

Manx Wildlife Sites
HANDBOOK





**MANX
WILDLIFE SITES
HANDBOOK**

MANX WILDLIFE TRUST

March 2008



MANX WILDLIFE SITES HANDBOOK

A HANDBOOK DESCRIBING THE PRACTICAL IMPLEMENTATION OF THE
MANX WILDLIFE SITES SYSTEM

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The Manx Wildlife Trust is part of the network of Wildlife Trusts dedicated to achievement of a
Britain richer in wildlife and managed on sustainable principles.

POSITION STATEMENTS OF PARTNERS INVOLVED IN THE MANX WILDLIFE SITES SYSTEM

The Government Departments and organisations involved with the Manx Wildlife Sites System have adopted the following position statements:

Department of Agriculture, Fisheries and Forestry (DAFF) Isle of Man Government

DAFF will respect the importance of nature conservation on Wildlife Sites by:

- exercising discretion when considering agricultural improvement grants on or adjacent to Wildlife Sites
- giving positive consideration to making site management payments on Wildlife Sites, if land forms part of a farm which qualifies for any agri-environment scheme which may be approved by Tynwald
- giving positive consideration to Wildlife Sites when making Section 30 agreements if the Site or parts of the Site meet the criteria for such payments
- seeking to maintain high farm waste management standards through promoting the Code of Good Practice, especially adjacent to Wildlife Sites
- having due regard to the Wildlife Site designation when considering applications under the Small Woodland Scheme and in considering any new Department Planting.

Department of Local Government and the Environment (DOLGE) Isle of Man Government

The Department of Local Government and the Environment endorses the principle that it is essential, in the interests of the wildlife of the Isle of Man, to maintain the biodiversity of the Island's Wildlife. The Department can and does provide an important and fundamental support to this principle through the various planning Acts, by identifying areas of interest and value for nature conservation in its various Planning Schemes, and by including policies which would prevent such developments as would adversely affect such areas of interest.

Isle of Man Farming and Wildlife Advisory Group

The Isle of Man Farming and Wildlife Advisory Group supports, in principle, the concept of a Manx Wildlife Sites System as set out in the Handbook.

We note with satisfaction that this non-Statutory Scheme is unlikely to conflict with provisions of the Wildlife Act 1990 in respect of NNRs or ASSIs.

We believe DAFF's Agri-Environment Scheme is an effective method of securing long-term management of Wildlife Sites (most of which are likely to be on farms) and therefore we would like to see the scheme's membership extended.

We consider the cross compliance standards of the proposed DAFF Decoupled Support Scheme provide an important opportunity to influence the management of all agricultural land on the Island, so as to maintain or improve wildlife habitats.

Manx Bat Group

The Manx Bat Group will collaborate in the development of the Manx Wildlife Sites System in the following ways:

- by the provision and interpretation of biological records of Manx Bats
- by undertaking bat surveys of sites and potential sites
- by collaborating where appropriate in research or zoological projects
- by making recommendations on sites and site selection criteria and their review
- by promoting the Manx Wildlife Sites system to Group meetings.

Manx Bird Atlas

Manx Ornithological Society

The Manx Bird Atlas and Manx Ornithological Society support the need for a system whereby areas of wildlife significance may be identified and, through agreement with landowners, afforded some level of protection. Both organisations are pleased to offer their ongoing assistance to the Manx Wildlife Trust in the task of identifying Wildlife Sites, providing relevant records of birds and assisting in studies wherever appropriate.

The Wildlife Site System is an important part of the continuing process of developing a greater level of awareness and appreciation of our Manx ecology and of the need to maintain biodiversity.

Manx National Farmers Union

The wildlife and ecosystems of the Isle of Man are essential elements determining the overall picture and interdependence of nature and the production of food.

The management of the environment and land through agricultural operations has developed the features we now accept as the scenic beauty of the Island.

The Agricultural Industry accepts the major role that it has to play in the maintenance and enhancement of the Biodiversity of the Manx countryside and with sufficient resources being made available will endeavour to play its part.

Manx National Heritage

The role of Manx National Heritage includes the presentation, protection, promotion and communication of the unique qualities of the Manx natural and cultural heritage on behalf of the Manx community.

The Wildlife Sites System aims to conserve, on a non-statutory basis, sites of ecological, geological and geomorphological importance to the Isle of Man. The Wildlife Sites System is one which should enable more of such sites on the Island to be identified and their future to be discussed, and Manx National Heritage is pleased to endorse this principle.

Manx Wildlife Trust

The Manx Wildlife Trust believes that conservation of Wildlife Sites is essential to maintain the biodiversity of the Isle of Man. The Trust's vision is for all areas of Wildlife Site quality to be managed to the benefit of the Island's wildlife and that, where needed, resources will be available to ensure this happens.

The Manx Wildlife Trust has been at the forefront of the move to develop a Wildlife Sites System for the Island and will be actively involved in its implementation. The Trust will work in partnership to identify and monitor sites and seek resources to enable the Trust to provide advice and practical assistance with management.

Society for the Preservation of the Manx Countryside and Environment

The Society will continue to promote the Manx Wildlife Sites System whilst continuing our role in monitoring all planning applications and commenting on any which we perceive as being likely to have an impact on the Manx countryside or the Environment. In so doing we will send copies of our comments to the MWT (or any other nominated agency) where we feel the development proposed will be likely to have an impact on Manx Wildlife. We will also continue to disseminate information and create interest in Manx Wildlife and its habitats within our membership as the opportunity occurs.

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SECTION 1:
RATIONALE & METHODS

1.1 BACKGROUND TO THE MANX WILDLIFE SITES SYSTEM

1.1.1 Manx wildlife

The variety of life that exists on Earth, or any given part of it is termed 'biodiversity'. This expression covers all living organisms from the most minute micro-organisms to man, from algae to alligators, tadpoles to tigers. But biodiversity also goes deeper than this: it encompasses the way all life interacts, the niches and habitats that support species and communities, the entire delicate balance of the natural world. The concept of biodiversity includes diversity within a species, between species, and of ecosystems.

There are many reasons for conserving biodiversity, both ethical and practical. For example, the Earth's biodiversity has always represented a huge potential resource; it may be increasingly used in the future, in medicine and food production, or in plant and animal breeding. We cannot risk unsustainable exploitation, which threatens the very resources on which we depend. We have a responsibility to maintain the Earth's biodiversity for the future.

With estimates for the number of species existing in the world ranging from 5-30 million, this is clearly a huge task and one which could never be achieved by any one organisation. Therefore the responsibility falls to individual regions to play their own part in the task, by developing strategies to maintain and preserve their own biodiversity. The most effective means of ensuring the maintenance of biodiversity in a region is to maintain a variety of habitats.

The biodiversity of the Isle of Man comprises a range of flora and fauna distinct from that of any other part of the British Isles. This can be attributed to its separation long ago from both Britain and Ireland, its central location and its exceptionally mild climate, which allows species typical of all corners of the British Isles to flourish. Many species, such as oyster plant, sea storks-bill and the woodlouse *Armadillidium album*, are found on the Isle of Man at, or near, the very edge of their geographical range.

There are other quirks in the Island's natural history – foxes, snakes and squirrels are notable by their absence here, as are some common British plants, such as dog's-mercury. But a number of species for which the UK holds much of the global resource, such as grey seal, western gorse and bluebell, are here in abundance, and in addition, the Isle of Man can boast several specialities of its own. For example, Isle of Man cabbage, a plant which in the whole world is native only to the Irish Sea region, and the "Manx" robber-fly *Machimus cowini*, were first named from specimens collected on the Island, the latter after its discoverer - a Manxman called Will Cowin. Both of these species are still found in the sites where they were originally collected, and both have a very limited distribution elsewhere in the British Isles. Another Manx species, the lesser mottled grasshopper, is found only at one site here and does not occur anywhere else in Britain – the nearest populations are found in France and Belgium.

The Isle of Man is very rich in bird life, supporting a significant proportion of the British population of a number of species, such as curlew and little tern, as well as being an important stopover point for migrant birds on both spring and autumn passage. The Island is home to more than a quarter of the British population of chough, and the Ballaugh Curragh, a wetland site of outstanding importance, supports what is thought to be western Europe's largest winter roost of hen harrier. Seabirds, most notably black guillemot and shag, are well-represented around the Island's coast, and the Calf of Man,

off the main Island's southern tip, once supported what was probably the world's largest Manx shearwater colony - hence the bird's common name. This colony, which was documented as early as the 11th century, was destroyed following the accidental introduction of rats to the islet and breeding was not re-confirmed there until recently. Further offshore, Manx waters support an amazing range of marine life and include some of Britain's best diving sites. The world's second largest fish, the basking shark, is a regular visitor, as are marine mammals such as the internationally protected harbour porpoise.

The key to the Isle of Man's outstanding natural history is the wealth of wildlife habitats that it supports. There can be few other places where coastal dunes, meadows full of orchids, internationally important wetlands and globally-threatened blanket bog lie within a mile or two of one another; where sheer sea cliffs, home to gulls, choughs and peregrine, give rise almost immediately to wild upland moors, purple with heather and shrill with skylarks.

Manx residents take great pride in the Island's rich natural heritage and visitors are always struck by its stunning, unspoilt landscapes – yet even here on the Island significant areas of wildlife habitat have been damaged and destroyed through reclamation, development and neglect. Statutory conservation measures - the facility for designation of Areas of Special Scientific Interest (ASSIs), National Nature Reserves (NNRs) and Marine Nature Reserves (MNRs) - exist on the Island through the Wildlife Act 1990. Protection of other areas is afforded by the Manx Museum and National Trust Act 1959. However, experience in the UK has shown that statutory measures alone cannot conserve the biodiversity of an area, nor can they prevent common species from becoming rare. Statutory designations aim to identify and protect the best examples of natural and semi-natural* wildlife habitats, but will not include many other sites which are important for wildlife, particularly on a local level.

1.1.2 The Manx Wildlife Sites System

If we are to conserve the Island's biodiversity successfully, it is vital that we do all we can to ensure that the species and habitats that we have, whether common or rare, are not allowed to decline or disappear in the future. Hence a system is required which will identify, and as far as possible protect, sites of wildlife importance outside statutorily protected areas.

The Manx Wildlife Sites System has been developed by a local partnership concerned with the environment, agriculture, conservation and wider landscape issues, including Government departments. Work has been coordinated by the Manx Wildlife Trust (formerly the Manx Nature Conservation Trust, MNCT), thanks to financial assistance from the Esmee Fairbairn Charitable Trust, obtained through The Wildlife Trusts, Department of Agriculture, Fisheries and Forestry, Department of Local Government and the Environment and the Department of Transport.

This handbook seeks to explain the aims and objectives of the Manx Wildlife Sites System, and describe its practical implementation.

** Virtually every ecological habitat has been, to some degree, modified by man's influence down the ages. Few habitats can be assumed to be wholly natural in origin.*

1.2. INTRODUCTION TO THE MANX WILDLIFE SITES SYSTEM

1.2.1 What are Wildlife Sites?

Wildlife Sites are places which are of high wildlife value but are not statutorily designated or recognised by law; but they are protected through the planning system. They are the most important places for wildlife outside legally protected land, such as Areas of Special Scientific Interest (ASSIs).

Local, non-statutory systems of identifying and conserving such sites have been developed in various parts of the UK during the last 20 years. The names used locally for such systems may vary, but in essence they are the same. The term 'Wildlife Site' has been widely adopted to describe sites identified in this way and it is now the most commonly used name for such sites in the British Isles.

Wildlife Sites systems should aim to identify all areas of value to wildlife that are of 'substantive nature conservation value'. In order that Wildlife Sites are selected in a rational and justified manner, locally-developed and tested criteria are applied to the wildlife resource of the area. Only those sites which qualify under one or more of the criteria will be considered as Wildlife Sites.

Background information and guidance on developing and implementing local Wildlife Sites systems is given in *The Wildlife Sites Handbook Version 2*, published by The Wildlife Trusts in 1997, and in *Local Sites; Guidance on their Identification, Selection and Management*, published by Defra in 2006. These documents have been instrumental in developing an equivalent non-statutory system for the Isle of Man, tailored to its unique situation and specific requirements.

The Manx Wildlife Sites System aims to conserve and enhance each site using two key mechanisms:

- liaison with landowners*, providing advice on appropriate management
- liaison with the Planning Division to ensure that:
 - it is aware of the location of Wildlife Sites and will take their wildlife value into account when considering planning applications that may affect them
 - policies regarding Wildlife Sites and other areas of wildlife potential are included in strategic and local plans.

**throughout this handbook, the term 'landowners', when it appears alone, is used for convenience to refer to owners, managers and tenants of sites, all of whom are equally important in this system.*

1.2.2 Interaction with statutory policies

Wildlife Sites systems complement statutory designations, but there are key differences between the two systems:

- **Wildlife Sites are not statutorily designated, but receive some protection against development through the planning system**
- **Wildlife Sites systems aim to select all sites that meet the agreed criteria, not just a sample of those sites.**

Under the Wildlife Act 1990, the Isle of Man Government Department of Agriculture, Fisheries and Forestry (DAFF) may designate areas of land of special importance as Areas of Special Scientific Interest (ASSIs). It may also declare land of national importance which is being managed as a nature reserve as a National Nature Reserve (NNR). To date only one area, the Central Ayres, has been designated under the Wildlife Act as an ASSI and NNR.

Land acquired under the Manx Museum and National Trust Act 1959 is protected by the powers and duties enabled by the Act to promote the permanent preservation of lands, their natural aspect features and animal and plant life. However, high wildlife value is not a prerequisite of site acquisition.

