

SCOTTISH
WILDLIFE
TRUST



ISLE RISTOL

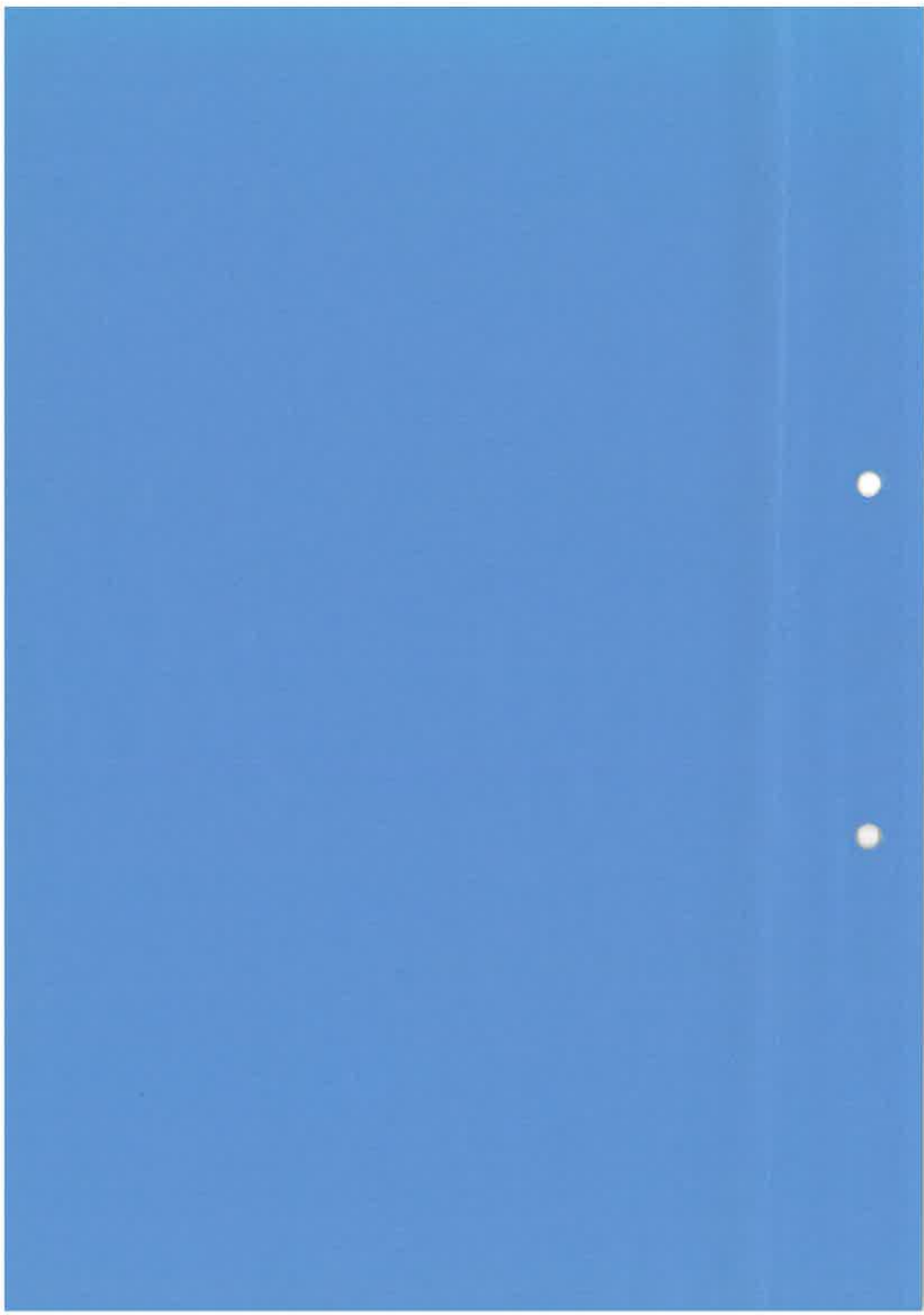
MANAGEMENT PLAN

1995 - 2000

Neil Willcox
August 1995

**REFERENCE
ONLY**

The preparation of this plan was assisted by Scottish Natural Heritage



PREFACE

The Scottish Wildlife Trust was established in 1964 and under its Memorandum and Articles of Association, it is stated that wildlife nature reserves will be established "for the conservation and control of wild plants and other vegetation and of the wild creatures of any description living naturally within".

"The Scottish Wildlife Trust acquires wildlife reserves so as to safeguard by management the full variety of wildlife and landforms found throughout Scotland, as examples to others to act in a similar way and also for the public benefit".

Reserve Mission Statement, April 1992.

The Trust acquired its first reserve in 1966 and by 1995 owned, leased or managed by agreement over 100 reserves covering some 18,500 ha. The Trust remains committed to the acquisition and management of wildlife reserves and this has resulted not only in the conservation of a wide range of habitats and species throughout Scotland, but also in the creation of a series of example sites which can be used to demonstrate the approach that other land managers could adopt towards wildlife conservation and its management.

The effective management of wildlife reserves requires a framework within which the correct management decisions can be taken. This framework is provided by the reserve management plan and it is the policy of the Scottish Wildlife Trust that all reserves should have such a plan.

The preparation of a management plan provides an opportunity for everyone with an interest in the reserve (e.g. reserve volunteers, reserve management groups, Branches, local authorities, SNH, staff, etc) to "come together" in order to resolve possible conflicts and to agree on the management objectives for the site.

In defining management objectives the Trust gives full and equal consideration to all reserve functions subject to causing no unacceptable damage to its nature conservation interest. These functions include geology, habitat and species conservation, interpretation, education, recreation and access, research, demonstration and landscape.

The plan falls into three main sections. **Part 1, the Description**, provides a statement of the site that conveys to site managers a picture of the site at the time the plan was completed. The effectiveness or otherwise of subsequent management can be judged against this statement. **Part 2, the Evaluation and Objectives**, is the most important part of the planning process. It deals with an assessment of the importance of the site and the identification of long term management objectives. In the light of constraints the objectives are modified and described as operational objectives. **Part 3, the Prescription**, considers how the objectives can be achieved and converted into defined units of work called projects. Projects are used as the basis for the production of detailed five year work plans.

Once a management plan has been agreed it should provide the basis for all work carried out on the reserve. Proper monitoring of the plan and hence the condition of the site requires detailed record keeping linked to those projects listed within the plan. These records will provide the basis for an annual review of the management plan. The management planning cycle will normally be five years and at the end of this period a major and critical review of the plan will be undertaken.

In all matters related to the acquisition and management of reserves the Scottish Wildlife Trust National Reserves Committee will act as final arbiters.

