind the cluster of houses.

12. GLENREA. N.G.R. NR657134. 450' a.s.l. On a remnant of valley-infill and thus well drained, the site is margined by deep stream gullies. The aspect is westerly but there is good shelter from all sides. The cluster, if there was one appears to have been linear. There are

the remains of possibly two houses, almost certainly late in origin and standing up to 5-6' high, particularly at the lower end of the line of houses. A modern sheep-fank occupied the site.

PARISH OF KILCALMONELL.

13. ALLT BOITHE. N.G.R. NR885669. 400' a.s.l. The group is sited on the steep west shore of Loch Fyne and is topographically very difficult. The aspect is northeasterly with some shelter from southerly and westerly points. The group is fragmented into a single house, below which, about 150 yds. away, are two houses in line. There are traces of old fields and cultivation all around the site, on both sides of the stream. All widths are 14' and room lengths 22'-33' and 12'-16'. No trace of kilns or well found but there is a good water supply from the stream in a narrow shallow gully.

14. EAST TARBERT or MEALLDARROCH. N.G.R. NR878683. 240' a.s.l. The first name was given by a local resident, the second is the name of the farm in the valley below the clachan. The site is very restricted and difficult on a narrow shelf on the steep east side of a juvenile valley entering the south side of East Loch Tarbert at its mouth. The aspect is northwesterly with good shelter from the east and southeast. A linear clachan of very small houses numbering 8/10. Local tradition has it that this was a fishing village, but there is a kiln associated with the group and a small enclosure on the slope below and at the south end. The lower edge of this enclosure shows distinct lynchet features. Many of the houses are about 15' by 10'. Walls are thin, $1\frac{1}{2}$ '-2'. A sunken trackway leads up to the cluster from the farm below. (Fig. 1).

PARISH OF SOUTH KNAPDALE.

15. ACHADH NA H-AIRDE. N.G.R. NR729613. 40' a.s.l. The site is at the back of the gently sloping 25' raised beach, set on the turf-covered shingle at the back of the beach, on the north shore of Loch Stornoway. The aspect is southerly with good shelter from the north. The group was linear/rectangular, of probably three houses, but not all necessarily contemporaneous. Narrow houses are 8'-10' wide and about 40' long, divided or undivided. Wider houses are 13-13 $\frac{1}{2}$ ' wide and 30'-40' long, but the three wider structures are in line and may represent only one house with a total length of 105'. There is a single stackyard enclosure associated with the wider structures, which overlies narrower structures at the west end about 10' wide.

16. BAILLIDH. N.G.R. NR750639. 280' a.s.l. The site is in the mouth of a northwest flowing tributary glen where it joins the southwest flowing Lergnahunsion stream. The aspect is westerly with good shelter. The group of about three houses creates a linear/rectangular pattern. There is one large house, 15' wide, occupied till 40-50 years ago. The roof was supported by the walls and not by crucks. The walls still stand about half intact. The other structures, now badly ruined,



Fig. 4. This settlement site (No. 2) utilises a remnant of valley infill, cut into by the juvenile Cantoig Burn. The house ruins are in the right centre, and behind are clear traces of field dykes and cultivation rigs.



Fig. 5. The ruins of Munichile, a muir farm on Kilberry. The ruins of the two structures are clear, and note the small store (?), excavated into the bluff behind the stream.

were about 11' wide, and one, definitely was cruck built, for a cruck slot was found. One enclosure associated with the group. Corn-drying kiln. Many old cultivation rigs in the area.

17. BREAC BHARR. N.G.R. NR738621. 150' a.s.l. The site is on a rocky, glaciated bench overlooking Loch Stornoway, with many rock outcrops all over the site. The aspect is southeasterly with only slight shelter from the north. An amorphous loose cluster of 4/5 houses. Clearly four houses with possibly a fifth turned into a small modern sheep-fank. There are three enclosures, one associated with the bank, one free-standing and one with the most westerly house of the group. House widths 10'-12' and 13'-15'. Lengths vary, but 26'-30', divided or undivided seems associated with the wider houses and 12'-16' with the narrower houses. In one case a wider house overlies an earlier narrower house. No kiln or well found but many traces of cultivation in the area.

18. MUNICHILE. N.G.R. NR743645. 385' a.s.l. The site is at the head of a southeast facing glen tributary to the Lergnahunsion stream, about $\frac{1}{2}$ mile from No. 16 above. The site is below the outfall from a large basin bog, where the stream appears to be incising into an old surface. May have been an amorphous clachan but remains are very scanty, with only two houses at most remaining. This was a muir farm of Kilberry estate. One large house, well preserved, was occupied till quite late; it was not cruck built. One other small house was definitely cruck built. Large house was 15' wide, small more ruined house was 11' wide. There was an enclosure with each, and there are many traces of old cultivation in the area. (Fig. 5).

19. TIGH NA H-EARRAINN. N.G.R. NR711654. 120' a.s.l. The site is towards the back of the undulating 100' raised beach at Kilberry. There is a slight slope to the northwest to the Crear Burn. The aspect is westerly and the site exposed with little shelter. The clachan is linear/parallel, consisting of two parallel rows of structures, totalling 4/5 houses. The name given above is that on the 1st Edn. 6" O.S. Sheet for the area, but almost certainly this cluster is the remains of South Culghaltro on the Kilberry estate, which appears on Langlands map of 1795. House sizes are consistent and each seems to have been of two parts, 30' by 13' and 19' by 13'. Two have been joined together by a narrower structure. Only the wall footings remain and there were no enclosures/stackyards apparently associated. The walls were probably robbed to construct the field dykes in the area.

PARISH OF NORTH KNAPDALE.

20. ACHOSHIN. N.G.R. NR704835. 50' a.s.l. The site is a restricted, badly drained and fragmented area at the mouth of a small gully, on the west coast of the Tayvallich peninsula. The aspect is westerly with shelter from the east and north. There were one or two houses, on a pendicle rather than a farm on the Ross Estate. Dimensions appear to be standard at 15' by 25' units, in one or two structure units.



Fig. 6. The foundations of the amorphous cluster of South Ardbeg were in the foreground. The remaining roofed structure is used as a henhouse and the modern farms of Barrahormaid and Kilmory Ross appear in the centre and background respectively.



Fig. 7. Site 24 represents many where excellent use of shelter is made while, in this case, remaining clear of the marshy bottom of a micro-strath.

21. BARR AN LOCHAIN (?). N.G.R. NR702826. 200' a.s.l. The site, very restricted and broken, is in a small topographic basin formed in a series of pitching anticlines and synclines in metamorphosed rocks. The group is linear/rectangular in shape, with possibly 3 houses. There is a modern sheep fank on the site. (a) 60' by 12' much altered for the fank. (b) 105' by 15' had living quarters in the upper end with straight gables (Dalradian) and a chimney built into the gable thickness. The middle and lower portions were the byre. (c) 10' by 7' with a gable door - a store of some sort. (d) 18' by 11' and 25' by 11', with a small enclosure/stackyard attached.

22. ----(?)---- at Port a' Bhuaillair. N.G.R. NR690811. 65' a.s.l. The site slopes gently to the southwest, is open and relatively level with shelter from east and northeast. A small cluster, linear/rectangular in shape, with three houses. One single large enclosure but no well or kiln found. Widths are consistently $15\frac{1}{2}'$ with room lengths of 28', 11'; 28', '?'; and 45'. One circular stack base on site.

23. SOUTH ARDBEG. N.G.R. NR715839. 110' a.s.l. The site is a good one on a small hillside shelf with a steep cliff slope to west above a steep drop to the east, a slight slope to the north and good broken hill land to the south. It is well sheltered all round and commands a good view over Linnhe Mhuirich and Loch Sween. The cluster is amorphous and had 5 (?) houses. The structures, with one exception, remain only as wall footings, now grass-covered. There are traces of sunken trackways and four enclosures/stackyards. Widths vary between $11\frac{1}{2}'$ and 14' with lengths of 14' and 21'-40'. Only one house had an interior division of a permanent nature surviving in the ground remains. (Fig. 6).

24. TIGH AN T-SLUICHD. N.G.R. NR750908. 230' a.s.l. The site is in a micro-strath between resistant rock strata with steep rock faces to the east and to the west. Further to the west is a steep cliff dropping to near sea-level below. The site is broken and slopes to the north. There is good shelter all round. The cluster is amorphous and partly fragmented with probably four houses. There were four stackyards/enclosures. One house was certainly cruck built originally for a cruck slot remains. Widths of $11\frac{1}{2}'$ -12' and lengths of 23'-24' and 41' were recorded. There are the remains of a corn kiln near the centre of the site. One house with gables (Dalradian) standing shows stone projections for thatch tying. (Fig. 7).

PARISH OF KILMARTIN.

25. INVERLIEVER. N.G.R. NM892054. 240' a.s.l. The site is on the west side of Loch Awe, near the south end of the loch. It is on a knoll overlooking a marshy hollow to the west with a steep slope to Loch Awe on the east. The aspect is southerly with poor shelter. The cluster of 4/5 houses is amorphous and with one exception the houses are badly ruined. The cluster is loosely grouped, almost fragmented.

Remains of a single large kiln (lime ?). This is in association with one house; two others have enclosures associated. The only general measurements taken were overall and about 30' by 12'.

26. ----(?)---- N.G.R. NR815987. 370' a.s.l. The site is at the junction of two small glens about a mile above Slockavullin on the Poltalloch estate. The group of houses is divided by a damp depression which probably carries water in wet weather. The aspect is south-westerly with good shelter from the north. The cluster is amorphous-fragmented totalling 10 houses. All structures are about 13' wide and some 30' and some 60' long. One part of the clachan is partly overlain by a substantial sheep-fank of the type common on the Poltalloch estates. This part of the cluster had 2/3 enclosures/stackyards. The second part of the group across the depression had 5 houses but no visible enclosures. There are many traces of old cultivation rigs in the immediate vicinity of the clachan on the flanks of both small glens. The site was probably cleared in the early 19th century for sheep.

PARISH OF GLASSARY.

27. CRAIGMUIRIE (Name taken from Roy's Map). N.G.R. NR869899. 310' a.s.l. The site is very open with only slight shelter from the north and a southerly aspect. There is a slight slope to the south-east and a distinct rise behind the clachan to the north. The group is amorphous, 5/6 houses. There are 4 stackyards/enclosures the interiors of which are 1-1½' above general ground level. The group of houses and enclosures forms an elongated pentagon with the long axis aligned north-south, giving a more or less completely enclosed general large enclosure or yard. The houses are very badly ruined and some of the walls have disappeared completely. Houses are all about the same size with widths of 12-14' and lengths of 25-40', divided internally in some cases, not apparently in others. This is an interesting site, rather unusual in that the houses are grouped around a single enclosure. The site commands a fine view over the east end of the Crinan-Lochgilphead lowland to the south, with the difficult hill country of Glassary to the north. (Fig. 8).

PARISH OF INVERARAY.

28. AUCHINDRAIN. N.G.R. NNO31031. 265' a.s.l. The site is beside the main Inveraray-Lochgilphead road about three miles north of Furnace. It is relatively level but badly drained. There is good shelter from all sides and the aspect is southerly. The cluster is amorphous, now numbering 3/4 houses but there were possibly 6/8 in all. This was a crofting township as recently as 1948 (W.H.S.). Now a single holding with two houses occupied. House sizes appear to have been similar to Auchnangoul (No. 29 below) and were definitely cruck built.

29. AUCHNANGOUL. N.G.R. NNO58055. 275' a.s.l. The site is on a small bench on a hillslope on the west side of the main road some 3½ miles south of Inveraray. The clachan faces south with its infield



Fig. 8. Craigmuirie from northwest. A settlement probably cleared for sheep farming. Despite the bad state of preservation, the general grouping around a central enclosure may be seen.



Fig. 9. Looking south-southeast across Auchnangoul, with part of the old infield/outfield below the settlement. The close nature of this cluster is evident.

below it but above the road. There is good shelter for the general situation is in a fairly large hollow almost totally ringed around with hills. The clachan is almost amorphous but might equally be described as linear or linear/rectangular. There are six houses standing, two of which are occupied, but there are the remains of at least 15/16 houses on the site, though all are not necessarily contemporaneous. The houses were cruck built and thatched, though now roofed with slates or corrugated iron sheeting. The crucks were slotted into the walls; some reached ground level, some stopped about $1\frac{1}{2}$ ' above ground level. The cruck members were composite, the two portions of each member being joined by wooden pins at eave level. 4 of the houses here are being renovated, the remainder are to be razed in the near future. Crucks appear to have been as far apart as 15'. Widths appear to have been 14' consistently, but lengths are anywhere in the range 25'-100'. The houses as they exist probably originated in the first half of the 18th century, but have been much altered since. (Fig. 9).

PARISH OF ARDNAMURCHAN.

30. BOURBLAIGE. N.G.R. NM547623. 335' a.s.l. The site is in a natural topographic basin, one margin being the upstanding edge of one of the igneous cone-sheets of the region. To the west and north-west Ben Hiant rises steeply. The aspect is southerly, with good shelter all round. This is the type example of the amorphous clachan, if one is required. It is a large cluster of 13-15 houses. This is one of the townships about Ben Hiant cleared c.1840. All the houses were of the hip-ended variety (Skye type). No kiln was found, nor a well, but there are good pools in the streams, of which there are about 5 in or near the cluster of houses. There are many traces of old cultivation in the immediate vicinity of the clachan. The house sizes are all similar at about 25' by 14'. There appear to be few if any separate outhouses, but the lower end of some of the houses shows definite signs of non-coursed re-building in contrast to the well-coursed remaining walls of the houses. There are only 2/3 small enclosures in the group. (Fig. 10, and Thesis Fig. 39).

31. CAMASNANGEALL. N.G.R. NM560618. 20' a.s.l. The site is on a low bench fringing the bay of the same name east of Ben Hiant. The aspect is southerly and there is good shelter except from the south. This is a scattered clachan and unclassifiable. It is now small and the existing ruins are clearly not all of a period. Some are definitely of Dalradian type, some possibly were of Skye type. The Dalradian houses have each a small enclosure associated. This is not a notable site except in so far as there would appear to be houses of two types in evidence, and that the houses are not all contemporaneous.

32. PLOCAIG. N.G.R. NM453698. 45' a.s.l. The site is exposed on a rock bench of considerable proportions, covered in some places by peat and in some by sand. It is on the north coast of the peninsula 4 miles east of the Point of Ardnamurchan. This is almost the type



Fig. 10. This view, looking north across the large ruined clachan of Bourblaige, was taken from the top of the differentially eroded, and thus upstanding cone-sheet, which forms the east and south edges of the hollow which is the site for the settlement. The house ruins are in the centre and foreground. Rigs in parts of the old run-rig lands are seen on a slight slope behind the clachan.

relevance here?

site for a linear clachan. There exist the roofless, but otherwise complete remains of 5 thatched houses of Skye type, and the complete remains of one white house, set not quite in line with the other ruins. The clachan is completely uninhabited but remains, technically, a crofting township. It was occupied until recently. One thatched house shows clear evidence of having been made with crucks. There are two lines of structures, the easterly were the dwellings, the westerly were outhouses with which were associated 2/3 small enclosures. This site was known as Lower Achnaha in the estate records for Ardnamurchan, but does not appear on Roy's Map, nor does it appear on Bald's map of 1806/7. House widths are all in range 12'-15' and lengths between 25' and 30'. (N.B. This does not include the white house on the site, which was not measured).

33. TORNAMONA. N.G.R. NM558623. 175' a.s.l. The site is on the west side of a rejuvenation gorge the stream of which flows through Camasnangeall (No. 31 above). The site is difficult due to the steep slope but there is plenty of room and the cluster sprawls over a large area. There is plenty of evidence of old cultivation in the area. This is an amorphous cluster numbering about 12 houses. It was one of the Ben Hiant townships cleared c. 1840. The houses appear to have been smaller than at Bourblaige and within the range 16'-20' in length and 8'-11' in width. They are all of Skye type as far as can be made out, but the majority are badly ruined, much more so than the Bourblaige houses. Part of the group has been turned into a sheep fank. There appear to have been 2/3 small enclosures on the site.

(b)

ON THE TERMINOLOGY INVOLVED IN THE STUDY OF RURAL SETTLEMENT IN SCOTLAND.

Throughout this thesis the term clachan has been applied to the settlements which housed the tenants of the eighteenth century joint-farms, and their successors. Included also are other clusters of houses which fulfilled non-agricultural but rural functions, such as small fishing settlements (site No.14), or mill-clusters. The study of rural settlement of this period, and an unspecified number of centuries before 1700, is gradually collecting a diversified group of terms, used sometimes, and sometimes not, in a technical way. As an example, Geddes employed the terms baile, ferm-toun and hamlet to describe essentially the same settlement feature (138:98-104, 139:453-471, 140:58). Discussing eighteenth century Lewis, the same author succeeded in using the terms hamlet and village indiscriminately, and distinguished neither from township (140:59).

Settlement terms may be used either in a morphological sense, or in a purely functional sense, or there may be involved an inference of both form and function. If clachan is used strictly morphologically, all settlements having the desired form, but of any size and having any function whatever, must be included within the definition. This is clearly undesirable. In studying rural settlement, we do not wish to be involved in a discussion of urban forms. Similarly, if a clachan is defined simply as a farming settlement, then all farming settlements regardless of size and form must be included, such as medieval agricultural villages in Lowland Britain (including parts of Lowland Scotland, and the Borders). So also the large agrarian settlements of countries like India would have to be included, and these are of quite a different order from the settlements under discussion by the present author. Some middle course therefore seems desirable, including in the definition a suggestion of form, function and size.