The criteria for Wildlife Site selection are different from those of Areas of Special Scientific Interest. Any site of substantive nature conservation interest will qualify as a Wildlife Site, but only those sites of exceptional value will be selected as ASSIs. The two systems are entirely separate, although they should complement one another. **Selection of a site under the Wildlife Sites System is not a precursor to statutory designation**, although all ASSIs should meet Wildlife Site criteria.

Collectively, these sites should, with appropriate management, ensure the conservation of biological diversity on the Isle of Man for the benefit of future generations. This concept is expanded visually in Figure 1.

1.2.3 Regionally Important Geological and Geomorphological Sites (RIGS)

Wildlife Sites are selected primarily for their biological importance. Although in many instances Wildlife Sites are also of geological interest; in order to conserve fully the geological interest of an area, additional steps must be taken.

Throughout the UK non-statutory site protection systems exist for geological sites. These are equivalent to Wildlife Sites Systems and in some cases are integrated or run in parallel with them, by local Wildlife Trusts, County Councils etc. Sites identified by such systems are generally known as Regionally Important Geological and Geomorphological Sites (abbreviated to RIGS), and the groups that identify and coordinate them are usually termed RIGS Groups. There are now over 50 RIGS Groups in the UK.

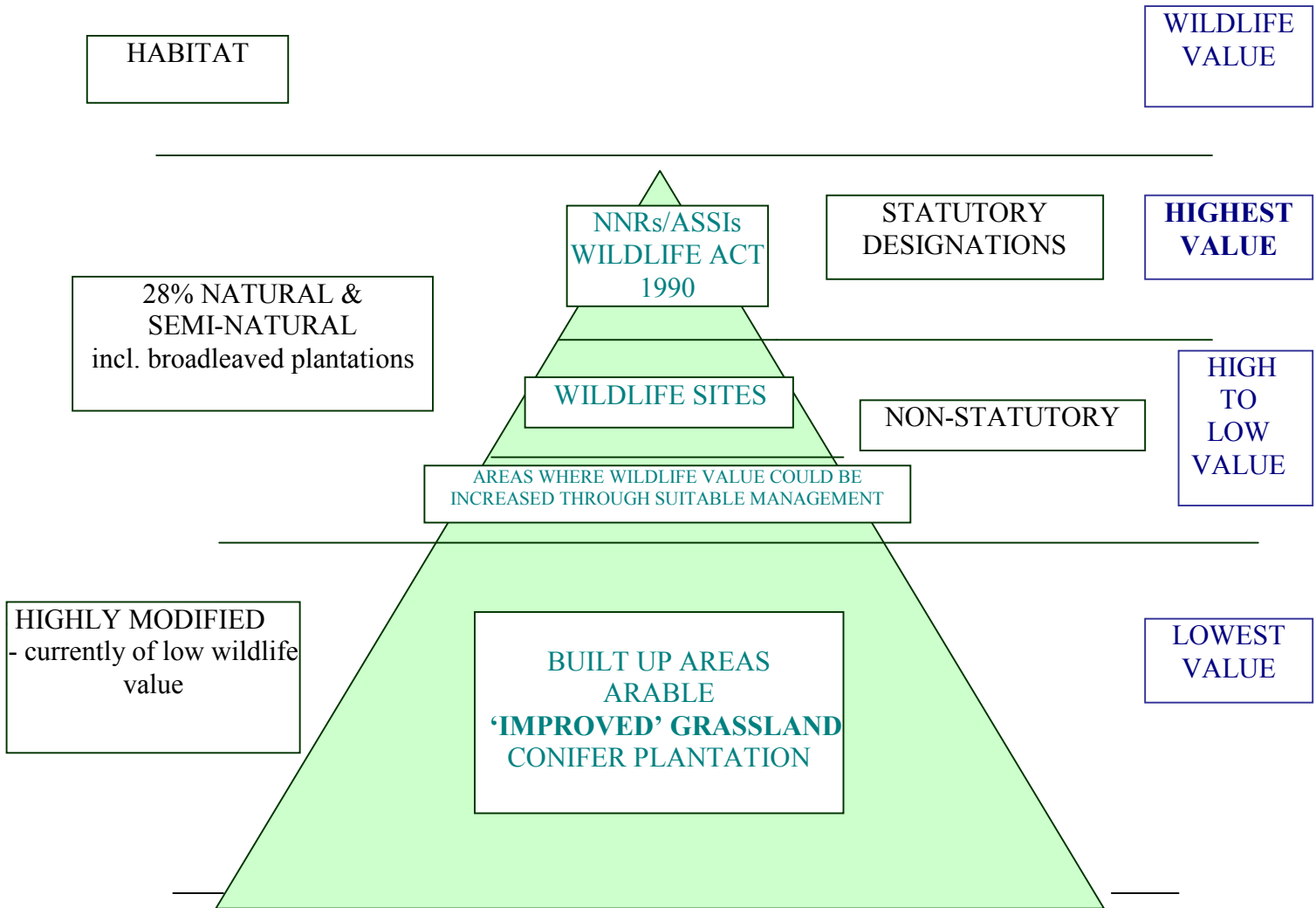
The RIGS Group will be responsible for identifying geologically and geomorphologically important sites on the Island, and advising the Steering Group as to which sites should

be selected as RIGS. However, as with Wildlife Sites, the Steering Group makes the final decisions regarding site selection.

The Manx RIGS Group is currently inactive but it is anticipated that this situation will change in the future. The criteria relating to RIGS sites have been included in this handbook for when this happens.

Throughout this handbook it should be assumed that, with the exception of the site selection process, all aspects of the Wildlife Sites System apply equally to the RIGS system.

Figure 1: The Manx Wildlife Pyramid



1.3 IDENTIFICATION OF WILDLIFE SITES

1.3.1 Introduction

Sites are selected by assessing their importance for wildlife in a Manx context, consideration being given to the habitat types, and the flora and fauna present. To qualify as a Wildlife Site, an area must fulfil one of a number of criteria, specially formulated to suit the Isle of Man and its unique situation.

The Manx Wildlife Sites System covers not only the general landscape of the Island but also intertidal and sublittoral areas, which will be known as Manx Marine Wildlife Sites; this is rarely included in Wildlife Sites Systems operating in the UK.

1.3.2 The need for selection criteria

Selection criteria are used to evaluate sites against a structured framework and demonstrate clearly why some are selected as Wildlife Sites and others are not. Omitting a site which is of high enough quality to be a Wildlife Site may increase the potential for damage to or degradation of that site; selecting sites which are not of sufficient quality wastes resources and threatens the integrity of the system.

In the UK, there have been occasions where the selection of an individual site, or the whole system used for site selection, has come into question. Such questioning can increasingly be expected at Public Inquiries, where a case may be won or lost on the strength of the system used. Systems may fall down, not because the sites are of insufficient value, but because the processes used have not been rigorously recorded and documented fully.

In order to select only those sites, which have ‘substantive nature conservation value’, criteria have been developed locally, drawing on specialist knowledge of the relative importance of the habitats and species found on the Island in an international, national and local context. Only those sites that qualify under one or more of these criteria will be considered as Wildlife Sites.

1.3.3 Key factors in site selection

The selection criteria for identification of key sites for Great Britain, published in the *Nature Conservation Review* (Ratcliffe, 1977), have been used as a basis for many systems since. They take into account the following factors:

i) DIVERSITY

a) of habitats: the range of habitats within a site boundary should be evaluated in conjunction with the extent (size) of the site.

b) of species: the number of different species likely to occur will depend upon the habitat (some habitats being intrinsically species-rich, others species-poor); the diversity of species should be assessed in relation to this.

ii) RARITY

a) of habitats: sites can be assessed as containing rare habitats in a local, national and international context. All three should be considered in evaluation.

b) of species: these can be assessed as being rare in a local, national and international context. All three should be considered in evaluation.

iii) NATURALNESS

This places high value on sites, which through investigation are shown to be largely unmodified by the influences of man (ie natural or semi-natural habitats).

iv) SIZE

Sites of greater extent are normally considered to be of higher value, due to their greater stability, than smaller sites of a similar nature. The relative importance of the size of a site must be evaluated against the local habitat survey.

v) TYPICALNESS

If the wildlife resource of an area is to be successfully maintained, it is very important that sites are selected that support habitats, species and communities typical of the area, and not only those that are rare or unusual. Wildlife Sites Systems should place high value on sites that are characteristic of the local area.

vi) POSITION IN ECOLOGICAL UNIT

Sites may have added conservation value by virtue of their position in relation to other sites. For example, they may enhance other sites by acting as a link in the ecological continuum, or by providing a wildlife corridor.

vii) POTENTIAL VALUE

Sites which could, through appropriate management, be of exceptional quality should be given merit in the evaluation process.

Greater detail on the key factors in site selection is given in the *Wildlife Sites Handbook Version 2* (Hawkswell S., 1997).

1.3.4 Development of Wildlife Site selection criteria

Site selection criteria have been developed by a Sites Selection Panel, a small group whose members have specialist knowledge of wildlife (most are also members of the Wildlife Sites Steering Group).

Sets of criteria have been drawn up for each terrestrial broad habitat type and species group represented on the Island:

Habitats	Species
<ul style="list-style-type: none">• woodland and scrub• semi-natural lowland grassland and heathland• upland habitats• wetland habitats• coastal habitats• habitat mosaics• linear and 'artificial' habitats	<ul style="list-style-type: none">• mammals• fish, reptiles and amphibians• birds• invertebrates• vascular plants• lower plants

DAFF's Phase 1 habitat survey (see Section 1.2.2) was used as the basis for drafting habitat criteria. It indicates the extent and distribution of different habitats on the island and enables the relative importance of individual habitat types to be assessed. This survey followed the methodology devised specifically for ecological habitat survey by the then Nature Conservancy Council. The technique and habitat classification used are described in the *Handbook for Phase 1 Habitat Survey* (NCC, 1990). A report has been produced summarising the results of the Manx survey (*Isle of Man Ecological Habitat Survey*, Sayle *et al*, 1995). In the criteria, any habitats corresponding to those defined in NCC's survey handbook are printed in **bold type** (see Section 2). It is expected that a new Phase 1 habitat survey map will be produced for each Wildlife Site identified. See section 1.3.6. for further details.

In the UK, criteria for selection of Wildlife Sites, like those for Sites of Special Scientific Interest (SSSIs), are frequently based on more detailed vegetation survey information, such as that obtained using National Vegetation Classification (NVC) survey techniques. This is desirable, but has not been possible within the Manx Wildlife Sites System as very little NVC survey has been carried out on the Isle of Man.

The relative importance of the Island's species and habitats was also assessed by considering them in the context of their regional, national or international status, referring to national and local Biodiversity Action Plans (BAPs), Red Data Books etc. (see Bibliography for examples of these). In drafting criteria for selection of sites of importance to individual species, the Sites Selection Panel sought additional advice from other specialists in the appropriate fields.

The majority of the habitat criteria contain size thresholds, which exclude sites that are below a given size. The value of individual habitats in a site may be greatly increased if they occur in conjunction or mosaic with other habitats. Therefore, where appropriate, two size thresholds have been built into the criteria: the area a habitat must occupy in

order to qualify is smaller if it occurs in close association with other habitats than if it occurs in isolation.

Before the drafted criteria could be applied to the wildlife resource of the Island, it was necessary to 'field-test' them thoroughly to ensure that they were both rigorous and practical. This was achieved by using existing survey and other data relating to Manx Wildlife Trust nature reserves and land owned by MNH and DAFF.

As our knowledge of the Island's biodiversity improves, appraisal and re-evaluation of the site selection criteria will be undertaken at frequent intervals. It is envisaged that revisions will be incorporated into future editions of this handbook.

The criteria used for selection of Wildlife Sites are reproduced in Section 2.

1.3.5 Development of RIGS selection criteria

Regionally Important Geological and Geomorphological Sites (RIGS) are identified and protected in similar ways to Wildlife Sites.

RIGS are generally selected according to their:

- Scientific value and research importance, in regional terms
- Educational value
- Historic significance
- Aesthetic value.

Criteria for the selection of Manx RIGS sites have been produced with these factors in mind, and are reproduced in Section 2.

1.3.6 Site identification using selection criteria

In identifying Wildlife Sites and RIGS, the species and habitat criteria are applied to the Island's wildlife and geological resource, in the first instance using existing survey information and local knowledge. Prior to carrying out or commissioning any survey work, all potential sources of data should first be investigated.

In recent years, a variety of information on the wildlife and landscape of the Island has been collated, which has potential to be of great value in the selection process. This includes:

- Phase 1 and Phase 2 ecological habitat surveys, carried out by DAFF between 1991 & 1997
- Roadside Verge survey, carried out by Department of Transport and the Manx Wildlife Trust (then the Manx Nature Conservation Trust) between 1990 & 1996

- Ramsey Estuary Environmental Survey (Port Erin Marine Laboratory, 1993-94)
- Coastal and Intertidal Surveys (Manx Wildlife Trust, 1995-1998)
- River Corridor surveys (Department of Transport/Manx Wildlife Trust, 1997-1998 and DOLGE/Manx Wildlife Trust, 2000)
- Manx Bird Atlas surveys
- moth trapping
- records contained in the Isle of Man Environmental Records Centre
- invertebrate surveys
- various environmental impact assessments

Other site-based information and historical records may also be taken into consideration.

Once potential sites have been identified, they must be visited to check that they are still of sufficient interest to qualify. Site visits, and any survey work subsequently necessary, are done *only with the understanding and consent of the landowner*; if access is refused, this will be respected and only data already available is used in assessment. Every reasonable effort will be made to locate landowners to obtain proper access permission.