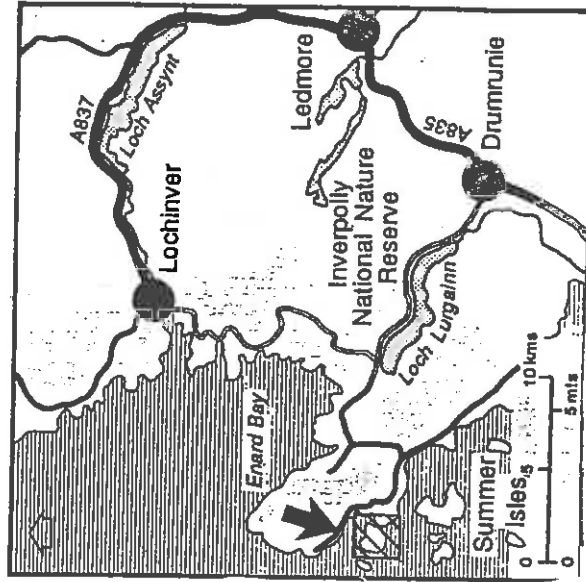
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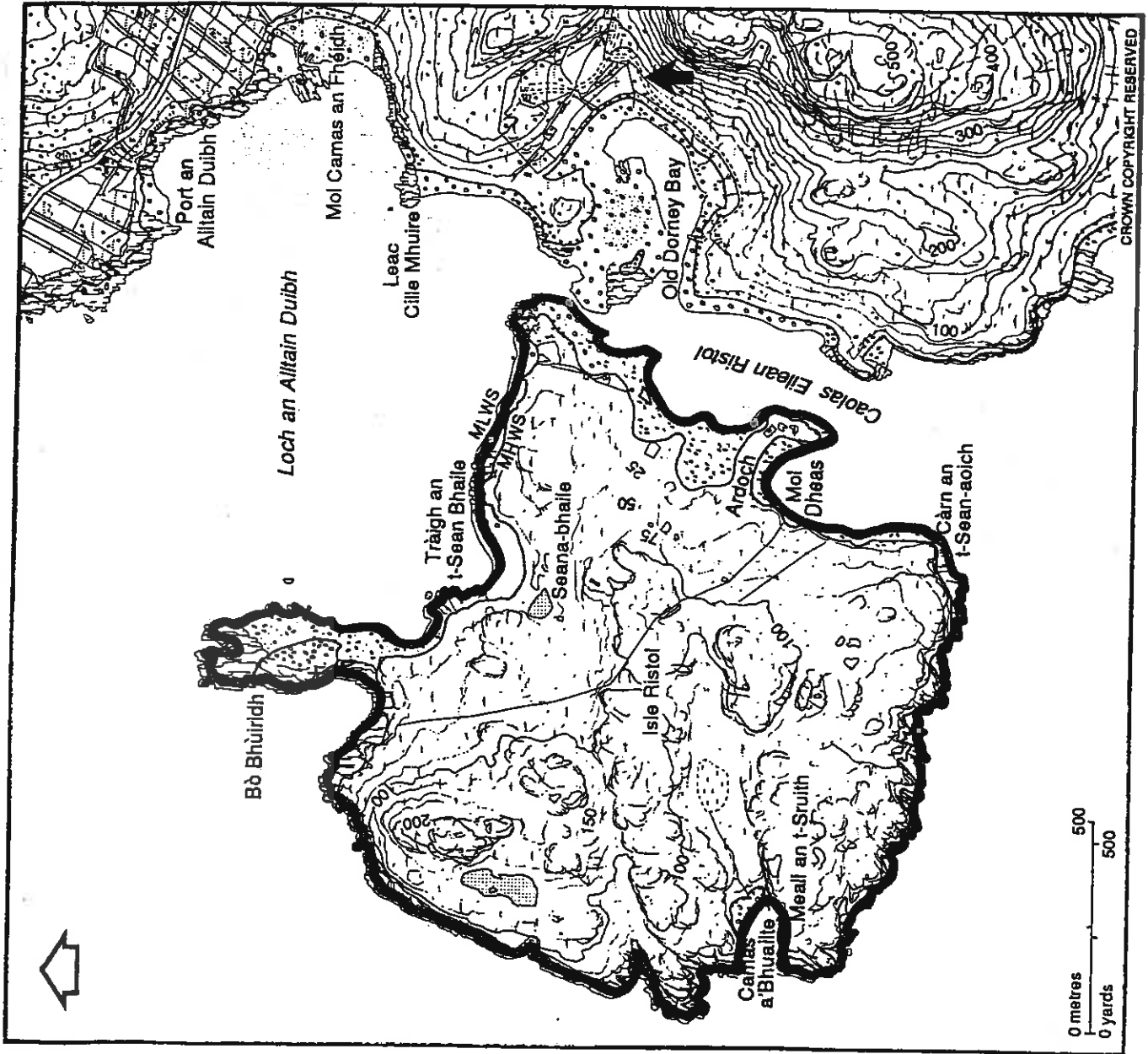
Isle Ristol

Ross and Cromarty

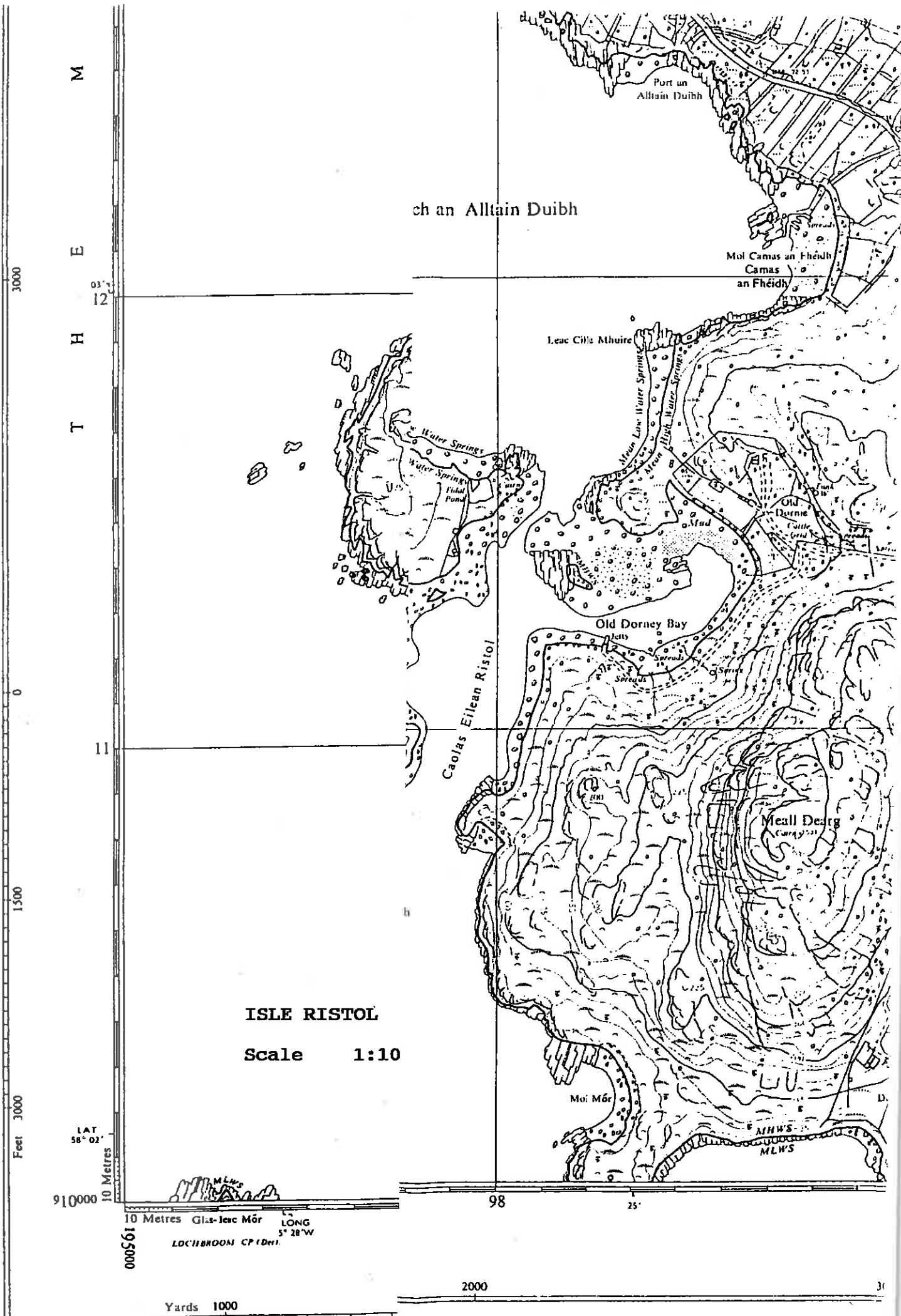
One of the Summer Isles, *machair*.



