BRITISH MINING Number 24

THE ANCIENT METAL MINES of the ISLE of ISLAY, ARGYLL

R M Callender J Macaulay

Frontispiece
A view of Ballygrant in 1848
From 'Sketches and Notes of a Cruise in Scotch Waters on board His Grace the Duke of Rutland's Yacht Resolution in the Summer of 1848' by John Christian Schetky and Lord John Manners. The illustration is described as 'Plate II - 'The Paps of Jura' and is reproduced by the permission of the Trustees of the National Library Scotland.

BRITISH MINING No.24

THE ANCIENT METAL MINES OF THE ISLE OF ISLAY, ARGYLL

by

R.M. CALLENDER, Cheshire
J. MACAULAY, Islay.

There is no evidence other than a volume of opinion that the Norse invaders of the ninth century mined for metal on the Isle of Islay. The lead and the copper veins around Ballygrant, and the iron and manganese deposits elsewhere on the island, have been a constant lure to adventurers, miners, prospectors and landowners for over three hundred years. Nowadays, as the Hebrides adapt to tourism, the mining sites revert to Nature.

****

A

Monograph of the Northern Mine Research Society

1984

ISBN: 090145026 X

Typesetting by COMMERCIAL SERVICE
Moorgate Road, Rotherham.

Printed & Bound by HENRY BOOT DESIGN AND PRINT,
Thompson Street, Chesterfield.

For the Publishers
NORTHERN MINE RESEARCH SOCIETY, SHEFFIELD, ENGLAND.
© N.M.R.S. Publications. 1984.

NB
This publication was originally issued in the A4 format then used by the society. It has now been digitised and reformatted at A5. This has changed the original pagination, which is given in square brackets.

Cover Illustration
The Smelt mill at Freeport, 1772.
An illustration by John Frederick Miller, one of the draughtsmen who accompanied Sir Joseph Banks to the Hebrides and Iceland. On occasion the drawing has been erroneously accredited to Pennant who borrowed a number of Banks' works and published them without permission in the journal of his own 1772 tour. As far as can be determined, the illustration has not been published before and is reproduced in this monograph by permission of the British Library who hold the original as accession number Add MS 15,509 - which is entitled 'Mr. Freebairn's House at Freeport'.

Fig.1 The location of the Isle of Islay.

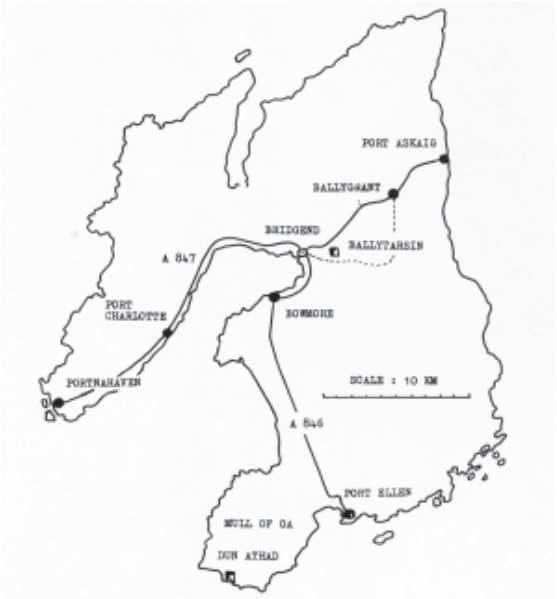

Fig.2 The principal roads on Islay together with the important place names referred to in the text.

PREFACE

On account of the geographical circumstances and the relative remoteness of Islay, this monograph has been tackled in an unusual manner. In 1978 and 1979, one of the authors (RMC) visited the island under the terms of a Kodak Bursary[1] and again in 1980 when, in partnership with the other (J Mac), an entry was made into a watersealed lead mine. Out of this, the collaboration was born but, for two years, had to continue by correspondence. In the interim, all available information was pooled and Macaulay substantiated old reports and descriptions by searching out the locations.

During early 1982, plans were made for joint fieldwork to recommence later that year in preparation for the compilation of this monograph. The selected month of August surpassed all records for wet weather but, nevertheless, the projected programme was completed successfully.

