Central Ayres
Area of Special Scientific Interest (ASSI)

Designation Documents

Please note:

- Notification as an ASSI confers no public right of entry to any land without the permission of the landowner.
- The citations and lists of operations requiring the Department of Environment, Food and Agriculture's consent may be subject to minor editorial changes and should not be assumed to be an exact facsimile of the original legal document.

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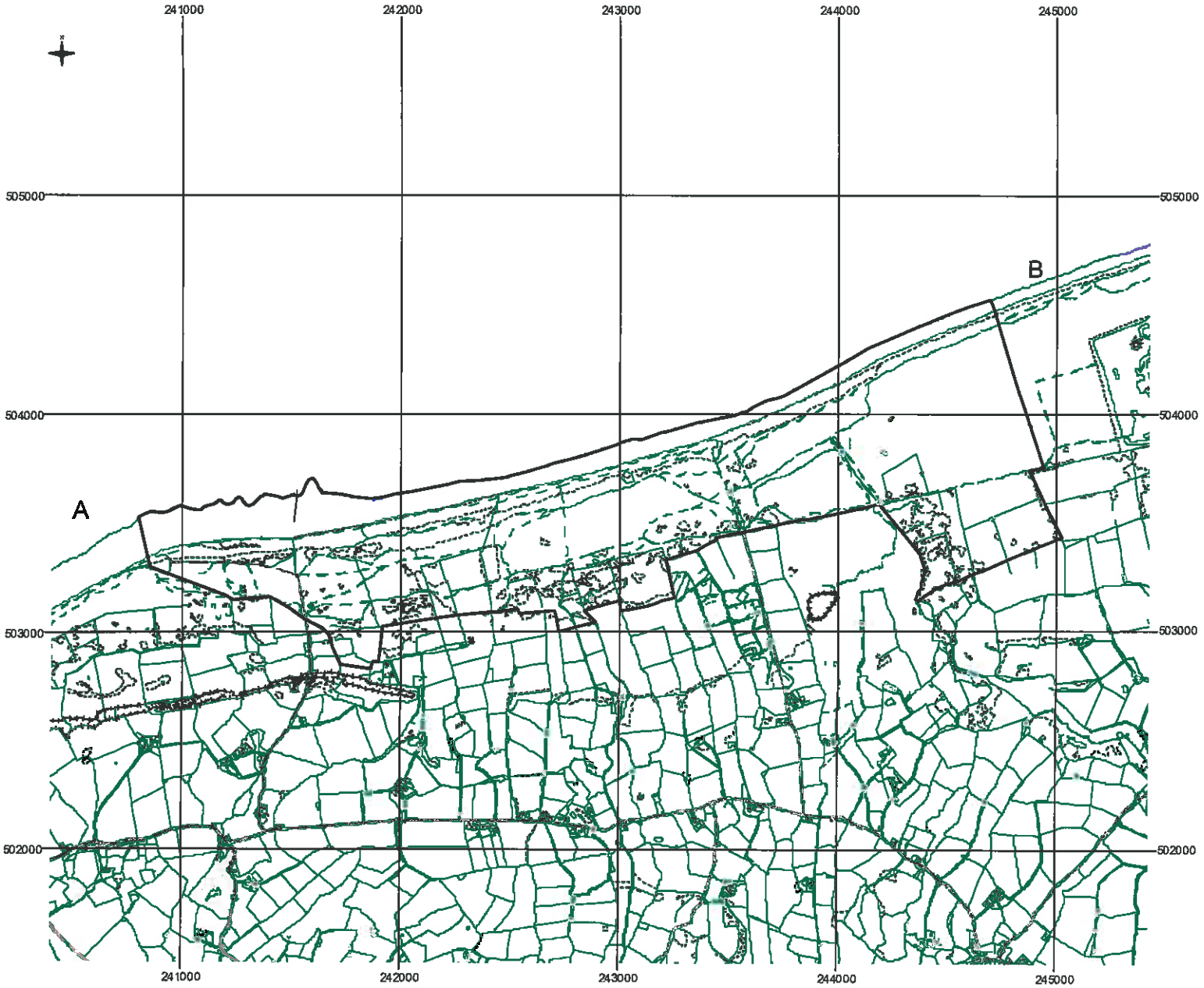

Isle of Man Government

Department of Agriculture, Fisheries and Forestry

CENTRAL AYRES AREA OF SPECIAL SCIENTIFIC INTEREST

Central Ayres ASSI

2008 ASSI boundary

Area*: 358.34ha (885.46 acres)

O/S Grid reference: NX430035
(approximate centre of site)

Designated: 1/8/1996
Varied: 11/2/2008
Confirmed 17/10/2008

*Note: the seaward boundary of the site is here defined as the Lowest Astronomical Tide between points A and B.