LOCATION MAP







ISLE RISTOL
Scale 1:10

LAT
 58° 02'

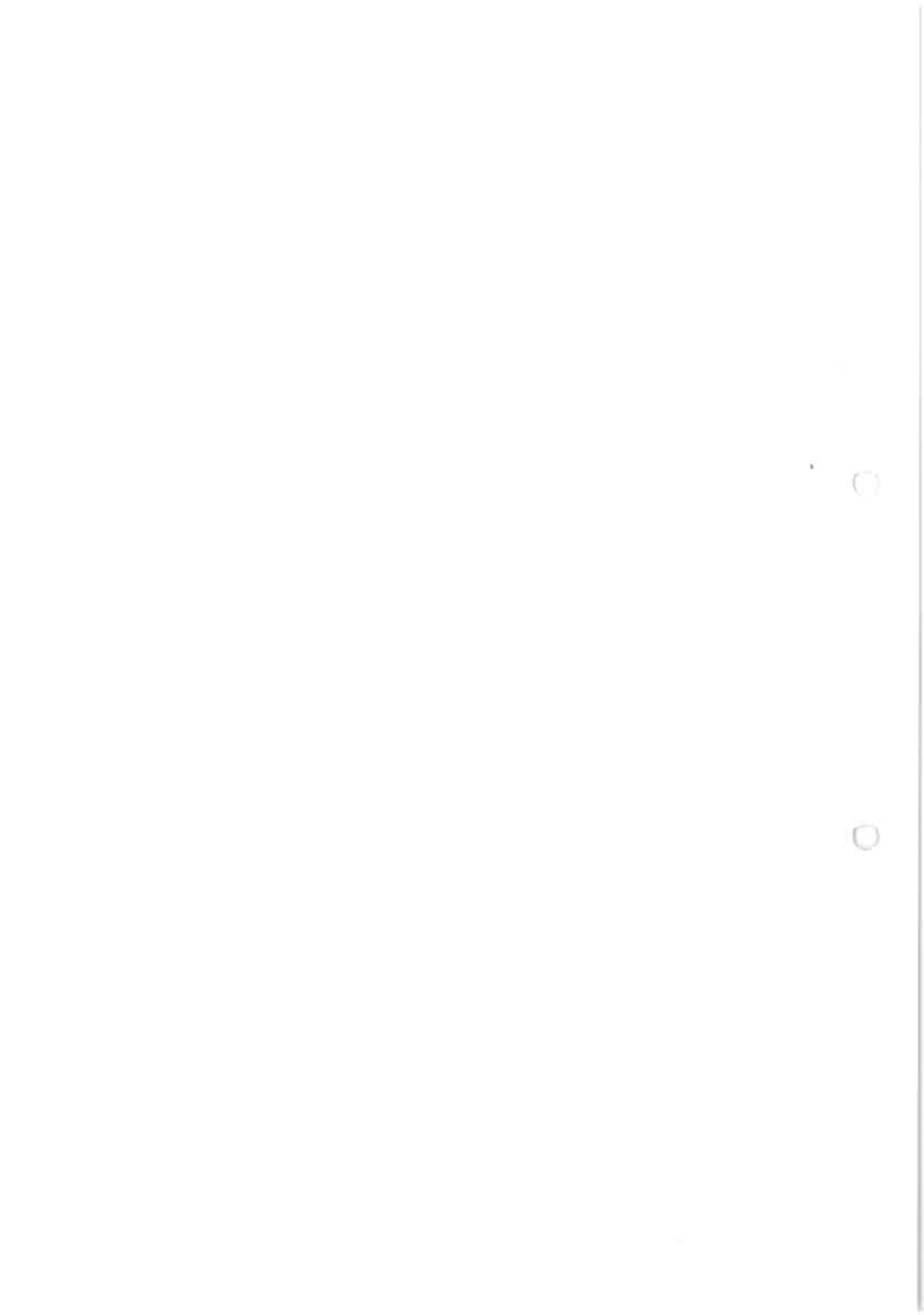
10 Metres
 10000

10 Metres Glas-leac Mór LONG
 5° 28' W
 LOCHBROOM CP (Det.)

Yards 1000

METRES

SURVEY DIAGRAM



ISLE RISTOL MANAGEMENT PLAN 1995 - 2000

PLAN SUMMARY

This summary provides a brief overview of the reserve and the long term management objectives.

A. SELECTION AND ACQUISITION OF THE RESERVE

The reserve was offered to the Trust as a gift in 1993. It was approved by the National Reserves Committee on 11th February 1993 on the basis that it comprised an unusual variety of habitats, that it represented a valuable addition to the nearby Benmore Coigach estate and that, although under crofting tenure, the grazing regime was understood to be reasonably sympathetic to the conservation interest of the island.

B. SUMMARY DESCRIPTION.

Isle Ristol, 125ha, is the innermost of the Summer Isles lying roughly 12 miles north of Ullapool in Wester Ross close offshore from Old Dorney Bay from which it is separated by a narrow tidal channel. The reserve forms the 'Isle Ristol Common Grazings' and is subject to regulations implemented by the Crofters' Commission. The reserve comprises a rich and unusual variety of habitats for a relatively small area including wet heath, dry heath, blanket bog, machair grassland on shell sand, saltmarsh and reed marsh. Over 160 species of higher plants have been recorded including the locally noteworthy mud sedge, *Carex limosa*, and saltmarsh flat sedge, *Blasmus rufus*. While the reserve contributes to an area of outstanding landscape access difficulties preclude opportunities for recreation and interpretation.

C. PAST HISTORY OF MANAGEMENT

This plan is the first management plan to be produced for the reserve. It is noteworthy that management for nature conservation can only be carried out through discussion and agreement with the Grazing Committee and to date no management specifically for nature conservation has taken place.

D. LONG TERM MANAGEMENT OBJECTIVES

1. To maintain and where appropriate enhance the existing range of plant communities and flora and associated fauna including the important machair grassland.
2. To maintain and where appropriate enhance populations of notable species.
3. To comply with all obligations and to work closely with crofters to implement the management plan.
4. To accommodate visitor access but without making any special provision.

Cl

O

E. RESOURCE SUMMARY

EXPENDITURE (projects with more than £0 in one year are listed)

Item	1995	1996	1997	1998	1999	Total
None identified.	0	0	0	0	0	0
Expenditure total	0	0	0	0	0	0

INCOME

Funding source	1995	1996	1997	1998	1999	Total
Rents/hide fees	13	13	13	13	13	65
Income total	13	13	13	13	13	65

BALANCE	1995	1996	1997	1998	1999	Total
Balance:	13	13	13	13	13	65

HUMAN RESOURCES

(Time in days)	1995	1996	1997	1998	1999	Total
Reserve Manager	1.0	1.0	1.0	1.0	3.0	7.0
Volunteer	1.0	1.0	1.0	1.0	1.0	5.0
Manpower total	2.0	2.0	2.0	2.0	4.0	12.0

At the time of writing it is not SWT policy to cost all managerial time against individual reserves. However, when this is considered, even on an approximate basis, the true cost of managing the reserves becomes apparent.

Total days, as shown above for the Reserve Manager, when costed at a rate of £80.00 per day gives gives a total of £560.00. This figure excludes expenses and volunteer expenses.

