

COPELAND ISLANDS

A SPECIAL PLACE...



The Copeland Islands

Copeland Islands ASSI is located off the County Down coast and comprises Big Copeland, Light House Island and Mew Island. The islands are important sites for breeding seabirds and waders, in addition to their coastal plant communities and geological features.



Arctic Tern

The rocks here date from some 400 million years ago to the closure of the Iapetus Ocean during the Silurian period. They contain among the best examples in Northern Ireland of intruded volcanic rocks of this age, where the form of the intrusions is controlled by structural alteration of the country rock.



Big Copeland supports the most diverse range of habitats of the three islands. Communities influenced by the sea are found around the shore with maritime cliff vegetation and pockets of salt-marsh also present. The centre of

Scots Lovage

SITES OF BIOLOGICAL AND EARTH SCIENCE IMPORTANCE HAVE BEEN SURVEYED BY ENVIRONMENT AND HERITAGE SERVICE TO ASSESS THEIR SCIENTIFIC INTEREST. THE BEST SITES ARE NOW BEING DECLARED AS AREAS OF SCIENTIFIC INTEREST (ASSIS). IN DOING SO, WE AIM TO SAFEGUARD THESE IMPORTANT SITES FOR THE BENEFIT OF PRESENT AND FUTURE GENERATIONS.

the island is occupied by semi-improved wet grassland with frequent areas of marsh.

The vegetation on Light House Island consists of short, rabbit grazed turf with large areas of rank Bracken and Himalayan Balsam. Notable species include English Stonecrop, Rock Sea-Spurrey, Scots Lovage and Sea Purslane. Light House Island represents the southern limit for Scots Lovage in Europe and the northern limit for Sea Purslane in Ireland.

Mew Island is dominated by rank stands of grass and Bracken but, as on all the islands, notable areas of inter-tidal and exposed rock habitat are present.





Manx Shearwater

The islands are internationally important sites for breeding populations of Manx Shearwater and Arctic Tern and nationally important sites for breeding Mediterranean Gull, Common Gull and Eider Duck.

The Manx Shearwater colony on Copeland Islands holds more than 1.7% of the world population. The colony is in excess of four thousand pairs.

The rabbit populations on the islands play an important role in the breeding success of the Manx Shearwater as the latter mainly nest in the rabbit burrows that honeycomb the islands. Grazing by rabbits maintains a short sward, which is desirable for the fledglings.

Big Copeland has an internationally important Arctic Tern colony, with some



Lapwing

550 pairs. The site now represents the largest colony for this species in Ireland. Mew Island has been an important tern colony in the past and it is hoped that positive management will encourage terns to become re-established.

The islands are the most important breeding sites in Northern Ireland for Common Gull with over 250 pairs present. Big Copeland has recently held Northern Ireland's first successful breeding pair of Mediterranean Gull.

The islands are home to a nationally important population of breeding Eider Duck. In total the three islands account for 14% of the Irish population. Non-breeding Eider form part of the nationally important population that occurs along the Outer Ards coast and Belfast Lough areas.

Other breeding species of note include Black Guillemot, Water Rail and Stock Dove. The latter species has suffered a dramatic decline in Northern Ireland, but numbers have increased on the Copeland Islands with some 100 pairs now breeding.

Breeding waders such as Lapwing and Snipe may be found further inland. Here the taller vegetation, interspersed with open areas, provides an ideal breeding habitat.

Birds of prey favour the islands when the breeding season is over. Hen Harrier, Sparrowhawk, Buzzard, Kestrel, Merlin and Peregrine are all seen regularly.



Grey Seal

Grey Seal and Common Seal can be found off the Copeland Islands in significant numbers. They utilise the off-shore islands and reefs as haul-outs and as pupping and mating sites.

It is very important to conserve for the future the best features that remain. Environment and Heritage Service aims to work with landowners and occupiers to ensure that special landscape features from our past, and habitats and species, like those at Copeland Islands, are protected for the future through ASSI designation.