An up to date Phase 1 Survey map with field notes will be produced for each site. This will provide some *baseline information* against which future changes can be compared. Landowners will be given copies of the survey maps on request. Maps held by DAFF may be out of date or at a scale inappropriate for mapping habitat features which can be small but important in a site context, such as dubs. Up to date information is also important in considering management advice, for example in ensuring that any proposed management will not adversely affect habitats/species. Guidance on fieldwork for assessing potential Wildlife Sites and submitting casual records is available from the Manx Wildlife Trust.

After the criteria have been applied, any site that qualifies is considered by the Steering Group, which makes the final decision on whether or not it is to be selected as a Wildlife Site. Detailed records will be kept for all sites considered, including the reasons for their acceptance or rejection (see Section 1.4).

1.3.7 Defining site boundaries

Wherever possible, when delineating site boundaries, use should be made of unambiguous ground or boundary features which are not liable to change, such as hedges, walls, fences or roads, or geographical features, such as rivers, cliffs or escarpments. The interface between habitat types may not be reliable as a site boundary, unless it is exceptionally clearly defined (eg a woodland edge). All areas of wildlife interest should be included within the boundary.

Wildlife Site boundaries are drawn to include natural and semi-natural habitat. They do not include 'buffer zones' comprising land of minimal wildlife value, although work on this land could affect wildlife on the land adjacent (eg through drainage or spray drift).

However, habitats of lesser wildlife value lying adjacent to an area of Wildlife Site quality may be included within the site boundary, where they contribute significantly to its structural and/or species diversity, and its overall value to wildlife. This is especially true when such habitats not only adjoin a site's main area of interest, but also link it to another area of Wildlife Site status.

Problems can arise when part of a field is composed of semi-natural habitat that would qualify for inclusion as a Wildlife Site (either alone or, more probably, as part of a larger adjoining site) while the remainder of the field is of low wildlife value, such as agriculturally improved pasture or arable land. In such instances, it is necessary to exercise discretion in considering whether or not the area in question should be included as part of the Wildlife Site. The answers to the following questions should help to resolve uncertainties:

- Is there a discrete boundary or interface separating the semi-natural habitat from the remainder of the area, sufficient to define the outer boundary of the site?
- Does the area of interest occupy a sufficient area, or hold sufficient interest, to reasonably warrant the inclusion of the whole field within the Wildlife Site?

When this situation arises, each case must be evaluated on its own merit. It is important to ensure that the reasons for including any area within the site boundary are always recorded clearly (see Section 1.4).

1.4 RECORDING AND MANAGING SITE INFORMATION

1.4.1 Introduction

For each site proposed as a Wildlife Site, the following information should be recorded:

- Location and description of main features
- Site boundary, which should be shown on a map (see section 1.4.3)
- Details of species and habitat composition, including a Phase 1 habitat map, with field notes where required
- Ownership details, including records of any liaison with the landowner. Ownership and tenure boundaries should be shown on a map.
- The criteria under which it may qualify for inclusion as a Wildlife Site
- Acceptance or rejection as a Wildlife Site, stating the reasons for the decision.

1.4.2 Site Recording and Citation Forms

It is possible to record site data on a standard recording form. This ensures that equivalent data are collected for each site considered, and enables sites to be proposed by members of other organisations and the public, as well as by those co-ordinating the system.

Separate Site Recording Forms have been produced for Wildlife Sites and RIGS, and are reproduced in Appendix 1. They are designed to be filled out quickly in the field and are suitable for filling in either as paper copies or using a computer. They also request other details about the site, such as location, ownership and access. Any data subsequently collected, and survey maps (see section 1.4.3) can be attached to the form.

The Citation form is to provide: a summary of the sites information, qualifying criteria under which the site has been selected, and an aerial photograph showing the site boundary. This page does not contain any personal information, and may be copied and passed on to the planning division as a source of basic site information.

If there is insufficient information to complete a form fully, further survey work/research can be done at a later date if requested by the Sites Selection Panel. Information submitted in other formats will be considered.

1.4.3 Site maps

1.4.3.1 *What kinds of maps will be produced?*

For each Wildlife Site, maps will be produced to show:

- Site boundary
- Ownership/tenure
- Habitats (Phase 1 habitat survey)

Site boundary and ownership maps will also be produced for each RIGS site.

Site boundary and other information can be stored in two ways:

1) *On paper*

Site boundaries, ownership and habitat information can be drawn on an Ordnance Survey Map. For most sites, this will be at 1:10,560 scale or larger. For some upland areas, 1:25,000 scale may be more appropriate.

2) *Using a Geographical Information System (GIS)*

A GIS is a computer based-tool for mapping and analysing things that exist and events that happen on earth, for example weather patterns, economic data, land use, crop type, as well as all the information presented on a conventional Ordnance Survey paper map such as roads, settlements etc.

A GIS is much more flexible than a paper map and in time it is expected that a GIS will be used in the Manx Wildlife Sites System to store and access site boundary, ownership and (eventually) habitat maps, and species records. This has the advantage of allowing:

- Easy and rapid updating of site boundary information (avoids reliance on printed local plan maps, which can become dated) and ownership information
- Maps to be reproduced at almost any scale
- Maps to be reproduced for any area of the Island with a grid overlay at an appropriate interval
- An index map of Wildlife Site locations to be produced at required scales and updated automatically
- Rapid calculation of the total area of Wildlife Sites and RIGS
- Comparison of Wildlife Site/RIGS distribution with other features
- Use of more up to date field boundary, road, footpath, building location and other information than is available on the 1:10,560 maps

Where mapping habitats is concerned, the ability to produce maps at any scale is a definite advantage. 1:10,560 maps may not be appropriate for recording small but important areas of habitat. For most lowland Wildlife Sites, it is expected that base maps

for recording habitat information in the field will be generated from the GIS at 1:2,500 scale or larger.

It is expected that MANNGIS, the Isle of Man Government's geographical data will be used as a base.

1.4.3.2 Who will have access to the maps?

A copy of the map(s) showing site boundaries will be held by the Planning Division of DOLGE, which will also hold copies of the Citation Forms (see Section 1.4.2, above).

As sites are added, or boundary information relating to existing sites is changed, the Planning Office will be notified and supplied with this information for each new or altered site. This will be supplied on paper until a GIS is in use, when new boundary information will be sent on disk or by e-mail attachment.

The Manx Wildlife Trust and the Isle of Man Environmental Records Centre will retain copies of the site boundary, ownership/tenure and habitat maps.

Landowners and tenants will be sent copies of the boundary map and, on request, copies of the ownership/tenure and habitat maps relating to land over which they have an interest (see also section 1.5).

All data relating to personal information will be held in accordance with the Data Protection Act (1986, revised 2005)

1.4.4 Management of site information

For a Wildlife Sites system to be successful, it must be based on sound data, and care must be taken that these are always used correctly. A large quantity of data will be generated by the system. In addition to biological information, data relating to liaison with owners and managers of sites will also be accumulated. Effective management of both types of data is vital.

It is essential that:

- **site information is kept as up-to-date as possible** (see also Section 1.7)
- **all data collection, storage and use is strictly regulated according to agreed guidelines**
- **data is managed properly, access to it is carefully controlled and confidentiality is respected**

Site information will be held by the Manx Wildlife Trust and by Manx National Heritage, both of which are registered for the holding of such data under the Data Protection Act 1986. Under this Act, everyone has a right to access any data that relates directly to him or her (see Section 1.5)

At the discretion of the Wildlife Sites Steering Group, certain information may be made available on request to various people, such as those involved in:

- wildlife conservation
- land-use planning
- providing advice on land management
- providing grant-aid subsidies for any aspect of land management

Information given in confidence will not be disclosed without consent, except when required under any enactment.

1.5 LIAISON WITH LANDOWNERS, LAND MANAGERS AND TENANTS

It is through past good management that Wildlife Sites have retained their interest and value. Protecting, maintaining and enhancing such sites is only possible with the continued agreement and support of their owners, managers and tenants.

The key to success of the Manx Wildlife Sites System is the development of a positive partnership between those running the system and those involved in land management. Once the site selection criteria have been applied, and a potential Wildlife Site has been identified, all owners, managers and tenants* should be contacted, to explain the system and request permission for a site visit and any survey work necessary. If the site qualifies as a Wildlife Site, its value to wildlife and its management should be discussed.

To assist in this process, and raise awareness of the system, leaflets were published in January 1998 and distributed to all the members the Manx National Farmers' Union and the Manx Grassland Society. A copy was also reproduced in the Isle of Man Farming and Wildlife Advisory Group newsletter. This leaflet (see Appendix 3) explains the main points of the Manx Wildlife Sites System and describes the consequences to the landowner if a Wildlife Site is identified on his land. A revised leaflet will be sent out in 2007.

All owners, managers and tenants of Wildlife Sites will be given:

- information on the Manx Wildlife Sites System and how it works
- an explanation of why the site has been selected as a Wildlife Site
- a map which shows the boundary of the Wildlife Site
- a brief summary of the wildlife interest and significance of the site (or more detailed information if the landowner so wishes)
- a brief outline of the basic management practices which would be needed to maintain or increase the wildlife value of the site
- information on how site data will be used, and to whom it will be made available

** In some circumstances it may prove difficult to determine the owners, managers or tenants of individual sites; however, reasonable measures will always be taken to try to establish this.*

From the point of view of landowners, managers and tenants, there are a number of advantages to their land having Wildlife Site status:

- Those who take part in the anticipated Whole Farm Single Payment Scheme and those who are taking part in the pilot Manx Agri-environment Scheme are likely to be among the first to benefit. The information they hold on the wildlife on their land could be used in support of applications to join the Scheme(s).
- Under Section 30 of the Wildlife Act 1990, the Department of Agriculture, Fisheries and Forestry (DAFF) may make management agreements with landowners/managers for the purpose of:
 - conserving or enhancing the natural beauty or amenity of any land
 - conserving the flora, fauna or geological or physiographical features of any land
 - promoting the enjoyment of land by the public

Wildlife Site/RIGS information will be useful to those considering entry into such agreements with DAFF. Agreements with set payment rates are currently available for orchid, corncrake and lapwing conservation. Further information can be obtained from the Senior Wildlife and Conservation Officer at DAFF, Knockaloe Agricultural Advisory Centre, Patrick, Peel IM5 3AJ (tel: 842335).

- They will be able to avoid time-consuming and expensive conflicts with the planning authority. Knowledge of their site's conservation value will enable them to seek advice and tailor planning applications to take into account the needs of wildlife. Such applications will be more likely to meet with approval.
- They may receive help and advice on land management.

1.6 MECHANISMS FOR CONSERVING WILDLIFE SITES

1.6.1 Sympathetic management of Wildlife Sites

Land management is fundamental to the concept of wildlife conservation, and the Manx Wildlife Sites System can only achieve its full potential with the support of landowners, managers and tenants.

In many cases the most suitable site management is likely to be the same as or similar to that already being carried out – the high wildlife value of Wildlife Sites is generally the result of a history of good management. However, some fine-tuning could result in benefits for wildlife and it is valuable to discuss the various options and review them every now and again.

In the UK, various schemes are in operation which provide grants for landowners for the management of Wildlife Sites; the budgets for these schemes are increasing significantly. On the Isle of Man, it is expected that financial assistance will become available to pay for positive management, for example through the Pilot Manx Agri-environment Scheme or the future Whole Farm Single Payment Scheme.

1.6.2 Protection through planning and development control

Whilst Wildlife Sites are not statutorily designated, they can receive a degree of protection through statutory policies.

As well as the legislation set out in the Wildlife Act, policies on wildlife and nature conservation are contained within the Strategic and Local plans produced by the Department of Local Government and the Environment. Environment Policies 4 & 5, within Chapter 7 of *The Isle of Man Strategic Plan, Towards a Sustainable Island*, (June 2007) state:

Environment Policy 4:

Development will not be permitted which would adversely affect:

- (a) species and habitats of international importance:
 - (i) protected species of international importance or their habitats; or
 - (ii) proposed or designated Ramsar and Emerald Sites or other internationally important sites.

- (b) species and habitats of national importance:
 - (i) protected species of national importance or their habitats;
 - (ii) proposed or designated National Nature Reserves, or Areas of Special Scientific Interest; or
 - (iii) Marine Nature Reserves; or
 - (iv) National Trust Land

- (c) species and habitats of local importance such as Wildlife Sites, local nature reserves, priority habitats or species identified in any Manx Biodiversity Action Plan which do not already benefit from statutory protection, Areas of Special Protection and Bird Sanctuaries and landscape features of importance to wild flora and fauna by reason of their continuous nature or function as a corridor between habitats.

Environment Policy 5:

In exceptional circumstances where development is allowed which could adversely affect a site recognised under Environment Policy 4, conditions will be imposed and/or Planning Agreements sought to:

- (a) minimise disturbance;
- (b) conserve and manage its ecological interest as far as possible; and
- (c) where damage is unavoidable, provide new or replacement habitats so that the loss to the total ecological resource is mitigated.

Wildlife Sites should be identified on proposal maps, with mechanisms in place to add sites as they are identified. The advantage of identifying Wildlife Sites on proposal maps is that it is clear that the sites exist, and they will become more widely recognised. It is important, however, that policies in local plans are written in such a way as to apply to any sites that meet the criteria for Wildlife Sites, and to any sites subsequently identified as such. Otherwise only those sites which are shown on proposal maps may receive protection. As selection of sites is an ongoing process, these maps can quickly become outdated. For this reason, there are advantages in using a geographical information system to keep site location and boundary information up to date.

Those involved in running the Manx Wildlife Sites System should ensure that they consult regularly over applications that could affect a Wildlife Site (either directly or indirectly).

Partners in the Manx Wildlife Sites System should attempt to co-ordinate their responses where the two-week response time to planning applications allows.