CONTENTS

PART 1 - DESCRIPTION

CHAPTER	1.1	GENERAL INFORMATION	
	1.1.1	Location, status and summary statistics	1
	1.1.2	Land Tenure	2
	1.1.3	Management Infrastructure	2
	1.1.4	Map Coverage	3
	1.1.5	Photographic coverage	3
	1.1.6	Compartments	3
 CHAPTER	 1.2.	 ENVIRONMENTAL INFORMATION	
	1.2.1	Physical	4
	1.2.2	Biological	4
	1.2.3	Cultural	6
	1.2.3.1	Archeaology/ Past and present land use	6
	1.2.3.2	Conservation Status	7
	1.2.3.3	Landscape and Public Interest	8
	1.2.4	Environmental relationships which may have implications for management	8
 CHAPTER	 1.3	 BIBLIOGRAPHY	 8

PART 2 - EVALUATION AND OBJECTIVES

CHAPTER	2.1	EVALUATION OF FEATURES	9
	2.1.1	Evaluation of features	9
	2.1.2	Summary of important features	11
	2.1.3	Long term objectives	12
 CHAPTER 2.2		SUMMARY OF FACTORS INFLUENCING THE ACHIEVEMENT OF THE LONG TERM MANAGEMENT OBJECTIVES	12
 CHAPTER 2.3		OPERATIONAL OBJECTIVES AND RATIONALE	13

PART 3 - PRESCRIPTION

CHAPTER 3.1	THE 5 YEAR WORK PLAN	15
CHAPTER 3.2	PROJECT REGISTER	18
CHAPTER 3.3	RESOURCES SUMMARY	20
CHAPTER 3.4	DETAILED RESOURCES PLAN	21

SITE NAME: ISLE RISTOL

SITE CODE: SWT F13

PART 1 DESCRIPTION

The description provides a clearly set out concise account of the reserve under various headings based on all relevant data. The description, which is fundamental to the whole planning process, conveys to reserve managers, present and future, a picture of the site when the plan was completed.

CHAPTER 1.1 GENERAL INFORMATION

The first page(s) of the plan is prepared following a standardised layout which is intended to be a summary of the reserve. When these are recorded on computer for all reserves the Trust will be able to produce statistical summaries.

1.1.1. Location, Status and Summary

Location: Isle Ristol is the innermost of the Summer Isles lying roughly 12 miles north of Ullapool in Wester Ross. It is immediately west of Old Dorney Bay from which it is separated by a narrow channel. Old Dorney Bay can be reached from the A835 by the Achiltibuie Road (see location map).

Area: c. 125 ha.

Site status: Lies within a National Scenic Area.

Grid Ref: NB972112 (centre of island)

OS Map: 1:50000 Sheet 15

Planning authority and Region: Highland

District: Wester Ross

Tenure: Owned

Rents/agreements: None excepting the status of the island as 'common grazings' for the township of Althandu.

Access: Isle Ristol can be reached by foot from Old Dorney at low tide. Otherwise it can only be reached by boat from the jetty at Old Dorney (ask locally).

1.1.2. Land Tenure

This is not a legal document. Please refer to the original tenure documents before taking any decision or any action which may have legal implications.

Owner: Scottish Wildlife Trust
Cramond House
Kirk Cramond
Cramond Glebe Road
Edinburgh EH4 6NS
Tel. 0131 312 7765

The reserve was gifted to the Trust by Mr Seth-Smith in 1993.

The reserve forms the 'Isle Ristol Common Grazings' and is subject to regulations implemented by The Crofters Commission. The regulations came into force on 18th August 1960 with amendments on 22nd January 1962. The regulations are long and detailed but include the following points that are particularly relevant to the management of the site:

- The Grazings are divided into 13 shares, all held by tenants of the township of Altandhu. No person other than a shareholder shall keep stock on the grazing.
- The souming ('grazing entitlement') for each full share in the common grazing is one cow or twelve sheep. (The total stocking is, therefore, set at 13 cows or 156 sheep).
- At no time shall both cattle and sheep be put on the common grazing together.

The regulations are administered by the Grazing Committee, who have the power to fix the period during which cattle or sheep may be put on the common grazing. The Clerk for the Common Grazings is Mrs Anne Girvan, 210 Altandhu, Achiltibuie, Ullapool, Ross-shire.

The grazings are unusual in that they constitute an 'extension of holdings'. It is understood that the grazings are part of the croft land rather than the common grazings; the implications of this are uncertain.

Note that under crofting legislation the landlord, namely the Scottish Wildlife Trust, has no power other than to collect rent, currently set at £13.00 p.a. The landlord also has the shooting rights, although subject to the grazings committee right to control 'vermin'.

1.1.3 Management Infrastructure

The site is managed as a wildlife reserve by the Scottish Wildlife Trust, although its status as 'common grazings' limits any action that can be directly carried out by the landlord. All changes to the grazings would have to be discussed at the Grazing Committee who have the sole responsibility (subject to the grazing regulations) for managing the grazing. Management includes numbers of stock, period of grazing, muir burning, agricultural improvements and condition of dykes and fences.

The 'management' of the reserve is administered by the Scottish Wildlife Trust Reserves Manager, Neil Willcox, based in Edinburgh. Because of the geographical proximity of the reserve to Benmore Coigach the two tend to be managed and considered together.

Robin Noble of Finlayson Hughes acts as 'factor' collecting the rent for Isle Ristol at the same time ascrofting rents for Benmore Coigach.

Finally John Smith (North Keanchullish, ULLAPOOL, Wester Ross IV26 2TW, Tel: 01854 6125310) is a useful local contact who has acted professionally for the Trust in the past. He is willing to carry out certain work in a voluntary capacity and for larger construction jobs can act as a contractor.

BUILDINGS/STRUCTURES/PATHS:

There are no paths and structures on the island excepting a stone 'dam' behind the beach and two stone exclosures.

1.1.4 Map Coverage

Maps currently available:

1 : 50000 sheet *

1 : 25000 ?

1 : 10560 sheet NB91SE (1970) *

*These maps are held by the Trust.

1.1.5 Photographic Coverage

The following aerial photographs are held at Scottish Wildlife Trust Headquarters:

8/10/1946	Verticals	SDD (RAF)	3 prints	No scale
23/6/1964	Verticals	SDD (RAF)	2 prints	No scale
15/5/1989	Verticals		2 prints	No scale

A series of fixed point photographs were taken in 1993 and are catalogued and stored in Scottish Wildlife Trust files in Edinburgh. All these photographs are taken from the mainland and provide a general overview of the island apart from one which is taken on the island and shows the machair.

No general photographs are known.

1.1.6 Compartments

The island has not been divided into compartments, although a number of distinct habitats do exist. In practise the entire island is managed as a single grazing unit and there are few internal physical features allowing easy division into compartments. A map at a scale of 1:10560 is included at the beginning of the management plan.

This chapter underpins the plan and provides an ecological description of the reserve. This is separated into physical, biological and cultural aspects of the site. The final section (Environmental Relationships which may have implications for management) examines the main inter-relationships which have particular significance to the management of the reserve.

1.2.1 Physical

The geology is entirely Torridonian Sandstone and grit laid down within the Cambrian period some 550 million years ago. The bedding plane slopes upwards from east to west.

1.2.2 Biological

Communities/flora

The reserve was surveyed in 1993 by Keith Hutcheon who made a number of observations in a report of the same year. The island was visited by M.E. and P.F. Braithwaite in 1995 who made a number of additional records. Otherwise there are very few records available and none of an historical nature.