Size may be defined by considering the area served by the settlement. In Ireland the clachan provides, often, the houses for the inhabitants of the townland, the smallest legal administrative division in a hierarchy of such units. Thus a fairly stable limit is set to the

Irish clachan of about 6 to 12 houses. Exceptions did occur, such as Menlough in Co. Galway which is reputed to have had a population of more than 1000 people just before the Great Famine. The Irish townland may exceed 3000 acres in the most unproductive areas, but the average size is of the order of 325 acres. In Ireland, too, settlement evolved and devolved showing a greater fluidity than appears to have been the case in rural Scotland (193:376), and as a result more than one clachan may be found in a townland. Daughter clachans arose with pressure of population, as in Carrowreagh Townland in the Fanad Peninsula in Co. Donegal. In some cases both nucleated and dispersed settlement are found as complementary elements in the total settlement pattern, representing different phases of a single process of change, as described by McCourt. In other areas nucleated or dispersed settlement may be dominant, or even exclusive. It is apparent in the work on Ireland that the term clachan is confined to purely rural communities having none of the functions associated with the urban way of life. This does allow the existence of the occasional shop, school, or exceptionally church, without invalidating the use of the term. Usually the communities living in Irish clachans followed an agricultural economy, including both pastoral activities and the growing of crops. In this it appears to have had as concomitants, transhumance with seasonal impermanent settlements on common grazings, and some form of open-field cultivation. Many of the booley, or shieling, sites disappeared centuries ago, but memories of transhumant practices remain in oral tradition and in place-names. It is with this as a background that Proudfoot is able to define simply a clachan in Ireland as "a cluster of farm houses and associated outbuildings usually grouped without any formal plan" (245:110).

In Scotland there is no legal network of land units with defined boundaries comparable with the Irish townlands. Joint-farms did exist, held and worked in common, utilising the arable area under runrig principles and practising a transhumant movement to summer shielings. On these the exclusive settlement seems to have been the clachan, but in Scotland the fluidity noticeable in Irish rural settlement was not so readily apparent if it existed (see chapter on Knapdale). The

arable land and common grazing pertaining to the joint-farm were together the nearest Scottish equivalent to the Irish townland, but did not enjoy the same legal recognition. For the joint-farm settlement the term clachan seems eminently suitable.

In Scotland the word clachan has certain colloquial and technical meanings. Colloquially, it may be applied to any small group of dwellings, irrespective of function, and is even occasionally used in urban areas. MacLeod and Dewar's Gaelic Dictionary (1909) defines a clachan as "a village or hamlet in which a parish church is situated" (also, 264:274). Apart from the reprehensible use of the Lowland English terms village and hamlet, this definition agrees with colloquial usage and particularly with the functions of those settlements having the word as a place-name. Clachan in Kintyre certainly fulfills the requirements of this definition, besides being a small service centre subsidiary to Tarbert Lochfyne and Campbeltown. Clachan is also partly an unplanned estate village at the gateway to the local proprietor's house.

The word clachan is of Gaelic origin, derived from cloch, a stone (264:274). As such it is eminently descriptive of the extant ruins and clusters of stone-built dwellings, but one wonders if the term could conceivably have ever been applied to a cluster of mud-walled or sod houses, such as must have existed prior to the eighteenth century if arguments presented elsewhere are acceptable. This point is of academic interest only in an attempt to justify the technical usage of the word as a settlement term. It is nevertheless of interest and poses the question of the antiquity of the term. In Ireland it appears to have been used by natives in the form clochan (meaning a beehive corbelled cell, as at Onaght on Inishmore, Aran, Co. Galway) to refer to structures generally assigned to the early Christian period. Almost certainly in Scotland also the term is of considerable antiquity, though to what class of structure or settlement it applied must still be demonstrated.

The argument is complicated in Scotland by the existence of at least two distinct cultural regions each with its own colloquial terminology for rural settlement. This is implicit in Geddes and

Forbes' study of late seventeenth century Aberdeenshire (138:98-104) where the terms baile and fermtoun apply, respectively in the Highland and Lowland districts of the county, to clachan settlement. In the Lowlands generally the Highland colloquial term clachan is replaced by a series of functional qualifications of the word toun or town (121:70) which is nothing more than a Lowland translation of the Gaelic baile. The meaning of baile itself is a matter of considerable argument (281:292-4), but Proudfoot considers the Irish evidence, and particularly that for Co. Down, of sufficient weight to suggest the concomitance of baile or bally place-names and clachan settlement. (281:462). In Scotland the Gaelic element baile or bally occurs in both Lowland and Highland place-names, but it must be abandoned as a technical term because of possible confusion with an urban connotation. In modern colloquial Irish, baile means town, an urban centre, but the Irish countryman will also translate the same word referring to a rural settlement into English as town! The variants possible on the Lowland Scots toun are ferm-toun, castle-toun, kirk-toun or mill-toun. In some cases these, particularly mill-toun, have found their way into the Highlands, where the element toun has been abbreviated to ton.

It is obvious that there is a confusing number of terms, used colloquially and technically, to describe the form of settlement in Scotland which is here under discussion. In Ireland students under Evans, especially Proudfoot, Buchanan, Johnson and McCourt, have freely adopted the word clachan to apply to the small house-clusters typical of certain areas, and certainly more widespread in the past (246:24). MacSween (217:51-53) and Fairhurst (121:69) have adopted this term in Scotland, particularly in the Highlands, though the latter has misgivings about applying it to Lowland rural settlement and prefers the qualified term, clachan form settlement. To the present writer this seems cumbersome, besides being yet another addition to an already long list. Admitting colloquial use and dictionary definitions, there seems no reason why clachan should not be adopted unreservedly into the academic settlement terminology, but sufficient latitude must be left to include variants in function such as the Lowland castle-toun and kirk-toun, with the proviso that should the latter take on other more

extensive functions they should be classed as service centres catering for a region and be denominated villages or towns. These then would be quite distinct from the clachans. Similarly the term must be admitted to embrace not only the purely amorphous cluster of houses, but also topographically controlled sites where there is "no sort of nucleus and no regular orientation of houses, unless one takes into consideration a general tendency for houses to be situated with the long axis on a slope" (217:51) or at right angles to a slope (135:104). A further morphological variant is what I have called the linear-rectangular clachan, where the building of houses in a straight line, or in two or more straight lines, at or nearly at right angles to each other, has brought a degree of orderliness to the clachan. This type seems to be a concomitant of agricultural improvement, and its distribution is more or less co-extensive with the amorphous type in the southwest Highlands (135:104).

One other variant in clachan form must be mentioned. In some areas the total houses belonging to the settlement and farm or joint-farm are divided among a number of very small groups, possibly three groups of two or three houses each, scattered over the arable land or along its margins. Remembering the caution that the representation of settlement is diagrammatic, this is evident in some cases from Roy's Map. Its occurrence on Roy's Map is sufficiently rare, however, to suggest that note was being taken of a peculiar variant of an otherwise dominant settlement form. In the field, a number of sites fall into this group, such as No. 13, the settlement on Tiray in Glen Lochay in Perthshire, or some of the settlements north of Loch Tummel. The settlement on the farms of West and East Lix, but not so convincingly on Middle Lix, falls into this category, and examination of contemporary records and excavation both suggest that here this arrangement belongs to the period of intensive agricultural improvement. I am indebted to Dr. Fairhurst, whom I assisted at excavations on East Lix during 1959 and 1960, for this information. There is an interesting link between Lix and the linear-rectangular clachans, for each individual group on Lix conforms generally to a linear or rectangular pattern.

For the sake of uniformity, and mutual understanding among research workers in the study of rural settlement in Highland Britain, there is no good reason to abandon the precedent set by workers in Ireland in using the term clachan to refer to what in Scotland, Highland and Lowland alike, were the settlements of the runrig joint-farms.

(c)

THE ORIGIN AND ANTIQUITY OF CLACHAN SETTLEMENT IN SCOTLAND:
SOME SUGGESTIONS.

The theme underlying the foregoing study of settlement changes in Argyll since the eighteenth century has been the decline and virtual disappearance of clachan settlement. This is but one aspect of the study of clachans. Until there has been further study of the distribution and regional variation of clachans in Scotland there will be little real progress. However, the study of the origins and antiquity of this settlement form is another aspect of the general problem. From the point of view of the modern geography of rural Scotland, it can have little practical relevance, but on grounds of theory it represents an academic study of considerable merit. Inevitably, in working through the evidence and literature on clachan settlement generally, and in the southwest Highlands in particular, I have had thoughts on the rural settlement of the period before 1700. The available evidence is tenuous in the extreme, and at the moment field evidence is indirect. This short appendix indicates the types of material available for this study, what the material suggests, and the wider context of the settlement of this earlier period. I have drawn unreservedly on the pioneer work of McKerrall, on the work of Lamont who agrees with McKerrall on all major issues, and on earlier authors on whom both McKerrall and Lamont have drawn, particularly W. F. Skene and Cosmo Innes. For parallels elsewhere I have used the work of Proudfoot for Ireland (following in part the work of Evans, McCourt and others), and the published papers of G. R. J. Jones and Emrys Jones for Wales. The problem involved is an immense one, impinging on the fields of historical geography, archaeology, legal history, the study of early Irish texts (Crith Gabhlach, Annals of Ulster, et.al.), and the study of place-names. It is clear that no one worker will ever make much headway in this large field without extensive co-operation and free exchange of ideas with other research workers (117:336). The present contribution must not be looked on as anything other than a short preface to the problem.

The procedure followed is an examination of the field and literary evidence for the southwest Highlands, followed by some attempt at a conclusion and the statement of parallels from other areas.

Field Evidence.

Accepting the evidence presented in the section on eighteenth century settlement, clachans were sufficiently dominant for the occasional isolated farms such as Kilian sheep farm south of Inveraray to be outstanding in the settlement pattern. Moreover, the clachans of the eighteenth century were small in comparison with those represented by the ruins which we see in the modern landscape. Table 1, column D in Appendix 1 makes this point clear. As Fairhurst argued "what we now see only too often are the ruins of the swollen clusters, deserted often almost immediately after a period of vigorous but unhealthy (population) growth" in the late eighteenth and first half of the nineteenth centuries. The farther back we probe, the more dominant the clachan becomes, and the more consistently its size seems to work out at about 5 or 6 houses per cluster. Interpretation of figures of Fencible Men for 1692 (220:62 et seq.) suggests settlements about this size, while the average clachan size derived from Roy's map for mainland Argyll is 4.6 houses.

Earlier maps such as those in Blaeu's Atlas are of no assistance in determining settlement size and form, marking only sites and even then giving a very incomplete representation.

Some historians, particularly I.F. Grant in her work on social and economic conditions in Scotland before 1700, have implied that the clachan form of settlement prevailed in earlier periods without ever producing good evidence in support of their statements. The written records of the earlier periods invariably deal with the upper strata in society, the lowly cultivator of the soil and herder of beasts being deemed unworthy of consideration in a legal sense. In the field these aristocrats are represented by the castles like Mingary, Dunstaffnage, Kilchurn or Tarbert, or, slightly lower in the social scale but still above the status of joint-tenant, the tackmen's houses such as Pitcastle in Perthshire (110:113-7) or the large ruin

slightly apart from the others at Libost in Skye (217:63).

The archaeological evidence for Iron Age and later settlement is of considerable importance. There are two distinct elements in Iron Age/Dark Age settlement types, one of which only now appears to be coming to light. The first group of monuments includes the duns and related structures (e.g. crannogs) in the Southwest Highlands. Important excavations by Fairhurst have shown, from two sites in Kintyre, evidence for occupation attributable to the Iron Age/Dark Age period, with concrete hints of medieval settlement. (118 and 119: *passim*). Farther east on the south face of the Campsie Fairhurst has also shown that a multivallate hill-fort, attributed by some to Roman or even pre-Roman peoples, was used over the same period as the Kintyre sites. He tells me, in a personal communication recently, that his general dating has received confirmation by the increasingly reliable radio-carbon method (120:64).

Secondly, and only just coming to light, is a settlement of a different character. At Poltalloch Mr. Cregeen has been excavating an Iron Age site with the remains of wicker curvilinear huts with traces of grain growing and domestic cooking in evidence. This important site is as yet unpublished and I am indebted to Mr. Cregeen for some preliminary information (excavation June/Sept. 1960). This site may prove to be cognate with the unenclosed sites postulated by Proudfoot in Ireland. However, it must be admitted that the appearance of a La Tene fibula at Poltalloch possibly argues against anything but an aristocratic settlement, but this must be weighed against the appearance of three types of grain arguing for considerable agricultural activity.

Regardless of speculation about the Poltalloch site, there is no reasonable doubt that the distribution of duns and allied structures does not represent the total settlement pattern of the period. Apart from the possibility of the non-contemporaneity of all of these sites, not all were settlement sites of a permanent nature. Fairhurst, in a recently excavated site at Bunessan in Mull, is unable to interpret what had been thought a small dun as anything but a purely defensive

structure, with no domestic settlement immediately associated, though there must have been some in the vicinity (Excavation Sept. 1960). Clearly some other form of Iron Age/Dark Age settlement existed alongside the duns. Since no remains attributable to these settlements have been found (with the possible exception of Poltalloch) it follows that these settlements were built of non-durable materials. As long ago as 1919 Capt. Graham pointed to some earthen banked enclosures and hut circles in north Kintyre which might conceivably belong to this period (149:98), but there is no concrete dating evidence available. Graham's work is almost the sole hint of a material nature of settlement other than the duns.

It is not altogether surprising that Iron Age/Dark Age settlements should be built of non-durable materials. Apart from the Hebrides, where Roussell has shown extant domestic structures and settlements to display distinct Norse affinities (282: passim), there are many references in eighteenth and nineteenth century literature which point to the existence of houses built of mud or wickerwork or sod. Fairhurst recently pointed to these references when dealing with the dating of Scottish clachans (121:74). Two examples will suffice; oval sod and wicker huts were being constructed in Argyll in 1791-2 (228: 508-9) and as late as 1833 the tradition of the use of impermanent building materials survived in Southend where William Dobie "saw a wattled partition in a house" A remnant of this same tradition may be seen in the wicker or lath panels built into the sides of barns I have seen at Balmacara, Ross-shire. Mud-walled houses are mentioned in the landward part of Campbeltown in the late eighteenth century (33:564).

Kissling's views on transhumance are also relevant to this discussion. Arguing from Hebridean evidence he suggests that in a mainly pastoral economy, such as the early Irish records claim was characteristic of Celtic communities, the summer dwelling on the extensive area of grazing land would have been the permanent settlement, and the winter home, possibly near the shore but certainly at a lower altitude would then have been as impermanent as are modern summer shielings (175:90). This reverses the transhumant movement

known to have prevailed in the eighteenth century and earlier. If acceptable, this idea could explain the absence of a dairy from the traditional peasant house as we have known it in the southwest Highlands, for the dairy was at the summer residence, originally the permanent settlement. More important from the point of view of the present argument, this view suggests that we have been looking in the wrong areas for the oldest settlements. Unfortunately, Kissling fails to provide any real evidence in support of his view, arguing from the acceptance of the viewpoint that early Celtic society was pastoral, and from the morphological and typological similarity of shieling huts and sites, and the now permanent settlements.

The much more acceptable hypothesis is that Dark Age settlement is to be sought in the same general areas as those in which we find the archaeological remains of this and related periods (117:335). In support of Kissling it must be admitted that there is an incredibly rich oral tradition associated with the shieling, more so than with any other aspect of Highland life. This fact remains to be explained adequately.

Land Denominations.

More important evidence is to be adduced from the study of land denominations as they existed in the medieval and post-medieval periods. Particularly, we are interested in the Celtic denominations. The later Norse and Saxon systems were imposed on the earlier Celtic hierarchy of land units to facilitate the calculation and collection of taxes and tribute. Since these earlier Celtic units were agricultural and not fiscal, there is a decided link between them and settlement. The Celtic and later systems inevitably merged and changed somewhat as time passed, but recent work in this field holds out some hope for the study of settlement. I have drawn freely on the work of McKerral (and of Lamont who appears to be in agreement with him on all major issues) who has succeeded in interpreting more clearly than anyone else to date, the awkward evidence from early rentals, from early Celtic literature, and from early students such as Cosmo Innes and W. F. Skene (206:39, 209:52, 208:179-181, 178:183-203, 179:86-106, 180:163:187).

The basic agricultural unit was the township or baile, which included the homes of the township's occupants, arable land held and worked in runrig, and common grazing. Eighteenth century rentals have given the names town and township to this community. The Gaelic word baile is cognate with the Latin vallum and suggests the primary meaning may have been a fortified place. In 1950 McKerral said of the settlement of this community, "The houses, unlike areas open to Northumbrian influences in the Lowlands, were not nucleated in villages but settled in groups over the land." By this McKerral surely implies clachan settlement.

The baile was divisible into quarterlands or ceathramh, each of which was responsible for a quarter of the total rent, but did not necessarily extend to a quarter of the total area of the baile lands. Smaller fractions were the ochdamh (1/8), leorthas, a "sufficiency" (1/16), and smaller divisions, the cota-ban and the da-sgillin, both of which McKerral says were incomplete farms, and therefore presumably tenanted by people having a status similar to the eighteenth century joint-tenants. The leorthas was the smallest area capable of supporting a full plough-team, and presumably the analogue of a joint-farm, tenanted by sub-tenants combining to work the lands jointly, possibly under a tacksman. If this is acceptable, the ceathramh, containing four of these units, would have had approximately four clachans and the baile upwards of sixteen. It may be just co-incidence that produces six entries in the 1751 Valuation of the Southend area beginning with the element Bal- or Bally- in their place-names, among a total of ninety-five entries. In forty-three possessions in South Knapdale at the same date, there were four places with this element in their names.

Writing in 1947, McKerral claimed that the average tacksman's holding was the ceathramh, which would therefore have included four joint-farms and clachans. The Islay Rental of 1507 includes this denomination fifty-five times out of seventy-seven entries, but by the beginning of the sixteenth century the quarterland denomination appears to have disappeared as the tacksman's holding in Kintyre, where the more normal unit was a four merkland in contrast to the

two and a half merklands of the ceathramh. A late sixteenth century account of Islay says that "ilk town in this Ile is twa merk land and ane half".