SECTION 2:
SITE SELECTION CRITERIA

WOODLAND AND SCRUB HABITATS

WS 1. All relic oak (*Quercus petraea* and *Q. robur*) woodland - ie that descended from the primary woodland present before clearance by man. Stunted oak woodland above coastal cliffs is included in this criterion. This woodland is likely to be descended from native stock, which colonized the island after the last ice age. It is not immediately obvious in the field due to its low, wind-pruned canopy.

WS 2. All areas of **semi-natural broadleaved woodland** (excluding willow and alder carr, see criterion WL3) that:

- are of 0.25 hectares or more in extent, or when occurring in mosaic or juxtaposition with other semi-natural habitats (see criterion HM)

and • exhibit a well-developed structure and support at least 15 groundflora species, or 1 locally rare species (marked *) plus 10 groundflora species from Table 1.

Characteristics of woodland with a well-developed structure include:

- Trees with a wide age range, from saplings to maturity. The canopy does not have to be continuous, there can be small glades or gaps caused by, for example, wind blow.
- Natural regeneration.
- Presence of standing and fallen deadwood. This provides a habitat for a diverse invertebrate fauna, certain birds, small mammals and fungi.

WS 3. All areas of **broadleaved plantation** or **mixed plantation** that:

- are of least 1 hectare or more in extent, or 0.5 ha when occurring in mosaic or juxtaposition with semi-natural habitats (see criterion HM)

and • have developed semi-natural characteristics – shown by:

- native species making up at least some of the canopy
- regeneration of native canopy species
- an understorey layer of native species
- a fairly well-developed groundflora.

and • support at least 15 groundflora species, or 1 locally rare species (marked *) plus 10 groundflora species from Table 1. .

WS 4. All areas of **scrub** (but not willow or alder carr) of 1ha or larger, excluding areas composed largely of European gorse (*Ulex europaeus*), or western gorse (*U. gallii*).

Failed stands of coniferous plantation should be considered under criteria applicable to the original vegetation.

Table 1:
Vascular plants characteristic of woodland habitats on the Isle of Man

<i>Ajuga reptans</i>	bugle
<i>Allium ursinum</i>	ramsons
<i>Alnus glutinosa</i>	alder
<i>Anemone nemorosa</i>	wood anemone
<i>Arum maculatum</i> *	wild arum
<i>Athyrium filix-femina</i>	lady fern
<i>Betula pendula</i>	silver birch
<i>B. pubescens (ssp. odorata)</i>	downy birch
<i>Blechnum spicant</i>	hard fern
<i>Brachypodium sylvaticum</i>	wood false-brome
<i>Bromus ramosa</i> *	hairy-brome
<i>Carex laevigata</i>	smooth-stalked sedge
<i>C. remota</i>	remote sedge
<i>C. sylvatica</i>	wood sedge
<i>Chrysosplenium oppositifolium</i>	opposite-leaved golden-saxifrage
<i>Circaea lutetiana</i>	enchanter's-nightshade
<i>Conopodium majus</i>	pignut
<i>Corylus avellana</i>	hazel
<i>Crataegus monogyna</i>	hawthorn
<i>Dryopteris aemula</i>	hay-scented buckler-fern
<i>D. affinis</i>	scaly male-fern
<i>D. carthusiana</i> *	narrow buckler-fern
<i>D. dilatata</i>	broad buckler-fern
<i>D. filix-mas</i>	male fern
<i>Epilobium montanum</i>	broad-leaved willowherb
<i>Equisetum sylvaticum</i>	wood horsetail
<i>Euonymus europaeus</i> *	spindle
<i>Festuca altissima</i> *	wood fescue
<i>Fragaria vesca</i>	wild strawberry
<i>Fraxinus excelsior</i>	ash
<i>Geranium robertianum</i>	herb-robert
<i>Geum urbanum</i>	wood avens
<i>Glechoma hederacea</i>	ground-ivy
<i>Hedera helix ssp. hibernica</i>	atlantic ivy
<i>Holcus mollis</i>	creeping soft-grass
<i>Hyacinthoides non-scripta</i>	bluebell
<i>Hypericum androsaemum</i>	tutsan
<i>Ilex aquifolium</i>	holly
<i>Lonicera periclymenum</i>	honeysuckle
<i>Lysimachia nemorum</i>	yellow pimpernel
<i>Luzula sylvatica</i>	great wood-rush
<i>L. pilosa</i>	hairy wood-rush
<i>Melampyrum pratense</i> *	common cow-wheat

Table 1 (cont'd)

<i>Melica uniflora</i> *	wood melick
<i>Oxalis acetosella</i>	wood sorrel
<i>Phegopteria connectilis</i> *	beech fern
<i>Phyllitis scolopendrium</i>	hart's-tongue
<i>Polypodium interjectum</i>	western polypody
<i>P. vulgare</i>	common polypody
<i>Polystichum aculeatum</i>	soft shield-fern
<i>P. setiferum</i>	hard shield-fern
<i>Populus tremula</i>	aspen
<i>Potentilla sterilis</i>	barren strawberry
<i>Primula vulgaris</i>	primrose
<i>P. spinosa</i>	blackthorn
<i>Quercus petraea</i>	sessile oak
<i>Q. robur</i>	pendunculate oak
<i>Ranunculus ficaria</i>	lesser celandine
<i>Rosa caesia</i>	dog rose
<i>R. canina</i>	dog rose
<i>R. mollis</i>	soft downy-rose
<i>R. sherardii</i>	sherard's downy-rose
<i>R. tomentosa</i>	harsh downy-rose
<i>Rubus idaeus</i>	raspberry
<i>Rumex sanguineus</i>	wood dock
<i>Salix cinerea</i> ssp. <i>oleifolia</i>	grey willow
<i>Sambucus nigra</i>	elder
<i>Sanicula europaea</i>	sanicle
<i>Silene dioica</i>	red campion
<i>Sorbus aucuparia</i>	rowan
<i>Stachys sylvatica</i>	hedge woundwort
<i>Stellaria holostea</i>	greater stitchwort
<i>Teucrium scorodonia</i>	wood sage
<i>Ulmus glabra</i>	wych elm
<i>Veronica hederifolia</i>	ivy-leaved speedwell
<i>V. montana</i> *	wood speedwell
<i>Vicia sylvatica</i> *	wood vetch
<i>Viola odorata</i> *	sweet violet
<i>V. riviniana</i>	common dog-violet

* occurs in only a few locations in the Isle of Man

SEMI-NATURAL LOWLAND GRASSLAND AND HEATHLAND HABITATS

These criteria apply generally to land lying below a height of approximately 170m (550 feet) above sea level but they also include calcareous, neutral, marshy and enclosed acid grassland lying above this altitude. Heathland and unenclosed acid grassland lying above 170m should be considered under upland criteria.

GH 1. All areas identified as supporting a **calcareous grassland** vegetation community.

GH 2. All areas of unimproved **neutral grassland**.

GH 3. All areas of semi-improved **neutral grassland** that:

- occupy an area of at least 1 hectare, or 0.5 ha in mosaic or juxtaposition with other semi-natural habitats (see criterion HM)
- and* • support at least 15 species, or 1 locally rare species (marked *) plus 10 others from Table 2.

GH 4. All areas of lowland **acidic grassland** that:

- occupy an area of at least 2 hectares, or 1 ha in mosaic or juxtaposition with other semi-natural habitats (see criterion HM)
- and* • support at least 3 of the species marked * from Table 3.

GH 5. All areas of **marshy grassland** that:

- occupy an area of at least 0.5 hectares, or 0.25 ha in mosaic or juxtaposition with other semi-natural habitats (see criterion HM)
- and* • support at least 15 species, or 1 locally rare species (marked *) plus 10 others from Table 4.

GH 6. All areas of **lowland heathland** which have at least 10 percent cover of heathers (*Calluna vulgaris* or *Erica* spp.). Such areas should normally occupy at least 1 hectare.

Table 2:
Vascular plants characteristic of neutral grassland on the Isle of Man

<i>Achillea millefolium</i>	yarrow
<i>Agrimonia eupatoria</i> *	agrimony
<i>A. odorata</i>	fragrant agrimony
<i>Agrostis capillaris</i>	common bent
<i>A. stolonifera</i>	creeping bent
<i>A. vineale</i>	brown bent
<i>Anthoxanthum odoratum</i>	sweet vernal-grass
<i>Anthyllis vulneraria</i>	kidney vetch
<i>Arenaria serpyllifolia</i>	thyme-leaved sandwort
<i>Campanula rotundifolia</i>	harebell
<i>Carex caryophylla</i>	spring sedge
<i>C. flacca</i>	glaucous sedge
<i>C. hirta</i>	hairy sedge
<i>C. nigra</i>	common sedge
<i>C. ovalis</i>	oval sedge
<i>C. pallascens</i> *	pale sedge
<i>C. panicea</i>	carnation sedge
<i>Centaurea nigra</i>	common knapweed
<i>Conopodium majus</i>	pignut
<i>Crepis capillaris</i>	smooth hawk's-beard
<i>Cynosurus cristatus</i>	crested dog's-tail
<i>Dactylorhiza fuchsii</i>	common spotted-orchid
<i>D. incarnata</i> *	early marsh-orchid
<i>D. maculata ssp. ericetorum</i>	heath spotted-orchid
<i>D. purpurella</i> *	northern marsh-orchid
<i>Daucus carota</i>	wild carrot
<i>Deschampsia cespitosa</i>	tufted hair-grass
<i>Euphrasia spp.</i>	eyebright
<i>Festuca pratensis</i>	meadow fescue
<i>F. rubra</i>	red fescue
<i>Filago minima</i>	small cudweed
<i>Galium verum</i>	lady's-bedstraw
<i>Hypochaeris radicata</i>	common cat's-ear
<i>Knautia arvensis</i> *	field scabious
<i>Lathyrus pratensis</i>	meadow vetchling
<i>Leontodon autumnalis</i>	autumn hawkbit
<i>Lotus corniculatus</i>	common bird's-foot-trefoil
<i>Luzula campestris</i>	field wood-rush
<i>L. multiflora ssp. multiflora</i>	heath wood-rush
<i>L. multiflora ssp. congesta</i>	heath wood-rush
<i>Ononis repens</i>	resthrow
<i>Phleum bertolonii</i>	smaller catstail
<i>Pimpinella saxifraga</i> *	burnet saxifrage
<i>Platanthera chlorantha</i> *	greater butterfly-orchid
<i>Poa pratensis</i>	smooth meadow-grass

<i>Potentilla anglica</i>	trailing tormentil
<i>P. reptans</i>	creeping cinquefoil
<i>Prunella vulgaris</i>	self-heal
<i>Ranunculus acris</i>	meadow buttercup
<i>R. bulbosus</i>	bulbous buttercup
<i>Rhinanthus minor</i>	yellow-rattle
<i>Rumex acetosa</i>	common sorrel
<i>Stellaria graminea</i>	lesser stitchwort
<i>Succisa pratensis</i>	devil's-bit scabious
<i>Valeriana officinalis</i>	common valerian
<i>Vicia cracca</i>	tufted vetch

* occurs in few locations in the Isle of Man

Table 3:
Vascular plants characteristic of acidic grassland on the Isle of Man

<i>Agrostis capillaris</i>	common bent
<i>Aira praecox</i>	early hair-grass
<i>Campanula rotundifolia</i> *	harebell
<i>Carex binervis</i> *	green-ribbed sedge
<i>Danthonia decumbens</i>	heath grass
<i>Deschampsia flexuosa</i>	wavy hair-grass
<i>Festuca ovina</i>	sheep's-fescue
<i>F. rubra</i>	red fescue
<i>Galium saxatile</i> *	heath bedstraw
<i>Juncus squarrosus</i> *	heath rush
<i>Nardus stricta</i>	mat-grass
<i>Potentilla erecta</i> *	tormentil
<i>Rumex acetosella</i> *	sheep's-sorrel

Table 4:
Vascular plants characteristic of marshy grassland on the Isle of Man

<i>Achillea ptarmica</i>	sneezewort
<i>Alopecurus geniculatus</i>	marsh foxtail
<i>Anagallis tenella</i>	bog pimpernel
<i>Angelica sylvestris</i>	wild angelica
<i>Caltha palustris</i>	marsh-marigold
<i>Cardamine pratensis</i>	cuckooflower
<i>Carex echinata</i>	star sedge
<i>C. flacca</i>	glaucous sedge
<i>C. hirta</i>	hairy sedge
<i>C. nigra</i>	common sedge
<i>C. ovalis</i>	oval sedge
<i>C. panicea</i>	carnation sedge
<i>C. pulicaris</i>	flea sedge
<i>C. viridula</i>	yellow-sedge
<i>Cirsium palustre</i>	marsh thistle
<i>Dactylorhiza fuchsii</i>	common spotted-orchid
<i>D. maculata ssp. ericetorum</i>	heath spotted-orchid
<i>D. incarnata*</i>	early marsh-orchid
<i>D. purpurella*</i>	northern marsh-orchid
<i>Deschampsia cespitosa</i>	tufted hair-grass
<i>Equisetum palustre</i>	marsh horsetail
<i>Filipendula ulmaria</i>	meadowsweet
<i>Galium palustre</i>	common marsh-bedstraw
<i>Glyceria fluitans</i>	common sweet-grass
<i>Holcus lanatus</i>	yorkshire-fog
<i>Hydrocotyle vulgaris</i>	marsh pennywort
<i>Iris pseudacorus</i>	yellow iris
<i>Juncus acutiflorus</i>	sharp-flowered rush
<i>J. articulatus</i>	jointed rush
<i>J. bufonius</i>	toad rush
<i>J. conglomeratus</i>	compact rush
<i>J. effusus</i>	soft-rush
<i>Listera ovata</i>	common twayblade
<i>Lotus pedunculatus</i>	greater bird's-foot-trefoil
<i>Luzula multiflora ssp. multiflora</i>	heath wood-rush
<i>L. multiflora spp. congesta</i>	heath wood-rush
<i>Lychnis flos-cuculi</i>	ragged-robin
<i>Mentha aquatica</i>	water mint
<i>Molinia caerulea</i>	purple moor-grass
<i>Myosotis laxa</i>	tufted water forget-me-not
<i>M. secunda</i>	creeping water forget-me-not
<i>Odontites verna</i>	red bartsia
<i>Pedicularis palustris</i>	marsh lousewort (red rattle)

Table 4 (cont'd)

<i>Pedicularis sylvatica</i>	common lousewort
<i>Phragmites australis</i>	common reed
<i>Potentilla anserina</i>	silverweed
<i>Potentilla palustris</i>	marsh cinquefoil
<i>Ranunculus repens</i>	creeping buttercup
<i>R. flammula</i>	lesser spearwort
<i>Senecio aquaticus</i>	marsh ragwort
<i>Sparganium erectum</i>	branched bur-reed
<i>Stachys palustris</i>	marsh woundwort
<i>Stellaria alsine</i>	bog stitchwort
<i>Succisa pratensis</i>	devil's-bit scabious
<i>Triglochin palustris</i>	marsh arrowgrass
<i>Valeriana officinalis</i>	common valerian
<i>Vicia cracca</i>	tufted vetch

*occurs in few locations in the Isle of Man

UPLAND HABITATS

These criteria apply to all land lying above the Mountain Wall, and elsewhere to all land at or above a height of approximately 170m (550 feet) above sea level. Exceptionally, habitats lying below this altitude but contiguous with upland habitats can qualify for inclusion under these criteria.

