National Parks and Wildlife Service

Conservation Objectives Series

Inishkea Islands SAC 000507



An Roinn Ealaíon, Oidhreachta agus Gaeltachta

Department of Arts, Heritage and the Gaeltacht



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> Series Editor: Rebecca Jeffrey ISSN 2009-4086

Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance
- exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

• population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

• the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.

2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.

3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.

4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.

5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

Qualifying Interests

* indicates a priority habitat under the Habitats Directive					
000507	Inishkea Islands SAC				
1364	Grey Seal Halichoerus grypus				
1395	Petalwort Petalophyllum ralfsii				
21A0	Machairs (* in Ireland)				

Please note that this SAC overlaps with Inishkea Islands SPA (004004) and adjoins West Connacht Coast SAC (002998). See map 2. The conservation objectives for this site should be used in conjunction with those for overlapping and adjacent sites as appropriate.

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

Year :	2003
Title :	Grey seal population status at islands in the Inishkea group, as determined from breeding
A (1)	ground surveys in 2002
Author :	Ó Cadhla, O.; Strong, D.
Series :	Unpublished report to NPWS
Year :	2004
Title :	Harbour seal population assessment in the Republic of Ireland: August 2003
Author :	Cronin, M.; Duck, C.; O Cadhla, O.; Nairn, R.; Strong, D.; O'Keeffe, C.
Series :	Irish Wildlife Manual No. 11
Year :	2004
Title :	Summary of National Parks and Wildlife Service surveys for common (harbour) seals (<i>Phoca vitulina</i>) and grey seals (<i>Halichoerus grypus</i>), 1978 to 2003
Author :	Lyons, D.O.
Series :	Irish Wildlife Manual No. 13
Year :	2004
Title :	Aerial surveying of grey seal breeding colonies on the Blasket Islands, Co. Kerry, the Inishkea Group, Co. Mayo and the Donegal coast during the 2003 breeding season
Author :	Cronin, M.; Ó Cadhla, O.
Series :	Unpublished report to NPWS
Year :	2007
Title :	Grey seal moult population survey in the Republic of Ireland, 2007
Author :	Ó Cadhla, O.; Strong, D.
Series :	Unpublished report to NPWS
Year :	2008
Title :	An assessment of the breeding population of grey seals in the Republic of Ireland, 2005
Author :	O Cadhla, O.; Strong, D.; O'Keeffe, C.; Coleman, M.; Cronin, M.; Duck, C.; Murray, T.; Dower, P.; Nairn, R.; Murphy, P.; Smiddy, P.; Saich, C.; Lyons, D.O.; Hiby, L.
Series :	Irish Wildlife Manual No. 34
Year :	2009
Title :	Coastal Monitoring Project 2004-2006
Author :	Ryle, T.; Murray, A.; Connolly, K.; Swann, M.
Series :	Unpublished report to NPWS
Year :	2013
Title :	Monitoring of the breeding population of grey seals in Ireland, 2009 - 2012
Author :	Ó Cadhla, O.; Keena, T.; Strong, D.; Duck, C.; Hiby, L.
Series :	Irish Wildlife Manual No. 74
Year :	2013
Title :	An aerial survey of harbour seals in Ireland. Part 1: Lough Foyle to Galway Bay. August 2011
Author :	Duck, C; Morris, C.
Series :	Unpublished report to NPWS
Year :	2015
Title :	Inishkea Islands SAC (site code: 507) Conservation objectives supporting document- coastal habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document

Version 1

Year :	2015
Title :	Inishkea Islands SAC (site code: 507) Conservation objectives supporting document- marine species V1
Author :	NPWS
Series :	Conservation objectives supporting document

Other References

Year :	1983
Title :	The grey seal (Halichoerus grypus) in Ireland
Author :	Summers, C.F.
Series :	Unpublished Report to the Minister for Fisheries, Forestry and Wildlife
Year :	1998
Title :	Population biology of grey seals (Halichoerus grypus, Fabricius 1791) in western Ireland
Author :	Kiely, O.R.M.
Series :	Unpublished PhD thesis, National University of Ireland, University College Cork
Year :	1998
Title :	Grey seal (<i>Halichoerus grypus</i>) pup production at the Inishkea island group, Co. Mayo and the Blasket Islands, Co. Kerry
Author :	Kiely, O.; Myers, A.A.
Series :	Biology and Environment: Proc. Royal Ir. Acad. 98B (2): 113-122
Year :	2001
Title :	Grey seal interactions with fisheries in Irish coastal waters
Author :	BIM
Series :	Report to the European Commission DG XIV. Study 95/40
Year :	2006
Title :	The vegetation of Irish machair
Author :	Gaynor, K.
Series :	Biology and Environment: Proceedings of the Royal Irish Academy, vol 106B, No. 3: 311-321
Year :	2007
Title :	Aerial surveying of grey seal breeding colonies on the Blasket Islands, Co. Kerry, the Inishkeas group, Co. Mayo and the Donegal coast, Ireland
Author :	Cronin, M.A.; Duck, C.D.; Ó Cadhla, O.
Series :	J. Nat. Conserv. 15(2): 77-83
Year :	2008
Title :	The phytosociology and conservation value of Irish sand dunes
Author :	Gaynor, K.
Author : Series :	
	Gaynor, K.
Series :	Gaynor, K. Unpublished PhD thesis, National University of Ireland, Dublin
Series : Year :	Gaynor, K. Unpublished PhD thesis, National University of Ireland, Dublin 2013
Series : Year : Title :	Gaynor, K. Unpublished PhD thesis, National University of Ireland, Dublin 2013 Conservation of selected legally protected and Red Listed bryophytes in Ireland