Much of the island is comprised of wet dwarf shrub heath in which cross leaved heath, *Erica tetralix*, purple moorgrass, *Mollinia caerulea*, deer grass, *Scirpus cespitosus*, bog myrtle, *Myrica gale*, bog ashpodel, *Narthecium ossifragum*, cotton grass, *Eriophorum angustifolium*, and *Sphagnum capillifolium* are all common. This is mostly equivalent to NVC community M15b *Scirpus cespitosus-Erica tetralix*.

Wet heath grades into smaller areas of dry heath on the steep slopes at the many craggy outcrops on the island. Here in addition to heather, *Calluna vulgaris*, bell heather, *Erica cinerea*, bearberry, *Arctostaphylos uva-ursi*, crowberry, *Empetrum nigrum*, creeping willow, *Salix repens*, and juniper, *Juniperis communis* spp *nana*, occur. Along the south and west coast of the island the heath takes on a more maritime appearance with sea plantain, *Plantago maritima*, being common.

Two areas of blanket bog with pools occur in the south west of the island, one with bog bean, *Menyanthes trifoliata*, white beaked sedge, *Rhynchospora alba*, pale butterwort, *Pinguicula lusitanica*, and the notable mud sedge, *Carex limosa*.

A lochan on the west of the island includes white water lily, *Nymphaea alba*, water lobelia, *Lobelia dortmanna*, and common spike rush, *Eleocharis palustris*.

Patches of coastal grassland which mostly occur at the top of the cliffs on the west coast of the island include maritime species such as sea plantain, buckshorn plantain, *Plantago coronopus*, thrift, *Armeria maritima*, thyme, *Thymus praecox*, and birds foot trefoil, *Lotus corniculatus*. On cliff ledges species such as Scots lovage, *Ligusticum scoticum*, mayweed, *Tripleurospermum maritimum* and rose root, *sedum rosea*, occur.

Inland on rocky ledges species such as greater woodrush, *Luzula sylvatica*, golden rod, *Solidago virgaurea*, wild angelica, *Angelica sylvestris* and mountain everlansing, *Antennaria dioica*, occur.

The most impressive habitats occur along the sheltered east of the island. At Traigh an t-Sean Bhaile there is an area of herb rich grassland growing on consolidated shell sand dune. Notable species include wild carrot, *Daucus carota*, moonwort, *Botrychium lunaria*, adders tongue fern, *Ophioglossum vulgatum*, early marsh orchid, *Dactylorhiza incarnata*, greater twayblade, *Listera ovata*, fragrant orchid, *Gymnadenia conopsea*, lesser butterfly orchid, *Platanthera bifolia*, frog orchid, *Coeloglossum viride*, and autumn gentian, *Gentianella amarella*.

Here also is a substantial stand of reed, *Phragmites australis*, over shallow standing water which was originally created as a 'duck pond' by constructing a stone dam. Bog bean, marsh cinquefoil, *Potentilla palustris* and intermediate bladderwort, *Utricularia intermedia* all occur here.

Narrow strips of saltmarsh vegetation occur along the east of the island particularly behind a small tidal bay with saltmarsh rush, *Juncus gerardii*, saltmarsh grass, *Puccinellia maritima*, and notably saltmarsh flat sedge, *Blysmus rufus*.

The presence of eared willow, *Salix aurita*, scrub is noteworthy and although this occurs in a stunted grazed form over much of the island it assumes small stands at the base of crags on the east side.

Bracken is widespread and sometimes forms dense patches which include 'woodland' plants such as wood sorrell, *Oxalis acetosella*, primrose, *Primula vulgaris* and bluebell, *Hyacinthoides non-scriptus*.

The following NVC community types have been identified on the island, although it should be noted that a thorough study has not been made:

- MG11b *Festuca rubra*-*Agrostis stolonifera*-*Potentilla anserina*, *atriplex* sub community.
- U2 *Pteridium aquilinum*-*Galium saxatile*.
- II7 *Calluna vulgaris*-*Scilla verna*, *Empetrum nigrum* sub community.
- II10a *Calluna vulgaris*-*Erica cinerea* typical subcommunity.
- II10b *Calluna vulgaris* - *Erica cinerea*, *Racomitrium* sub community.
- M15 *Scirpus cespitosus* - *Erica tetralix*, *Carex panicea* sub community.
- M15b *Scirpus cespitosus*-*Erica tetralix*, typical sub community.
- M15c *Scirpus cespitosus*-*Erica tetralix*, *cladonia* sub community.
- M17a *Scirpus cespitosus*-*Eriophorum vaginatum*, *Drosera rotundifolia*-sphagnum sub community.
- M17b *Scirpus cespitosus*-*Eriophorum vaginatum*, *cladonia* sub community.
- SD8d *Festuca rubra*-*Galium verum*, *Ranunculus acris*-*Bellis perennis* sub community.
- SD8e *Festuca rubra*-*Galium verum*, *Prunella vulgaris* sub community.
- SM13 *Puccinellia maritima*.
- SM16 *Festuca rubra*.
- SM19 *Blysmus rufus*.
- MC2 *Armeria maritima*-*Ligusticum scoticum*.
- C *Phragmites australis*, *Menyanthes trifoliata* sub community.

Other possible sub communities are:

- A2 *Nymphaea alba*.
- A22 *Littorela uniflora*-*Lobelia dortmanna*.
- MC8 *Festuca rubra*-*Armeria maritima*.
- MC9 *Festuca rubra*-*Holcus lanatus*.

In species terms at least 165 species of higher plants have been recorded, mostly by Keith Hutcheon, but it should be born in mind that this is bound to be an underestimate given the degree of survey coverage.

Species locally of note include:

Carex limosa.
Blasmus rufus.

Other plants of local interest include:

Botrychium lunaria.
Ophioglossum vulgatum.
Ligusticum scoticum.
Gentianella amarella.
Pinguicula lusitanica.
Utricularia intermedia.

Fauna

There are few faunal records for the island apart from casual observations. There is a normal range of moorland and coastal birds. The sheltered intertidal areas on the east provide good feeding for waders while the cliffs on the west support small numbers of seabirds in two separate locations. Numbers are unlikely to be more than 30 pairs of fulmars, 25 pairs of shag and 5 pairs of herring gull. Black guillemot probably breed in addition.

Greylag geese use the island during the summer (1 pair seen in July 1995), but judging from the amount of goose droppings around the island it is likely to be frequented to a much greater extent during the winter. Mr Seth Smith indicated that barnacle, pinkfooted and grey lag geese all occur during the winter.

A small lochan above the cliffs on the west seems ideal for divers but there is no evidence that they have bred in recent years.

Small numbers of roe deer are frequently present on the island. There are a number of possible otter holts around the coast. Bank voles and moles occur, although the only record for rabbits comes from Mr Seth Smith. Lizards are present.

No invertebrate recording has taken place.

1.2.3. Cultural

1.2.3.1 Archaeology/Past and present land use

There is no known archaeological interest on the island.

The island was inhabited until very approximately the turn of the century. There were a number of dwellings, all more or less opposite Old Dorney Bay. The evidence of these is now poor, much of the stone presumably having been used for other purposes. However, there is considerable and very clear evidence elsewhere on the island of its previous occupation. Below the old dwellings intertidal areas cleared of stone indicate where boats were kept. On land the island's grazing land is separated by a turf/stone dyke from the cultivated land, the latter occupying the north eastern third. The pattern of cultivation or 'lazy beds' are clear and must have occupied most of the available land within the dyke. Outwith the dyke there is evidence of former peat cuttings. It is uncertain where previous inhabitants obtained fresh water from although there are understood to be fresh water springs above Traigh an t-Sean Bhaile.

