



## **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 *Cephus 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.