At the end of the year the authors met in the Mitchell library, Glasgow and thrashed out the first rough draft. Later, three revisions were subsequently agreed by postal and telephone communication.

INTRODUCTION

LEAD IN SCOTLAND

In any account of lead mining in Scotland, the importance of the Leadhills and Wanlockhead industries in the Lowther Hills rightly dominates the scene. As a result, other locations receive scant attention apart from, perhaps, the Strontian Mines in Ardnamurchan, Argyll, where strontium was discovered in 1756.[2] The specialist will know of lead mines at Carsphairn, Galloway and Tyndrum but, in fact, it has been claimed[3] that the Islay group of lead mines was possibly Scotland's second most productive location.

Fourteen lead mines in the Ballygrant area, plus the copper mine at Kilsleven, represent the important metal mines of Islay. However, in the past, explorations for iron have been made, whilst the possibility of mining for manganese has been considered on occasion.[4]

THE ISLE OF ISLAY

Islay is the most southerly island of the Inner Hebrides, one of the largest, and because of the Islay malt whisky distilleries, it has a unique economic importance to the British Exchequer. As the crow flies it is only 128 kilometres from Glasgow yet a need to circumvent the sea lochs of Scotland's west coast will add a further 130 kilometres on the road journey to the port of departure at Kennacraig on a Mull of Kintyre.

The island is an important tourist attraction and, as a result, there are few obstacles placed in the way of visitors to the island. For this reason it is especially enjoyable to explore the mining locations which are set in attractive scenery.

At its longest part, the island measures 40 kilometres and is about 20 kilometres wide but, of course, distances of journeys are generally much less. Three A-class roads stem from Bridgend:

(a) to Portnahaven in the south west
(b) to Port Ellen in the south east
And (c) to Port Askaig in the north east.

It is not possible to drive round the island due to lack of roads in the mountainous districts of the north and the south east. The lead mines are well served by roads and are clustered around the village of Ballygrant. Ballygrant is on the Bridgend to Port Askaig road and the most important site, Mulreesh, is clearly indicated by a direction board on the main road.

[1]

LEAD IN ISLAY

Investigating Hebridean lead mines is probably no different from those in other remote parts of the United Kingdom except that the Scottish west coast climate appears to contribute above average volumes of water into the proceedings. Also, the rural nature of the island means that dead sheep are a frequent encumbrance at the openings of adits, drifts, levels and shafts.

In addition, the age of the mines, combined with the fact that the island supports an agricultural industry means that, very often, the mine site has been 'treated' in order to reclaim the ground as farm land. As a result, a number of historically-important locations can be disappointing when they are tracked down and corroborated by a combination of factors, such as Ordnance Survey references, written descriptions, oral tradition and hunches based on the examination of sites more generous in the provision of information. Sadly, and somewhat frequently, solid proof of a location is often provided by the large accumulation of farmyard and domestic refuse!

On the other hand - and by way of compensation – because some of the places happen to be out of harm's way, or off the beaten track, they are relatively undisturbed and very much as they were when abandoned many years ago; subject, of course to a restitution to Nature.

It is for this reason that a starring system has been adopted in the gazetteer of Part Two which describes the evidence remaining at the fifteen mining sites which are found on Islay.

ACKNOWLEDGEMENTS

Both authors, individually and together, have been assisted in their enquiries by many people and it is important that this encouragement and interest should not pass unacknowledged.

Our joint thanks are extended to Mr Gordon Booth, founder of The Museum of Islay life, who first brought us together in 1980 and has continued to contribute advice. ideas and encouragement ever since. The present-day staff at the Museum continue to assist with demands for information, and where appropriate, have contributed ideas from their own fund of local knowledge.

The enthusiasm of Mrs Gloria Gilchrist of Port Charlotte for our project, and for the history of Islay, has also been appreciated during the periods of low-key activity. Mrs Gilchrist's own research in the Glen of the Margadale River near Bonahaven has produced a number of conundrums which have not yet been satisfactorily explained. From time to time, she has collected specimens of bog iron ore and recorded minor gravel disturbances in the vicinity of Stoisha Cottage. Mrs Gilchrist has also described, in letters and in discussion, mysterious stone structures by the Margadale River as well as 'four deep holes quite invisible' from ground level and measuring 15-20 feet in depth. The area is limestone and therefore the possibility of early Viking mining trials cannot be ruled out.