Superimposed on the baile system were other hierarchies of fiscal units, of which we will here consider the Norse one. This was based on the imposition of a tax or scat of one silver ounce on each baile. The resultant fiscal unit was the Ounceland (Gaelicized to Tirunga), also known as the Davoch (pronounced doch) in the north of Scotland. The ounceland was divided into twenty pennylands, and so the Gaelic ceathramh should contain or be equivalent to five pennylands. In Ardnamurchan in the 1751 Valuation the five pennyland crops up quite frequently, but more important, it is possible to group the various townships topographically in fours approximately, and the resultant total of pennylands comes to twenty or thereby. It is conceivable that here we may pick out the old baile. Thus the townships around the foot of Ben Hiant which were cleared in the nineteenth century to make way for sheep, the four pennyland of Tornamonie, the five pennyland of Bourblaig, the five pennyland of Skeenid and the six pennyland of Corrivullin and Derrybuy, total twenty pennylands. The unity of these townships is not apparent immediately for they are grouped two on the east side of the mountain and two on the west side. When we remember that early Celtic society was pastoral in outlook, the excellent common grazing of Ben Hiant itself provides the unifying link. Clearly we must not think in terms of river valleys as settlement units. In the same way the Achateny-Fascadale and Swordle (with Ockle) settlements seem to constitute two bailes.

It is admitted that the evidence from the different parts of the county, just cited, is not in accord. In the north it looks as though the ceathramh supported a single, possibly large clachan, while in the southwest it seems as though the ceathramh included up to four joint-farms. What is important to this argument is not that this difference needs explanation, but that there appears to be sufficient evidence to suggest a concomitance of clachan settlement and the early Celtic land units. The use of the 1751 Valuation, a

document dating from a time when these units had long ceased to have any practical significance, is justifiable in the knowledge that the units were handed down over the years, fairly well intact as Lamont has shown in Islay and they were commonly used to designate the size/value ratio of joint-farms, even into the nineteenth century (Inverneil: Calculations ascertaining the Old and New Extents of Inverneil 1820).

Summary and Conclusions.

There appears to the author to be sufficient evidence, material and circumstantial, to postulate the extension of clachan settlement, similar to that in existence in the seventeenth and early eighteenth centuries, backwards into the pre-medieval period. Much research is needed to substantiate this claim, which must be treated as little more than an initial impression gained from some of the evidence.

Evidence from other Celtic Lands.

From the Welsh evidence both Emrys Jones (171:59-65) and G. R. J. Jones (172:69-71) have pointed to a dichotomy in Dark Age and Medieval settlement and society. There was a free element in the population living often in large free-standing settlements, associated with pastoralism. Living in clustered settlements of clachan type, with a concomitant openfield system of land tenure and agriculture, was a class of bondmen (284: 66-81). These clustered settlements were frequently built of non-durable materials and only exceptionally have archaeologists found traces of them. They are known especially from a comparison of the archaeological remains of the period with the early Welsh Laws and with place-names and oral tradition. In this study the work of Colin Gresham is particularly noteworthy (159: 18-53).

With a wealth of archaeological and literary evidence (the like of which is not currently available for Scotland), Proudfoot reasonably suggests that in Ireland clachan settlement had its roots in the Dark Ages, that is before the Anglo-Norman invasions of the late twelfth century (245: 112-5, 281: Ch.V). As in Wales, these clachans housed a bond element of society, probably in huts constructed of wicker or mud. The raths and associated structures (parallel with

the Scottish duns) were the farmsteads of free pastoralists.

This dichotomy in settlement and society was still evident in the eighteenth century Highlands, though its outward appearance had changed. In Ardnamurchan, Mingary Castle was the aristocratic and administrative centre for much of north Argyll, one of a tenuous line of castles the purpose of which was to bring "law and order" from the seat of justice in Inveraray. Mingary was the source of the "news frae Moidart" in August 1744 (124: Ch.I). Clustered round it were the many clachans of the west end of Ardnamurchan housing a people still free in theory, though in practice as securely tied to the soil and heather as any medieval serf to his manorial open fields. A similar dichotomy appears at Kilberry where the clachans of North Town and Fairfield, and Middle Town, closely associated with eighteenth century Kilberry Castle, have totally disappeared. If clachans as recent as these have disappeared, is it to be wondered at that earlier clachans, built of sod, or wattles or mud, should leave so little trace ? It looks as though the impermanent nature of the early clachans is yet another of the unifying aspects of the Atlantic Ends. *covered in this book!*

(d)

THE PEASANT HOUSES OF THE SOUTHWEST HIGHLANDS: DISTRIBUTION, PARALLELS AND EVOLUTION.

Parallel with the study of changes in settlement form is the examination of the varying changes in technique and material used to construct the ultimate settlement unit, the peasant house. With the notable pioneering exception of Colin Sinclair this study has been neglected hitherto as a whole, but Roussell, Kissling and Walton have each made important contributions to specialised topics. Roussell and Kissling studied the Hebridean blackhouses, Roussell pointing out links with Norse house types. Walton studied the methods of roof construction. The fortunes of the settlement form and habitation unit are inextricably interwoven and changes in the one have wrought parallel changes in the other, though not necessarily contemporaneously. One important result for us is that the change to the use of stone as a building material in the southwest Highlands preserved material remains of clachans for field study. No ruined clachan has yet been discovered built of any material other than stone, and consequently the dating of the introduction of stone building provides an ante quem non in attempting to arrive at a chronology for ruined house clusters.

Colin Sinclair noted three main types of peasant house construction in the Highlands (257:16-7). His first, the Hebridean type, we are here not really concerned with, though it just makes an appearance in Argyllshire in Tiree. It does not seem to have gained a footing on the Argyllshire mainland where the Skye and Dalradian types predominate. The Hebridean house is extremely thick-walled. The wall consists of two well-built facings, each almost a wall in its own right, separated by a layer of rubble, earth or sand. The roof is hip-ended in all the older examples and is supported from the inner edges of the walls, the butts of the couples resting directly on the wall-heads. This leaves a ledge up to three feet wide around the roof, a feature which distinguishes the type from other Highland houses which have roofs rising from the outer edges of the house walls with overhanging eaves

of thatch. The walls in the Skye house are much less thick than those in the Hebridean house, and consist of a single core with two outer facings, a single-unit wall in contrast to the Hebridean double-unit wall. The Skye house, as Sinclair's name implies, is typified in Skye and the adjoining mainland, but its distribution extends southward to include Ardnamurchan and Ardgour, and probably also Morvern though there are no extant examples.

The Dalradian type is now almost non-existent. Taking its name from the southwest Highlands proper, especially Kintyre, Islay and Jura, its distribution extends northward from the Mull of Kintyre to the Great Glen, isolated examples being found north of the fault, as at Camasnangeall in Ardnamurchan (now ruined), and also in Mull. Similarly examples have been found in Skye and Lewis (257:40), but these, on enquiry, can all be shown to be of relatively recent origin. Also, the distinguishing feature of the type, a straight gable continuous with the end wall of the house, may also be found added on one end of many Hebridean houses providing a composite type with a ledge round three sides only of the roof. In other respects the Dalradian and Skye types are superficially similar, with relatively thin walls (2 - 4 ft.) and overhanging thatch eaves. I can not agree with Sinclair when he makes the claim that the crow-stepped gable is not and was not found (257:16). I have found many ruined houses in Argyllshire where quite clearly a crow-stepped gable had existed, albeit a pale shadow of the development of this feature in Lowland towns and cities in the east of Scotland. As in Irish houses of similar type (see for instance an Aran Islands' house illustrated in 134: Fig.2), the angles in the steps of the gables were used to keep the thatching ropes in place and to lead them over the end of the house to be tied to pegs, usually stone ones, driven into the gables. In this way a network of longitudinal and transverse ropes held the thatch in place.

In all remaining thatched houses the straw or other roofing material is held down by a network of ropes, either weighted with stones or tied to pegs in the wall and gable edges. Recently, the ropes have often been replaced by wire, wire-netting or old fishing

nets. There seems now to be little variation from this method (but see Fig. 1) but sometimes sally rods or sticks may be used to prevent the ropes from cutting back into the thatch at the eaves, where it is most vulnerable. Thatching is thus not a very specialised technique on the west coast, requiring merely the placing of a sufficient thickness of thatch material over the screws which lie on the roofing timbers, and tying it securely down. The straw may be put on either in loose bundles overlapping from eave to ridge, with added straw overlapping the ridge, or it may simply be spread evenly and loosely over the whole roof in a number of layers. The specialised techniques used in other forms of thatching, some of which seem to have existed in the southwest Highlands in the past (see below), found widely still in Ireland (Sl: 128-137)+, were lost with the introduction of standardised housing to the Highlands. In the northeast, in Aberdeenshire, Mr. Fenton of the National Museum tells me that a parallel to the stapple thatch of Co. Down (see Ulster Folklife, Vol. 6, 1960, p.68-70, note by the present author on The Use of Mud in Thatching: Scotland) is still known and practised by one or two older thatchers. In Glamis I have seen houses thatched apparently similarly to the widespread scollop thatching of Ireland and other countries.

Walton, in an important paper on Cruck-Framed Buildings in Scotland, draws attention to different types of roof timbering construction in Scottish peasant houses. His comments on distribution need some qualification. The ad truss he claims is found in the central and eastern Highlands and generally south of the Great Glen, but I have also seen it in many Hebridean houses.

The crup truss is of greater significance to the present discussion. The roof couples are pegged, either directly or in a scarfed joint, to vertical members (crup) which may either stand on the ground and against the wall, or may be let into a slot in the wall face running either to ground level or terminating up to two feet above it. On personal field work in the southern and southwestern Highlands, and with Dr. Fairhurst and Dr. Proudfoot in the Killin area, I have seen the last variation in many ruined houses.

* Supplementary Bibliography on Irish houses at end of present discussion.

Walton shows the type to have existed in houses in Skye and the adjoining mainland. His distribution may be extended into the southwestern Highlands, where many extant and ruined houses in Argyllshire were found with crup slots (see below, also Appendix 3a, Sites 16, 18, 24, 28, 29 and 32). Though no examples were found in Kintyre, this roof construction technique appears to be associated with both Skye and Dalradian types and was clearly common in the southern Highlands.

All remaining thatched houses are stone built, and none now remain housing man and beast under a single roof. The traditional peasant houses have been disappearing fast, the thatch first giving way to a more permanent roof of slate or corrugated iron, and most recently the houses themselves being replaced by modern two-storey or bungalow houses, many with the aid of D.O.A.S. or other grants from the Government. Even in Lewis, the last stronghold of so many traditional features of Celtic life, the black houses are few and far between. In 1919 the proportion of black to white houses was three to one (144: 365), but now the proportion in most townships is at least reversed. Skye, too, retains some of the traditional thatched houses, though fewer than Lewis, but in the southwest Highlands it is difficult to find any. None were seen on the mainland south of Ardnamurchan, where five houses of Skye type remain roofed, though only one is occupied permanently. Budge provides a photograph of the last thatched house in Jura, at Keills (73: 112), which may well be the last remaining thatched house of Dalradian type in Scotland, for I have heard of none elsewhere. There are still some houses of this type throughout the area which have had their thatched roofs replaced by slates or corrugated iron. Good examples may be seen in Auchnangoul and Auchindrain on Loch Fynesside. Improvements in convenience and hygiene are not to be denied, but something in accord with the rugged west coast environment, something which indicates the harmony between man, work and place, in the past at least, has almost disappeared.

Already, parallels with Irish peasant architecture have been suggested. The appearance of stapple thatch, confined in Ireland

to the small Barony of Lecale in Co. Down (S2: Fig.1), and apparently restricted to the Turriff district of Aberdeenshire, is of considerable interest. It is recorded nowhere else in Britain or Ireland and a problem of origins is posed, which is currently unanswerable. Roped thatch in Ireland is confined to the western seaboard (S3: Fig.3) with a possible variant in north Antrim in pegged thatch (S1: Fig.6). Alternatively pegged thatch may be regarded as a fusion of the roped thatch tradition with the scollop thatch tradition. Sinclair records a similar fusion from Knapdale (see below). The western distribution of roped thatch in Ireland is continued into Scotland where all west Highland houses are now thatched in this way. This distribution is paralleled in both countries by that of the byre-dwelling, past and present. One or two of these possibly remain in north Lewis, for instance in Fivepenny Borve.

However, the distribution of hip-ended roofs in the two countries is different. In Scotland this is found typically with the Skye and Hebridean houses, that is in the most open and exposed areas of the Highlands. In the slightly kinder circumstances of Argyllshire the straight-gabled Dalradian house appears. Conversely, in Ireland, the straight gabled house is found associated with roped and pegged thatch in Ireland, and also with scollop thatch in the north of Ireland. The hip-ended roof, with a much steeper pitch than roofs in western Ireland, is found in the Irish midlands, a distribution paralleled by that of mud-walled houses and scollop or thrust thatching techniques. These are all traits associated with a kinder environment than that of the windy wet west coast. In maintaining the roof the operative factor in relation to environment appears to be the pitch or angle of the sides. Common to western Ireland and western Scotland is a low-pitched roof with rounded ridge, in contrast to the steep roofs, often with sharp ridge, of central Ireland and the southwest Highlands of Scotland. In western Scotland it is the hip-ended roof which is found to answer best in the most exposed situations.

It is clearly impossible to impute an environmental control on

regional peasant house styles, for there are apparent contradictions. Some of the traits which we may discern now may well be anachronistic, and their survival explained only by cultural and not environmental (in the physical sense) arguments. Broad cultural zones do exist in western Britain, and have existed in the past, and these may be expressed materially in some aspects of house construction. The widespread distribution of the byre dwelling in Scotland, Wales and Ireland is only one example. Apparent unity lies in the existence, past and present, of wall-beds of one sort or another. The bed-outshot in Ireland has been well defined typologically and distributionally by Danaher (S3: Fig. 1, S4: Fig.3, S5: type 3) and by McCourt (S6: Plate VII). Both of these writers have suggested Scottish parallels in the bed-neuk of Hebridean houses, described by Thomas at the end of the nineteenth century. I have seen examples in corbelled structures on the island of North Rona (see forthcoming paper in the *Archaeological Journal*, *The Antiquities of North Rona*, Helen C. Nisbet and R. Alan Gailey). Walton shows an even closer parallel to the Irish outshot type from an old house at Camserney, Aberfeldy (270: Fig.2).

Only a limited amount of information about the evolution of house types is available from the study of existing examples and their distribution. There have been alterations in the materials used in construction, and there is an increasing body of evidence to show that the introduction of the straight gable to the thatched peasant houses of the southwest Highlands was of relatively late date, possibly during the eighteenth century. Campbell made a similar suggestion about the straight gable in western Ireland (S7: 212-214).

The initial evidence comes from field study. Measurement of ruined clachans (Appendix 3a) shows that late eighteenth and nineteenth century houses fall into two clear dimensional groups. There are houses with widths in the range eight to eleven feet and these are associated with structures having lengths in the range ten to twenty feet, though a house may consist of more than one apartment giving total lengths up to forty feet. (All measurements

are internal). Such are sites 1, 4, 7, 15, 16, 17, 18 and 33, though there is some doubt attached to the last in the author's mind. Site 1 is demonstrably early, being cleared in the early nineteenth century (135:104). Clachans of the second group contain houses with widths between twelve and sixteen feet, apartment lengths falling in two ranges, ten to eighteen feet and twenty to thirty-five feet. In this group total house lengths may be as little as forty to forty-five feet (a two-roomed house), but they not infrequently attain, in later stages (e.g. sites 28 and 29), lengths in the range fifty to one hundred and five feet. Sites 15 and 17 are of vital importance, for the wider houses demonstrably overlies the narrower ones, thus supporting the idea of a relatively earlier date for narrow houses as suggested by Site 1. In my own mind there is no doubt that a change in building technique occurred, probably in the eighteenth century, which allowed a widening of the house. There is one situation in which this is easily conceivable. Sod, wicker, and possibly mud houses, are relatively structurally weaker than well-built stone houses, and their walls are unable to support as wide a roof-span due to the outward thrust of the roof members. Therefore it is possible that a change in building material brought in its train a change in house width. The narrow stone-built houses may then be explained in terms of a lag, representing the continuation of earlier building traditions in the new building material. Such a lag is not surprising: I saw recently the interior of a new bungalow in the Aran Islands, Co. Galway, where in the kitchen was maintained the island tradition of a wide open stone-built hearth and fireplace, with corner seats, built into the thickness of a wall, though the wall concerned was now an interior one, and not the gable wall of the traditional two-roomed island house.

There is another feature to be noted which supports this hypothesis. The survival of the cruck in well-built stone houses is an anomaly. The cruck is associated with a house form where the side walls are unable to absorb the full thrust of the roof, such as in the timber-framed clay houses of lowland England. In Scotland

we find the cruck in stone houses the walls of which are capable of absorbing the thrust from a normally coupled roof resting directly on the wall-heads, as is the case in most Irish stone-built houses. The survival of cruck slots, or crup slots, in stone houses in Sites 16, 18, 24, 28, 29 and 32, and in houses I have examined at Old Crinan, must be regarded as a regressive feature, a manifestation of cultural and technical time-lag.

There is considerable evidence from literary sources to suggest a change in building materials about the middle of the eighteenth century. Fairhurst pointed to some of these in discussing the dating of Scottish clachans (121:74).

Writing in 1911 on Highland houses, Colin Sinclair noted that not all structures were stone built: "more primitive types were also to be found, the walls consisting of wattles and clay ..." (256:15). Sir John Sinclair, summarising the Statistical Accounts of the 1790's said of the Highlands generally,

"The miserable cottages, built of turf or sod, which are in some districts rapidly, and in other slowly disappearing, do not require any particular description Besides the low and uncomfortable walls of turf, the rounded form of the roof, with the fire-place in the middle, characterises a considerable number of the habitations of the lower classes in the Highlands and Islands.