The grid lines on this map form part of the National Grid, and are spaced at 1km intervals

VARIATION OF AN AREA OF SPECIAL SCIENTIFIC INTEREST Appendix I

Site name: **Central Ayres ASSI**

Status : Area of Special Scientific Interest (ASSI) notified under Section 27 of the Wildlife Act 1990.

Area: Isle of Man **Parishes:** Andreas & Bride

Planning Authority: Department of Local Government and the Environment

Local authorities: Bride and Andreas Commissioners

National Grid Reference (centroid): NX430035 **Area:** 358.34ha (885.46 acres) in total, of which the extension to the previously notified area = 98.68ha (243.84 acres).

Ordnance Survey Sheet: 1:50,000 OS Landranger Map No.95 and 1:10,560 sheets NX40SW & NX40SE

Date notified: 1st August 1996
Date of last revision: 11th February 2008
Date of variation confirmation: 17th October 2008

Purpose

The purpose of this designation is to extend the protection of an area which is important for its coastal habitats: intertidal shingle, gravel and sand, vegetated shingle and decalcified fixed dunes with dune heath and grassland. The area also supports important populations of rare and protected breeding and visiting wild birds, nationally threatened and vulnerable invertebrates[1] and rare and protected plants including one nationally vulnerable species[2]. This Notification applies to the old designation boundary plus an extended area of approximately 98ha, which includes the intertidal zone adjacent to the old boundary, plus contiguous areas of dune heath and grassland. These were not included at the time of the previous designation, but are now known to have a high wildlife importance and form an integral part of the same ecosystem. This is therefore a formal revision, replacing the previous Central Ayres ASSI notification.

Description and reasons for notification:

The Central Ayres Area of Special Scientific Interest comprises the central part of an extensive area of coastal shingle and sand dunes. The dunes nearest to the sea are relatively mobile and rise to 5 metres in height, but have been wind-blown onto the landward side to form flat, fixed dune areas with occasional small depressions, and further back in the heath. Decalcification of the sand on the fixed dune areas has led to a unique vegetation of low herbs and shrubs ranging from almost-bare, lichen-dominated ground through to dwarf shrub heath. To the south of the site are wet hollows with seasonal pools. The extended area of designation comprises the intertidal elements of the shingle and gravel coast adjacent to the existing ASSI, and a larger area of fixed dune grassland and heath on the south-eastern edge of the site.

Intertidal zone and shingle

The main intertidal habitats identified from the site are barren shingle or gravel shore, and burrowing amphipods *Pontocrates* spp. and *Bathyporeia* spp. in lower shore clean sand. Areas of ephemeral algae and edible mussels have also been identified[3]. "Intertidal edible mussel beds on mixed and sandy sediments" is on the OSPAR Commission list of threatened and/or declining species and habitats.

The importance of the intertidal zone adjacent to the existing designated area relates to its ecological position. In addition to providing the source of sand for the dune system, the intertidal sands and shallow water provide a feeding area for birds that visit and/or breed on the site, including species which rely on the local sand eels, *Ammodytes tobianus* and *Hyperoplus lanceolatus* . Regular bird visitors known to feed on and beyond the intertidal area at high tide include a wide range of coastal species such as gannet *Sula bassana* , shag *Phalacrocorax aristotelis*, cormorant *Phalacrocorax carbo,* red-throated, black-throated and great northern divers *Gavia stellata, G. arctica, G. immer*, arctic tern *Sterna paradisaea**, sandwich tern *Sterna sandvicensis**, little tern *Sternula albifrons** (see below) and guillemot *Uria aalge*, razorbill *Alca*

torda and waders such as golden plover *Pluvialis apricaria**, curlew *Numenius arquata**, dunlin *Calidris alpina*, sanderling *Calidris alba*, common sandpiper *Actitis hypoleucus** turnstone *Arenaria interpres* oystercatcher *Haematopus ostralegus* and ringed plover *Charadrius hiaticula*. Black-tailed godwit *Limosa limosa#*, whimbrel *Numenius phaeopus*, redshank *Tringa tetanus,* knot *Calidris canutus* and lapwing *Vanellus vanellus** are amongst the more occasional visitors.

The shingle above the high-tide mark supports sparse strandline vegetation including sea sandwort *Honckenya peploides*, sea beet *Beta vulgaris subsp. maritima*, common orache *Atriplex patula*, Babington's orache *Atriplex glabriuscula*, spear-leaved orache *Atriplex prostrata*, yellow horned-poppy *Glaucium flavum*, sea-rocket *Cakile maritima*, Ray's knotgrass *Polygonum oxyspermum*, sea holly *Eryngium maritimum* and the nationally scarce, occasional rarity oysterplant *Mertensia maritima****. This area of shingle is of importance for breeding arctic tern *Sterna paradisaea** and little tern *Sternula albifrons**, oystercatcher *Ostralegus haematopus* and ringed plover *Charadrius hiaticula**, as well as providing a feeding area for a range of birds including starling *Sturnus vulgaris#**. The Ayres coast is the only place on the Island where little terns are known to breed regularly and numbers have reached 50 pairs or more, i.e. over 1% of the total British population. The shingle beach is an occasional haul-out site for grey seals *Haliochoerus grypus* ** which are regularly seen feeding in the shallow waters.