Mr Alistair MacEachern of Ballygrant's early recollections of Mulreesh provided many important starting points for our theories and interpretations of the site. That his oral claims have been substantiated time and again by practical endeavour on our part, speaks well for the ancient tradition of "word of mouth"!

Special thanks are extended to the Hon Mr and Mrs James Morrison of Islay House who generously arranged for Callender to study the archival papers relating to mining which are held by the Islay Estate. Permission to publish the results of the research is gratefully acknowledged.

Macaulay was also granted the privilege of discussing aspects of our project with Mrs Freda Ramsay of Kildalton who kindly placed some of her collected papers at his disposal. Information from the meetings have contributed substantially to the section relating to manganese.

For the best part of four years, librarians, assistants, curators and directors of many public and private libraries have generously provided snippets of information which have been incorporated into the whole work. Assistance from the following quarters is readily acknowledged:

Mr C.D. Will of the Institute of Geological Sciences, Edinburgh, The Scottish Records Office, The National Record of Archives, The University of Strathclyde, The National

library of Scotland, P.D. Milne of the Map Room, Edinburgh, The Royal Commission on the Ancient and Historical Monuments of Scotland, Edinburgh University library, The Mitchell library, Glasgow, Edinburgh Central library, The Companies Register Office, Edinburgh, Argyll and Bute District Library, Dunoon, The British library, The Institute of Geological Sciences, London, The National library of Wales, The Kent Archives Office and the Highland and Island Development Board, Inverness.

In addition, Mr Wm S. Harvey of leadhills, Mr G. Downs-Rose of Wanlockhead and Mr C.J. Williams of Clwyd have not only given advice and encouragement, but have passed on many items of information which might otherwise have been overlooked.

A final word of appreciation goes to the members of our families who have endured the lead mines of Islay for several years. A recurring feature of the recent explorations and field work has been wet weather and damp clothes, combined with long periods of waiting and hanging about forlorn landscapes.

R.M. CALLENDER.
J. MACAULAY.

REFERENCES AND FOOTNOTES:

1. R.M. Callender, 'The lead Mines of Islay', Professional Photographer, October 1980,76-84.

2. R.M. Callender, 'The Strontian Connection', Industrial and Commercial Photographer, March 1979, 48-53.

3. G.W.T. Barnett, 'lead in Islay', Contribution to the Symposium organised by the Institution of Mining and Metallurgy in 1959 on the Future of Non ferrous Mining in Great Britain and Ireland.

4. Long after its discovery in 1774, manganese took on a special industrial importance because of its ability to toughen steel. Interest was directed to the possible deposits on Islay on the outbreak of each of the two World Wars.