The dry stone cottage, where earth is put in place of clay or lime, among the interstices between the stones, and which has generally one foot of turf-wall built above five feet of stones, was, till within the past fifty years, in many parts of Scotland, the habitations of married servants, who were attached to farms. Both in this, and in the turf-walled cottages, the couples or supporters of the roof were built in the wall, the feet of the couple resting on flat stones place in it for that purpose. This sort of cottage, however imperfect, was greatly superior to the Highland shealing, or round-roofed cottage, which was built wholly of turf." (258: 127-8).

Talking of Argyllshire at the same period, Smith said,

".... the lower, which are the more numerous class of tenants, are still very poorly lodged. Their houses are generally low, narrow, damp and cold. The walls are built sometimes with dry stones, and sometimes with clay or mud for mortar". (261:16).

Of the roofing timbers he added,

"The couple side consists sometimes of one piece, with a natural bend, sometimes of two pieces fixed together at the

eaves. The feet are built up in walls, which is apt to shake them. If the walls were of stone and lime, the couple-soles might as well rest on top of them, over a flag, like those of slate and tile roofs. This mode, which is less troublesome and expensive, has been lately followed in several instances in Kintyre". (261: 16-7).

Smith had noticed the anachronism of crucks in stone-built houses. He also noted that the cruck-built houses were low and narrow and thus had to be long (261:18).

Older houses were always byre-dwellings, even well into the nineteenth century, and in as progressive an area as Kintyre. In 1843 they were reported as common in Killeen and Kilchenzie (52: 376-94). All the houses were thatched in the eighteenth and early nineteenth centuries. There are references to hand on thatching from Southend where the houses were also described as low, narrow and cold (54: 413-36), from Campbeltown where farm-houses are discussed (33: 565), but the houses of the burgh in the eighteenth century were also thatched (219: 27), from Kilmartin (45:561), Inveraray (46: 3,44) where ferns were used for thatching, and from Ardchattan and Muckairn (38:504). Heather was a favourite thatching material, which, "well put on, will last 100 years, if the timbers will last so long." (261:19).

Usually "The thatch, which commonly consists of straw, sprits, or rushes, is laid on loosely, and fastened by ropes of the same materials, "but Smith also noted that in Kintyre the usual technique differed from this, and from his description it resembled Irish scollop, or more probably thrust thatch (Sl: 130-4, 136-7).

"The straw is fastened by driving the one end into the roof with a thatcher's tool, as in the low country. A few roofs are covered with ferns, and fewer still with heather." (261:17).

Smith gave just a hint that this method had been introduced from Lowland Scotland, and it may be that this technique arrived with the seventeenth century Lowland Plantation of Kintyre.

The common method of roped thatching is clearly illustrated in the photograph (Fig. 1) from Kilmory, Knap, taken c.1870-80. The network of twisted ropes, heather probably in this case, is quite clear, the ropes led through the angles in a crow-stepped gable at

the left hand edge of the picture. On this house, however, the ropes had been supplemented at the eaves, the most vulnerable part of the thatch due to wind lift. Here sally rods or hazel twigs, sgolban, had been bent into staple shape and driven through straw and screws to secure the former in place as firmly as possible. This method has not been recorded elsewhere in Scotland, but is known in Ireland.

Sinclair recounted the thatching method as described to him by a resident in Kilmory Knap, and it is worth placing it on record here beside this photograph.

"For holding down the thatch, straw ropes (sugan) were made and hazel twigs in two sets of lengths procured, the shorter being employed as pins and the longer as binding hoops (sgolban, cf. scobe in Co. Down, Sl:130). The ropes were placed longitudinally and transversely over the roof, a hazel pin being inserted at the crossings of the ropes and driven into the sods. The ends of the horizontal ropes were secured by pins fixed to the edge of the gable sods (sic), with similar pins securing the lower ends of the transverse ropes to the sods at the eaves. The sgolban were used to strengthen the lower part of the thatching above the eaves and were interlaced, with each pointed end driven through the thatch into the sods." (257:43).

This looks very like a fusion of scollop and roped techniques, just as is the pegged thatch of north Antrim and west Co. Galway in Ireland (Sl:138).

There are many references to mud, sod or wattled structures. Speaking of the more northerly Highlands in 1754, Burt had this to say of the peasant houses.

"The Walls were about four Feet high, lined with Sticks wattled like a Hurdle, built on the outside with Turf, and thinner Slices of the same material serve for Tiling. The Skeleton of the Huts was formed of small crooked Timber, but the Beam for the Roof was large and out of all Proportion. This is to render the Weight of the whole more fit to resist the violent Flurries of Wind ..." (67:59).

Huts of similar nature existed in Argyllshire, at Corieburgh (?) and were formed thus,

"An oval spot is enclosed with poles stuck into the ground, and fresh turf is built around the poles to the height of six feet. A roof with a gentle slope is put on this wall

Sullivan and ...



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Fig. 1. The method of obtaining experimental conditions and the results of the experiment.

the county is clear on this house at Kilmory Knap, c. 1880. A

network of heather or straw ropes was usual, either weighted with stones or with the free ends tied to stone pegs under the eaves.

and in the gables. In this case the network of ropes is supplemented

at the most vulnerable part of the thatched roof, the eaves, by a form of pegging in the bottom of the thatch with willow or hazel

rods or staples.



Fig. 1. The method of thatching apparently widespread throughout the county is clear on this house at Kilmory Knap, c. 1880. A network of heather or straw ropes was usual, either weighted with stones, or with the free ends tied to stone pegs under the eaves and in the gables. In this case the network of ropes is supplemented at the most vulnerable part of the thatched roof, the eaves, by a form of pegging in the bottom of the thatch with willow or hazel rods or staples.

rods or staples. The history of Kilgobbin is recorded in 1788 and is preserved in the Library in Vol. 3 (Part IV) of Unpublished Manuscripts. The relevant passage refers to parts of Argylshire and some of the following, in the early part, are runs thus:

and covered with grassy turf, and as care is taken to lay the grassy side outwards, the whole building when finished, except the door and window, is covered with verdure, and seems to be a cave dug into a grassy knoll." (228: 508-9).

As late as 1883, Rev. Norman M'Leod remembered

"The old house of Glendessary (in Morvern, which) was constructed, like a few more, of wicker work; the outside being protected with turf, and the interior lined with wood." (213:177).

Even in the present century a sod blackhouse was photographed at Loch Eynort in South Uist (102:272). Curwen here gives other references to sod houses during the eighteenth century from Lochaber, Sutherland and Deeside. Boswell, in 1773, mentioned turf houses covered with grass in the district of Sleat in Skye (66:98, Mon.6th Sept.). He also described a turf hut on Loch Ness-side with an interior wattled partition (66:80, Mon.30th Aug.).

Wattling was widely used. Pennant illustrated an apparently Dalradian (straight-gabled) house in Islay, but the gables seem to be of wattles with stone side-walls, and a bundle of twigs for a door (239:246). He also described the shielings of Jura as

"some oblong, many conic, and so low that entrance is forbidden, without creeping through the little opening, which has no other door than a faggot of birch twigs: they are constructed of branches of trees covered with sods;....." (239:246).

Of houses in Islay, Pennant had this to say,

they were "scenes of misery, made of loose stones; without chimnies, without doors, excepting the faggot opposed to the wind at one or other of the apertures," and he added briefly, "But my picture is not of this island only". (239: 262-3).

Discussing wattle huts from an archaeologist's point of view, O.G.S. Crawford drew attention in 1938 to an interesting eighteenth century description of rectangular "basket-houses" on the west coast of Scotland (100:482). The MS description by Mr. James Robertson was read before the Society of Antiquaries of Scotland in 1788 and is preserved in their library in Vol. 2 (fol.23) of Unpublished Communications. The relevant passage refers to north Argyllshire and south Inverness-shire, on the west coast, and runs thus:

"The houses in which they live they call basket-houses. The method of building them is this, they first make out both breadth and length of the house, then drive stakes of wood at nine inches or a foot distance from each other, leaving four or five feet of them above ground, then wattle them up with heath and small branches of wood upon the outside of which they pin on very thin turf, much in the same manner that slates are laid. Alongst the top of these stakes runs a beam which supports the couples and what they call cabers (thin rafters or scantlings stretching from wall-head to ridge-pole; Walton; 270:118), and this either covered with turf, heath or straw."

All the descriptions of wattle, or wattle and sod houses are consistent with each other and suggest a widespread house type in the eighteenth century. These, along with contemporary mud or clay, and stone houses were of an important nature. Smith claimed that traditional houses of all types needed to be renewed with every lease (261:18) and while this may be a slight exaggeration, there is evidence that at least the roofs were moveable and readily renewable. The thatch was often applied annually to the ground as fertiliser. Occasionally the house walls were the tacksman's property but the roof and roofing timbers belonged to the occupying sub-tenant, which he removed with him when he departed to another house (256:16). This is all not to suggest that throughout Scotland during and before the eighteenth century, mud, clay, sod or wicker houses were common. Indeed these survivals, as late as the eighteenth century, may represent the vestiges of an early tradition, surviving in relative isolation from outside contacts in Celtic areas. Quite another story may be told of the Lowlands, especially in the east of the country where there was a long tradition of contact with the Low Countries. Of Lowland Scotland generally, Lupold von Wedel, a Pomeranian noble, in 1584 said that the villages looked poverty-stricken, but implied that the houses were at least stone-built, but with sod roofs (227:465).

Equally with changes in house size and in material used, there were alterations in roof form. In the general area assigned by Sinclair to the Dalradian house (257:40), there are on pictorial

record houses having a hip-ended roof. Sir James Fergusson in his study of Argyll in the Forty-Five included a reproduction of a drawing of the burgh of Inveraray before it was removed to its present site. The drawing was executed in 1746. Clustering around the old castle house was an inner ring of obviously stone-built tall slated tenements, surrounded by an outer ring of single-storey thatched cottages, some of them with hip-ended roofs and all with overhanging thatch eaves. The resultant houses appear to be identical with Sinclair's Skye type, with the exception that some of them had central stone chimneys (124:60). This evidence, alone, does not amount to much, and involves interpretation of an artistic piece of work, not of a photograph. Photographs taken about 1870-80 give added significance to the 1746 picture of Inveraray.

The Rev. J. B. Mackenzie, of Colonsay, sometime about 1870-80, took a number of photographs in Argyllshire which are now held by the Mid-Argyll Natural History and Antiquarian Society. Two of these are from Kilchrenan, and are included here (Figs. 2 and 3). Both show dry-stone wall houses of usual Dalradian type, of dimensions accordant with those from measured ruined clachan sites (see above). All the houses display very clearly the net-work of ropes holding the thatch in place. However, the farthest away house in Fig. 2 has a hip-ended roof and is almost certainly a dwelling. There would appear at Kilchrenan at this date to have been a mixture of Skye and Dalradian types.

Archaeological evidence at the moment is scanty. In a penetrating review of possibilities in the archaeology of Dark Age Scotland, Clarke commented on houses in terms applicable to most of western Scotland, although he was referring specifically to Strathclyde. He said:

"On analogy with the Celtic area generally we should expect dwellings of any pretensions to have been of circular type, constructed of wooden posts, probably wattled and thatched. Sometimes the walls were double, the space between being for storage. Such concentric house circles have been observed both in the Borders and in Wales and are referred to a post-Roman cattle-raising community. Sometimes buildings were of clay on dwarf sleeper-walls of stone. The form was not always round; a rectangular shape with rounded corners was in vogue quite early and in remoter areas persisted into post-medieval



Fig. 2. Thatched houses at Kilchrenan, Mid-Argyll, c.1880. Two types are represented. Three houses have straight stone-built gables, but the fourth has thatched hip-ends to the roof.



Fig. 3. Kilchrenan, c.1880. A long-house with byre and dwelling under a single roof, though probably separated by an interior wall, and with separate entrances. Note also the gable chimney.

times. Two types which occur elsewhere seem to be missing in Strathclyde, the underground dwellings of Pictland and the houses terraced into a hillside as often in South Wales (and northwest Wales); it should be remarked, however, that there is evidence of the latter type, not far away, in Dalriada around Skipness." (89:134).

The last reference is to Graham's study of Skipness where he mentioned platforms, which could have supported rectangular houses (148: 109-12). Graham considered these to be associated with charcoal working before 1800, during the period of intensive exploitation of woodland in Argyllshire for iron-smelting at Bonawe and Furnace. He provides no conclusive proof for his idea, and on typological grounds they might equally be settlement sites of the form studied by various workers in Wales, and which Gresham particularly has been able to relate most convincingly to medieval literary records (159: 18-53). In fairness to Graham, however, it must be admitted that many of the sites he discussed are topographically extreme and can not be looked on as favoured sites for human settlement.

Medieval rectangular houses have been excavated and described from another part of the Celtic west. From Devon, Joep and Threlfall at Beere, North Tawton (173: 112-40) and Aileen Fox on Dean Moor (130: 141 et seq.) produced house types related unmistakeably to the byre-dwellings of other Celtic lands. The superficial similarity to Highland and Hebridean houses of the eighteenth century is almost amazing. Had they been discovered in a Scottish context they would almost certainly have been assigned to the eighteenth century, or even later, but careful excavation and interpretation have shown them to be associated with medieval pastoralists. Joep and Threlfall's reconstruction of the house at the settlement of Beere is of considerable interest in relation to Highland houses and provides many parallels for features noticed in the excavations at Lix (121: 74-6).

The evidence presented above is of varied nature, and unfortunately only a fraction of it is available in the field at first hand. Pictorial and photographic record has limitations and literary references are subject to the accuracy of the

observations of the authors concerned. Nevertheless, the author feels that sufficient evidence exists to suggest an evolutionary sequence in the peasant housing of the southwest Highlands along the following lines:

1. In post-medieval, and possibly in medieval and even Dark Age times, turf, clay or mud, and wattled houses, of round oval or rectangular form, existed and were possibly widespread in the region. Stone houses certainly existed, e.g. Pitcastle which has straight gables and is of seventeenth century date (110:116). In the Hebrides and certainly in north Scotland, as Roussell showed, stone houses with Norse affinities existed, but these are outwith the area under immediate discussion.
2. During the eighteenth century, whether due to agricultural improvements, general improvement in living conditions, or some other cause, a gradual change to stone construction in peasant architecture took place.
3. Concomitant alterations lagged behind the introduction of stone building. Thus we find early ruined stone houses which are narrow (eight to ten feet wide). These may be associated with a hipped roof form, and a roof supported on a cruck frame.
4. The broader stone-built house without crucks does not seem to have appeared until the beginning of the nineteenth century, and it was even later before it became dominant.
5. At this period also the straight gable of the Dalradian house was introduced.
6. This sequence is applicable through time in the southwest Highlands, but today an approximation to it may be seen distributionally in extant house types, with the earlier stratum represented by the Hebridean house, an intermediate stage in the Skye house, and the latest stage in the houses of the southwest Highlands, of which few remain. There are, super-imposed on this scheme, Norse affinities to be seen in the Hebridean house.
7. The sequence may be modified locally by the survival in cultural backwaters of archaic features. One such was the survival until recently of cruck-supported roofs in houses in mid-Argyll.

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No: 4

SETTLEMENT AND POPULATION
IN KINTYRE

By

R. A. GAILEY

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SETTLEMENT AND POPULATION IN KINTYRE, 1750 - 1800

R. A. GAILEY

Highland estate papers have been a little-explored source for historical geography. For Lowland areas both Lebon ¹ and Third ² have published analyses of landscape change based on estate maps drawn up about the time of agricultural improvements. Other sources of information in collections of estate material are equally valuable, such as valuations and series of rentals. Recently, the author has been fortunate in being given access to a more unusual source: two censuses exist for the Duke of Argyll's estates in mainland and insular Argyll, dated 1779 ³ and 1792 ⁴. This short paper discusses the evidence given by these, and contemporary sources, for the distribution and structure of population and settlement in Kintyre during the latter part of the eighteenth century, and points to the important relationship between such sources and field evidence.

Before discussing the censuses it is necessary to examine the nature and extent of the Argyll Estates in Kintyre. A comparison of the Parliamentary Valuation of Argyll for 1751 ⁵ with the Military Survey of Scotland (more commonly known as Roy's Map) ⁶ indicates the number and extent of estates in Kintyre at the mid-eighteenth century. Comparing the farm names in the censuses with those in the earlier sources it is clear that there was no significant areal alteration in the Argyll Estates between 1750 and 1800. Identification of the farm settlements presented few problems for 95 per cent of the names appearing in the 1751 Valuation and in the later censuses appear either on Roy's Map (approximately 80 per cent) or on the earlier editions of the Ordnance Survey six-inch map-sheets. The few remaining farms were located approximately from field and oral evidence, or by a process of intelligent guessing based on the fact that the farm names appear in the censuses (and in rentals) in a logical order when viewed in relation to the topography.

The farms of the Argyll Estates were concentrated in the southern half and along the west coast of Kintyre. The northern third of the peninsula, topographically more difficult and agriculturally less productive, is almost totally unrepresented. Thus the illustrations, Figures 1 and 2, refer to the central and southern portions of Kintyre. Arguing from the number of farms given in the 1751 Valuation, which appear under proprietors' and not tenants' names, the Duke of Argyll possessed half of Kintyre exactly while the next two largest estates, those of McMillan of Dunmore and MacDonald of Largy, could between them account for only 12 per cent of the peninsula. On the basis of the money valuation given the Duke possessed about 41 per cent of the total but since the actual basis on which the valuation was carried out is not clear, the number of farms probably gives a truer reflection of the real position, especially as the Duke's farms were concentrated on the more fertile areas of the west coast, the Laggan ⁷ and Glen Breackerie and Conieglen in the Parish of Southend.