COPELAND ISLANDS



An Agency within the Department of the

Environment

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Document B



**ENVIRONMENT
AND HERITAGE
SERVICE**

DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT COPELAND ISLANDS, COUNTY DOWN. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

The Department of the Environment (the Department), having consulted the Council for Nature Conservation and the Countryside and being satisfied that the area described and delineated on the attached map (the area) is of special scientific interest by reason of the flora, fauna and geological features and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as 'Copeland Islands Area of Special Scientific Interest'.

The Copeland Islands are important for their geology together with their coastal plant communities and animal, notably bird, populations.

The Copeland Islands are composed of Lower Palaeozoic sedimentary rocks of deep marine facies, strongly folded, faulted and weakly metamorphosed. The area is part of the Scottish Southern Uplands / Irish Down - Longford Terrane, one of a series of terranes assembled through the closure of the Iapetus Ocean during the Silurian period, some 400 Million years ago (Ma).

Of greatest significance is the exposure of well-developed deformation structures in the country rock together with later intrusive dykes. Geological structures include the eastward continuation of the Orlock Bridge fault, representing the division between older Ordovician and younger Silurian rocks. The dykes are well developed on Big Copeland especially at Barnagh Bay, Collins Port and The Long Hole.

The Copeland Islands support vegetation typical of marine islands that have experienced considerable guano enrichment from long established seabird colonies and in addition have experienced human disturbance in the past. This has led to the development of extensive units of Bracken *Pteridium aquilinum*, Red Campion *Silene dioica* and Indian Balsam *Impatiens glandulifera* scrub, most notably on Lighthouse Island. The spray zone and transitional communities are interspersed with marshy hollows and rush *Juncus* spp. flushes, leading on to a central block of semi-improved grassland, the latter present on Lighthouse Island and Big Copeland.

Big Copeland supports coastal fringe communities along its southern shore. These are comprised of maritime cliff vegetation on the rock ledges and along the shoreline, grading into stabilised calcareous dune grassland. The rocky shore here supports a

limited saltmarsh community, with small stands of Sea Club-rush *Bolboschoenus maritimus* and Common Spike-rush *Eleocharis palustris* and patches of Saltmarsh Rush *Juncus gerardii*. Away from the shore are pockets of mixed mesotrophic marsh vegetation comprised of Yellow Iris *Iris pseudacorus* beds and a sward of Sharp-flowered Rush *Juncus acutiflorus* and Jointed Rush *J. articulatus* with species such as Marsh Pennywort *Hydrocotyle vulgaris* and Bugle *Ajuga reptans* present. Open fields of species poor, semi-improved mesotrophic grassland occupy the centre of Big Copeland. Combined grazing by stock and rabbits keeps the sward height low except in the wetter areas where stands of Soft-rush *Juncus effusus* generally predominate.

The vegetation on Light House Island is short rabbit grazed turf, invaded in late spring and summer by a lush growth of taller plants such as Bracken *Pteridium aquilinum*, Red Campion *Silene dioica*, and Indian Balsam *Impatiens glandulifera*. Inland in sheltered areas, Elder *Sambucus nigra* scrub has become established with a mixed ground flora. English Stonecrop *Sedum anglicum* is found extensively on rocks above the splash zone with frequent patches of Rock Sea-Spurrey *Spergularia rupicola*. Notable plants include Scots Lovage *Ligusticum scoticum*, at the southernmost part of its range here while Sea Purslane *Atriplex portulacoides* has its most northerly site in Ireland.

Mew Island is very different from Light House Island, with rank Red Fescue *Festuca rubra* dominated turf and mono-dominant stands of Bracken *Pteridium aquilinum* vegetation.