Spatial data sources

Year :	2009
Title :	Coastal Monitoring Project 2004-2006. Version 1
GIS Operations :	QIs selected; clipped to SAC boundary; overlapping regions with Saltmarsh CO data investigated and resolved with expert opinion used
Used For :	21A0 (map 3)
Year :	2015
Year : Title :	2015 NPWS rare and threatened species database

Conservation Objectives for : Inishkea Islands SAC [000507]

21A0 Machairs (* in Ireland)

To restore the favourable conservation condition of Machairs in Inishkea Islands SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For sub- site mapped: Inishkea Islands - 115.65ha. See map 3	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). One sub-site was mapped giving a total estimated area of 115.65ha. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 3	Based on data from Ryle et al. (2009). Iniskea North is low-lying and dominated by machair vegetation. At Inishkea South there is a small area of machair in the north-eastern part of the island. See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Based on data from Ryle et al. (2009). The CMP noted that the machair at Inishkea North was severely eroded, which had been exacerbated by overgrazing. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). In places, the machair and heath habitats grade into saltmarsh, particularly along their fringes. Other habitats present within the SAC include open marine water, lowland dry grassland, wet grassland, boulder beaches, shingle and bedrock shores. See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of Machair habitat, subject to natural processes	Based on data from Ryle et al. (2009). <i>Petalophyllum ralfsii</i> was recorded on the north island along a well worn sheep path- see the conservation objective for 1395. Bare ground cover greater than 10% was recorded by the CMP in monitoring stops on Inishkea South. See coastal habitats supporting document for further details
Vegetation structure: sward height	Centimeters	Maintain structural variation within sward	Based on data from Gaynor (2008) and Ryle et al. (2009). The machair on the Iniskea Islands was overgrazed. Inishkea North and South are grazed by rabbits (<i>Oryctolagus cuniculus</i>), barnacle geese (<i>Branta leucopsis</i>) and sheep. See coastal habitats supporting document for further details
Vegetation composition: typical species and sub- communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub- communities with typical species listed in Ryle et al. (2009)	Based on data from Gaynor (2006) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. On Inishkea North, the negative indicators Yorkshire foc (<i>Holcus lanatus</i>) and ragwort (<i>Senecio jacobaea</i>) were noted by the CMP. On Inishkea South, thistles (<i>Cirsium</i> spp.) were present. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	No more than 5% cover or under control	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: bryophytes	Percentage cover	Should always be at least an occasional component of the vegetation	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details

1364Grey Seal Halichoerus grypus

To maintain the favourable conservation condition of Grey Seal in Inishkea Islands SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Access to suitable habitat	Number of artificial barriers	Species range within the SAC should not be restricted by artificial barriers to site use. See map 4	See marine supporting document for further details
Breeding behaviour	Breeding sites	Conserve the breeding sites in a natural condition. See map 4 for known sites	Attribute and target based on background knowledge of Irish breeding populations, repeated breeding surveys in 1995, 1996 (Kiely, 1998; Kiely and Myers, 1998), 1998 and 1999 (BIM, 2001), 2002 (Ó Cadhla and Strong, 2003), 2003 (Cronin and Ó Cadhla, 2004; Cronin et al., 2007), 2005 (Ó Cadhla et al., 2008) and 2011 (Ó Cadhla et al., 2013), and unpublished NPWS records including those reported by Summers (1983) and Lyons (2004). See marine supporting document for further details
Moulting behaviour	Moult haul-out sites	Conserve the moult haul- out sites in a natural condition. See map 4 for known sites	Attribute and target based on background knowledge of Irish populations, on review of data from Kiely (1998) and Lyons (2004), a national moult survey (Ó Cadhla and Strong, 2007) and unpublished NPWS records. See marine supporting document for further details
Resting behaviour	Resting haul-out sites	Conserve the resting haul- out sites in a natural condition. See map 4 for known sites	Attribute and target based on review of data from Kiely (1998), BIM (2001), Lyons (2004), Cronin et al. (2004), O Cadhla et al. (2008), Duck and Morris (2013) and unpublished NPWS. See marine supporting document for further details
Disturbance	Level of impact	Human activities should occur at levels that do not adversely affect the grey seal population at the site	See marine supporting document for further details