- U 1.** All areas of **dry dwarf shrub heath** which are greater than 2ha in extent, or occur in association with other habitats of Wildlife Site quality

- U 2.** All areas of **wet dwarf shrub heath** which are greater than 1ha in extent, or occur in association with other habitats of Wildlife Site quality

- U 3.** All areas of **unimproved acid grassland**, which are at least 2ha in extent and occur in association with other habitats of Wildlife Site quality

- U 4.** All areas of **flush** which are greater than 0.25ha in extent, or are part of a mire complex

- U 5.** All areas of active **blanket bog**

- U 6.** All areas of **dry modified bog**, except severely degraded examples

- U 7.** All areas of **wet modified bog**, except severely degraded examples

- U 8.** All areas of **valley mire** and **basin mire**, except severely degraded examples

WETLAND HABITATS

WL 1. All areas of **willow carr** ('curragh') that:

- are greater than 1 hectare in extent*, or 0.5 ha when occurring in mosaic or juxtaposition with other semi-natural habitats (see criterion HM)
- and** • support at least 20 species, or 1 locally rare species (marked *) plus 15 others from Table 5; excepting sites which are severely and irreversibly degraded (e.g. through heavy grazing or poaching, or tipping).

*Temporary reduction in the canopy area below 1ha by coppicing does not exclude sites from qualifying.

WL 2. All areas of **alder carr**.

WL 3. All areas of **mire** (fen and bog) vegetation occurring in lowland areas (generally less than 150m above sea level)

WL 4. All areas of **tall swamp** vegetation and reedbed that are dominated by one or more of the following species:

- common reed (*Phragmites australis*)
- reed canary-grass (*Phalaris arundinacea*)
- bulrush (*Typha latifolia*)
- greater pond-sedge (*Carex riparia*)
- greater tussock-sedge (*Carex paniculata*)
- bottle sedge (*Carex rostrata*)
- branched bur-reed (*Sparganium erectum*)
- yellow iris (*Iris pseudacorus*)

WL 5. All stretches of natural watercourses that:

- exhibit no obvious artificial modification to bed and water level
- and** • have a high proportion of semi-natural habitat on both banks.

WL 6. All stretches of artificial watercourses that:

- support a variety of native aquatic plant species

and/or • are especially rich in aquatic invertebrate life, or support notable aquatic invertebrate species

WL 7. All open water or wetland sites that:

- have rich marginal, inundation or aquatic vegetation communities (dominated by native species)

and/or • are of particular value for invertebrates, birds, fish or bats.

but excepting sites that are severely and irreversibly degraded (e.g. by pollution, poaching, tipping or infill).

Table 5:
Vascular plants characteristic of willow carr ('curragh') on the Isle of Man

<i>Achillea ptarmica</i>	sneezewort
<i>Agrostis canina</i>	brown bent
<i>A. stolonifera</i>	creeping bent
<i>Ajuga reptans</i>	bugle
<i>Alnus glutinosa</i>	alder
<i>Alopecurus geniculatus</i>	marsh foxtail
<i>Angelica sylvestris</i>	wild angelica
<i>Betula pendula</i>	silver birch
<i>B. pubescens</i>	brown birch
<i>Callitriche spp.</i>	water-starwort
<i>Caltha palustris</i>	marsh-marigold
<i>Cardamine flexuosa</i>	wavy bittercress
<i>C. pratensis</i>	cuckooflower
<i>Carex echinata</i>	star sedge
<i>C. flacca</i>	glaucous sedge
<i>C. hirta</i>	hairy sedge
<i>C. nigra</i>	common sedge
<i>C. panicea</i>	carnation sedge
<i>C. paniculata*</i>	greater tussock-sedge
<i>C. remota*</i>	remote sedge
<i>C. rostrata</i>	bottle sedge
<i>Chrysosplenium oppositifolium</i>	opposite-leaved golden-saxifrage
<i>Cirsium palustre</i>	marsh thistle
<i>Dactylorhiza fuchsii</i>	common spotted-orchid
<i>D. maculata</i>	heath spotted-orchid
<i>Deschampsia cespitosa</i>	tufted hair-grass
<i>Digitalis purpurea</i>	foxglove
<i>Epilobium hirsutum</i>	great willowherb
<i>E. palustre</i>	marsh willowherb
<i>Equisetum fluviatile</i>	water horsetail
<i>E. palustre</i>	marsh horsetail
<i>Fraxinus excelsior</i>	ash
<i>Galium palustre</i>	common marsh-bedstraw
<i>Glyceria fluitans</i>	floating sweet-grass
<i>Hedera helix ssp. hibernica</i>	atlantic ivy
<i>Hydrocotyle vulgaris</i>	marsh pennywort
<i>Hypericum androsaemum</i>	tutsan
<i>H. tetrapterum</i>	square-stalked St. John's-wort
<i>Juncus acutiflorus</i>	sharp-flowered rush
<i>J. bufonius</i>	toad rush
<i>J. effusus</i>	soft-rush
<i>Listera ovata</i>	common twayblade

Table 5 (cont'd)

<i>Lonicera periclymenum</i>	honeysuckle
<i>Lotus pedunculatus</i>	greater bird's-foot-trefoil
<i>Lychnis flos-cuculi</i>	ragged-robin
<i>Lycopus europaeus</i>	gypsywort
<i>Lythrum salicaria</i>	purple loosestrife
<i>Mentha aquatica</i>	water mint
<i>Menyanthes trifoliata</i>	bogbean
<i>Myrica gale</i>	bog myrtle
<i>Oxalis acetosella</i>	wood-sorrel
<i>Platanthera bifolia</i>	lesser butterfly-orchid
<i>Populus tremula</i>	aspen
<i>Potentilla anglica</i>	trailing tormentil
<i>P. palustris</i>	marsh cinquefoil
<i>Pyrola minor*</i>	common wintergreen
<i>Ranunculus flammula</i>	lesser spearwort
<i>R. omiophyllus</i>	water-crowfoot
<i>R. repens</i>	creeping buttercup
<i>Rosa sp.</i>	rose
<i>Rumex sanguineus</i>	wood dock
<i>Salix aurita</i>	eared willow
<i>S. cinerea ssp. cinerea</i>	grey willow
<i>S. pentandra</i>	bay willow
<i>Scrophularia nodosa</i>	common figwort
<i>Silene dioica</i>	red campion
<i>Solanum dulcamara</i>	bittersweet
<i>Sparganium erectum</i>	branched bur-reed
<i>Stellaria alsine</i>	bog stitchwort
<i>S. graminea</i>	lesser stitchwort
<i>S. holostea</i>	greater stitchwort
<i>Succisa pratensis</i>	devil's-bit scabious
<i>Valeriana officinalis</i>	common valerian
<i>Vicia cracca</i>	tufted vetch
<i>Viola palustris</i>	marsh violet

*occurs in few locations in the Isle of Man

2.2.1.5 Coastal Habitats

- C 1. All areas of **dune**, excepting severely degraded examples.
- C 2. All sea caves supporting populations of, or utilised by, important species
(More research on this habitat type is needed)
- C 3. All saline lagoons (as defined by Barne J.H. *et al*, 1996)
- C 4. All areas of **coastal grassland**
- C 5. All areas of **coastal heathland**
The dwarf shrub cover must be at least 25 percent
- C 6. All areas of **saltmarsh**
- C 7. All stretches of strandline that
- support at least 20 species, or 1 locally rare species (marked *) plus 10 others from Table 7.
- and/or* • are shown by scientific study to be of particular importance (in terms of species records and suitability of habitat) for invertebrate or bird life
- C 8. All stretches of seashore that are of high invertebrate value, in terms of species diversity and/or rarity, and population levels.
This includes rocky shores as well as sand, shingle and pebble beaches.
- C 9. All stretches of **maritime soft cliff** that are shown by scientific study to be of high invertebrate value
- C 10. All stretches of **maritime hard cliff** that supports important colonies of seabirds.

Table 6:
Vascular plants occurring in coastal grassland on the Isle of Man

<i>Achillea millefolium</i>	yarrow
<i>Agrostis stolonifera</i>	creeping bent
<i>Aira caryophyllea</i>	silver hair-grass
<i>A. praecox</i>	early hair-grass
<i>Anacamptis pyramidalis</i>	pyramidal orchid
<i>Anthyllis vulneraria</i>	kidney vetch
<i>Aphanes microcarpa</i>	parsley-piert
<i>Arenaria serpyllifolia</i>	thyme-leaved sandwort
<i>Armeria maritima</i>	thrift
<i>Astragalus danicus</i>	purple milk-vetch
<i>Bromus hordeaceus</i>	soft-brome
<i>Carduus tenuiflorus</i>	seaside thistle
<i>Carex arenaria</i>	sand sedge
<i>C. caryophyllea</i>	spring sedge
<i>Catapodium marinum</i>	sea fern-grass
<i>C. rigidum</i>	fern-grass
<i>Centaureum erythraea</i>	common centaury
<i>C. littorale</i>	seaside centaury
<i>Cerastium arvense</i>	field mouse-ear
<i>C. diffusum</i>	dark-green mouse-ear
<i>C. semidecandrum</i>	little mouse-ear
<i>Cochlearia danica</i>	early scurvy-grass
<i>C. officinalis</i>	common scurvy-grass
<i>Cuscuta epithimum</i>	common dodder
<i>Cynosurus cristatus</i>	crested dog's-tail
<i>Dactylis glomerata</i>	cock's-foot
<i>Danthonia decumbens</i>	heath grass
<i>Daucus carota</i>	wild carrot
<i>Eriophila verna</i>	whitlow-grass
<i>Erodium cicutarium</i>	common stork's-bill
<i>E. lebelii</i>	sticky stork's-bill
<i>E. maritimum</i>	sea stork's-bill
<i>Euphrasia spp.</i>	eyebright
<i>Festuca ovina</i>	sheep's-fescue
<i>F. rubra</i>	red fescue
<i>Filago minima</i>	small cudweed
<i>F. vulgaris</i>	common cudweed
<i>Galium verum</i>	lady's-bedstraw
<i>Gentianella campestris</i>	field gentian
<i>Hypochaeris radicata</i>	cat's-ear
<i>Jasione montana</i>	sheep's-bit
<i>Koeleria macrantha</i>	crested hair-grass
<i>Lotus corniculatus</i>	common bird's-foot trefoil
<i>Myosotis discolor</i>	changing forget-me-not

Table 6 (cont'd)

<i>Myosotis ramosissima</i>	early forget-me-not
<i>Ononis repens</i>	rest harrow
<i>Ornithopus perpusillus</i>	bird's-foot
<i>Phleum arenarium</i>	sand cat's-tail
<i>Pilosella officinarum</i>	mouse-ear hawkweed
<i>Plantago coronopus</i>	stag's-horn plantain
<i>P. lanceolata</i>	ribwort plantain
<i>P. maritima</i>	sea plantain
<i>Polygala vulgaris</i>	common milkwort
<i>Pulicaria dysenterica</i>	fleabane
<i>Rosa pimpinellifolia</i>	burnet rose
<i>Sagina apetala</i>	annual pearlwort
<i>S. apetala</i>	fringed pearlwort
<i>S. subulata</i>	heath pearlwort
<i>Scilla verna</i>	spring squill
<i>Sedum anglicum</i>	English stonecrop
<i>Silene uniflora</i>	sea campion
<i>Spergularia rupicola</i>	rock sea-spurrey
<i>Spiranthes spiralis</i>	autumn lady's-tresses
<i>Thymus polytrichus</i>	wild thyme
<i>Trifolium arvense</i>	hare's-foot clover
<i>T. fragiferum</i>	strawberry clover
<i>T. ornothopodioides</i>	fenugreek
<i>T. scabrum</i>	rough clover
<i>T. striatum</i>	soft clover
<i>T. subterraneanum</i>	subterranean clover
<i>T. suffocatum</i>	suffocated clover
<i>Valerianella locusta</i>	cornsalad
<i>Vicia lathyroides</i>	spring vetch
<i>Viola canina</i> ssp. <i>canina</i>	heath dog-violet
<i>V. tricolor</i> ssp. <i>curtisii</i>	seaside pansy