The Copeland Islands support a number of breeding bird populations that are internationally important. These are Manx Shearwater *Puffinus puffinus*, and Arctic Tern *Sterna paradisaea*, while breeding Common Gull *Larus canus* is of national importance. The breeding and non-breeding population of Eider Duck *Somateria mollissima* is also of national significance.

The Copeland Island Manx Shearwater *Puffinus puffinus* colony is 1.7% of the world population and 16% of the Irish breeding population. The Copeland Bird Observatory studies on the Manx Shearwater colony are notable, together with their long-term ringing programmes on all migratory species. In total, some 4,800 breeding pairs of Manx Shearwater are estimated to have nested on Big Copeland (2002 survey) and Lighthouse Island (2000 survey). They nest in a network of rabbit burrows which honeycomb the islands; clearly, the Manx Shearwater are dependent on rabbits to provide nest sites and also to maintain a short sward which assists fledging success.

Big Copeland also supports an internationally important Arctic Tern *Sterna paradisaea* colony with an annual breeding population (estimated over the 5 year period from 1998 to 2002) of 566 pairs. This is 22.6% of the Irish population and the site is now the largest colony in Ireland for this species. Historically, Mew Island has been an important tern colony and, with ongoing positive management there, it is hoped that the terns will become re-established.

The Islands also support a nationally important population of Common Gull *Larus canus* with 250 pairs present. This is 7% of the Irish population and the site is the most important breeding location for this species in Northern Ireland.

The islands host a nationally important breeding population of Eider Duck *Somateria mollissima* with 140 pairs between the three islands, representing 14% of the Irish population. In addition the breeding birds contribute to the non-breeding flock of Eider *S. mollissima* that form part of the nationally important population that occurs along the Outer Ards coast and Belfast Lough. Counts of more than 200 ducks are regular on Big Copeland especially, being some 10% of the Irish population.

Big Copeland supports Northern Ireland's first confirmed breeding pair of Mediterranean Gull *Larus melanocephalus*. Breeding pairs were present in 2002 and again in 2003, mirroring the recent trend of attempted breeding at various other sites in Ireland.

Other bird species of note include breeding colonies of Black Guillemot *Cepphus grylle* and also more unusually, breeding Water Rail *Rallus aquaticus*, the former on Lighthouse Island, the latter on all three islands. In addition, Big Copeland held 372 pairs of Black-headed Gull *Larus ridibundus*, 6 pairs of Ringed Plover *Charadrius hiaticula*, 6 pairs of Lapwing *Vanellus vanellus*, up to 2 pairs of Snipe *Gallinago gallinago*, 1 pair of Redshank *Tringa totanus*, 83 pairs of Oystercatcher *Haematopus ostralegus* (2002 data). At least 100 pairs of Stock Dove *Columba oenas* breed on the islands; this species has declined markedly in recent years within Northern Ireland but has increased on Copeland. The islands also host notable breeding populations of both Sedge Warbler *Acrocephalus schoenobaenus* and Reed Bunting *Emberiza schoeniclus* with 20 pairs of each generally present.

Outside the breeding season, the islands regularly prove attractive to a number species of birds of prey. These include Hen Harrier *Circus cyaneus*, Sparrowhawk *Accipiter nisus*, Buzzard *Buteo buteo*, Kestrel *Falco tinnunculus*, Merlin *Falco columbarius* and Peregrine *Falco peregrinus*.

There are significant populations of both Grey Seal *Halichoerus grypus* and Common Seal *Phoca vitulina*. Off-shore islands and reefs are used as haul-outs, pupping and mating sites.

SCHEDULE

The following operations and activities appear to the Department to be likely to damage the flora and fauna of the area:

1. Any activity or operation which involves the damage or disturbance by any means of the surface and subsurface of the land, including ploughing, rotovating, harrowing, reclamation and extraction of minerals, including rock, cobble, boulders, gravel, sand and peat.
2. Any change in the present annual pattern and intensity of grazing, including any change in the type of livestock used or in supplementary feeding practice.