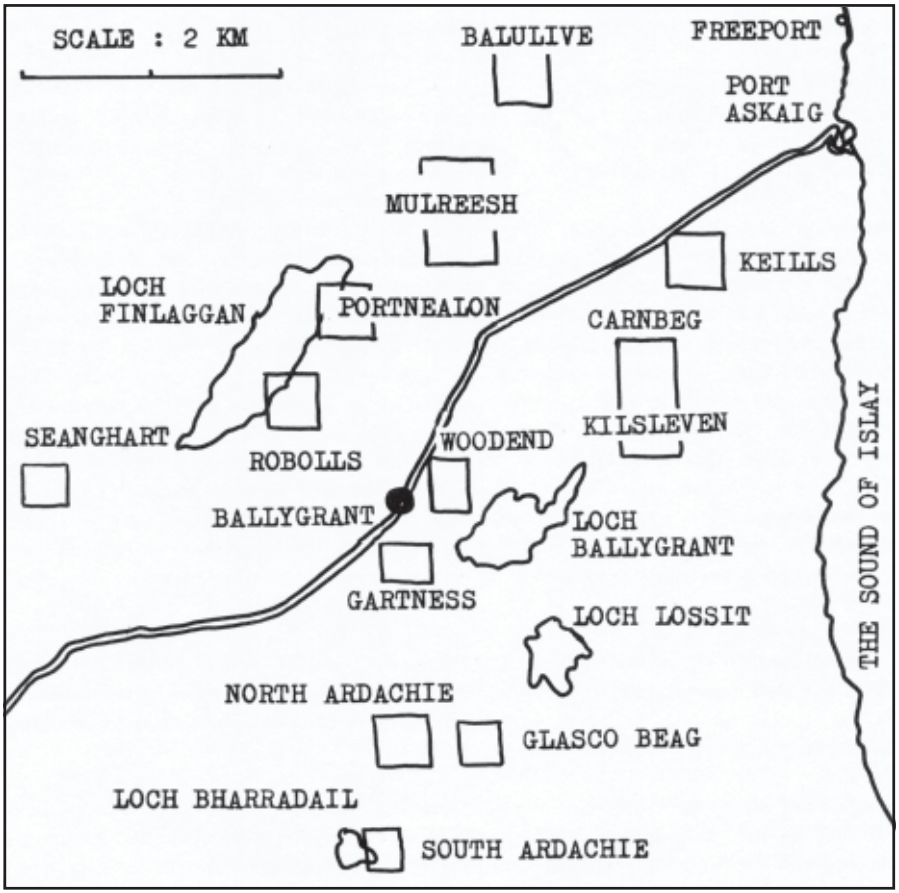

Fig.3 Diagrammatic representation of the metal mines which are grouped around the village of Ballygrant.

CHAPTER I

HISTORY

In a study of the lead mining industry of Islay it is not possible to ignore the history of the island, and for the present purpose the events are summarised in seven phases.[1] In passing, it is worth noting that the common convention of assuming that the Romans may have been the first lead miners does NOT apply to the Hebridean island whose invaders traditionally came from the Norse lands.

To this day, Islay retains strong evidence of occupation in prehistoric times and a glance at the modern Ordnance Survey maps confirms a mass of antiquities. Throughout the island there are plentiful traces dating from Mesolithic and Neolithic times, and from the Bronze and Iron Ages. Typical, for example, is the settlement at Cragabus on the Mull of Oa, whose prehistoric stones decorate a chambered cairn no further than three metres from the roadway.

Around about the sixth century, disciples of St Columba began arriving from Ireland and settled on Islay in order to spread the word of Christ. Simultaneously, Gaels came from the mainland and the two groups lived and worked in harmony. Out of the relationship emerged permanent symbols of the Celtic culture – beautiful chapels all over the island and, notably in the south east, huge decorated crosses proclaiming highly developed artistic skills.

The Celtic idyll collapsed in AD 800 when the Viking raiders rampaged along the western seaboard of what has now become Scotland. After the conquest, the Vikings colonised the island so well that, for 500 years, the Gael and Viking lived in a peaceful coexistence which was finally terminated by the Treaty of Perth in 1266 whereby the Norsemen agreed to cede their Sudreys (that is, the South Islands) to the Kingdom of Scotland.

It is no surprise that the Norse occupation contributed a wealth of words and place names to Islay and it is satisfying that one name, Balulive, is assigned to one of the lead mines.

Rid of Norse domination, the Hebrides introduced an enlightened self-help programme in which the clan system blossomed and the dominant clans set themselves up in positions of power. The MacDonalds styled themselves 'Lords of the Isles' but had to wait one hundred years until, in 1476, they received recognition of their title – one which survives today in the titles of the Heir to the throne, Prince Charles.

The surviving traces of the Lordships' rule are spectacular. In Loch Finlaggan, two small islands support the chapel, the palace and other medieval building structures which confirm that Islay was the most important administrative centre for over four

hundred years. In spite of the fact that the Campbells are the traditional opponents of the MacDonald clan, it was with the Macleans of Mull that the latter fought a pitched battle, just four years before the Union of Scotland and England in 1603. The days of the Lordship and a single domineering family were numbered when Angus MacDonald faced financial difficulties in 1612. Two years later, by Crown Charter, Sir John Campbell of Cawdor resolved the matter of all the debts which had accrued under MacDonald and took possession of Islay.