Table 7:
Vascular plants occurring in strandline vegetation on the Isle of Man

<i>Ammophila arenaria</i>	marram
<i>Arenaria serpyllifolia</i>	thyme-leaved sandwort
<i>Atriplex laciniata</i>	frosted orache
<i>A. littoralis</i>	grass-leaved orache
<i>A. glabriuscula</i>	Babington's orache
<i>A. prostrata</i>	spear-leaved orache
<i>A. x patula</i>	common orache
<i>Beta vulgaris</i> ssp. <i>maritima</i>	sea beet
<i>Cakile maritima</i>	sea rocket
<i>Calystegia maritima</i>	sea-bindweed
<i>Cirsium</i> spp.	thistles
<i>Coincya monensis</i> ssp. <i>monensis</i> *	Isle of Man cabbage
<i>Crambe maritima</i>	sea kale
<i>Elymus</i> spp.	couch
<i>E. farctus</i>	sand couch
<i>E. repens</i>	common couch
<i>Eryngium maritimum</i>	sea holly
<i>Euphorbia paralias</i>	sea spurge
<i>E. portlandica</i>	Portland spurge
<i>Galium aparine</i>	cleavers
<i>Glaucium flavum</i>	yellow-horned poppy
<i>Honckenya peploides</i>	sea-sandwort
<i>Hyoscyamus niger</i>	henbane
<i>Leymus arenaria</i>	Lyme grass
<i>Mertensia maritima</i>	oyster plant
<i>Polygonum aviculare</i>	knotgrass
<i>P. oxyspermum</i>	Ray's knotgrass
<i>Potentilla anserina</i>	silverweed
<i>Raphanus raphanistrum</i> ssp. <i>maritima</i>	sea radish
<i>Rumex crispus</i>	curled dock
<i>Salsola kali</i> ssp. <i>kali</i>	prickly saltwort
<i>Sonchus</i> spp.	sow-thistle
<i>Tripleurospermum maritimum</i>	sea mayweed

*occurs in few locations in the Isle of Man

HABITAT MOSAICS

HM 1. All areas composed of two or more semi-natural habitats in mosaic or close combination, where one (or more) of the habitats :

- is at least of borderline Wildlife Site quality

(where two size thresholds are quoted, as for example in some of the grassland and wetland criteria, a site in a mosaic may qualify under the smaller of the two)

and • occupies a significant proportion of the site (usually one quarter or more)

HM 2. All habitat mosaics/combinations which narrowly fail to qualify under individual habitat/species criteria (including the above criterion) but nonetheless:

- support important populations or assemblages or species

and/or • represent a habitat combination of high potential value that is rarely encountered on the Isle of Man.

LINEAR AND 'ARTIFICIAL' HABITATS

- A 1.** Verges, tracks and railway corridors (whether in use or not) that would qualify under other guidelines except in terms of minimum size may be considered if they are at least 50m in length.
- A 2.** All boundary features, verges, tracks and disused railways that:
- exhibit a well-developed, continuous semi-natural vegetation structure
- and* • act as wildlife corridors between two or more areas of Wildlife Site or ASSI status.
- A 3.** All areas of 'artificial' habitat (e.g. old quarries, tips, derelict land, mine wastes) that demonstrate particularly good examples of succession from bare ground towards wildlife-rich grassland, heathland or woodland communities.
- A 4.** All examples of mine waste that carry good examples of flora showing adaptation to heavy metal-rich soils.
- A 5.** All areas of particular value to wildlife in built-up areas. Such areas should qualify for inclusion under one (or more) of the species or habitat criteria but need not fulfil any of the size elements specified.

(Parkland, churchyards etc. in built-up areas are included under this criterion, but in rural areas these habitat types should be considered under separate habitat or species criteria)

HABITAT MOSAICS

HM 1. All areas composed of two or more semi-natural habitats in mosaic or close combination, where one (or more) of the habitats:

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(where two size thresholds are quoted, as for example in some of the grassland and wetland criteria, a site in a mosaic may qualify under the smaller of the two)

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(Parkland, churchyards etc. in built-up areas are included under this criterion, but in rural areas these habitat types should be considered under separate habitat or species criteria)

MAMMALS

M 1. Any winter or summer bat roost* (excluding residential dwellings) of significant size in relation to the species involved, plus the surrounding habitat that makes the roost viable.

* All bat roosts are protected under the Wildlife Act 1990. The Manx Wildlife Sites System is therefore concerned particularly with sites on which bats depend for feeding.

M 2. All observed feeding areas for bats that are of significance with respect to the species identified[†].

M 3. Any area of habitat that supports a breeding population of stoat

M 4. Any significant terrestrial and intertidal sites regularly used by common seal (*Phoca vitulina*).

M 5. Any significant terrestrial and intertidal sites regularly used by grey seal (*Halichoerus grypha*).

[†] as required by virtue of the acceptance by the Isle of Man Government of the Bonn Convention on the Conservation of Migratory Species of Wild Animals, and the provisions therein as they apply to resident bat species (including the Agreement on the Conservation of Bats in Europe, Article III.2).

BIRDS

B 1. All important Manx sites for all bird species (seabirds excluded, see below) for which the Island is known to hold, or has recently held, at least 0.5% of the British Isles breeding and/or wintering populations, ie:

- hen harrier
- curlew
- peregrine
- whooper swan
- chough

plus any additional species identified as fulfilling this criterion in the future.

B 2. Any site which supports a breeding population of a rare Manx breeding bird species (listed in Table 7). For this purpose, a rare Manx breeding species is defined as one for which:

- there are fewer than 10 breeding pairs on the Island

or • the breeding population is known to be small but has not yet been fully determined.

or • the breeding population, which may exceed 10 pairs, is restricted in its distribution and/or abundance by the availability of suitable habitat.

B 3. All sites of importance to wintering wildfowl species (listed in Table 8). This is defined as all sites that:

- regularly support 10% of the Island's total population of any one species

and/or • regularly support 5% of the Island's total wintering wildfowl population.

B 4. All sites of particular importance for cliff-nesting seabirds (these species, their population sizes and significance thresholds, are listed in Table 9). Sites that should be included under this criterion are those that:

- regularly support at least 5% of the total Manx population of cliff-nesting seabirds (aggregate of species)

and/or • regularly support more than 5% of the total Manx population of any one of these species.

B 5. All breeding sites for the following ground-nesting seabirds with a total Manx breeding population of:

- black-headed gull 5 pairs
- common gull less than 5 pairs
- sandwich tern less than 25 pairs
- Arctic tern 5 - 15 pairs
- little tern 5 – 50 pairs

B 6. All sites regularly supporting 5 or more pairs of swift or sand martin

B 7. All cliff nesting sites for house martin, and any human structure sites containing 10 or more regularly used nests

B 8. All sites regularly supporting a heronry (one or more nests)

B 9. All sites containing a rookery of more than 200 nests

**Table 7:
Rare Manx breeding bird species***

Species	Breeding Details
little grebe	Last bred in 2004
storm petrel	1 breeding site; never proved
Manx shearwater	4/5 colonies; numbers variable
mute swan	8 breeding pairs, 11-12 breeding sites
teal	Less than 10 pairs per year; probably under-recorded
shoveler	Sporadic breeder; last breeding record in 1979
tufted duck	Increasing species - maximum of about 20 pairs
eider	Recent colonist; in excess of 50 pairs (estimate)
red-breasted merganser	Breeding attempted twice, in 1985 and 1986
merlin	Confirmed breeding in 1986 and 1990
corncrake	Breeding confirmed for the first time in 11 years in 1999; breed annually
redshank	Up to 3 pairs; no longer breed annually
snipe	Up to 20 pairs but very variable each year. Reduction in numbers over last 20 years, through habitat loss etc
common sandpiper	Sporadic breeder; 4 breeding records
common gull	Recent coloniser; 6-10 pairs
common tern	Extinct breeder; bred in last 20 years
barn owl	Actual population difficult to determine; current captive breeding and release programmes mask true status
short-eared owl	A few pairs breed annually
tree pipit	Sporadic breeder
dipper	Only one post 1930's breeding record, in 1990
redstart	Sporadic breeder; bred annually from 1968 to 1971
ring ouzel	Sporadic breeder
garden warbler	Sporadic breeder
wood warbler	Sporadic breeder
lesser whitethroat	Sporadic breeder; singing males occur almost annually
crossbill	Sporadic breeder

*For the purposes of the Manx Wildlife Sites System, the term “Manx breeding bird species” excludes species that have reached the Island as a result of introduction to the British Isles from 1950 onwards, even if they have reached the Isle of Man from the United Kingdom or Republic of Ireland by natural means.

Table 8:
Manx wintering wildfowl species: their population levels and
significance thresholds

Species:	Estimated wintering population	Significance threshold: 10% of any one species <i>or</i> 5% of total population
whooper swan	20 - 60	2
wigeon	800 - 1000	80
teal	Less than 1500	150
mallard	2000 +	200
shelduck	100 - 130	10
shoveler	Less than 10	1
pochard	Less than 80	8
tufted duck	50 +	5
goldeneye	70 - 80	7
Total population of wintering wildfowl	4630 - 4910	463

**Table 9:
Manx cliff-nesting seabirds: their population levels and significance thresholds**

Species	Estimated breeding population	Count Unit*	Significance threshold 10% of any one species or 5% of total population
fulmar	2981 – 3143	AOS	298
cormorant	134	AON	13
shag	912	AON	91
lesser black-backed gull	114	AON	11
herring gull	7126	AON	712
great black-backed gull	405	AON	40
kittiwake	1045	AON	104
guillemot	4566	IA	456
razorbill	1524	IA	152
black guillemot	602	IA	60
Puffin	85	IA	8
Manx shearwater	103 – 130	AON	10
Total population:	19597 – 19786		3120

* AOS: Apparently Occupied Site
AON: Apparently Occupied Nest
IA: Individual Adult

FISH, REPTILES AND AMPHIBIANS

FRA 1. River habitat which supports populations of one (or more) of the following species:

- river lamprey
- and/or*
- nine-spined stickleback
- and/or*
- indigenous brown trout

Key marine access points for the first two species should also be designated as associated sites.

FRA 2. Any viable river systems, which contain:

- significant salmon* spawning areas
- and/or*
- the habitats necessary for supporting the resulting juveniles.

FRA 3. All basking sites that support a significant population of viviparous lizard (*Lacerta vivipara*).

FRA 4. Any habitat which supports significant populations of common frog (*Rana temporaria*).

* in this document, the term 'salmon' refers to both Atlantic salmon and sea trout

INVERTEBRATES

INV 1. All sites which support populations of any invertebrate species listed as category 1, 2 or 3 in the appropriate Red Data Book, or in more recent status reviews.

INV 2. All sites shown by scientific study to be especially rich in invertebrate life.

INV 3. All important breeding sites for any of the butterflies, Odonata or Orthoptera listed in the provisional Manx Biodiversity Action Plan (see Table 10).

INV 4. Sites which contain both vegetation and structural habitat features of particular value for invertebrate life.

(Sites considered under this criterion should normally be situated within, or adjacent to, areas of semi-natural vegetation that qualify, or narrowly miss qualifying, as Wildlife Sites under other criteria)

**Table 10:
Butterflies, Odonata and Orthoptera listed in the provisional Manx
Biodiversity Action Plan**

Butterflies (*Lepidoptera*)

dark green fritillary	<i>Argynnis aglaja</i>
holly blue	<i>Celastrina argiolus</i>
orange tip	<i>Anthocharis cardamines</i>
grayling	<i>Hipparchia semele</i>
speckled wood	<i>Pararge aegeria</i>
comma	<i>Polygonia c-album</i>

Moths (*Lepidoptera*)

Scarce crimson & gold	<i>Pyrausta sanguinalis</i>
devon carpet	<i>Lampropteryx otregiata</i>
cloaked carpet	<i>Euphyia biangulata</i>
dew moth	<i>Setina irrorella</i>
square-spot dart	<i>Euxoa obelisca</i>
square-spot dart	<i>Euxoa obelisca grisea</i>
coast dart	<i>Setina irrorella</i>
sand dart	<i>Agrotis ripae</i>
portland moth	<i>Acetbia praecox</i>
great brocade	<i>Eurois occulta</i>
grey	<i>Hadena caesia mananii</i>
shore wainscot	<i>Mythimna litoralis</i>
sword-grass	<i>Xylena exsoleta</i>
black-banded	<i>Polymixis xanthomista statices</i>

Dragonflies and Damselflies (*Odonata*)

emerald damselfly	<i>Lestes sponsa</i>
golden-ringed dragonfly	<i>Cordulegaster boltonii</i>

Orthoptera

lesser mottled grasshopper	<i>Stenobothrus stigmaticus</i>
----------------------------	---------------------------------

VASCULAR PLANTS

VP 1. All sites which support populations of native species; listed in table 11 for one or more of the following reasons:

- they are found in 5 or fewer 1km squares on the Isle of Man
- they are present here at the edge of their geographical range
- they are listed in the British Red Data Book (categories 1, 2 or 3)
- they are listed as being Nationally Scarce species in Britain
- they are threatened or declining locally
- they are endemic to Britain.
- they are listed in Schedule 7 of the Wildlife Act 1990

Table 11:**Vascular plants listed for one or more of the reasons in criterion VP1**