Dunes
Mobile dunes on the seaward side have a typical dune flora dominated by marram *Ammophila arenaria* and sand couch *Elytrigia juncea*, with Portland spurge *Euphorbia portlandica****, sea spurge *Euphorbia paralias*, sea bindweed *Calystegia soldanella* and sea holly *Eryngium maritimum*. Newer areas of fixed dune support a lime-tolerant flora including rest-harrow *Ononis repens*, bird's-foot trefoil *Lotus corniculatus*, eyebrights *Euphrasia spp*, sea storksbill *Erodium maritimum*, wild thyme *Thymus polytrichus*, early purple orchid *Orchis mascula,* moonwort *Botrychium lunaria*, mouse-ear hawkweed *Pilosella officinalis* and abundant pyramidal orchids *Anacamptis pyramidalis****.

Further inland the flat area of fixed dunes has an extensive zone of low vegetation and occasional bare ground, with low to short vegetation including wetland species in the wet depressions or "slacks". Dune slack plants of interest include adder's-tongue fern *Ophioglossum vulgatum*, dwarf yellow-sedge *Carex viridula subsp. viridula*, northern marsh orchid *Dactylorhiza purpurella****, allseed *Radiola linoides*, chaffweed *Anagallis minima*, twayblade *Listera ovata**** and early marsh orchid *Dactylorhiza incarnata****. This area is a feeding area for wading birds such as snipe in winter.

Fixed dune heath and grassland
Dunes which are well-established and subject to heavy leaching by high rainfall may develop into decalcified fixed dunes, which support a neutral to acid-loving flora and fauna despite their origins in lime-rich shell sand. The heavy rainfall and mild climatic conditions of the Atlantic coasts of Europe give rise to *Atlantic decalcified fixed dunes,* an internationally important Priority Habitat under Annex 1 of the EU Habitats Directive. The well-established fixed dunes at the Central Ayres ASSI largely fit this category, and are notable for a low-growing, wind-pruned dwarf shrub heath with a high proportion of lichen cover. Shrubby areas are dominated by ling *Calluna vulgaris*, bell heather *Erica cinerea*, Western gorse *Ulex* gallii and frequent patches of very low-growing burnet rose *Rosa spinossissima*.

The shortest vegetation on the fixed dune areas is ideal for the growth of lower plants, in particular lichens and mosses. The ground is almost bare in places and is dominated by lichens, in particular the grey lichens *Cladonia portentosa*, *C.arbuscula*, *C. fimbriata*, *C. floerkeana*, *C. uncialis* and *Hypogymnia physodes*. The latter species grows here not on trees but by colonizing other lichens and old heather stalks. The shortest areas are also notable for the presence of abundant "sausage lichen" *Usnea articulata*, which is only locally distributed in the British Isles and usually confined to growing in trees. The proportion of each species of lichen varies across the site, depending on the degree of shading by taller species, level of disturbance, and acidity of the substrate. These lichens have helped to create an exceptionally structurally diverse and species-rich example of the fixed dune habitat. Other lower plants of interest include the moss *Racomitrium ericoides*, and the uncommon winter stalkball fungus *Tulostoma brumale*.

Dune grassland occurs amongst the heath, particularly in fields along the southern edge of the site where there is grazing by rabbits and occasionally livestock. In addition to a diverse range of typical coastal

grassland plants, rarities occur such as Autumn lady's tresses *Spiranthes spiralis**** and field gentian *Gentianella campestris****. These are Near Threatened and Nationally Vulnerable[2] species respectively, on account of severe population decline throughout the British Isles in recent years. Small ponds occur within the grassland and heath areas, adding to the habitat diversity.

The fixed dunes as a whole offer an excellent habitat for a range of birds and animals, some of which occur nowhere else on the Island. Breeding birds of interest in these dunes and associated scrub include skylark *Alauda arvensis,* eider *Somateria mollissima,* linnet *Carduelis cannabina*#, yellowhammer *Emberiza citrinella*#*, stonechat *Saxicola torquata* and reed bunting *Emberiza schoeniclus.* Birds which feed over the dune heath and grassland include skylark *Alauda arvensis*#*, peregrine *Falco peregrinus**, hen harrier *Circus cyaneus**, merlin *Falco columbarius* and long-eared owls *Asio otus** which breed in the small plantation. Animals of note include the common frog *Rana temporaria*** and viviparous lizard *Lacerta vivipara***, and a great diversity of invertebrates including all but one of the Island's 15 native butterfly species. Of particular note are the scarce crimson and gold moth *Pyrausta sanguinalis*** which is classified as a Red Data Book Endangered species[1], and the heath bee-fly *Bombylius minor***, classified as Vulnerable. There are also 26 Nationally Scarce invertebrates recorded on the Ayres.