3. Any change in the established method or frequency of rolling, mowing or cutting.
4. Any change in the annual pattern of application of manure, slurry, artificial fertiliser or lime.
5. The application of herbicides, fungicides or other chemicals deployed to kill any form of wild plant, other than plants listed as being noxious in the Noxious Weeds (Northern Ireland) Order 1977.
6. The storage or dumping, spreading or discharge of any material not specified under paragraphs 4 or 5 above.
7. The release into the area of any animal (other than in connection with normal grazing practice) or plant. 'Animal' includes birds, mammals, fish, reptiles, amphibians and invertebrates; 'Plant' includes seed, fruit or spore. This excludes established practice, with regard to numbers and species, in relation to the managed shoot.
8. Changes in tree or woodland management, including afforestation, planting, clearing, selective felling and coppicing.
9. Construction, removal or disturbance of any permanent or temporary structure including building, engineering or other operations.
10. Alteration of natural or man-made features, the clearance of boulders or stones and grading of rock faces.
11. Operations or activities which would affect wetlands (including, streams and open water), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification of the structure of any watercourse;
 - (iii) lowering of the water-table, permanently or temporarily;
 - (iv) change in the management of bank-side vegetation;
 - (v) changes in field drainage.
12. The killing or taking of any animal in a manner likely to affect the continued existence of the species within the area except as provided for under the terms of the Wildlife (Northern Ireland) Order 1985.
13. The following activities undertaken in a manner likely to damage the scientific interest of the area:

- (i) educational activities;
 - (ii) research activities;
 - (iii) recreational activities;
 - (iv) exercising of animals.
14. Changes in game, waterfowl, or fisheries management or fishing or hunting practices.
15. Sampling of rocks, minerals, fossils or any other material forming a part of the site, undertaken in a manner likely to damage the scientific interest.
16. Use of vehicles or craft likely to damage the scientific interest of the area.

FOOTNOTES

- (a) Please note that consent by the Department to any of the operations or activities listed in the Schedule does not constitute planning permission. Where required, planning permission must be applied for in the usual manner to the Department under Part IV of the Planning (Northern Ireland) Order 1991.
- (b) Also note that many of the operations and activities listed in the Schedule are capable of being carried out either on a large scale or in a very small way. While it is impossible to define exactly what is "large" and what is "small", the Department would intend to approach each case in a common sense and practical way. It is very unlikely that small scale operations would give rise for concern and if this was the case, the Department would normally give consent, particularly if there is a long history of the operation being undertaken in that precise location.

COPELAND ISLANDS

Views About Management The Environment (Northern Ireland) Order 2002 Article 28(2)

A statement of Environment and Heritage Service's views about the management of the Copeland Islands Area of Special Scientific Interest ("the ASSI")

This statement represents the views of Environment and Heritage Service about the management of the ASSI for nature conservation. This statement sets out, in principle, our views on how the area's special conservation interest can be conserved and enhanced. Environment and Heritage Service has a duty to notify the owners and occupiers of the ASSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the ASSI and there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest. It is also very important to recognise that management may need to change with time.

The management views set out below do not constitute consent for any operation or activity. The written consent of Environment and Heritage Service is still required before carrying out any operation or activity likely to damage the features of special interest (see the Schedule on pages 3 - 5 for a list of these operations and activities). Environment and Heritage Service welcomes consultation with owners, occupiers and users of the ASSI to ensure that the management of this area maintains and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

MANAGEMENT PRINCIPLES

The Copeland Islands support a range of habitat types that are important for wildlife, especially birds. These include the network of burrows for breeding Manx Shearwater, the areas with low vegetation and shell or stone for breeding terns, the wet grasslands for breeding small gulls, the grasslands for breeding waders and the rocky shores for breeding sea duck. Environment and Heritage Service would like to see the habitat and its species continue to be conserved and enhanced.