<i>Adiantum capillus-veneris</i>	maidenhair fern
<i>Agrimonium eupatoria</i>	agrimony
<i>Alisma lanceolatum</i>	narrow-leaved water plantain
<i>Alopecurus aequalis</i>	orange foxtail
<i>Anacamptis pyramidalis</i>	pyramidal orchid
<i>Anagallis minima</i>	chaffweed
<i>Anthriscus caucalis</i>	bur chervil
<i>Apium inundatum</i>	marshwort
<i>Arum maculatum</i>	lord's-and-ladies's
<i>Aster tripolium</i>	sea aster
<i>Astragalus danicus</i>	purple milk-vetch
<i>Atriplex litoralis</i>	grass-leaved orache
<i>A. portulacoides</i>	sea-purslane
<i>Baldellia ranunculoides</i>	lesser water plantain
<i>Bidens cernua</i>	nodding bur-marigold
<i>Blysmus rufus</i>	chestnut sedge
<i>Botrychium lunaria</i>	moonwort
<i>Briza media</i>	common quaking-grass
<i>Calamagrostis epigejos</i>	wood small-reed
<i>Calamintha ascendens*</i>	common calamint
<i>Carex curta</i>	white sedge
<i>C. diandra</i>	lesser fox sedge
<i>C. dioica</i>	dioecious sedge
<i>C. muricata</i> ssp. <i>lamprocarpa</i>	prickly sedge
<i>C. pallescens</i>	pale sedge
<i>C. paniculata</i>	greater tussock-sedge
<i>C. punctata</i>	dotted sedge
<i>C. riparia</i>	greater pond sedge
<i>C. viridula</i> ssp. (= <i>C. serotina</i>)	a yellow sedge
<i>Carlina vulgaris</i>	carline thistle
<i>Cerastium arvense</i>	field mouse-ear
<i>Cochlearia anglica</i>	English scurvygrass
<i>Coeloglossum viride</i>	frog orchid
<i>Coincya monensis</i> ssp. <i>monensis</i>	Isle of Man cabbage
<i>Crepis paludosa</i>	marsh hawkbeard
<i>Cryptogramma crispa</i>	parsley fern
<i>Cuscuta epithymum</i>	dodder
<i>Dactylorhiza fuchsii</i>	common-spotted orchid
<i>D. incarnata</i>	early marsh-orchid
<i>D. maculata</i> ssp. <i>ericetorum</i>	heath-spotted orchid
<i>D. puperella</i>	northern marsh orchid
<i>Diphasiastrum alpinum</i>	alpine clubmoss
<i>Dryopteris aemula</i>	hay-scented buckler fern
<i>D. carthusiana</i>	narrow buckler fern
<i>Echium vulgare</i>	viper's bugloss
<i>Eleocharis quinqueflora</i>	few-flowered spike-rush

Table 11 continued

<i>E. uniglumis</i>	slender spike-rush
<i>Eleogiton fluitans</i>	floating club-rush
<i>Epipactus palustris</i>	marsh helleborine
<i>Erodium lebelii</i>	sticky stork's-bill
<i>E. maritimum</i>	sea stork's-bill
<i>Euonymus europaeus</i>	spindle
<i>Euphorbia paralias</i>	sea spurge
<i>E. portlandica</i>	Portland spurge
<i>Festuca altissima</i>	wood fescue
<i>Fumaria purpurea</i>	purple ramping-fumitory
<i>Gentianella campestris</i>	field gentian
<i>Genista tinctoria</i>	dyer's greenweed
<i>Glaucium flavum</i>	yellow-horned poppy
<i>Gymnadenia conopsea</i>	scented orchid
<i>Halimione portulacoides</i>	sea puslane
<i>Hieracium</i> spp.	all scarce hawkweeds
<i>Hippuris vulgaris</i>	maretail
<i>Hyperzia selago</i>	fir clubmoss
<i>Hymenophyllum wilsonii</i>	Wilson's filmy-fern
<i>Hyoscyamus niger</i>	henbane
<i>Hypochaeris glabra</i>	smooth cat's-ear
<i>Juniperus communis</i>	juniper
<i>Lathyrus linifolius</i>	bitter vetch
<i>Lavatera arborea</i>	tree mallow
<i>Lemna triscula</i>	ivy-leaved duckweed
<i>Limonium binervosum</i> agg.	rock sea lavenders
<i>L. vulgare</i>	common sea lavender
<i>Linum bienne</i>	pale flax
<i>Listera cordata</i>	lesser twayblade
<i>L. ovata</i>	common twayblade
<i>Lycopodium clavatum</i>	stagshorn club moss
<i>Lysimachia vulgaris</i>	yellow loosestrife (native populations only)
<i>Medicago arabica</i>	spotted medick
<i>Melampyrum pratense</i>	common cow-wheat
<i>Melica uniflora</i>	wood melick
<i>Mentha pulegium</i>	pennyroyal
<i>Mertensia maritime</i>	oyster plant
<i>Minuartia verna</i>	spring sandwort
<i>Moehringia trinervia</i>	three-veined sandwort
<i>Myosotis ramosissima</i>	early forget-me-not
<i>Myrica gale</i>	bog myrtle
<i>Myriophyllum spicatum</i>	spiked water-milfoil
<i>Neotinea maculata</i>	dense-flowered orchid
<i>Nuphar lutea</i>	yellow water-lily
<i>Nymphaea alba</i>	white water-lily
<i>Oenanthe fistulosa</i>	tubular water dropwort
<i>O. lachenalli</i>	parsley water dropwort
<i>Ophioglossum vulgatum</i>	adder's tongue

Table 11 continued

<i>Ophrys apifera</i>	bee orchid
<i>Orchis mascula</i>	early purple orchid
<i>Orobanche minor</i>	common broomrape
<i>O. rapum-genistae</i>	greater broomrape
<i>Osmunda regalis</i>	royal fern
<i>Parapholis strigosa</i>	sea hard-grass
<i>Parentucellia viscosa</i>	yellow bartsia
<i>Phegopteris connectilus</i>	beech fern
<i>Pilularia globulifera</i>	pillwort
<i>Pimpinella saxifraga</i>	burnet saxifrage
<i>Platanthera bifolia</i>	lesser butterfly orchid
<i>P. chlorantha</i>	greater butterfly orchid
<i>Pinguicula lusitanica</i>	pale butterwort
<i>Polystichum aculeatum</i>	hard shield fern
<i>Potamogeton obtusifolius</i>	blunt-leaved pondweed
<i>P. pectinatus</i>	fennel pondweed
<i>Puccinellia distans</i>	reflexed saltmarsh-grass
<i>Pyrola minor</i>	common wintergreen
<i>Radiola linoides</i>	allseed
<i>Ranunculus baudotii</i>	brackish water crowfoot
<i>R. lingua</i>	greater spearwort
<i>R. sceleratus</i>	celery-leaved buttercup
<i>Rorippa islandica</i>	marsh yellow-cress
<i>R. sylvestris</i>	creeping yellow-cress
<i>Rubus</i> ssp.	all scarce brambles
<i>Rumex maritimus</i>	golden dock
<i>Sagina nodosa</i>	knotted pearlwort
<i>S. subulata</i>	heath pearlwort
<i>Salicornia europaea</i>	glasswort
<i>Salix herbacea</i>	least willow
<i>S. pentandra</i>	bay willow
<i>Schoenoplectus lacustris</i>	bulrush
<i>S. tabernaemontani</i>	grey bulrush
<i>Scutellaria minor</i>	lesser skullcap
<i>Selaginella selaginoides</i>	lesser clubmoss
<i>Seriphidium maritimum</i>	sea wormwood
<i>Solanum nigrum</i>	black nightshade
<i>Sparganium natans</i>	floating burr-reed
<i>Spiranthes spiralis</i>	autumn lady's tresses
<i>Stellaria palustris</i>	marsh stitchwort
<i>Teesdalia nudicaulis</i>	shepherd's cress
<i>Torilis nodosa</i>	knotted hedge-parsley
<i>Trichomanes speciosum</i>	killarney flimy fern
<i>Trifolium arvense</i>	hare's-foot clover
<i>T. fragiferum</i>	strawberry clover
<i>T. occidentale</i>	western clover
<i>T. ornithopoides</i>	fenugreek
<i>T. scabrum</i>	rough clover

Table 11 continued

<i>T. subterraneanum</i>	subterranean clover
<i>T. suffocatum</i>	suffocated clover
<i>Utricularia</i> sp.	bladderwort
<i>Vaccinium oxycoccus</i>	cranberry
<i>V. vitis-idaea</i>	cowberry
<i>Veronica anagallis-aquatica</i>	water speedwell
<i>V. catenata</i>	pink water speedwell
<i>V. x lackenschweitzii</i>	A hybrid water speedwell
<i>V. Montana</i>	wood speedwell
<i>Vicia lathyroides</i>	spring vetch
<i>V. sylvatica</i>	wood vetch
<i>Viola lutea</i>	mountain pansy
<i>V. tricolor</i> ssp. <i>curtsii</i>	seaside pansy
<i>Vulpia fasciculata</i>	dune fescue
<i>Wahlenbergia hederacea</i>	ivy-leaved bellflower
<i>Zannichellia palustris</i>	horned pondweed
<i>Zostera marina</i>	eelgrass

* native status not certain

LOWER PLANTS

LP 1. All sites supporting populations of one or more species of bryophyte classified as:

- nationally rare (ie occurring in 15 or fewer 1km squares in Britain)

or • nationally scarce (ie occurring in 16-100 10km squares in Britain)

LP 2. All sites supporting populations of one or more species of lichen that are:

- nationally rare / listed in the relevant British Red Data Book

or • classified as nationally scarce

LP 3. All sites supporting populations of one or more species of fungi that are:

- nationally rare / listed in the relevant British Red Data Book

or • classified as nationally scarce

LP 4. All sites supporting populations of one or more species of Charophyte (stonewort)

REGIONALLY IMPORTANT GEOLOGICAL AND GEOMORPHOLOGICAL SITES (RIGS)

- G 1.** Good examples of geological/geomorphological features, suitable for visiting by students (either from schools or further education institutions) in terms of their content, accessibility and safety.
- G 2.** Sites which demonstrate features of regional (ie north-west Britain), national or international significance or importance.
- G 3.** Sites which offer valuable scope for local research.
- G 4.** Sites which have been instrumental in the development of new geological theories, or are otherwise significant in terms of important advances in earth science knowledge.
- G 5.** Sites of geological or geomorphological value which also contain significant features relating to the Island's natural or industrial heritage.
- G 6.** Sites which demonstrate good examples of geological or geomorphological features which are easily discernible and would be of interest or aesthetic value to the general public (eg fossils).
- G 7.** Sites which contain features listed in the Geological and Geomorphological 'Manx Red Site list' (see Table 12), in significant exposure. Only the best examples of these features will normally be selected.

Table 12:
The Manx Geological Red Site List

The aim is to identify sites which illustrate as many of the following features as possible. Individual sites may contain examples of several of the listed features.

1. GEOLOGICAL FEATURES

1.1 Sedimentological:

- i) Graded bedding
- ii) Ripple marks
- iii) Cross-bedding
- iv) Dessication cracks
- v) Calcretes
- vi) Erosion surfaces
- vii) Load structures

1.2 Stratigraphical:

- i) Unconformity
- ii) Included fragments
- iii) Way-up structures
- iv) Way-up relationships
- v) Distinctive fossil relationships
- vi) Cross-cutting relationships
- vii) Localised successions relating to environment
- viii) Type sections

1.3 Petrological

1.3.1 Igneous & Volcanic rocks:

- i) Granite – rock type with extensive outcrop
- ii) Granite – contact with country rock
- iii) Pegmatite
- iv) Granite vein
- v) Gabbro
- vi) Dolerite dykes
- vii) Pyroclastic deposits and lava

1.3.2 Metamorphic rocks

- i) Slate
- ii) Schist
- iii) Phyllite
- iv) Quartzite
- v) Quartz vein [see Structural]
- vi) Carbonate vein
- vii) Dolomitisation

- viii) Thermal metamorphism/hornfels

1.4 Structural

- i) Parallel fold with flexural slip – profile
- ii) Similar fold with axial plane
- iii) Overtaken fold – profile
- iv) Fold with spaced cleavage – profile
- v) Fold hinge
- vi) Tectonic lineation
- vii) Quartz veins – tensional array
- viii) Quartz veins - folded
- ix) Boudinage
- x) Normal fold with observable offset
- xi) Fault zone with fault breccia and gouge
- xii) Mineral fibre lineations / slickensides
- xiii) Stylolites
- xiv) Joint array
- xv) Thrust with ramp / flat geometry
- xvi) Carbonate vein array
- xvii) Bedding inversion demonstrated by inverted sedimentary structures

1.5 Palaeontological:

- i) Lower Palaeozoic faunas – graptolites and orthocones
- ii) Carboniferous faunas
- iii) Derived Lower Palaeozoic fossils
- iv) Quaternary to Recent faunas and floras

1.6 Mineralogical

- i) Galena
- ii) Sphalerite
- iii) Hematite
- iv) Chalcopyrite
- v) Rare metallic minerals
- vi) “Spar”
- vii) Tufa

2. GEOMORPHOLOGICAL FEATURES

2.1 Upland

2.1.1 Glacigenic landforms

- i) Nivation hollows
- ii) Sub-glacial drainage channels

2.1.2 Periglacial landforms

- i) Solifluction lobes
- ii) Rock talus cones

2.1.3 Fluvial landforms

- i) Alluvial fans
- ii) Valley asymmetry; uncharacteristic valley morphology
- iii) Sequences of alluvial terraces displaying good surface morphology, stratigraphy and chronology
- iv) Active upland gravel-bed rivers

2.2 Lowland

2.2.1 Glacigenic landforms

- i) Sub-glacial drainage channels
- ii) Terminal moraine
- iii) Drumlins
- iv) Sandur terraces
- v) Kettleholes
- vi) Pingos