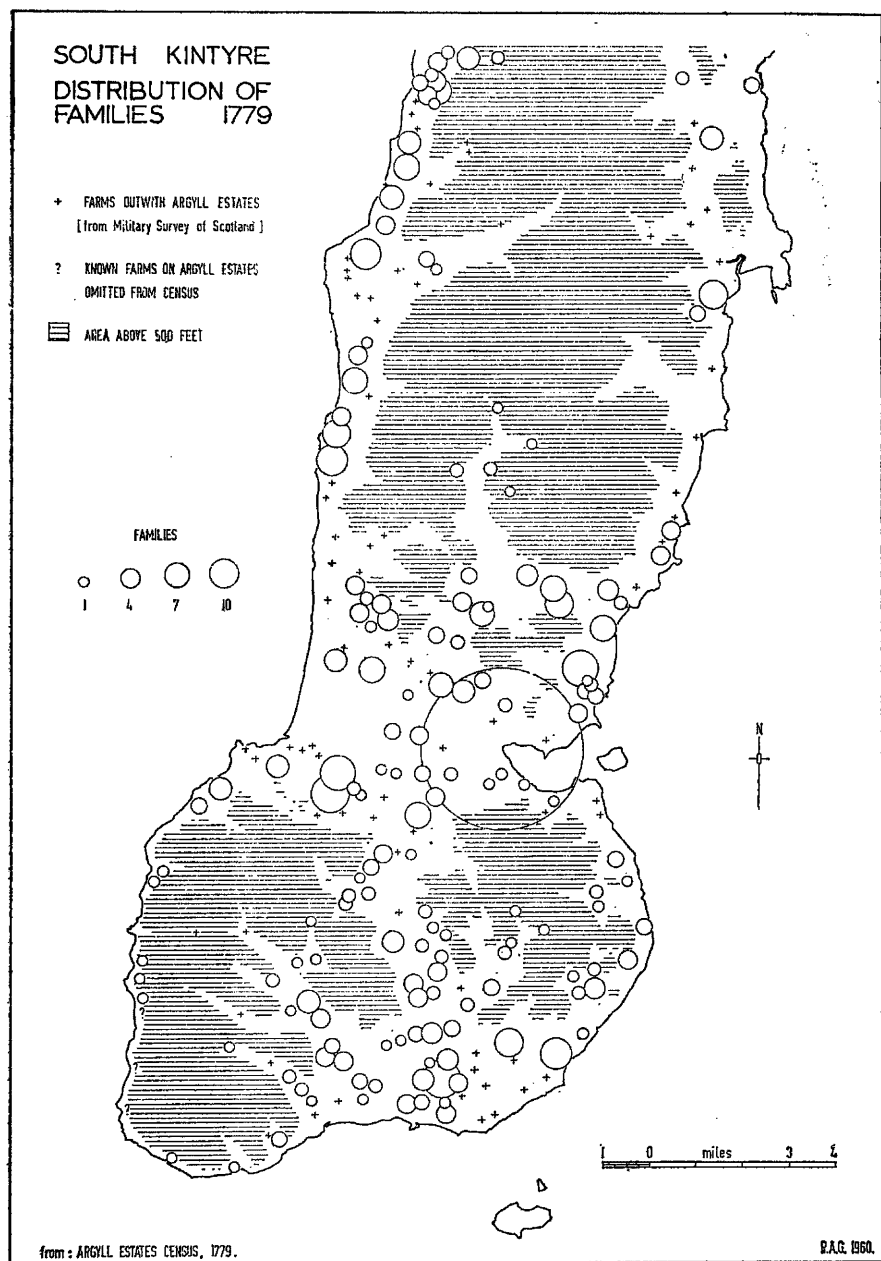


Fig. 1. South Kintyre : distribution of families 1779.

The two censuses are complementary. That of 1779 is of a summary nature and gives for each farm the number of resident families together with the number of tacksmen, tacksmen's sons, servants and cottars. The total population for each farm is not given, but this earlier list gives more explicit information as to the social structure of the population

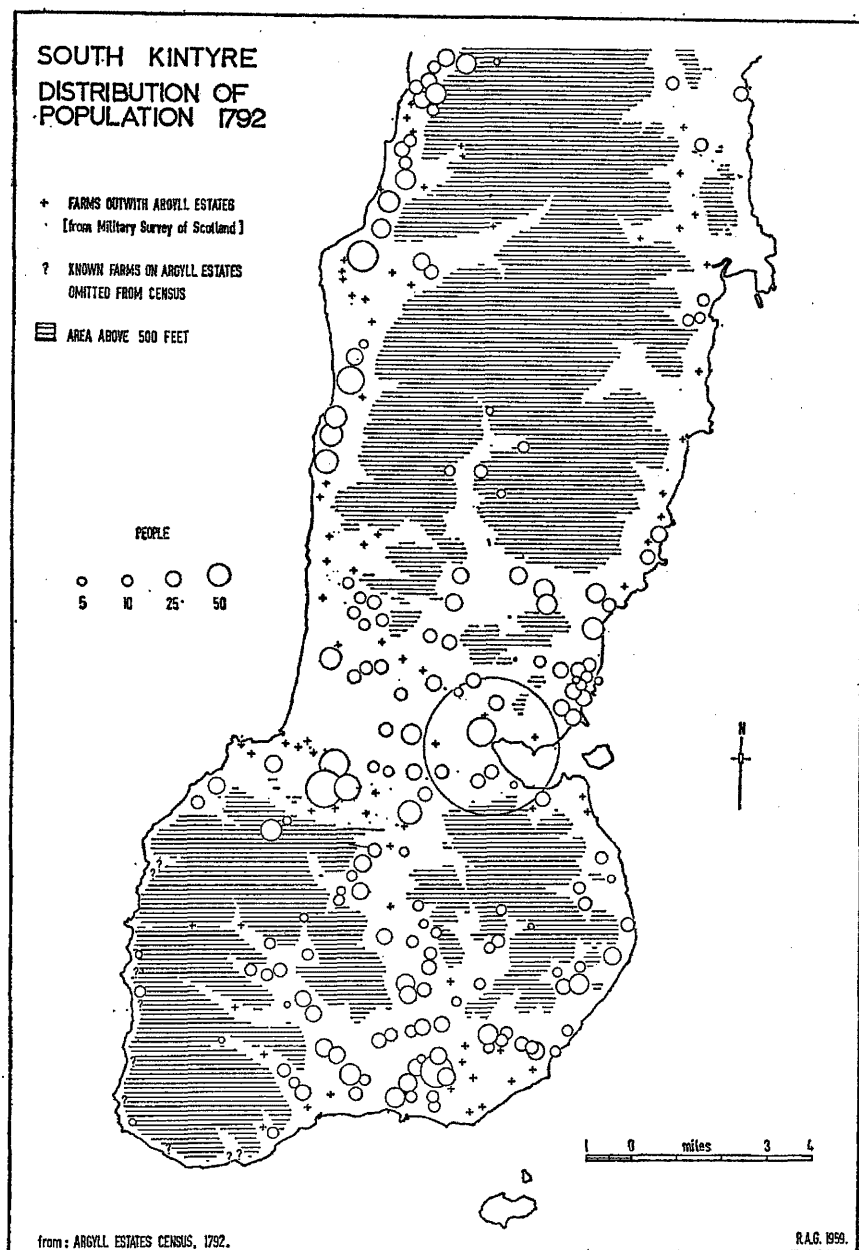


Fig. 2. South Kintyre : distribution of population, 1792.

than does the 1792 census which is only a list of the total population on each farm by name (and thus sex) and age. The distribution of population shown by these censuses has been expressed cartographically using proportional circles and the figures summarised in two tables. The distribution shown on each map is essentially similar; only minor differ-

ences appear. For instance, two large multiple-tenancy farms in the south-east of Southend Parish appear to have been split into a series of smaller farms between the taking of the censuses.

In Southend the population was concentrated in the Strone, Breack-erie and Conie Glens, on the area of low fertile ground in the south-east of the parish where the MacDonald of Sanda estate was concentrated ⁸, and in the smaller glens of the east coast such as Hervie and Balnabraid, where glacio-fluvial and fluvial terraces provided isolated patches of fertility in an area otherwise dominantly suited to hill pastures. The west side of south Kintyre, northwards from the Mull, showed the existence of a series of small settlements in topographically extreme sites on the steep and, in places, almost precipitous coast. The names of these fall into two groups: one beginning with the element Bal- or Bally- followed generally by a surname, the other descriptive of the sites, such as Innean-co-callich (the Innean or cleft of the five old women). Comparison of the two maps suggests the abandonment of some of these sites towards the end of the century, evidence which finds support elsewhere ⁹.

The Laggan showed a distribution of population essentially similar to that of today, though the intensity was of a different order. The settlement was concentrated on the benches along the landward margins of this area and the reclamation of the moss area in the centre was still being carried out. Much of this area is still sterilised for settlement in Machrihanish airfield. Outstanding was the concentration on the southern margin in the settlements of Coalpits and Drumlemble, both associated with the early exploitation of coal in the Machrihanish area.

The remainder of Kintyre may be divided into three distinct regions: the west and east coasts which presented contrasting patterns, and Glenlussa which illustrated the sparse settlement of the interior of the peninsula. The west coast showed strikingly the significance of the raised beaches. Analysis of the sites on the ground and from large-scale maps shows that the settlements were dominantly on the higher benches, the 25-foot raised beach being still at this period in process of reclamation. *Per se*, raised beach does not necessarily imply fertility, a comment particularly applicable to the 25-foot beach in Kintyre ¹⁰, and more especially so in the latter part of the eighteenth century when improvements such as enclosing and draining were only getting under way. The concentration of Argyll Estate farms on the coastal benches was striking, the valleys such as the Clachaig and the Barr remaining in other ownership. By contrast the east-coast settlement was sparser, sited especially in major valleys such as Glencarradale, Glensaddell (not shown on map and outwith Argyll Estates) and the lower reaches of Glenlussa. Typically this east coast is steeper and the coastal benches more fragmented than in the west, and the difference in fertility was accurately reflected in the smaller populations which the farms supported. Glenlussa, and by analogy probably also the upper reaches of the Barr, had dominantly small farm-populations subsisting on limited arable areas on restricted drift deposits, deriving their livelihood more from stock-rearing than was the case on the lower ground. Such, *par excellence*, were the 'muir' farms. In the more fertile areas of the west

coast and the Laggan grain played a greater part, partly due to the influence of local distilleries in the Campbeltown area ¹¹.

The Burgh of Campbeltown has been indicated on each map but the population shown in each case is but a fraction of the total, and moreover an unknown fraction. At this period the beginnings of rural depopulation might be suggested as due to the initiation of improvements, especially on the Argyll Estates even as early as the seventeenth-thirties ¹², but it was not until after 1790 that such a trend rose to importance. Before 1750 when the idea of improvement was in its infancy in the area, settlement and population were not significantly different from their circumstances in true run-rig conditions. After 1790 draining and enclosure were widespread and the large farm-steading built around a central yard or court, typical now of the Laggan and the parish of Southend, and clearly reminiscent of steadings in the Lowlands, were introduced soon after. Between 1750 and 1790 it is impossible to point to any single date to claim that there a significant change took place. Consequently the distribution of settlement and population given by these two censuses is that during a period of continuous change. The conservatism of a tenant population in accepting a new order meant that there was a lag between the disappearance in a legal sense of the multiple-tenancy farm, and the decline of the concomitant small rural nucleation or 'clachan'.

An analysis of the altitudinal range of settlement during the period has been attempted. Comparing the farms in the censuses with those in the 1751 Valuation and on Roy's Map, it is considered that the last source gives an adequate cartographic sample of the settlement of the second half of the eighteenth century. The clachans were located on, and their altitudes estimated from, the G.S.G.S. 1:25,000 map-sheets. The sites which exist today as ruined settlements or which have disappeared totally, were noted. Some of the former in the Parish of Southend and in the vicinity of Tarbert, Lochfyne, were visited in the field. The altitudes were grouped in 100-foot categories and the resultant totals compared with the areas between the 100-foot contours as shown on the Ordnance Survey 1:63,360 map-sheets. The results are given in diagram form (Fig. 3). Clearly the settlements above 400 feet formed only a small proportion of the total settlement, despite the fact that there is a greater area between 400 feet and 600 feet than between 200 feet and 400 feet. The combined effects of altitude and exposure, then as now, were sufficient to restrict settlement, and agriculture, to the few sheltered glens above 400 feet. Of such sites about 70 per cent exist as ruined clachans. Between 200 and 400 feet there is the major concentration of such ruined settlements, but they represent a considerably smaller proportion of the original total within that range than do those above 400 feet. The decline in total settlement, and the survival of ruined clachans above about 300 feet must both be a reflection of the marginal nature of much of that area, marginal at least from the viewpoint of arable agriculture. Most of this area is now used for grazing and some of the clachans were destroyed, to be rebuilt during the nineteenth century as sheep-fanks. In spite of the slightly more restricted area below 200 feet the concentration of settlement here was notable. A more detailed analysis of the sites shows they were dominantly above 50 feet,

further emphasising the distinction already made between the lower and the upper beaches, as far as settlement and agriculture were concerned in the pre-improvement period. As this area has been in continuous occupation, the majority of eighteenth-century clachan sites are now occupied by modern farm buildings, and few exist as ruined clachans, although some disappeared totally.

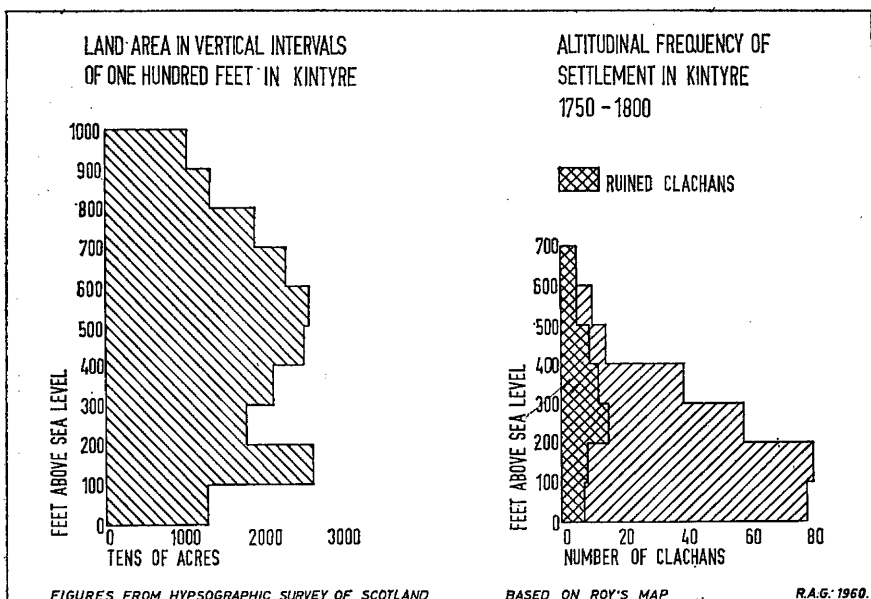


Fig. 3. Altitudinal distribution of land area and settlement (1750-1800) in Kintyre.

The ruined clachans fall into two clear groups morphologically. There are sites which show no clear indication of a logical layout; the group of dwellings and associated out-buildings are amorphous, although individual structures within the group may show a preferred orientation in one of two directions at right-angles to each other. This latter feature appears to be related to slope. Most clachans show a distinct tendency to a linear or rectangular plan. Within these clachans most of the buildings appear better-preserved than those in the other type, and many are known to have been built no earlier than the last quarter of the eighteenth century. Such is Glenrea in Campbeltown Parish, which did not appear on Roy's Map. By contrast, sites belonging to the first category such as Balmavicar in Southend Parish on the west coast, were cleared or deserted voluntarily at about the same period¹³. Most of the sites marked on Figures 1 and 2 as omissions from the censuses belong to this category. On this evidence it is tentatively suggested that the distinction in clachan sites recognisable on a morphological basis may also be valid chronologically, the amorphous clachan being earlier and the linear or rectangular clachan belonging to the period of improvement. The latter had, however, become sufficiently widespread (and exclusive?) in Kintyre for the Duke's Chamberlain to comment on it as an evil standing in the way of further improvement when advocating

the adoption of the substantial Lowland-type steading ¹⁴. Further evidence is needed from other areas before this distinction in clachan morphology may be considered a really significant feature in the evolution of Highland settlement.

Apart from distributional aspects, the two censuses together provide a full portrayal of the age and sex structure of the population and of the social circumstances of the tenantry of Kintyre.

Age Group	1792			1881			1951		
	M	F	T	M	F	T	M	F	T
0-4	6.8	5.5	12.3	6.0	5.7	11.7	4.5	4.0	8.5
5-14	12.4	12.3	24.7	12.1	12.1	24.2	8.0	7.6	15.6
15-44	19.1	26.3	45.4	22.3	20.7	43.0	20.7	18.7	39.4
45-64	6.7	6.8	13.9	7.6	7.2	14.8	11.6	12.3	23.9
65-	2.3	1.8	4.1	3.1	3.2	6.3	5.8	6.8	12.4
Total	47.3	52.7	100.0	51.1	48.9	100.0	50.6	94.4	100.0

Table 1. Age and sex structure of population : figures are percentages of the total population; figures for 1881 and 1951 are derived from *The Census of Scotland*; figures for 1792 are derived from the *Argyll Estates Census*. M, males; F, females; T, total.

The age and sex structure of the population is best shown in Table I. The figures all refer to the population outwith the Burgh of Campbeltown. Striking is the small structural difference in the population between 1792 and 1881, the greater change coming during the twentieth century. The late-eighteenth century population structure is characteristic of the period before medical and hygienic improvements advanced the average age of the population. There is a significant difference between males and females in the 15-44 age category, both in 1792 and in 1951. The preponderance of women in 1792 was probably partly seasonal (the census was a summer one) and the absence of the men is commented on in the *Statistical Account for Campbeltown* at the same period, though not explained ¹⁵. Seasonal work elsewhere may provide the answer such as agricultural labouring in the Lowlands, or fishing, although the latter seems unlikely in view of the evidence adduced by Gray on the fishing industry of the period in the south-west Highlands ¹⁶. Work in Campbeltown Burgh may be partly responsible, but as the number involved is of the order of 300, this will not provide the complete answer. The reverse, an excess of men, is evident in 1951. This feature is clear in many Highland areas where many of the women are temporarily away in service or more or less permanently in occupations such as nursing and teaching.