Environment and Heritage Service would encourage the maintenance and enhancement of these habitats, through the development of their structure and the conservation of their associated native plants and animals. Specific objectives include:

Encourage the maintenance of the burrow complexes used by breeding Manx Shearwater; this includes all banks and earth walls that support burrows.

Encourage the maintenance of habitat suitable for breeding terns, small gulls and waders through the appropriate management of grasslands and wetlands

and of the shoreline for the needs of breeding sea duck and other bird species, together with seals.

Encourage the maintenance of an appropriate rabbit population to ensure ongoing development of burrows and maintenance of grazing for those areas where no other grazing stock are present.

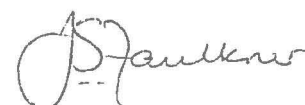
Encourage the maintenance of an environment with limited disturbance to minimise human impact on the breeding birds and other native plants and animals.

Ensure the continued absence on the islands of pest species, such as rats, ferrets and feral cats. Such introduced pest species can have a devastating impact on ground and burrow nesting birds.

Discourage non-native plant species, especially those that tend to spread at the expense of native wildlife.

Maintain the diversity and quality of other notable habitats associated with the islands, such as saltmarsh and fen. These adjoining habitats can often be very important for wildlife.

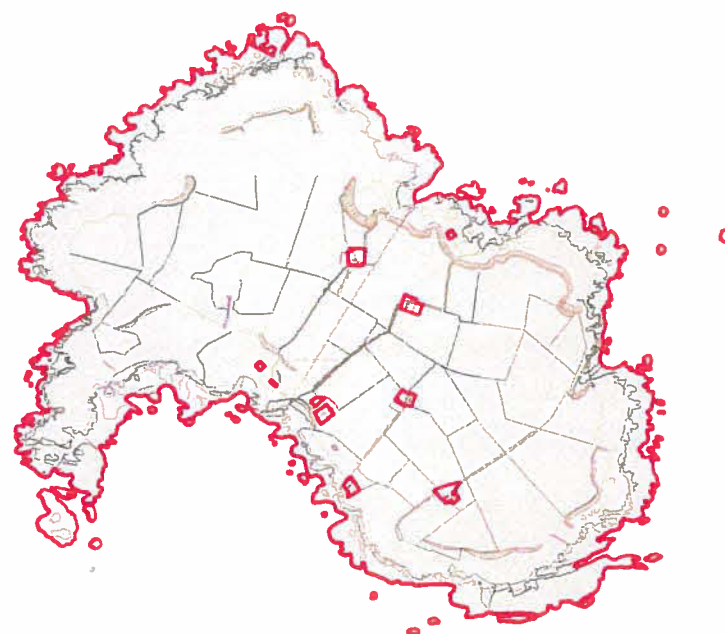
Sealed with the Official Seal of the
Department of the Environment
hereunto affixed is authenticated
by



Dr J S Faulkner
Senior Officer of the
Department of the Environment

Dated the 31st of MARCH 2004

COPELAND ISLANDS ASSI



Scale 1:20,000
Centre (359451, 384553)
metres
0 100 200 300 400 500
yards
0 200 400 600 800 1000

DEPARTMENT OF THE ENVIRONMENT

COPELAND ISLANDS AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 31 MARCH 2004

SITE BOUNDARY: The Area of Special Scientific Interest (ASSI) includes all the lands highlighted within the solid coloured lines.

AREA OF SITE: 201.52 hectares

OS MAPS 1:50,000: Sheet No. 15
1:10,000: Sheet No. 116

IRISH GRID REFERENCES: BIG COPELAND J 593 835
LIGHT HOUSE ISLAND J596 858
MEW ISLAND J 602 860

COUNCIL AREA: ARDS BOROUGH COUNCIL

COUNTY: DOWN



Dr J S FAULKNER
SENIOR OFFICER OF THE
DEPARTMENT OF THE ENVIRONMENT