2.2.2 Fluvial landforms

- i) Alluvial fans
- ii) River terraces
- iii) Waterfalls
- iv) Over incised relict fluvio-glacial channels

2.2.3 Lacustrine landforms

- i) Terrestrialised lake basins

2.2.4 Periglacial landforms

- i) Cryoturbated stratigraphy

2.3 Coastal

2.3.1 Depositional landforms

- i) Raised shorelines: evidence of higher sea-levels including raised beaches, former cliff lines
- ii) Sand dunes and shingle ridges
- iii) Storm beaches and other beach landforms

2.3.2 *Erosional landforms*

- i) Arches, stacks, caves
- ii) Wave-cut platforms

2.4 Pleistocene and Holocene Stratigraphy

2.4.1 *Pleistocene stratigraphy*

- i) Late Glacial stadial and interstadial sediments
- ii) Kettle hole stratigraphies
- iii) Devensian glacial stratigraphy
- iv) Late Glacial to Holocene upland-edge alluvial fan stratigraphy
- v) Drumlin cross-sections
- vi) Moraine cross-section stratigraphy
- vii) Periglacial stratigraphy, including ice wedge casts and other involution structures
- viii) Sections on the contact between intra- and extra- insular tills
- ix) Sections pertaining to the glaciomarine / terrestrial debate
- x) Solifluction terrace stratigraphy
- xi) Penecontemporaneous fluvial activity
- xii) Notable Great Deer sites

2.4.2 *Holocene stratigraphy*

- i) Organic sequences
- ii) Sedimentological evidence of Holocene sea-level fluctuations

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In establishing the Manx Wildlife Sites System, and producing this document, reference has frequently been made to the criteria and methods devised and used by those running other local Wildlife Sites and RIGS systems. In addition to those sources mentioned in the bibliography above, we would like to thank all those groups that gave us assistance in devising our own system, and to acknowledge in particular the work of the following groups:

Cornwall RIGS Group
Gloucester RIGS Group

Cumbria RIGS Group
RIGS Northeast

APPENDIX 1

**SITE RECORDING AND CITATION FORMS
USED IN THE SELECTION OF
WILDLIFE SITES
AND
REGIONALLY IMPORTANT GEOLOGICAL AND
GEOMORPHOLOGICAL SITES (RIGS)**

Manx Wildlife Site Recording Form

Site Name	Grid reference (central)						
Location	Date						
Recorder(s)	Time on site						
	<i>Hrs</i>			<i>Mins</i>			



Main/Additional Habitat Type(s)

BL Woodland			Curragh		
Plantation (BL/MX/CN*)			Alder Carr		
Scrub – scattered			Swamp		
Scrub – dense			Reedbed		
Grassland (Ne/Ca/Ad/My/Cst*)			Standing Water		
Heathland – upland (wet/dry*)			Running Water		
Heathland – lowland (wet/dry*)			Dune		
Heathland - coastal			Saline Lagoon		
Bog			Saltmarsh		
Mire			Maritime Cliff (S/H)		
Flush			Ruderal		

Constraints

Early/Late Survey	
Short Visit	
Hay Cut	
Weather	
Terrain	
Vegetation	

Total Area (ha)

Site description including habitat proportion(s), flora, fauna, notable species etc

Additional features

Veteran Trees	Abundant nectar sources	Invasive species
Pollarded Trees	Varied sward height	Public access
Standing/fallen deadwood	Anthills	Areas with frequent/prolonged flooding
Holes in Trees	Bare ground	Seasonally wet/damp areas
Hedge	Rock outcrops	Archaeological features
Sod Hedge	Steep slopes	Appropriate management
Tussocky vegetation	South facing slopes	Inappropriate management

* delete as appropriate

Abbreviations: BL = Broadleaved, MX = Mixed, CN = Coniferous, Ne = Neutral, Ca = Calcareous, Ad = Acid, My = Marshy, Cst = Coastal, S = soft, H = Hard

Manx Wildlife Site Recording Form

Site Ownership – including details of any managers/tenants:

Is permission required to access the site and if so, who from?

Description of access to the site:

*Is/are the landowner(s) aware of the sites value? Yes/No/Not Known**
*willing to manage the site in a sympathetic manner? Yes/No/Not Known**

Summary of management required to maximise the sites potential:

Summary of any threats to the site:

Is the site already protected in any way?

*Phase 1 map completed? Yes/No**

*Photographs? Yes/No**

Additional information:

* delete as appropriate

Abbreviations: BL = Broadleaved, MX = Mixed, CN = Coniferous, Ne = Neutral, Ca = Calcareous,
Ad = Acid, My = Marshy, Cst = Coastal, S = soft, H = Hard

**Manx Wildlife Site
Citation Form**

<i>Site Name:</i>		<i>Ref:</i>	
<i>Location:</i>		<i>OS Grid Ref of center of site:</i>	<i>Total Area (ha):</i>
<i>Parish:</i>	<i>Date identified:</i>	<i>Proposed by:</i>	
<i>Selected as Wildlife Site? Y/N</i> <i>Date:</i>	<i>Any other designation?</i>	<i>Criteria Code(s):</i>	

Brief reasons for proposing site and summary of its importance (if site has been rejected state reasons):

Manx RIG Site Recording Form

Site Name	Grid reference (central)						
Location	Date						
Recorder(s)	Time on site						
	<i>Hrs</i>			<i>Mins</i>			



Main Geomorphological/Geological Feature(s)

Up: Glacigenic landforms	
Up: Periglacial landforms	
Up: Fluvial landforms	
Low: Glacigenic landforms	
Low: Fluvial landforms	
Low: Lacustrine landforms	
Low: Periglacial landforms	
Cst: Depositional landforms	
Cst: Erosional landforms	
Pleistocene stratigraphy	
Holocene stratigraphy	

Sedimentological	
Stratigraphical	
Petrological: Igneous & Volcanic	
Petrological: Metamorphic	
Structural	
Palaeontological	
Mineralogical	

Constraints

Early/Late Survey	
Short Visit	
Weather	
Terrain	
Vegetation	

Total Area (ha)

Site description including geological/geomorphological proportions and surrounding habitat:

Type of exposure

Coastal		Old mine workings	
Inland natural outcrop		Mine waste tip	
Road cutting		Disused quarry	
Railway cutting		Other (specify above)	
Active quarry			

Additional features

Public access	
Educational value	
Regional scientific importance	
Historical association(s)	

Abbreviations: Up = Upland, Low = Lowland, Cst = Coastal

Manx RIG Site Recording Form

Site Ownership – including details of any managers/tenants:

Is permission required to access the site and if so, who from?

Description of access to the site:

*Is/are the landowner(s) aware of the sites value? Yes/No/Not Known**
*willing to manage the site in a sympathetic manner? Yes/No/Not Known**

Summary of management required to maximise the sites potential:

Summary of any threats to the site:

Summary of educational value of the site:

Is the site already protected in any way?

What, if any, sort of collecting might be allowed at this site?

*Phase 1 map completed? Yes/No**

*Photographs? Yes/No**

Additional information:

**Manx RIG Site
Citation Form**

<i>Site Name:</i>		<i>Ref:</i>	
<i>Location:</i>		<i>OS Grid Ref of center of site:</i>	<i>Total Area (ha):</i>
<i>Parish:</i>	<i>Date identified:</i>	<i>Proposed by:</i>	
<i>Selected as RIG Site? Y/N</i> <i>Date:</i>	<i>Any other designation?</i>	<i>Criteria Code(s):</i>	

Brief reasons for proposing site and summary of its importance (if site has been rejected state reasons):

APPENDIX 2

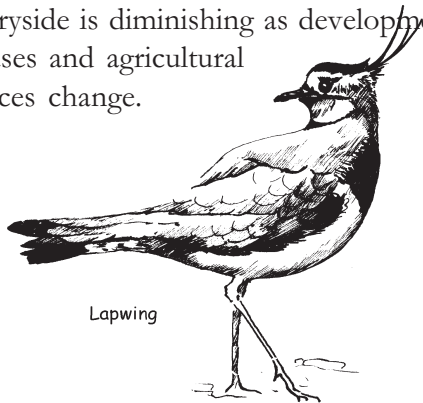
**LEAFLETS
PRODUCED FOR DISTRIBUTION TO
LANDOWNERS
AND THE
GENERAL PUBLIC**

The Isle of Man: our rich natural heritage

The Isle of Man, “gem of God’s earth”, is famed for its beauty. Close your eyes and imagine its rolling hills covered in purple heather and golden gorse, its winding wooded glens, the call of the skylark, the curlew and the chough, the scent of thrift and wild thyme drifting from its coasts. Visitors to the Island cannot fail to be struck by its wild and unspoilt scenery and residents are justly proud of its unique and outstanding natural heritage.

The Island’s location and its exceptionally mild climate allow it, uniquely, to support a rich and varied flora and fauna representing all parts of the British Isles. We even have a species of grasshopper that does not occur anywhere else in Britain, and a plant for which the Irish Sea area is the only location on Earth !

It is largely thanks to you, the landowner, that we have such idyllic scenery and such a wealth of wildlife, but we cannot afford to be complacent. Even here on our unspoilt Island, the countryside is diminishing as development increases and agricultural practices change.



Lapwing

The Manx Wildlife Sites System

Wildlife Sites are places which are considered to be of importance for wildlife but are not designated as such by law. Such sites are often quite small but they contribute greatly to the richness of the Manx countryside and landscape. Without them the Island would lose much of its character as well as many of its wildlife habitats and species.

The partners in the Manx Wildlife Sites System recognise the importance of such areas and have set up a system by which Wildlife Sites may be identified and offered some protection, so that they can be maintained for future generations. This *Wildlife Sites System* is similar to others already operating successfully in the UK, but has been tailored to suit the Isle of Man and its unique situation.



How are Wildlife Sites chosen ?

Sites are selected by assessing their importance for wildlife in a Manx context. Consideration is given to the plants, birds, animals and insects that are present. To qualify as a Wildlife Site, an area must fulfil a number of criteria, which have been carefully drawn up and tested to make sure that they are practical. They relate to factors such as the size, diversity and typicalness of a site, and also to the rarity of the species and habitats that are found there, judged in a local, British or even global context.

How does this system work ?

Wildlife Sites are identified using existing survey information (such as the results of the Phase 1 vegetation survey carried out by the Department of Agriculture, Fisheries and Forestry between 1991 and '93), and also using the knowledge of local people and organisations.

When an area is identified as a Wildlife Site, the landowner/tenant will be notified, and any further survey work felt to be necessary will only be carried out with their permission. Information about all sites will be held by the Manx Wildlife Trust and the Manx Museum. Site information will be given to the landowner/tenant but will not be made available to the general public.

The Department of Local Government and the Environment will be informed of the location of Wildlife Sites and will bear their wildlife value in mind when considering planning applications affecting these areas.

If the landowner/tenant is willing, the Manx Wildlife Trust will be able to advise on the best way to look after the site for the benefit of its wildlife.

In order to keep our information up-to-date and accurate, Wildlife Sites will be regularly reviewed and monitored.

What would happen if a Wildlife Site was identified on my land ?

Having a Wildlife Site on your land will not give anyone the right of access onto it, other than on existing rights of way, nor will it impose any legal or statutory obligations upon you, so your normal agricultural operations will not be affected. However, if you are happy to look after the Wildlife Site in question the Manx Wildlife Trust will be delighted to discuss its management with you and provide advice and support.

Such management may often be similar to that already carried out, such as seasonal grazing or cutting - **remember, the site is as it is because of the way it has been looked after in the past.** By getting the management right, sites may be made even richer in wildlife. Conversely, leaving the site to look after itself may cause problems - neglect can be as damaging as the wrong management.

Grants for those wishing to manage sites for wildlife may become available on the Island in the future (like those currently available in the UK, e.g. the Agri-environment Scheme). Owners of Wildlife Sites would then be likely to obtain financial assistance for appropriate site management.

The wildlife interest of a site will be considered, along with other normal planning considerations, by the planning committee if major changes are proposed, but this applies to land in general, not just to Wildlife Sites.

Who is involved in the Manx Wildlife Sites System ?

The Manx Wildlife Sites System is run by a Steering Group composed of representatives of a wide range of organisations concerned with the countryside. These include:

Manx National Farmer's Union
Isle of Man Farming & Wildlife Advisory Group
Manx Wildlife Trust
Manx Bird Atlas
Manx National Heritage
The Isle of Man Government

About the Manx Wildlife Trust

The Manx Wildlife Trust (Registered Charity No. 225) was set up in 1973, and is the principal voluntary body for nature conservation in the Isle of Man. The Trust owns and manages nearly 230 acres of land as nature reserves. It is part of a network of Wildlife Trusts operating throughout the British Isles.

For further information about the Manx Wildlife Sites System, please contact:

Manx Wildlife Trust
Tynwald Mills, St John's
Isle of Man IM4 3AE
Telephone (01624) 801985 / Fax 801022



The Manx Wildlife Sites System

- how will it affect me ?



Putting *wildlife* on the map

APPENDIX 3

ACKNOWLEDGEMENTS FROM THE PREVIOUS VERSION OF THE MANX WILDLIFE SITES HANDBOOK

ACKNOWLEDGEMENTS

Sincere thanks go to the following for making possible the establishment of the Manx Wildlife Sites System:

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The Isle of Man Government Department of Local Government and the Environment and Manx National Heritage for hosting meetings.

Manx Wildlife Trust, April 2000

Personal and sincere thanks also go to the following for the advice, support, encouragement and constructive criticism that they provided during my time as Wildlife Sites Project Officer:

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Bridget Keehan, Wildlife Sites Project Officer, October 1997 to May 1999