* = Protected under Schedule 1 of the Wildlife Act 1990
** = Protected under Schedule 5 of the Wildlife Act 1990
*** = Protected under Schedule 7 of the Wildlife Act 1990
# = Birds of Conservation Concern Red List species[4]

Other information:

This designation refers to a variation of the original Ayres National Nature Reserve and ASSI boundary, which was drawn up before the present-day ASSI criteria were written, and followed administrative boundaries above the high tide mark as well as habitat considerations. The omission of the intertidal zone – and of areas of dune heath contiguous with the designation boundary – is now seen as a major shortcoming of the original designation. The current policy follows that of the UK[5], which is to include adjacent related habitat such as the intertidal zone, where that habitat is vital for the support of features for which the site has been designated.

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[1] Shirt, D.B. (editor) (1987). British Red Data Books: 2 Insects. Peterborough: Nature Conservancy Council.
[2] Cheffings, C. and Farrell, L. (Editors), (2005), The Vascular Plant Red Data List for Great Britain, ISSN 1473-0154
[3] Holt, TJ (1999), An Intertidal Survey of the Isle of Man. Manx Wildlife Trust
[4] Gregory Richard D, Wilkinson Nicholas I, Noble David G, Robinson James A, Brown, Andrew F, Hughes, Julian, Proctor Deborah, Gibbons David W, and Galbraith Colin A. (2002) The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002-2007. British Birds Vol 95 No 9 Pages 410-448
[5] NCC (1989), *Guidelines for the Selection of Biological ASSIs p35 S5.7.* Peterborough: Nature Conservancy Council.

VARIATION OF AN AREA OF SPECIAL SCIENTIFIC INTEREST Appendix II

Site Name: Central Ayres ASSI

Operations likely to damage the special interest of the site

Standard reference number†	Type of operation
1	Cultivation including ploughing, rotovating, harrowing and reseeding
2	Grazing where already damaging, the introduction of grazing and changes in grazing regime (including type of stock or intensity or seasonal pattern of grazing and cessation of grazing).
3	Stock feeding, where already damaging, the introduction of stock feeding and changes in stock feeding practice.
4	Mowing or other methods of cutting where they are already damaging, changes in mowing or cutting regime (including conversion from hay making to silage or cessation of mowing).
5	Application of manure, fertilisers and lime.
6	Application of pesticides, including herbicides (weedkillers).
7	Dumping, spreading or discharge of any materials.
8	Burning, lighting of fires and changes in frequency or pattern of burning, where applicable.
9	The release into the site of any wild, feral or domestic animals *, plant or seed.
10	The killing or removal of any wild animal *, including pest control
11	The destruction, displacement, removal or cutting of any plant or plant remains, including herb, dead or decaying wood, moss, lichen, fungus, leaf mould or turf.
12	The introduction of tree and /or woodland management and changes in tree and/ or woodland management.
13	Drainage (including moor-gripping, the use of mole, tile, tunnel or other artificial drains).
14	The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
15	Infilling of ditches, dykes, drains, ponds, pools, marshes or pits.
16	Coastal fishing or fisheries management and seafood or marine life collection, where already damaging, the introduction of coastal fishing and changes in coastal fishing practices or fisheries management and seafood or marine life collection, including the use of traps and fish cages.
17	Reclamation of land from sea, estuary or marsh.
18	Bait digging on inter-tidal areas, (if it is shown to be damaging).
19	Erection of sea defences or coastal protection works, including cliff or land-slip drainage or stabilisation measures.
20	Extraction of minerals including peat, shingle, sand and gravel, topsoil, subsoil, chalk, lime, limestone pavement, shells and spoil.
21	Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of

	pipelines and cables, above or below ground.
22	Storage of materials.
23	Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling,.
24	Modification of natural or man-made features (including cave entrances), clearance of boulders, large stones, loose rock or scree and bettering, buttressing or grading rock faces and cuttings, in-filling of pits, and quarries.
25	Removal of geological specimens, including rock samples, minerals and fossils.
26	Use of vehicles or craft likely to damage or disturb features of interest,
27	Recreational or other activities likely to damage features of interest or soil, fauna and flora
28	Game and waterfowl management and hunting practices, where already damaging, introduction of game or waterfowl management and changes in game or waterfowl management and hunting practices.

† Note: each type of operation has a standard reference number; for each site, only those operations which are relevant to the site will be listed, hence there may be gaps in the numbering for some sites.

* "animal" includes any mammal, reptile, amphibian, bird, fish or invertebrate.