In purchasing Islay, the Campbell family was altruistic rather than out to settle old scores. They believed that the land-resource techniques which they had pioneered on their Cawdor property in the North of Scotland could be successful in stimulating the Islay economy. Not only did they initiate schemes for arable and agricultural reform, but explorations for lead deposits were also carried out. By 1677, however, Sir Hugh Campbell was forced to meet mounting debts and as a consequence, had to revise the arrangements for developing the potential of his mining scheme.

The economic revival which the Union of the Parliaments of 1707 was intended to create came just too late for the Campbells of Cawdor and by 1716, Islay was being described as a 'heavily burdened property'. The disadvantages of running the affairs from Nairn in North Scotland did little to ease the administrative problems and the time was right for a fresh initiative.

Standing in the wings was Daniel Campbell of ShawfIeld, Glasgow, and for the very reasonable fee of £12,000 in 1726 he relieved his namesake of the Isle of Islay. This Campbell family also tried to improve the economic viability of Islay and over the next 122 years provided a succession of four family Lairds.

By investing in Islay, 'Great Daniel' had accepted a big challenge – a challenge caused by difficult times in Europe generally, local difficulties of land management and a lack of a co-ordinated policy on utilising land resources. Fortunately the new owner's approach to his Islay problems was to work for improvement in the long term and a [4] detailed history of the next twenty seven years would speak .of his agrarian reforms, accurate surveying and mapping ventures, the introduction of a flax industry for making linen, and sincere attempts to improve leasing arrangements for tenants.

The following twenty five years were under the guidance of his grandson, 'Daniel the Younger', and not only did farm husbandry improvements continue, the era was marked by a genuine desire to introduce new industries such as lead mining and fishing, in order to support an increasing population.

The town of Bowmore was replanned and a once-weekly mailboat service between Islay and the mainland was introduced. After an initial rejection, a 'plan of the improvement of that island' received a form of government funding, and in 1777,

Daniel was given a further grant to implement training schemes for farmers and fishermen, and to reconstruct the quays at Bowmore and at Pork Askaig.

The third Campbell Laird, Walter, maintained the enlightened approach of improvement for the benefit of the island (rather than for himself, as was common among Highland landowners of the time). Roadmaking attracted further grants and a limited seaweed industry was started. Distillation of whisky continued to increase but cut-backs in lead mining led to a lull and, in some cases, abandoned mines. The population had maintained a growth of over fifty per cent during the last half of the eighteenth century and the increase to over eight thousand was now straining the available resources of the island.

Not unwisely, by 1814, Walter Campbell had decided to quit and began to shed his various properties to his sons. His eldest, John, had died in 1808, so that 'Old Shawfield' – as he was known – was eventually succeeded on his death in 1816 by the grandson, Walter Frederick. The very success of three family predecessors in improving the return from agriculture so as to support an enlarged population meant that Walter Frederick had to seek alternative remedies. Improvements to roads and communications all took time and the population shot to over 15,000. It is no wonder the load on the land was extreme and that in 1826 emigration was considered as a viable alternative to the clearance programme (of the Highlands) in which a tenant in arrears with rent was removed from his home and livelihood.

Very slowly a state of natural wastage took place and the population began to reduce. Land reclamation schemes succeeded and new 'planned' villages came into being which were independent of agricultural employment, but supported the 'new' industries of whisky, fish and weaving. Nevertheless, Islay still relied on farm produce to feed its people and the going was far fr.om easy. One of the schemes which the Laird attempted to initiate was a claim for an unemployment grant to subsidise a new mining venture but the potato famine of 1846 created, among other things, a shortage of rents and Walter Frederick was forced into bankruptcy.

His properties were confiscated in view of debts now in excess of £800,000. The Islay estate was eventually sold in 1852 when the Morrison family of Berkshire became the new – and current – owners of the island.

The missive containing the particulars of sale which attracted James Morrison listed all the benefits and attributes of the property – shooting, mansion house, climate, agricultural and fishing opportunities, and a cautious reference to 'a great variety of minerals'.