Table 2, derived from the 1779 census, summarises the social and tenurial status of the population. The adjustment of the Campbeltown figures is the omission of the exceptional coal-mining settlements of Coalpits and Drumlemble. The figures for south Kintyre (Southend and Campbeltown) show the effects of agricultural improvement on the population. Many of the farms had by now become single tenancies with a corresponding reduction in the number of cottars per farm. Now, the

Parish	1	2*	3*	4*	5
Southend	2.9	1.3	1.5	1.6	38
Campbeltown	3.5	1.4	2.0	2.0	41
Campbeltown (adjusted)	3.1	1.4	2.0	1.6	42
Killean and Kilchenzie	4.5	2.0	1.7	2.5	29

Table 2. Social and tenurial averages, 1779. * Refers to males only.

1. Number of families per farm; 2. Number to tacksmen per farm; 3. Number of servants per farm; 4. Number of cottars per farm; 5. Number of single-tenancy farms as a percentage of the total number of farms.

term tacksmen must be restricted to mean merely a tenant holding a lease or tack. The social connotation of the term applicable before 1750 when the tacksmen represented a middle class in society does not apply¹⁷. Killean and Kilchenzie may be taken as typical of central and north Kintyre where, in terms of population, the joint-farm with its concomitant clachan still existed, even though run-rig had disappeared in many cases. Here the proportion of single-tenancy farms was significantly lower, a feature brought out on the maps where the relatively large farm-populations are evident. Again, the number of cottars per farm was significantly different, emphasising the more traditional nature of the society where, as in the run-rig period, the cottars acted as tradesmen, particularly weavers, for the local community. The proximity of the Burgh and the increasingly commercialised nature of the agriculture inevitably brought about the decline of the cottar class in south Kintyre. However, the number of servants per farm appeared to be more constant throughout Kintyre suggesting that the single-tenancy farm with its need for farm and domestic servants was a force to be reckoned with everywhere in the peninsula. The thin end of the improving wedge had been driven in, alike in south and north, and the difference between the two areas was really an expression of the time lag inherent in the acceptance of innovation in a rural community when that innovation spread from a single area. The suggestion is that the improvement of the Argyll Estates began in the south and spread gradually northward.

Unfortunately detailed estate censuses for Highland areas in the eighteenth century occur rarely. The Argyll Estates show the value of such sources, particularly when viewed in the light of field evidence and other contemporary sources of information, such as the *Statistical Accounts* of the seventeen-nineties, estate rentals and Roy's Map. The value of such sources in historical geography need not be stressed.

The author expresses his indebtedness to His Grace, The Duke of Argyll for permission to consult and publish material based on manuscript sources in his possession. Also, Mr E. R. Cregeen of the Extra-Mural Department of Glasgow University, Mr Duncan Colville of Machrihanish and the staff of Register House, Edinburgh have given valuable assistance.

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- ⁷ The Laggan is the name given to the triangular area of Lowland which has its apex at Campbeltown and its base on Machrihanish Bay.
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MOBILITY OF TENANTS ON A HIGHLAND ESTATE IN THE EARLY NINETEENTH CENTURY.

(R. A. GALLEY, Department of Geography, The University, Glasgow.)

Rural society and settlement in the Highlands of Scotland are known to be topics of supreme importance in the study of Highland affairs in the past, particularly during the eighteenth and nineteenth centuries when the traditional clan society was giving way to a money economy and when the modern crofting system was in process of emerging over the north-west Highlands and Islands. New facets to the complex of this rural society are constantly being discovered. One such facet is here described but, from the nature of the available evidence, a full explanation of it is impossible and it remains enigmatic. Some suggestions are, however, presented towards the end of the paper.

Examination of a set of estate papers, especially leases for the period from 1800 to 1830 has shown a considerable mobility upon the estate of Inverneil in the parish of North Knapdale¹. More exactly, the farms were those in the estate of Ross (then a part of Inverneil) on the Taynish peninsula on the west side of Loch Sween, together with the islands of Danna and Ulva. Topographically the area is extremely fragmented and isolated, though the relief is not considerable, and in many places the old crystalline rocks and fringing raised beach deposits have broken down into excellent soils supporting good pasture and what in the nineteenth century was considered good arable land. The area is south of the present crofting region. It is doubtful if crofting as it now exists ever attained any importance in Knapdale, the term crofter being restricted, as on other Highland estates at the period and earlier², to estate servants holding an acre or two of arable and a cow's grass, the grazing generally held on a nearby farm. Certainly anything approaching township organisation appears to have been lacking in Knapdale once run-rig disappeared³. Today the area is dominantly a stock-rearing one with few sheep, unlike much of the remainder of the two Knapdale parishes. The farms are now

all single tenancies, but a century ago many were still double tenancies and a few were multiple tenancies held in run-rig⁴. At the beginning of the nineteenth century the farms were held jointly and equally directly from the proprietor by three or four tenants, a feature common throughout both North and South Knapdale⁵.

The tenant farmers lived in small clusters of houses, or clachans.⁺ Each clachan normally contained five or six houses, for besides the joint-tenants one or two cottar families lived on each farm. These cottars were normally tradesmen such as smiths, tailors or weavers, though occasionally an outlying or poor piece of arable ground was constituted a pendicle and given to one of these cottars who held either directly from the proprietor, or occasionally as a sub-tenant. In one or two cases, as on the farm of Coishindrochid, these clachans grew almost to the proportions of a village. The estate was served by a single village at Tayvallich where weavers, a smith, a doctor, a teacher, a minister and an inn-keeper all provided services; in the early 1840's it boasted of 190 souls⁶.

The leases for the farms provide a great deal of valuable information as to prevailing social and economic conditions in the area. There were twenty-two farms involved, excluding Tayvallich and some pendicles. Rents were rising but not yet exceptionally high, and although the leases enumerate the rents partly as money payments and partly as payments in kind, from rent collection lists it seems clear that the total rent was paid in money. What evidence exists suggests that the tenant farmers seldom experienced great difficulty in paying their rents. Services were still exacted but the proprietor appears to have used these solely in the interests of his tenants, though at the same time improving the condition of his estate. Stone-dyke building was going on apace, both at the

+ The term clachan, which is found as a Scottish place-name, is coming to be used to signify, both in Scotland and Ireland, a cluster of farm houses and associated out-buildings usually grouped without any formal plan. In Scotland these were the settlements of joint-farms and appear to have been a concomitant of run-rig. See V. B. Proudfoot, Gwerin, Vol.11, No. 3 June, 1959.

expense of the proprietor and also at the expense of the tenantry. Some of the later leases especially are "improving" leases of this nature. In every case the leases make it clear that there was no intermediary between the proprietor and the man working the land. The class of tacksman had disappeared. Earlier documents in the Inverneil Papers show that though some tacksmen had existed during the latter half of the eighteenth century, the normal mode of tenancy was of joint-tenants holding directly from the proprietor. This is also evident on the Kilberry estate in South Knapdale from the 1730's onwards, rentals for which have been examined⁷. Similarly the Duke of Argyll on his estates in Kintyre was letting farms directly to joint-tenants and gradually removing tacksmen before the middle of the eighteenth century⁸. This is in contrast to areas to the north such as Skye, where until well into the nineteenth century the tacksmen were an important middle class in society⁹.

New leases were granted on three occasions, in 1802-3 1810-11 and 1819. The first leases were for seven years and the two following sets for nine years each. From other estate documents there appear to have been few changes in tenancy between the granting of leases, certainly no more than would be expected due to deaths and other changes in the normal run of events. The sets of leases are not wholly comparable. The first and last sets are almost complete but the middle set is fragmentary. However, comparison of one set with another allows an almost total picture of the changes in tenancy over the estate to be drawn between 1800 and 1830, that is over approximately a generation. Every lease gives the full name of each tenant and also his previous residence or holding. Immediately it is clear if a tenant was moving into the estate from outside. A typical lease reads: for "the Town and Lands of Arinafadbeg

... Set to John McGugan, possessor there
John Taylor in Barbea Ross
Hector McLean in Keills
Archibald Smith in Barbreck" equally between them.

The total rent to be paid was £86 Sterling, and as was normal the tenants were tied to the estate mill at Duntaynish and to one of the estate smithies, either at Tayvallich or at Coishindrochid.

This lease was granted on 8th May, 1819, Barbea Ross and Barbreck were other farms on the estate and Keills was a farm on the neighbouring estate on the peninsula west of Loch Sween.

The twenty-two farms contained about seventy tenancies but the number fluctuated, for instance New Ulva decreased from three joint-tenants to a single tenancy in 1819. In 1802-3 there were twenty-one changes of which thirteen involved tenants new to the estate, and thirty-five tenancies show no change. In 1819 there were thirty-one changes and thirty-nine tenants continued in their tenancies, or at least remained on the same farms though possibly changing the land they worked. These must be regarded as minimum figures only for details are lacking in one or two cases. The total changes in 1819 represent alterations in almost half of the tenancies on the estate which is many more than may be accounted for, by deaths, normal succession as allowed in the leases and other normal causes of change. Clearly considerable movements were taking place but it is surprising, especially in the later leases, how few new tenants were coming into the estate. Most of the incomers were from neighbouring areas in mid-Argyll, though one came from a Loch Awe side parish and another from Glasgow. While they were only admitted to the estate if known to be proficient farmers there appears to be no correlation between incomers and the development of agricultural improvements. The incomers became involved in later internal changes within the estate equally with those who were already Inverneil tenants. There is a further point to be noted. Taking the total number of changes per farm over the whole period, those farms experiencing fewest changes were among the most inaccessible at the south end of the estate and include the island of Danna (farms: New Danna, Mid Danna and Dannan-acloich which respectively had three, four and four tenants, and six, none and three cottars each), Barbea Ross and Coishindrochid. These farms were still in run-rig and even as late as 1867-69 they were described in an estate valuation as being the only farms remaining under this system on the estate ¹⁰.

Whether or not the changes in tenancy indicated in the leases meant in every case a change of abode is uncertain. Where a change

involved contiguous farms, for example tenants moving from Turbiskell and Barnashallog to Upper Fernoch, an actual change of house would have been imperative. Many of the changes were over distances of five miles or more and, considering all the evidence available, a change of house seems likely in every case. Also, there was written into every lease a clause stating that houses and out-buildings were to be left in a tenantable condition at the termination of the tenancy and that the tenant was obliged to remove himself without notice at that period. Such removals must not be thought of in modern terms for the houses of the period were generally small thatched cottages, and the material possessions of the tenantry were of a simple nature and not over-plentiful.

Any attempt at explanation of this changing between farms within the one estate can be at best partial.

While the estate papers give much evidence as to prevailing wages, prices and values, and also as to the proprietor's finances, too little is known about the financial and social circumstances of the tenant families. Only incidentally are there references to these changes, which normally pass unnoticed in the estate correspondence, though there is a hint that the proprietor through his factor, may have been responsible for the ultimate placing of his tenants, for an earlier letter, in 1786, clearly shows his preferences in the letting of the farms of Barnashallog and New Danna¹¹. Presumably an economic incentive was involved somewhere. There never was a shortage of tenants for the available holdings and families appear to have been very content with general conditions on the estate, for though many of them changed their holdings, most stayed within the estate. Much later, at the beginning of the twentieth century, when the farms had become single tenancies it was claimed that "The majority of tenants have been either themselves or their parents on the estate for a great number of years and there has never been any difficulty in finding fresh tenants when vacancies occur"¹².

Without detailed information as to the financial status of individual families it is impossible to say if economic betterment was the sole motive, or even one of the motives, for these changes.

Arguing from the comparison of the number of tenancies with a summary of the acreages of the farms¹³, it is unlikely that very considerable differences existed between one tenancy and the next. Admittedly mere size is an insufficient basis for argument; fertility and exposure are also important factors. The rearing of Highland cattle was the chief source of income and accordingly the extent of grazing attached to the farms was important. If there was no considerable difference in the sizes of the holdings, then the fertility might be the operative factor, but this seems to be invalidated by the fact that some tenants moved off holdings on the richer raised beach soils and on to poorer soils developed on the crystalline rocks. The greater fertility of the raised beaches might be thought an attractive feature and yet almost all of the farms on which run-rig lasted longest and which suffered fewest changes in tenancy in the period under review are on the raised beaches. If fertility (actual or potential) were the important factor, one would have expected the proprietor to have insisted on the more rapid improvement of these farms.

The introduction of improvements in agriculture must not be overlooked. Many of the leases contain clauses relating to the planting of wood, and the draining and enclosing of arable land. In a period of rising rents the uneven development of improvements over the estate may, for a time, have made some holdings more attractive than others. Alternatively, the relatively rapid improvements of the estate from about 1780 onwards may well have been allowed by the short leases and the frequent and large turnover of tenantry. In comparison with other Argyll estates such as Kilberry in South Knapdale, the Duke of Argyll's farms in the parish of Southend, or the Riddell estate in Ardnamurchan in the north, leases on the Inverneil estates were for short periods varying between five and eleven years. On the former estates periods of between eleven and nineteen years were common. Indeed, some farms on Inverneil were held by verbal agreement only, particularly before 1800 and even at the end of the nineteenth century occasional holdings were held on an annual basis. This may seem odd in view of the fact

that there were many advocates, in the Highlands, of long leases as an encouragement to improvement¹⁴. The close and kindly interest taken by the proprietor of Inverneil in the running of his estate was probably sufficient reason for the rapid improvement, despite the relatively short leases.

When the estate was purchased on behalf of Colonel (later Major General Sir) Archibald Campbell in the 1770's run-rig was already disappearing. This is evident from material contained in rentals of Taynish between 1779 and 1794¹⁵, some of which refers to the period before the estate was sold. By 1800 run-rig was disappearing rapidly and by 1830 almost all of the farms - with exceptions already noted which remained in run-rig until 1869 or later - had been enclosed into separate tenancies, though still nominally joint-farms and with the tenant families still living in the old clachans. Run-rig involved the periodic reallocation of rigs in the infield and outfield to ensure that each joint-tenant had a fair share of the farm during the period of his tenancy. Consolidation of holdings and development of improvements inevitably entailed a cessation of such change of arable land, and it is tempting to find a raison d'etre for the tenancy changes noted from the leases, in a continuation of the custom of changing land on the part of the individual farmer. Now, such changes could occur only at the end of the leases and not during the period of tenancy and entailed a move to another house, unless the tenant merely changed his holding on the one farm at the giving of the new lease. The latter, nearer to the practices of run-rig, would remain unrecorded in the leases, and other estate documents give no clue.

It is becoming clear from recent work both within and outwith Highland Scotland, that this social mobility in rural communities is not an isolated phenomenon, either in time or space. Examination of rentals for the Kilberry estate in South Knapdale¹⁶ has revealed almost equally numerous changes between 1735 and 1766. On the six merkland of Kilberry only the years 1740, 1742, 1747, 1760 and 1763 showed no change in the twelve tenancies on the farm. Admittedly in some years only a single change was experienced, but in others three or four occurred, and the minimum of forty-seven changes over the

period of thirty-two years may not be explained solely by involving normal family succession. From the evidence here it is more difficult to prove actual shift of abode for seldom is there an indication given in the rentals of origin or destination of moving tenants at a change. To the north it has been shown that tacksmen on the MacDonald estates in North Skye were moving about between tacks, but, due to the nature of the evidence, the same may not be said of the sub-tenants who actually worked the land. The evidence here comes from a comparison of rentals for 1721 and 1733¹⁷. In Orkney Professor Miller has shown similar movement of farmers within the past few decades, from smaller to larger holdings, both within the islands themselves and from Orkney to Aberdeenshire. The motive here was one of economic advancement¹⁸. Outwith Scotland, Mitchell shows an analogous movement in Devon in the nineteenth century of farmers from smaller to larger holdings, accompanied by a change in social status¹⁹.

The mobility in a rural community which has been discussed is a feature heretofore only briefly mentioned in northern Britain. As in Orkney this may yet be a feature of rural life, but in Highland Scotland it appears to have been a function of the existence of multiple tenancies, and with the rise of the single tenancy this mobility died a natural death. Whether it was a projection of run-rig practices into a newly-organised rural community, or whether it was solely due to short leases and other conditions peculiar to Inverneil remains to be seen. Certain it is that this feature existed but a full explanation must await comparative information from other areas.

The estate documents from which this rural mobility was found to exist are in possession of J. L. Campbell of Canna, and the Kilberry Rentals, which provided some comparable material, are at Kilberry Castle in the possession of Miss Marion Campbell. To both the author is deeply indebted for permission to work from these sources.

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ROSS ESTATE
TENANT POSSESSION, 1819 - 1830.

A. Cottars, pendiclers, etc. B. Tenants.

1819 - 1819.	B	A	CHANGES	A	B	1830 - 1830.
Barbea Downie	?	?		?	?	Barbea Downie
Tayvullin Scotnish		2		1		Tayvullin Scotnish
Arinafadbeg	4	1		1	4	Arinafadbeg
North Scotnish	1			1		North Scotnish
South Scotnish	2			2		South Scotnish
Kantallan		5		3		Kantallan
Tayvallich		8		3		Tayvallich
Duntaynish & Barmore	?	?		?	?	Duntaynish & Barmore
Turbiskell	3	4		4	3	Turbiskell
Barnashallog	?	?		?	?	Barnashallog
Upper Fernoch	2	1		1	2	Upper Fernoch
Mill of Ross		2		2		Mill of Ross
Barbreck	4	1		1	4	Barbreck
Nether Fernoch	3	1		1	3	Nether Fernoch
Barbea Ross	2			2		Barbea Ross
Drumagaul	3			3		Drumagaul
North Ardbeg	3	1		1	3	North Ardbeg
Barrahormaid	4			4		Barrahormaid
South Ardbeg	2			2		South Ardbeg
Kilmory	2			2		Kilmory
Achahoisin		2		2		Achahoisin
Glacknamuck		1		1		Glacknamuck
Coishindrochaid	4	2		2	4	Coishindrochaid
Old Ulva	4	1		1	4	Old Ulva
New Ulva	3			1		New Ulva
New Danna	3	6		6	3	New Danna
Mid Danna	4			4		Mid Danna
Dannanacloich	4	3		3	4	Dannanacloich

Keills

Kilmun, Dalavich

Glasgow

Appendix 5, Fig. 1.