Some time after the island became uninhabited crofting legislation placed Isle Ristol into the common grazings of tenants of the township of Altandhu. This was certainly the position as laid down by the land court in 1927 when, amongst other regulations, there was a souming of 26 cows or 156 sheep and just one tenth of the island could be burnt in strips or patches each year. These regulations continued to prevail in 1960 when new regulations for the Management and use of the common grazings were confirmed under section 26(3) of the Crofters (Scotland) Act 1955, subsequently amended by the Crofters (Scotland) Act, 1961 (see 1.1.2 land tenure for further details).

Up until approximately 1970 most if not all the grazing rights were exercised. Stocking was at a maximum and grazing took place throughout the year. Both sheep and cattle were grazed and the steeper cliffs on the west were fenced to prevent losses of cattle. The island was burnt regularly up until this time.

Since 1970 the island has only been grazed during the winter months and no burning has taken place. It has been suggested that the island is not suitable for supporting breeding ewes during the summer due to a Cobalt/Magnesium deficiency and/or a tick problem.

Currently only two people (Mrs A Girvan and Mrs Wilding) graze the island approximately from the beginning of September to mid March/ early April. There are usually up to 100 sheep (around 60 ewes and hogs) and this is well within the total souming of 156 sheep.

The island was acquired by Mr Seth Smith in 1938 from the inheritors of the estate of Mr James Matheson of Achany in Sutherland. The following brief notes are largely based on conversations with Mr Seth Smith in 1993 shortly before his death. It should be noted that much of Mr Seth Smith's activities on the island stems from his sporting interests.

- When he purchased the island he hoped to build a house on it, but after marriage he decided to settle on the mainland.
- Created a small tidal pond by constructing a dam in the north east corner. Intended as a goose pool but never successfully held water.
- Built a wall behind the sandy beach in order to create a shallow freshwater pond, stocked with trout and intended as a duck pond. Reeds brought in from Fife were planted here.
- Unsuccessfully stocked the lochan with trout.
- Island stocked with pheasants at one time.
- Constructed a wooden hut on a spit known as Ardoch within a substantial stone enclosure. The hut eventually blew down.
- Very keen on shooting e.g. Heron, teal, seal, otter, black-back gull, shag.
- Introduced myxomatosis to the island. Never many rabbits.
- Unsuccessfully attempted to plant trees and mushrooms.
- Built crofters a sheep tank opposite Old Dorney.
- For 12 years there was a billy goat on the island.

No specific management has been carried out for nature conservation purposes.

1.2.3.2. Conservation Status

The island has no special conservation status.

Little is known about past interest, although Frank Fraser Darling is understood to have visited the island.

1.2.3.3 Landscape and Public Interest

Isle Ristol forms part of the internationally renowned scenery of Wester Ross/Sutherland and more particularly the Summer Isles and Benmore Coigach. The island is a prominent feature when viewed from the mainland near Altandhu. From the island itself the views south and west to the other Summer Isles and NE to Suilven seen from a foreground of cliff, moor and white sand are superb.

Isle Ristol is valued locally as a pleasant place to visit in summer, due to its sandy beach. Mr Seth Smith did not actively encourage visits, including camping, to the island.

1.2.4 Environmental relationships which may have implications for management

These are always difficult to describe but important relationships include:

1. The influence of geology, topography, drainage and salt spray on the vegetation. This is a largely natural consideration, although drainage, past improvement and centuries of grazing and muirburn have all influenced the development of the plant.
2. The influence of sheep, deer and rabbit (?) grazing on the composition and structure of plant communities is critical. Grazing can both serve to maintain the species diversity of certain plant communities such as the machair grass and saltmarsh and damage others such as those dominated by dwarf shrubs and willow.
3. The important 'machair' grassland is characteristic of calcareous fixed dunes. Its species composition and structure are influenced by the impoverished conditions that come with long stability of lime rich sand and the wet cool summers and mild winters typical of the north west of Scotland.
4. Regular burning combined with grazing can lead to a progressive impoverishment in soils and plant communities with the small shrub components being particularly vulnerable.
5. Bracken is widespread and well established on the deeper more fertile soils of the island. It is uncertain whether it is spreading and generally it can be considered harmful to the interest of the island as it suppresses, through overshadowing, other plants.
6. The special needs of noteworthy species are poorly understood and at this stage no special management considerations are thought to be necessary.

CHAPTER 1.3 BIBLIOGRAPHY

Habitat survey of Isle Ristol, Keith Hutcheon, SWT, 1993

PART 2 EVALUATION AND OBJECTIVES

The second stage of the planning process assesses or evaluates the information collected within the preceding description for the purposes of identifying the significant features of the reserve.

CHAPTER 2.1 EVALUATION OF FEATURES

The second stage in the planning process assesses or evaluates the information collected within the preceding description for the purpose of identifying the significant features of the site.

2.1.1 Evaluation of Features

Size

The island is some 125ha in extent. Most of the individual habitat components, especially the more important ones, are small with the exception of wet dwarf shrub heath which is the predominant vegetation type. The populations of orchids, notably fragrant, greater twayblade and frog, are substantial.

Diversity

For a relatively small offshore island comprised of Torridonian Sandstone there is a remarkable and unusual diversity of habitats. Although flora is under recorded the list of higher plants, currently at over 160 species, appears to reflect the diversity of habitats.

Naturalness

With the exception of inaccessible sea cliffs and the littoral zone little of the island is in a truly natural state. At one time the island was inhabited and partly cultivated. Over the past 100 years the predominant type of management has been sheep grazing and some muirburn. A wetland has been created by damming and *Phragmites*, which was introduced to the island, has successfully colonised this.

Rarity

The diversity of habitats, including flower rich machair grassland, may be unusual. The restriction of grazing to winter months, which appears to favour the conservation value of the plant communities, is also unusual.

The variety of plant species, including a number of orchid species and the locally noteworthy *Carex limosa* and *Blysmus rufus*, may also be unusual.

Otters occur on the island and this is protected under the Habitats Directive as an annex 11 species. Otherwise the fauna is poorly known and in particular there are no invertebrate records.

Fragility

All the plant communities are sensitive to changes in grazing management and muirburn.

Typicalness

The range of plant communities are generally typical of the Wester Ross and West Sutherland coast although the diversity in such a relatively small area is unusual. What is less typical is the extent to which recent management has favoured the development of plant communities.

Recorded History

Very little has been written about Isle Ristol and prior to 1993 there are no written records known about.

Ecological Position

One of a series of offshore islands, the Summer Isles, but only separated from the mainland by a narrow tidal channel. The relative isolation of the island may make species vulnerable to extinction and similarly limit the possibilities of colonisation.

Conservation Potential

The pattern of grazing is the critical factor influencing the development of the various plant communities on the island. On the one hand the interest of certain plant communities depends upon grazing, while others might improve in the absence of grazing (eg wet heath and scrub willow). The current grazing regime favours the conservation interest of the island. Further improvements could only come with the provision of internal fencing to allow further control of grazing in different areas.

Landscape and Public Interest

Although the island comprises part of an outstanding landscape its relative inaccessibility limits opportunities for public access and interpretation on the reserve itself.

2.1.2 Summary of Important Features

Feature	National	Regional	Local
Habitats/communities			
Machair		X	
Dry heath			X
Coastal heath			X
Blanket bog			X
Fen mire/reedswamp			X
Saltmarsh		X	
Willow scrub			X
Species			
Flora:			
<i>Carex limosa</i>			X
<i>Blasmus rufus</i>			X
<i>Botrychium lunaria</i>			X
<i>Ophioglossum vulgatum</i>			X
<i>Ligusticum scoticum</i>			X
<i>Gentianeula amarella</i>			X
<i>Pinguicula lusitanica</i>			X
<i>Utricularia intermedia</i>			X
Fauna:			
Otter			X
Landscape			
	X		

2.1.3 Long-term Management Objectives

1. To maintain and where appropriate enhance the existing range of plant communities and flora and associated fauna including the important machair grassland.
2. To maintain and where appropriate enhance populations of notable species.
3. To comply with all obligations and to work closely with crofters to implement the management plan.
4. To accommodate visitor access but without making any special provision.