During the next ten years, portions of the Islay Estate were sold so as to create new estates of Kildalton and Dunlossit which, along with the 'traditional' ones of Sunderland and Ballinbay, accounted for the total ownership of the island. It is worth

noting that the lead mining resources around Ballygrant are today shared by the Dunlossit and Islay Estates.

The Lairdship which had come into being with the Campbells of Cawdor effectively disappeared when the fourth Morrison laird, John Granville Morrison, was created Lord Margadale of Islay in 1964 – the title stemming from the remote but beautiful region in the north east of the island.

The population decline which began in the middle of the nineteenth century has continued during the twentieth century and, but for one brief resettlement programme following World War II, it has never been tackled seriously. The numbers are now less than four thousand and the drift to the mainland is a familiar story – a hunt for employment.

Currently the whisky industry is feeling the effects of the world-wide economic recession whilst computer controlled systems are simultaneously reducing the necessary workforce like many other places, Islay's hope for the future must lie in tourism – unless a mining venture can yet again be initiated.

[5]

GEOLOGY

The geology of Islay is complicated and, as far as can be determined, is not yet resolved.[2] A convenient approach is to accept that Islay's varying landscapes and terrains are the result of the different geological conditions which are to be found on the island. Quartzite rocks create bleak and deserted mountains in the north east and the south east; a flat plain stretching from Ballygrant to Port Ellen emerges from the mica schist and limestones. The Torridon sandstone west of Bridgend accounts for the lush fertile farmlands at the head of Loch Indaal.

Rocky cliffs and rocky soil in the southerly part of the Rhinns derive from the very old Lewisian gneiss whereas, at the north end, raised beaches and sand dunes predominate. In contrast, the Mull of Oa is made up of phyllites out of which the sea is eroding spectacular cliffs and innumerable caverns.

Limestone is very localised between Ballygrant and Port Askaig where the lead veins occur in strata which have been twisted into a series of shallow folds, with the result that there are no deposits in any great quantities. Neither is it likely that the veins have any depth as the slate bed below is not the type of rock which has fissures suitable for the accumulation of minerals.

In 1770, when Mr. Charles Freebairn was in charge of the mines, his interpretation was more optimistic:

Most of the ore in Islaly's in limnstone, tho I have seen it in other soiles twenty miles distant from Limnston. And it is the opinion of all the coniseuers in minerals who have been to Isla that the Limnstone is a limited stratum in depth as well as in extent, and that, if once we were through it, there would be prodigious body of minerals from whence so many veins spring to the surface.[3]

On the other hand, Freebairn's overall assessment of the island's structure was more accurate, namely:

This island contains upwards of 300 square miles, the extent quhairof is too much for anyone person to examine in a mineral way. But there is upwards of 40 square miles, contiguous, to where I have bestowed a good dale of trouble and expence, and can aver to be truely and wholy mineral.

Williams[4] singled out Islay for special attention whilst preparing his Natural History of the Mineral Kingdom in 1810. In attempting to classify the different types of imperfect mineral veins, Williams cites Islay as a good example of 'strings'. Consequently he describes the contributing geological factors and states that 'the limerock is mostly bare' and that 'besides the mineral veins, there are also an innumerable multitude of whin dykes, of all sizes and dimensions, which cross and intersect each other, and which cross and intersect the mineral veins in all manner of directions; so that the whole patch of limestone is curiously cut and divided into a multitude of compartments'.

Later, Williams provides a definition of his Islay 'strings':

> ... imperfect discontinuous mineral fissures; some hundreds of which produced, and now contain, a small quantity of good lead ore, and yet certainly come to nothing at the depth of a few feet ...

In spite of his own explanation, he is very critical of the methods of mining which he had studied during a three week stay on the island:

> ... The phenomenon of such prodigious numbers of superficial trials within so small a compass of ground, not above ten miles over, struck me with surprise and, therefore, I made some enquiry about it ...
>
> ... their principal way of procuring ore was by employing and encouraging the peasantry of the island to dig and raise the ore at so much per bing, which is a certain weight or measure; and in consequence of some ore being seen at the surface in numbers of veins, the country people searched, dug and rummaged the whole face of the mining field. They laid all the veins open to the day, like a trench or ditch, where they found any ore.[5]