RAG. 1960.

APPENDIX.

The diagram represents an attempt to show graphically the changes which took place when new leases were granted on the Ross estate in 1819-1820. The farms are represented in geographical order from north to south in each column. The left hand column represents the position under the old leases, the right column that under the new. The lines joining the columns represent cases where tenants changed from one holding to another, but tenants who remained in the same possessions under both old and new leases are not shown in the diagram. Each line represents one tenant moving. It is possible that some changes have been missed in Barbea Downie and Duntaynish and Barmore where full information is not available. The diagram makes clear two points: the great number of changes taking place and how few incomers there were from outwith the estate, when new leases were granted at this period. The farm of Keills is in fact at the south end of the Tayvallich peninsula and the movement from Keills to Arinafadbeg is essentially of the same character as the movements within the estate.

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THE ROLE OF SUB-LETTING IN THE CROFTING COMMUNITY.

Alan Gailey.

North and west of the Caledonian Canal, and particularly west of the main Highland watershed, in the Hebrides and in Shetland lies the crofting region of Scotland. In this area of uninviting environment is preserved an agricultural community cast in the mould of a communally organised society dating from before 1800. There have been inevitable and necessary adjustments as ideals and standards have changed, but many elements in the crofting scene have their antecedents in the agricultural and social framework of clan society. Crofting is organised on a township basis, the township consisting of a number of crofts each of which has rights in a common grazing. The crofts are normally consolidated areas of arable with dwellings sited on the individual crofts, though in some cases a tight cluster of houses has maintained its site throughout the various changes which have taken place since the disintegration of the old open-field economy. The common grazing is operated on a system of shares, of which each croft has one or some multiple or fraction of one. The share is stated as a certain number of animals which the crofter has the right to graze on the common. This is known as the souming. In the great majority of cases the house, arable land, and grazing rights form indivisible elements of the croft.

The regulation of the common grazing is in the hands of a township committee, and all the work associated with the common, particularly work with the sheep, is the joint responsibility of the whole township. This calls for a degree of communal organisation, but only a pale shadow of that involved when the inbye land also was communally held and periodically reallocated among the tenants under the equalitarian principles of run-rig.

Prior to 1886 most crofters were tenants-at-will. The Crofters' Holdings (Scotland) Act, 1886 based on the work of the Napier Commission of 1884, gave security of tenure to the crofter as part of the process of recognising formally, for the first time, the existence of crofting as a way of life. Crofting law is such that the individual tenant virtually owns his land, and pays only a nominal rent. There is more than a grain of truth in the oft-repeated saying that the crofter

enjoys the benefits, but bears none of the responsibilities of ownership. In such circumstances it is understandable that many crofting proprietors regard their estates as millstones round their necks.

It is not intended here to discuss the historical emergence of crofting, important though this is in explaining the average very small size of the individual holding. The purpose is to demonstrate one of the as yet unrecorded aspects of a framework of small-holdings which has become ossified in a pattern suited to nineteenth century requirements, but which has been projected into the changed social, and particularly demographic, circumstances of the mid-twentieth century.

Crofting is much more than a tenurial system - it is a way of life. In modern conditions the croft is usually too small to provide an adequate living for a family, or even to keep the head of the family fully occupied. Many crofts are minute, some in north Lewis consisting only of 3 acres of inbye land, not all of which is arable. By contrast there are units only just within the legal definition of having no more than 50 acres or a rent of under £50 per annum. Unfortunately these larger and viable units are the exception and not the rule. Consequently the "typical" crofting family will have possibly only one man of working age on the croft full-time, but one or more others in ancillary employment in the vicinity, such as local small industries, Forestry Commission work, or employment as bus drivers or postmen. Many crofting households have men working away from home semi-permanently; for instance, in 1957 one third of all the men in the island of Barra were at sea, the majority with merchant shipping companies. Such non-agricultural employment is not confined to the men; seasonal domestic work in hotels is common among the younger women, but nursing and teaching both recruit women from the crofting region in considerable numbers. Thus, in many crofting townships few of the 15-44 age group are resident. And yet such people often have no other home, in a permanent sense, than the croft. The resident population consists of the elderly and the very young, with barely sufficient men and women of working age to maintain some semblance of activity in the community.

In circumstances such as these it is inevitable that many crofts are occupied only by a portion of the crofting families, while others will lie unoccupied though legally tenanted by families seeking a livelihood beyond the township. Almost always the basic cause of this is the small size of the crofts, but factors such as physical remoteness, and consequent social isolation on a district scale must not be disregarded, especially since two wars have shown many crofters something of life beyond the Highlands. Some crofts lie derelict temporarily for the croft is often kept for use on retiral, while the land is worked by a neighbour on a basis of unofficial sub-letting. Sub-letting also occurs where the tenant works full-time in the vicinity, or away from it, while his family live on the croft but do not work the land. If the croft house is occupied by an aged or widowed tenant the land is frequently sub-let to a neighbouring active crofter. The desire of tenants to take land from those willing to sub-let is easy to understand, especially where the crofts are very small. It is the purpose of this study to examine sub-letting, and its place in the modern crofting economy and society. The evidence is taken from detailed field examination of townships studied by the author as part of a wider project being carried out by the Geography Department of Glasgow University.¹ As such it is in the nature of a sample study, but it is considered that the townships here studied are representative of most of the social conditions to be met with in the crofting region. The townships concerned are in Barra and north Lewis in the Outer Hebrides, and in west Ardnamurchan on the mainland. In addition, reference is made to a recent unpublished study of part of north Skye by MacSween, and to the published study by Caird of the district of Park in southeast Lewis.

West Ardnamurchan is physically very isolated and although the land is potentially more valuable than in some other crofting districts (this is particularly true of some of the grazings), the physical isolation has entailed social stagnation if not regression. Since 1841 the population densities have declined from 23.1 persons per square mile to 16.1 in 1891, to 4.5 in 1959. For present purposes west Ardnamurchan may be taken to represent a crofting community which

has stagnated to such an extent that there is no longer sufficient demand for land among the resident crofters to ensure that all crofts are worked. The 28 crofts studied are in two townships, one large and one small; three of the crofts were totally derelict in 1959.

In Barra a single township of 34 crofts was studied. It lies on the west side of the island, which is more fertile than the east side, due to the presence of "machair" land based on shell sand. The arable land of the crofts is thus partly lime-rich machair along the coast, with behind it the more acid "black land", peaty and in need of constant drainage. These two are complementary and provide the area with a variety of land for both stock and crops. The township is representative of many where there is a keen demand for any land available and the land is fully, but not necessarily adequately, worked.

In north Lewis group A is a single large township of very narrow strip-crofts where there is relatively little sub-letting. The standard of husbandry is not high and little advantage is taken of facilities for improving the land. Tradition and the need to conform with majority patterns and decisions are both strongly rooted in the community. Here the township communal structure is a reality in every sense. Group B, again a single large township, ought more properly to be considered as two units, for each has a separate name and exists as a separate social entity. There is a single common grazing and grazings committee. By contrast with group A the crofts are well-worked and there is an air of progressiveness about the area. The demand for land here has been such that in one of the two groupings within the township, in the absence of sub-let crofts certain tenants have each in the past appropriated a few acres of common grazing, adjacent to their crofts, as croft extensions. Such a position is not theoretically possible without following a set procedure which has not in this case been adhered to, and consequently these extensions are not recognised in the rent roll and do not legally exist.

The areas studied are all different, varying from almost total stagnation at one extreme to a well-worked area where the tenants take advantage of all available grants for croft and grazing improvements at the other. The social position in Lewis is complicated by the

presence of two groups of householders who are technically landless. Cottars are usually relatives of croft tenants who build a second dwelling on a croft, and who may work part, or all of the croft land. Squatters usually live in houses built on the edges of the common grazings. They are not legally recognised, and so live free of rents and rates. The squatters enjoy much greater freedom than cottars and have often brought under cultivation parts of the common grazings round their dwellings. Cases are on record where individual squatters claim and work more land than legal croft tenants in the same township. None of these "non-crofting" categories have rights in the common grazings and so officially own no stock, yet some of them possess animals equivalent to the souming for a croft. Cottars exist sporadically throughout the crofting region but the squatter problem is concentrated in the northern part of the Outer Hebrides. In this study these two groups are not differentiated, and figures relating to them in the Statistical tables appear in brackets.

In practice there is little social distinction between crofters, and cottars and squatters. In social units as small as the individual township there has in the past been considerable intermarriage and it has been normal for most marriages to be contracted within the parish, if not the township. It is thus understandable that there should often be close relationships between the land-holders and the landless. Some tenants have been reared in squatter households, and a tenant may have in the same township a brother or sister living as cottar or squatter. Mobility from the status of crofter to that of cottar or squatter, or in the opposite direction, is easily possible. Though cottars and squatters have no legal representation in the running of township affairs, in particular the regulation of the common grazings, it would be unusual for their opinions to be disregarded completely and they may well share in the grazing re-seeding schemes which have recently been instituted in some of the townships in north Lewis paradoxical though this may appear. Squatters will take land equally with crofters from those willing to sub-let their land, and in the same way some squatters sub-let the land they have appropriated from the grazings, either to crofters or to other squatters. The cottar and squatter

problem is not a recent phenomenon in Lewis, indeed there is reason to believe that it is less pressing now than at the beginning of the century. In 1910, 24 of 36 listed cottars and squatters in groups A and B were noted as having a share in a croft in their respective townships, and 23 of these were also noted as paying up to half of the rent of the crofts they worked. (Crofters Commission 1911-12: 220-255). It was also suggested that most of these squatters and cottars had come into existence in the townships after 1886 and that their appearance was a function of rising population, for Lewis did not attain its population maximum till 1911.

ELEMENTS OF THE CROFT IN RELATION TO SUB-LETTING.

(a) The Land.

TABLE I

	1	2	3	4	5	6	7	8
Ardnamurchan	28+	11	39	251	100	40	9	9
Barra	34	11	32	234	62	26	7	6
Lewis A	51(17)	9(5)	18(29)	202(32)	30(9)	15(30)	4(2)	3(2)
Lewis B	58(5)	9	16	323(15)	41	13	6(3)	5

+ 3 crofts derelict.

1. Total number of crofts.
2. Total number of sub-let crofts.
3. % of total crofts sub-let.
4. Total area of inbye (acres).
5. Area of inbye sub-let (acres).
6. % of inbye area sub-let.
7. Average size of crofts (acres).
8. Average size of sub-let crofts (acres).

From Table I some of the distinctions between the areas already noted are clear. The high percentage of sub-letting in Ardnamurchan is evident in contrast to the lower percentages recorded for Lewis, despite the fact that the Lewis crofts are much smaller. This is partly explained by the existence of the Harris tweed industry providing an ancillary occupation lacking in the other areas, operating to maintain a higher level of population than would otherwise be possible. The Lewis areas are also within easy reach of Stornoway, the largest urban centre of the crofting region which allows other employment possibilities. By contrast, Ardnamurchan's nearest urban centre is Tobermory in Mull, the connection between the two being by motor-launch on a

rather infrequent service and subject to the vagaries of the weather. The nearest mainland centre is Fort William, too far away to exert any significant influence in terms of employment. Apart from labouring jobs with the County Council the area is totally devoid of ancillary employment and consequently the population level has declined drastically within the past 60 years.

Apart from Ardnamurchan there is a tendency for the smaller crofts to be sub-let, suggesting that such are incapable of providing a sufficient base from which the crofter can work up an operative unit which involves taking land from others willing to sub-let their crofts. This is seen in the percentages of inbye area sub-let when compared with the percentages of total crofts sub-let.

(b) The House.

TABLE II				
<u>Houses on sub-let crofts.</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Ardnamurchan	1	6	0	3
Barra	4	4	0	3
Lewis A	1(2)	1(1)	1	5(2)
Lewis B	4	0	0	5

1. No house.
2. House unoccupied.
3. House sub-let.
4. House occupied by part or all of tenant's family.

From the examples studied, the house associated with a croft is of little importance in the causation of sub-letting. The exception occurs in tourist areas where crofters are allowed by law to sub-let their houses to tourists for a period in the summer. Some sub-let crofts have no house while on others it is ruinous due to age or long-continued absence of the tenant. There is no consistent regional pattern in this and the reasons for absenteeism are discussed later. The distinction between Barra and Ardnamurchan on the one hand, and Lewis on the other is clear in the remaining categories. Again the greater employment potentialities of Lewis, and the consequently more stable population position, mean that few houses are unoccupied, and in the majority of the cases where the crofts are sub-let the houses are occupied by the tenants' families or relatives. The position

is reversed in the less successfully worked areas of Barra and Ardnamurchan where proportionally more houses lie unoccupied.

(c) Grazing Rights.

The most important element of the croft in relation to sub-letting is the grazing rights. As noted, a souming and system of shares operates in each township, and in most cases a set of equivalences is stated to complement the souming, equating the different species of animals. As an example, in one of the townships studied, the souming is stated in the grazing regulations as 1 horse, 2 cows and their followers and 33 sheep and their followers per share, each croft having one share. Here the equivalence stands at 1 horse = 2 cows = 10 sheep. This enables a crofter having no horse to balance his stock by carrying more cattle and/or sheep. Using the souming and the equivalence it is possible to evaluate the allowed and the actual stock per croft, or per township, counted in cow units (or any other stock units). Table IIIa has been worked out in this way while Table IIIb, which concerns the sheep stock only, does not involve the use of equivalences. These tables refer only to units in the respective areas which involve sub-letting. In this way it is possible to arrive at some assessment of the potency of over-stocking as a reason for the demand for sub-let crofts.

Including units which do not involve sub-letting, the areas studied are each under-stocked as a whole; in the case of Ardnamurchan about half of the allowable stock is carried, and even here the larger of the two townships carries only 35% of the souming. The level of sheep maintained is better than that of total stock, but is still below the allowed maximum. The Barra area is better all round with 75% of the allowable stock carried, but there is a considerable excess of sheep with under-stocking in cattle. The position in the Lewis areas is rather similar to that in Barra, though relatively fewer sheep are kept.

Table IIIa Operative units which involve sub-letting. Stock carried (total stock) related to souming. Numbers of units.

	1	2	3	4	5	6
Ardnamurchan	7	5	1	1	0	0
Barra	7	2	1	3	0	1
Lewis A	13(5)	3	3	3	1	3
Lewis B+	10(2)	3	4	2	1	0

1. Total number of units.
2. Number of units carrying less than half soum.
3. Number of units carrying half to three quarters soum.
4. Number of units carrying three quarters to full soum.
5. Number of units carrying one to one and a quarter times full soum.
6. Number of units carrying more than one and a quarter times full soum.

+ One unit without any stock.

Table IIIB Operative units which involve sub-letting. Sheep carried related to sheep souming. Number of units.

	1	2	3	4	5
Ardnamurchan	7	4	2	1	0
Barra	7	0	2	0	5
Lewis A	13(5)	2	3	3	5
Lewis B+	10(2)	1	5	1	1

1. Total number of units.
2. Number of units carrying less than half sheep soum.
3. Number of units carrying half to full sheep soum.
4. Number of units carrying one to one and a half times full sheep soum.
5. Number of units carrying more than one and a half times full sheep soum.

+ Two units without any sheep.

Because squatters have no legal existence in the township organisation and cottars no rights in the common grazing, it is impossible to assess statistically the level of their stocking. Their animals have been included in the observations concerning the townships as a whole (supra). The very fact that such people do keep stock must be a good reason for their desire to get land wherever possible, enabling them to legalise their position with regard to their stock in the townships' eyes. A sub-let croft must carry with it its souming, and it is the souming which is attractive

rather than the land in such cases. While this may satisfy the township as a community, such people remain technically non-agricultural for sub-letting without the consent of the proprietor is illegal. In this way the squatter or cottar working a sub-let croft is unable to claim cattle or sheep subsidies or to benefit from improvement grants or cropping grants for the land which he in fact works.

From the tables it is clear that most of the crofters are under-stocked though almost half carry their full sheep stock or more. In some cases crofters carry up to three times the number of sheep stipulated in the souming, compensated for by lack of other animals, particularly horses which are fast disappearing in face of competition from tractors. As the standard of croft and township fencing is now rapidly improving with the recent introduction of fencing grants, there would seem to be an increasing desire on the part of the individual crofter to feed his own stock on his own inbye land in winter, though the township regulations often still claim that the inbye land is open to all in winter - a remnant of run-rig practices. Clearly, the more nearly fully soumed a crofter is the more inbye land he will desire for winter feeding. This is especially true where an excess of sheep is carried for they are not housed in winter as cattle may be. The progressive crofter also wishes to use his own inbye at lambing time to ensure as high a lambing percentage as possible, for the common grazings are often dangerous to the ewes at this period due to exposure and other physical factors. This becomes more important with recent progress in the fencing of individual crofts, leading to the decline of common usage of the arable area in winter. In the past, when the level of stock maintained was higher, over-stocking may have been of great importance in determining who would seek land on a sub-letting basis from his neighbours. Now, when under-stocking appears to be the norm, it would be easy to over-stress this as a factor. Many depopulated and remote areas disregard their grazing regulations as being unrealistic in modern circumstances. Bad grazing management in the past has ensured that many townships are not now over-stocked with respect to the stated soumings. This is

not to say that these grazings are not over-stocked with respect to their present capacity. Only now are grazing reseeding schemes being tackled, with government aid, in the crofting area and notably in north Lewis.