CHAPTER 2.2 FACTORS INFLUENCING THE ACHIEVEMENT OF THE LONG-TERM MANAGEMENT OBJECTIVES

This section assesses the constraints, trends and obligations that may influence the ability to achieve the long-term management objectives.

The single most important factor that may limit the achievement of the management objectives is a legal one arising from crofting legislation. Grazing is regulated by regulations which are themselves overseen by the 'Grazing Committee'; the landlord, namely the SWT, has no legal rights apart from the collection of rent from grazing (set by the land court and currently just £13.00 p.a.) and any sporting activities. Changes to the grazing can only come about through discussion with and agreement by the Grazing Committee.

Crazing by sheep is the major man induced factor that influences the composition and structure of the vegetation. It is likely that grazing limits the development of scrub. While overgrazing could lead to the impoverishment of plant communities undergrazing could lead to the loss of species particularly from the coastal grassland communities. This points to the complexity of the ecological processes at work.

The fact that Isle Ristol is an island imposes constraints on management and certainly prevents any prospects for public access.

CHAPTER 2.3 OPERATIONAL OBJECTIVES AND RATIONALE

In turn, each long-term objective is considered in respect of the factors influencing the ability to achieve it, and if necessary it is modified to form a short-term objective which is achievable within the 5 year period of the plan. The final section (limits of acceptable change) identified points beyond which there may be a need for management action.)

LONG TERM OBJECTIVE 1

To maintain and where appropriate enhance the existing range of plant communities and associated flora and fauna including the important machair grassland.

Despite its relatively small size the island has a surprisingly large diversity of habitats.

To some extent the location and mixture of various habitats results from physiographic, climatic and edaphic factors. However, there is a further significant influence in the form of past and present management by man (e.g. drainage, cultivation, muirburn and grazing). These human influences prevent the natural development of the vegetation. From a conservation stand point grazing management contributes to the species diversity of coastal grassland and heath but on the other hand prevents structural vegetation diversity and suppresses the growth of heaths and scrub willow.

The machair grassland is the only example of its type under Trust 'management'. This together with the saltmarsh and blanket bog community are probably the overriding management concern. The present grazing regime, which has been practised for more than 25 years, and involves wintering sheep on the island appears to favour the first two without causing any damage to the last. Indeed the profusion of flowers on the island, most striking along the east and north east coast, is dramatic. Experience gained from the SWT reserve at the Hill of White Hamars in Orkney indicates that such a grazing regime favours the relative abundance of forbs to grasses and maintains dwarf shrub cover. Avoidance of summer grazing leaves flowers to set seed, as well as providing nectar and pollen and a large bulk of leaf material for invertebrates. Removal of material through heavy autumn/winter grazing exposes the underlying soil to light and frost and encourages seed germination.

Eared willow scrub is, in places, forming distinct stands and there are clear parallels with the SWT reserve on Handa. There willow scrub developed even under sheep grazing, the critical factor apparently being the absence of burning. It is to be expected that willow scrub will further develop on Isle Ristol.

In conclusion present grazing management favours the nature conservation interest of the plant communities. This contrasts dramatically with much of the nearby mainland, which has suffered from centuries of overgrazing and burning. In such extremes of climate muirburn is unlikely to be of any nature conservation benefit and furthermore must be of doubtful value as a means of improving the grazing.

LONG TERM OBJECTIVE 2

To maintain and where appropriate enhance populations of notable species.

Although the plant communities on the island have been surveyed the degree of recording and coverage is poor. Opportunities should be taken to build up knowledge of flora and fauna. In the absence of information and advice to the contrary it is assumed that no special management is required and habitat management as discussed under objective 1 should favour the existing species.

Vascular plant species of particular note include mud sedge, *Carex limosa*, and saltmarsh flat sedge, *Blasmus rufus*. Otters are also known to use the island.

LONG TERM OBJECTIVE 3

To comply with all obligations and to work closely with the crofters to implement the management plan.

The principal obligation is that caused by the system of crofting tenure under which the island operates. It is essential to understand that the landlord has no rights concerning the grazing management of the island. These are entirely regulated by the Grazing Committee whose primary interest and concern is the quality and quantity of grazing. By accident rather than design the present grazing regime largely favours the nature conservation interest of the island. Every effort should be taken to work with the active crofters. The successful integration of conservation with sheep grazing has a wider demonstration value.

LONG TERM OBJECTIVE 4

To accommodate visitor access but without making any special provision.

Access difficulties render the island unsuitable for public access and related interpretation measures. There is some casual access to the island during the summer and this is certainly not damaging. No special access or related measures are necessary.

PART 3 PRESCRIPTION

The final stage in the planning process identifies, in the light of the description and evaluation of the site, the work that will be carried out in order to meet the objectives.

CHAPTER 3.1 THE 5 YEAR WORK PLAN:

The table shows how the individual operational objectives will be achieved over a five year period by linking them through prescriptions to individual tasks of work (projects). Annual work programmes will be generated each year from this five year work plan. These will assist with budgeting and will provide a basis for reporting.

Explanation of tables:

The financial and management year is 1 April to 31 March.

Year 1 - 1995 to 1996

Year 2 - 1996 to 1997

Year 3 - 1997 to 1998

Year 4 - 1998 to 1999

Year 5 - 1999 to 2000

Projects are prioritised as follows:

1. Vital projects, the minimum that must be carried out.
2. Less important projects that should be carried out if at all possible.
3. The least important projects, often depending on resources or events that cannot be planned for.

The codes given in brackets after the project are for internal SWT use and correspond to standard codes used as part of the "Countryside Management System".

The following codes are used in the work plan and resources details to indicate the person/s or agent/s responsible for carrying out a particular project. The estimated time required for each project is indicated in Chapter 3.4. Detailed Resources against each person/agent, except for the RMR, for whom estimated time is normally indicated in a single project covering the entire responsibility for implementing the plan. No distinction is made in the tables between the organiser and executor of the project.

CNT	Contractor
LAU	Local authority
OWN	Owner of the reserve
PTT	Projects and Training Team of SWT
RAN	Ranger
RCR	Ranger Convenor
RMG	Reserve Management Group
RMR	Regional Reserves Manager
SNH	Scottish National Heritage
SRA	Seasonal ranger
STF	Other SWT staff
TEN	Tenant farmer
VOL	Volunteers, including members of the reserve management group, individual volunteers, school groups, students etc.

Objective	Prescription	Project	Compartment	Agent	1995	1996	1997	1998	1999
1 To maintain and where appropriate enhance the existing range of communities and associated flora and fauna including the important machair grassland	1.1 Monitor the vegetation communities and associated fauna. 1.2 Monitor numbers and timing of grazing by sheep and its affects on the vegetation	1.1.1 Take and collect photographs, both general and fixed point (RV10) 1.1.2 Collect all biological data (RB00) 1.2.1 Keep a record of stock grazing and use of the island (RH80)	RMR		3	2	3	3	3
			RMR, VOL		2	2	2	2	2
			RMR		2	2	2	2	2
		1.2.2 Maintain regular contact with the clerk to the grazing committee (ML20)	RMR		1	1	1	1	1
		1.2.3 Try and assess affects of grazing on the composition of plant communities (RF00)	RMR		2	2	2	2	2
2 To maintain and where appropriate enhance populations of notable species	2.1 Take steps to locate new notable species and assess the status of all notable species	2.1.1 Collect all biological data (RB00)	RMR		2	2	2	2	2
3 To accommodate visitor access but without making any special provision	3.1 Monitor visitor use of site and make special note of any damaging activities	3.1.1 Collect information on public use of the island (RH33)	RMR		2	2	2	2	2
		3.1.2 Ensure that public use of site does not cause undue damage (RH36)	RMR		2	2	2	2	2
4 To comply with all obligations and to work closely with the crofters to implement the management plan	4.1 Establish and maintain good relations with those grazing the island and the clerk to the grazing committee 4.2 Ensure that annual grazing rent is collected and take steps to review rent during first year of plan	4.1.1 Maintain regular contact with the clerk to the grazing committee (ML20) 4.2.1 Collect annual rent through Finlayson Hughes (AF00)	RMR		1	1	1	1	1
			RMR		1	1	1	1	1

Objective	Prescription	Project	Compartment	Agent	1995	1996	1997	1998	1999
4 To comply with all obligations and to work closely with the crofters to implement the management plan	4.3 Review the management plan and ensure that the site is managed in accordance with the plan	4.3.1 Revise the reserve management plan (AP20)		RMR	-	-	-	-	1
		4.3.2 Prepare an annual work plan (AP60)		RMR	1	1	1	1	1
		4.3.3 Implement the reserve management plan (AT60)		RMR	1	1	1	1	1

CHAPTER 3.2 PROJECT REGISTER

This chapter provides a full account of the action required to complete each project successfully. The projects are listed in the order in which they appear in the five year work plan.

1.1.1 Take and collect photographs, both general and fixed point (RV10)

"Fixed point photographs" have already been taken in 1993 and are stored in files at Cramond. Most of these were taken from a distance and consideration should be given to taking further photographs on the island. Photographs should be repeated and if there are no changes in management and interval of around 10 years is probably sufficient. General photographs should be taken on visits to the island of notable species, management and events.

1.1.2 Collect all biological data (RB00)

Records should be kept by all visiting naturalists of all plant and animal groups with a view to improving knowledge of the reserve. There should be a particular emphasis on under recorded groups, particularly invertebrates and birds. Pay particular attention to locating notable species and assessing their distribution and status.

1.2.1 Keep a record of stock grazing and use of the island (RH80)

Both through direct observation and through discussion with the grazing committee keep a general record of numbers of sheep on the island and the timing of grazing. Try and supplement by direct observation how stock use the grazing on the island and whether they favour certain plant communities.

1.2.2 Maintain regular contact with the clerk to the grazing committee (ML20)

Grazing is regulated by the Grazing Committee. The key contact is the clerk to the grazing committee who is presently Mrs Anne Girvan, 210 Altandhu, Achiltibuie, Ullapool. She should be visited regularly and a thorough picture of the grazing, past and present, should be established.

1.2.3 Try and assess affects of grazing on the composition of plant communities (RF00)

Grazing is the key management factor governing the nature conservation interest of the island. A continual judgement should be made as to whether the regulation of grazing could be improved in order to better favour the interest of the island. Detailed monitoring schemes are not appropriate in the circumstances; rather relevant literature and experts should be consulted together with a visual assessment of the vegetation on site.

2.1.1 Collect all biological data (RB00)

3.1.1 Collect information on public use of the island (RH33)

By casual observation, but especially through discussion with the grazing clerk, keep a very approximate impression of the extent to which the island is visited by the public

3.1.2 Ensure that public use of site does not cause undue damage (RH36)

Try to be alert to any possible damage caused by public use of the site. Take whatever actions may be necessary.

4.1.1 Maintain regular contact with the clerk to the grazing committee (ML20)

4.2.1 Collect annual rent through Finlayson Hughes (AF00)

Finlayson Hughes of Inverness collect the rent as part of their responsibilities for Ben More Coigach. Currently this stands at £13.00 pa, but it is intended to review it at the same time as crofting rents at Ben More Coigach are reviewed.

4.3.1 Revise the reserve management plan (AP20)

This plan expires in 2000. The plan should be thoroughly reviewed during its last year and all new information included. Management prescriptions and projects should be refined in the light of better understanding of the site.

4.3.2 Prepare an annual work plan (AP60)

From the management plan complete an annual work plan each year. Make whatever changes are necessary in the light of new information to the five year plan.

4.3.3 Implement the reserve management plan (AT60)

The Reserve Manager has responsibility for ensuring that work is carried out on the reserve in accordance with the management plan. The time spent organising this work is contained within this project, although the RM may still appear against individual projects. Note that where the RM also carries out the project a time estimate appears against that project.

CHAPTER 3.3

RESOURCES SUMMARY

This chapter provides a summary of projected expenditure, income and human resources over the five year work plan. Any expensive projects are shown and anticipated sources of funding are indicated.

E. RESOURCE SUMMARY

EXPENDITURE (projects with more than £0 in one year are listed)

Item	1995	1996	1997	1998	1999	Total
None identified.	0	0	0	0	0	0
Expenditure total	0	0	0	0	0	0

INCOME

Funding source	1995	1996	1997	1998	1999	Total
Rents/hide fees	13	13	13	13	13	65
Income total	13	13	13	13	13	65

BALANCE	1995	1996	1997	1998	1999	Total
Balance:	13	13	13	13	13	65

HUMAN RESOURCES

(Time in days)	1995	1996	1997	1998	1999	Total
Reserve Manager	1.0	1.0	1.0	1.0	3.0	7.0
Volunteer	1.0	1.0	1.0	1.0	1.0	5.0
Manpower total	2.0	2.0	2.0	2.0	4.0	12.0

CHAPTER 3.4 DETAILED RESOURCES PLAN

This table provides a detailed account of the financial and human resources that it is anticipated will be required to achieve the plan. The resources summary, Chapter 3.3, is derived from this.

Project	1995		1996		1997		1998		1999	
	Who	Days	Who	Days	Who	Days	Who	Days	Who	Days
1.1.1 Take and collect photographs, both general and fixed point (RV10)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0
1.1.2 Collect all biological data (RB00)	RMR VOL	0.0 1.0	RMR VOL	0.0 1.0	RMR VOL	0.0 1.0	RMR VOL	0.0 1.0	RMR VOL	0.0 1.0
1.2.1 Keep a record of stock grazing and use of the island (RH80)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0
1.2.2 Maintain regular contact with the clerk to the grazing committee (ML20)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0
1.2.3 Try and assess affects of grazing on the composition of plant communities (RF00)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0
2.1.1 Collect all biological data (RB00)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0
3.1.1 Collect information on public use of the island (RH33)	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0	RMR	0.0

Project	1995		1996		1997		1998		1999			
	Who	Days	Income	Expend	Who	Days	Income	Expend	Who	Days	Income	Expend
3.1.2 Ensure that public use of site does not cause undue damage (RH36)	RMR	0.0			RMR	0.0			RMR	0.0		
4.1.1 Maintain regular contact with the clerk to the grazing committee (ML20)	RMR	0.0			RMR	0.0			RMR	0.0		
4.2.1 Collect annual rent through Finlayson Hughes (AF00)	RMR	0.0	IRMT	13	RMR	0.0	IRMT	13	RMR	0.0	IRMT	13
4.3.1 Revise the reserve management plan (AP20)									RMR	0.0		
4.3.2 Prepare an annual work plan (AP60)	RMR	0.0			RMR	0.0			RMR	0.0		
4.3.3 Implement the reserve management plan (AT60)	RMR	1.0			RMR	1.0			RMR	3.0		