SUB-LETTING AND THE CROFTING POPULATION.

While the physical characteristics of the crofts have some influence on sub-letting patterns, the most potent factors lie within the social milieu. Analysis of the ages and occupations of tenants sub-letting their crofts provides more likely answers. Sub-letting tenants are immediately divisible into those resident in and those absent from their home townships.

TABLE IV

Number of tenants who sub-let
their crofts.

	1	2	3
Ardnamurchan	11	3	8
Barra	11	4	7
Lewis A	8(5)	6(2)	2(3)
Lewis B	9	4	5

1. Total number of tenants who sub-let crofts.
2. Number resident.
3. Number absent.

Table IV shows that absenteeism is the most significant cause of sub-letting. Were it not for the existence of the weaving industry in Lewis crofts, the figures there would be more comparable with those of Barra and Ardnamurchan, where two-thirds of the sub-letting tenants are absent from the townships. In almost every case examined the reason given for absenteeism is the small size of the crofts concerned, though this reason appears equally in areas of larger and smaller crofts. Some absentee tenants are the younger folk of a previous generation who have had to migrate in the past to find employment and have remained away in spite of having inherited the crofts. Such people look on their crofts as a safeguard against possible future unemployment and as a place to which to retire on a small financial outlay. Some absentee tenants are single men and women who take employment elsewhere, having left the croft as a residence on the death of their parents.

Such a tie is easily maintained within the crofting framework while the present surreptitious system of sub-letting remains, but an active proprietor could insist on the croft being relinquished if he were able to prove bad husbandry. As long as the croft is sub-let this is difficult to prove for some use, however inadequate, is being made of the land.

Resident crofters who sub-let their land appear in two categories. There are in every township aged and widowed tenants who cultivate only a potato patch and possibly keep a single cow, or sub-let their land to a relative or neighbour in return for various services, most commonly for basic food requirements such as potatoes and milk. Such tenants are usually of pensionable age. Where tenants younger than this sub-let they normally follow a full-time occupation in the vicinity of the township and are between 45 and 64 years of age. Usual jobs are with the Post Office, Forestry Commission, County Councils on road-work, or with public transport operators. Some have independent businesses such as house-builders or decorators, and in Lewis full-time weavers.

It is more unusual for a resident tenant under 45 years of age to sub-let his croft, but when this does occur the reasons are identical with those above. More commonly the younger men work away from home till they are 40 to 45 years old when they return to take over the working of the croft from parents or relatives. Increasingly now, these men follow the trade they have learned while away from the crofting community and either work their land part-time or sub-let it. Many do not marry till relatively late in life when there is a prospect of settling down in the foreseeable future on the home croft as tenants, an important factor tending to bring about smaller families now than in the nineteenth and early twentieth centuries in these areas. Inevitably this adds to the population problems of the crofting region. Such a pattern is partly a function of the multiplicity of small holdings, inherited from a period with very different living standards, and this in a community where the availability of land is an important social factor.

A minor cause of absenteeism is the existence of the multiple tenancy. This occurs where a single tenant falls heir to more than

one croft, frequently in more than one township, either in his own right, or by marriage. In this way the total unit, regardless of any sub-letting arrangements contracted in addition, may be fragmented into pieces scattered over two or more townships, and the townships separated by as much as six or seven miles. The clerk of one of the township grazings committees in Barra held his office by virtue of being a tenant in that township. However, he resided on his wife's croft some miles to the south, one important reason being that his wife was post-mistress in her own township. Clearly the problems of operating such fragmented units are considerable and only one of the crofts can be occupied by the tenant's family, though he may have relatives on the other. Cases such as this are known as partial units with respect to any single township and appear thus in Table V. Partial units of this nature may also arise through sub-letting transactions which transcend township boundaries.

SUB-LETTING AND THE OPERATIVE UNIT.

To quote Caird (Caird 1959: Table II, note 3), an operative unit is defined as "any unit, whether a legal croft or number of legal crofts owned and/or sub-let, or a cottar, or squatter having stock. (Operative units may include crofts in other townships worked from the home (croft))". The application of this definition to sub-letting leads to the discussion of the causes for taking land from those willing to sub-let, and involves analysis of the families living off operative units.

TABLE V. Operative Units.

	1	2	3	4	5	6
Ardnamurchan	28	14	1	7	20	9
Barra	34	16	6	7	17	7
Lewis A	51(17)	40(15)	2	13(5)	5(3)	4(2)
Lewis B	58(5)	49(5)	1	10(2)	6(5)	6(3)

1. Total number of crofts.
2. Total number of operative units.
3. Number of partial operative units.
4. Number of operative units involving sub-letting.
5. Average size of operative units involving sub-letting (acres).
6. Average size of crofts (acres).

In west Ardnamurchan and Barra half of all the operative units involve sub-letting arrangements and the number of operative units is only half the total number of crofts. Obviously sub-letting is very important here, the average size of the operative units which have increased their effective inbye area in this way being more than twice the average croft area. In north Lewis the operative units number three quarters of the total number of crofts, and only a third or less of these units involve sub-letting. Here the average croft size and average operative unit size do not differ greatly for two reasons. Initially the croft is small and it is not always the case that a sub-let croft is transferred complete, and almost never so in the Lewis crofts studied. Thus a single sub-let croft may be split among as many as four different operative units. This means that the sub-let additions to operative units will not necessarily alter the croft size by very much (in Table V the areas are given only to the nearest acre). Also there is a tendency in Lewis for the smaller crofts to seek extra land through sub-letting and so bring their size up to the average. This is not the case everywhere, as suggested previously, for the smaller the croft the less likely is it to be able to provide a base from which to build up a workable unit. As cited in a different context, the tweed weaving industry is the stabiliser assisting to keep tenants of minute crofts in the area who would otherwise leave. It is in Lewis also that the splitting of the sub-let croft among a number of operative units reaches its peak, in association with a relatively higher level of population. Of the Ardnamurchan sub-let crofts studied, only one was divided in the transaction, while in the Lewis examples the majority were divided among at least two operators, some among three, and in two examples among four operators. The statistical assessment of sub-letting is consequently complex and necessarily incomplete. Added to these difficulties is the fact that sub-letting may vary from the transferring of the croft complete with its grazing rights at one extreme, to the separation of the basic elements of the croft at the other. Permission may be granted to one to graze a cow or horse on the land, to another to cut hay off part of the land, to another to

grow oats or potatoes on half an acre or so, and yet another may be allowed to take up the grazing rights in the common pasture. The transference of grazing rights, dissociated from the croft land, appears to be very infrequent, though its remaining unrecorded could be due to the difficulties of establishing the existence of what are essentially illegal practices among an understandably reticent population.

Tenants sub-letting their land receive payment in many different ways. There may be a simple cash exchange, and often the legal tenant bears only a tacitly agreed proportion of the total rent to cover his house which seldom comes under sub-letting arrangements. An absentee tenant often sub-lets to a neighbour in return for having his house and fences maintained. A resident tenant (particularly an elderly one) may be paid in kind, for instance potatoes, milk, the winning and drawing of peats. These are usually the commodities which the elderly or infirm tenant is unable to provide for himself, but which are needed to supplement a small pension.

Table VI

The working of operative units in relation to employment.

	1	2a	2b	3a	3b	3c
Ardnamurchan	7	2	3	2	0	0
Barra	7	3	0	3	1	0
Lewis A	11(5)	5(3)	3(1)	2	0	1(1)
Lewis B	10(2)	0	5(2)	2	1	2

1. Number of operative units involving sub-letting.
- 2a. Units worked by a single operator with other employment.
- 2b. Units worked by a single operator without other employment.
- 3a. Units worked by two operators, one with other employment.
- 3b. Units worked by two operators, both with other employment.
- 3c. Units worked by two operators, neither with other employment.

Of the crofters operating units involving sub-letting, one third take no other employment, the unit supplying sufficient work to keep them fully occupied. Such crofters tend to be over 45 years old, and it is found that where an operator is under this age he usually has an ancillary occupation. Where there is more than one operator on a croft there is always a family relationship involved such as father and son, or brothers. Other relationships are possible for women must sometimes be classed as croft operators. Half of the operators working a unit

alone take another job, equally in all the areas under consideration. Where two operators are involved, in two thirds of the cases studied one, and occasionally both, take another job. Such occupations may be full-time such as van-driving for a local shop, or periodic such as acting as a ploughing contractor with one's own tractor. In less than a quarter of the cases neither take other employment, and this includes the partially disabled and the invalid.

Generally where regular employment is available it will be taken up but seldom are there sufficient jobs to go round. Occasional jobs, mainly labouring, for example on regional or township water schemes, or seasonal agricultural work on neighbouring farms make up the balance. Ardnamurchan has some seasonal salmon fishing which employs a few local men. Common regular jobs have been mentioned, many of them related to the provision of necessary services for the local community. Exceptional employment of each kind may be taken up as in Barra where some croft operators spend up to ten months a year at sea returning only for a period either at sowing or at harvest.

THE SIZE OF THE MINIMUM ECONOMIC UNIT.

The study of the operative unit raises the problem of the size of the economic unit. There is no doubt that the majority of crofts are too small, and the practice of sub-letting, unofficial as it generally is, does give to the progressive crofter some opportunity to gain a livelihood from full-time croft work. In this context the average size of operative unit involving sub-letting is of interest, for it may be taken that the operators of such units represent the go-ahead elements in the township community, and their total holdings will approximate to economic units in the prevailing economy. In the Lewis areas studied where the percentage of crofts sub-let is small, on average the operative unit involving sub-letting is not significantly different in area from the size of the average croft. If the population decline which has been experienced since 1911 were to continue it is likely that more land would become available for sub-letting. Militating against this is the weaving industry, operating to keep people in the area who would otherwise leave. The prosperity of the weaving industry is dependent on an outside market, unfortunately

subject to considerable fluctuations. In Ardnamurchan and Barra where the size of the average unit involving sub-letting is more than twice the average croft size, sub-letting assumes a greater significance in the production of operative units. These, however, are not necessarily well-worked. Sub-letting is usually unofficial for seldom has the proprietor's permission been sought as crofting tenure requires. Thus no cropping or improvement grants are available to the operator in respect of the sub-let part of his unit. Therefore sub-let land is often taken only to provide extra inbye grazing and winter fodder in the form of natural (not sown) hay, and to allow the keeping of extra stock. Agriculturally, the sub-let crofts are not being properly utilised, drainage is neglected and fences fall into disrepair. If the process continues too long the land becomes derelict. Sub-let crofts may often be distinguished in the field by the facts that no green or white crops are grown on them, and their drainage is even worse than that of the remainder of the township. Herein lies the evil of sub-letting.

As Caird has shown in Park, the size of the operative unit, as distinct from the croft size, is relevant to the taking of ancillary employment. Table VII is taken from his study (Caird 1959 - Table V).

Table VII. Park, Lewis.
Occupations of males, (15-64), related to unit size.
Figures in brackets are percentages.

1.	2.	3.	4.	5.
0 - 5	14(30)	27(59)	5(11)	46(100)
5 - 10	19(42)	22(49)	4(9)	45(100)
10 - 15	14(50)	12(43)	2(7)	28(100)
over 15	7(54)	3(23)	3(23)	13(100)
Total	54(41)	64(48)	14(11)	132(100)

1. Size of operative units (acres).
2. Full-time croft work.
3. Croft work with regular employment.
4. Croft work with periodic employment.
5. Total (This table omits units operated by more than one person).

These figures point clearly to the conclusion that the greater the size of the operative unit the greater is the possibility of that unit providing full-time work for the operator. Using these figures together

with those in Table V, it is suggested that in the circumstances of crofting as it exists now the most satisfactory size of unit is one with about 15 acres of inbye land. This must not, of course, be dissociated from adequate grazing facilities, and there always remains the need for some ancillary employment. This conclusion finds support in MacSween's study of Trotternish, north Skye, where he has divided the townships into "old" and "new", the distinction being that many of the "new" townships are of late nineteenth and early twentieth century origin as resettlements, having larger crofts, and larger common grazings than the "old" townships in which there has been continuity of small holder settlement since the mid-eighteenth century (MacSween 1959: 223-36, 249-50). In the "old" townships where the average croft size is only fractionally above 7 acres, 31% of the crofts are sub-let or vacant, but this figure drops to 12% in the "new" townships with an average croft size of 12 acres. Here also, the greater the size of the unit, the greater the possibility of it providing a viable existence for the operator.

The closest parallel to sub-letting as it exists in Highland Scotland appears to be in the practice of conacre letting in Ireland, recently studied for Northern Ireland by Forbes². The reasons for conacre letting and for sub-letting appear to be identical. It is interesting to note that a size of about 15 acres is suggested for the minimum working unit in a marginal area in Northern Ireland, comparable with much of the crofting region. The basic difference between the two systems is that conacre letting is legal while the sub-letting of crofts (as it is done in the vast majority of cases without the consent of the proprietor) is illegal.

OFFICIAL ATTITUDES TO SUB-LETTING.

The attitudes of proprietors and government bodies to the practice of sub-letting are interesting. Proprietors frequently regard their crofting estates as liabilities, for the crofter enjoys a virtually absolute security of tenure for a small rent. Technically it is possible for a crofter to be removed for inadequately working his land, but this is both difficult to prove and expensive to carry out. In practice most proprietors are content to turn a blind eye to

sub-letting, if not occasionally actively to support it. This is very understandable where the proprietor is not deriving a considerable financial return from his crofting townships, and would prefer to see some use, however inadequate, being made of the unoccupied crofts, than have them lie totally derelict. Were there no sub-letting, the latter would be the case within the existing framework.

In the past official attitudes to sub-letting have been incomprehensible. As long ago as 1884, before the crofter existed in the legal sense, sub-letting and its attendant evils had been recognised. (Napier Commission Report 1884: 43-44). The Taylor Commission of 1954, on the recommendations of which the present Crofters Commission was set up in 1955, recognised and took evidence on the nature and wide extent of sub-letting in the crofting region, but shut its eyes to the practice. The discussion of sub-letting here ends with the remarkable statement, "We have considered whether these evils should not be remedied by bringing the law into line with the facts of the situation and making sub-letting lawful. We have come to the conclusion that in this respect no change should be made in the law and we think that the remedy lies rather in a stricter enforcement of the rules of good husbandry". (Taylor Commission Report 1954: Para.183). Failure to recognise the social aspects of the problem was implicit in this attitude.

The Report of the Crofters Commission for 1959 gives much more cause for hope for the future. The Commission adopts a sane attitude in noting that on some 20,000 registered crofts, "only about one third of the crofters concerned are fully and seriously cultivating their holdings". The Report continues "This does not justify any harsh judgement. Many crofters do not work their crofts because they are too small or the land too poor to reward labour as it is priced today. The crofter's decision in such cases to cut his losses and apply his labour elsewhere for a living wage is sensible and businesslike. In many cases the crofters are old or infirm". (Crofters Commission 1960: Para. 61a.). The Commission has also recognised the problem from the landlord's viewpoint. The Report suggests that the Commission

are at present under-powered to enable them to attempt any rationalisation of crofting agriculture. ".... about two thirds of the 20,000 crofts are not being cultivated, or are under-cultivated, or have been informally turned over to neighbours for grazing. Given normal economic fluidity, much of the unwanted or unworked land would long since have passed legally into the hands of those who need and can work it; but security of tenure has frozen crofting agriculture in an out-dated pattern of minute units. The pressure of economic trends has indeed wrought much change, but it is all undercover. The problem is to unfreeze the systemto give.... legal form to the changes ... already accepted" (Crofters Commission 1960: Para. 69).

An unfreezing process is envisaged without causing any major social upheaval, allowing particularly the older people to live out their lives relatively undisturbed under conditions similar to those current. The major change sought by the Commission is "powers to sub-let crofts which are not worked in a satisfactory manner". (Crofters Commission 1960: Para. 84). The obvious advantage of legalising sub-letting lies in the fact that all crofts would thus qualify for the various agricultural grants and the quality of the inbye land could be maintained or improved. However, the problem of what constitutes adequate working of the croft remains.

This attitude, involving a complete reversal of previously held opinions, is to be commended. There will be inevitable opposition from those in the crofting community who are well content with existing conditions, and who would view compulsory sub-letting of unworked crofts as an infringement of what they have come to regard as their inalienable right to do what they will with land they rent under crofting tenure. This attitude is exemplified in the failure of an attempt to re-organise a crofting township in Wester Ross under the existing framework. After a considerable expenditure of resources by the Commission, the crofters concerned turned down a rationalisation of the present chaotic conditions in their area. (Crofters Commission 1960: Appendix IX). Further schemes are in preparation, and already crofters in part of Sutherland are taking measures to protect their existing "rights". It remains

to be seen if the Crofters Commission will, in fact, be granted the powers it seeks.

CONCLUSION.

In present circumstances the practice of sub-letting is both inevitable and desirable. It is a function of minute holdings, inadequate employment opportunities, and an unbalanced population structure. Sub-letting fulfils an important social function, for were it removed completely there would undoubtedly be even heavier migration from the West Highlands and Islands than already exists. Not only for the sake of the people, but also for the good of the land involved, the practice needs legalising, but this must be part and parcel of the creation of much more stable social and economic conditions in the Highlands. Regional planning, and not County planning, is called for. It is encouraging to know that the problem is at last being faced up to by the Crofters Commission as this body is one whose sphere of influence transcends county boundaries.

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NOTES

1. Glasgow University Geography Department Crofting Survey. Initiated 1956. Five seasons field study covering the Outer Hebrides on an individual croft basis, recording data on stock, crops, population and employment.
2. The author is indebted to Miss Jean Forbes for access to, and permission to quote from a MS copy of the section on conacre, of the forthcoming "Land of Ulster: Land Utilisation Memoir".

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