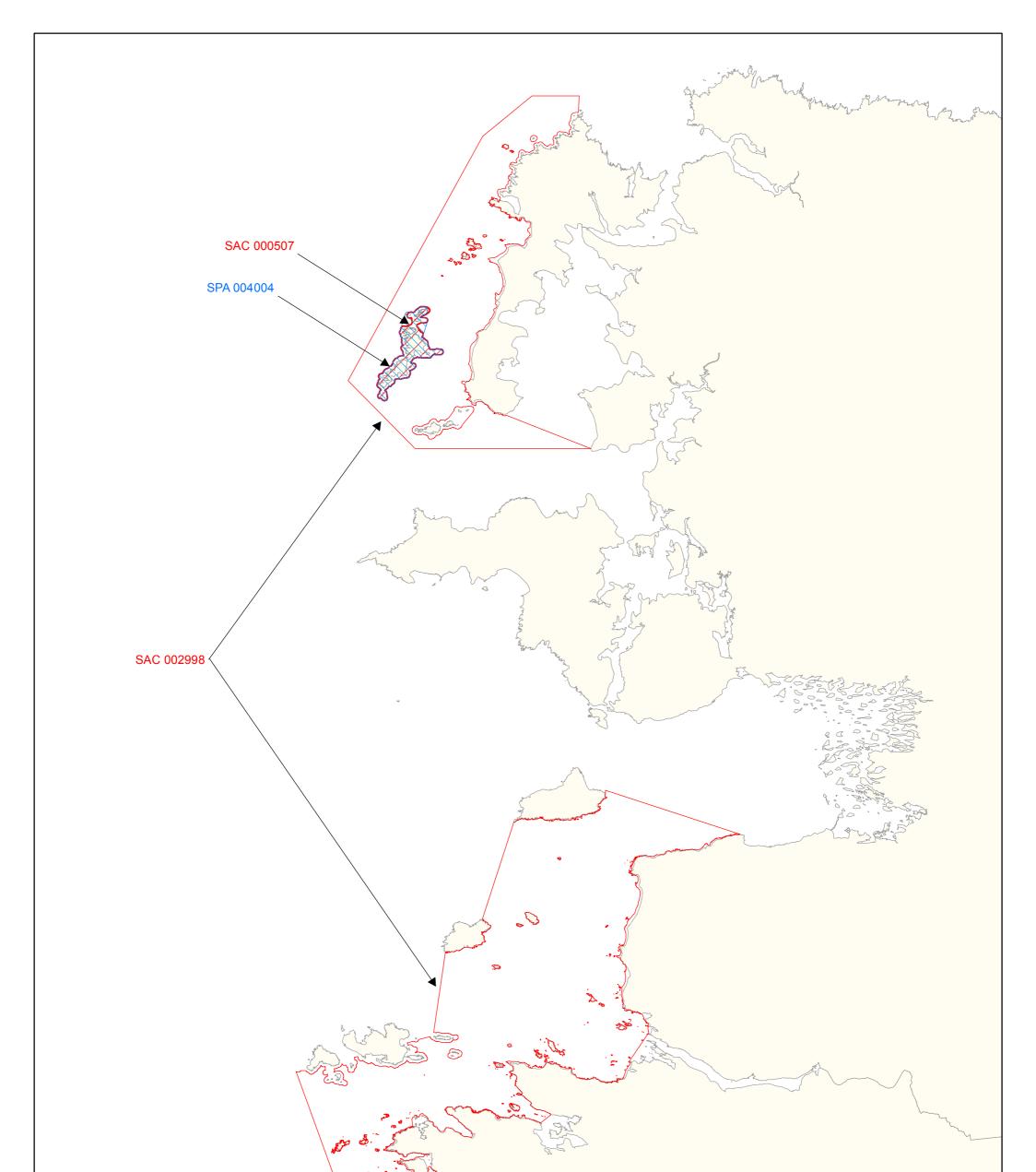
1395 Petalwort *Petalophyllum ralfsii*

To maintain the favourable conservation condition of Petalwort in Inishkea Islands SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Distribution of populations	Number and geographical spread of populations	No decline. See map 5 for recorded location	The population at North Inishkea was recorded at intervals along a well-worn sheep track traversing the lower edge of machair plain, c.100m from the sea by N. Lockhart of NPWS in July 1998. The islands have not been comprehensively searched for the species since that time
Population size	Number of individuals	No decline. The population has been estimated at a miniumum of 7 thalli	Lockhart recorded a minimum of 7 thalli in July 1998
Area of suitable habitat	Hectares	No decline. Area of suitable habitat at North Inishhea currently unknown, but thought to be very small, c.0.00003ha	The extent of suitable habitat around the recorded location at North Inishkea has not been accurately measured using GPS, but is known to be very small $(c.0.25m^2)$
Hydrological conditions: soil moisture	Occurrence of damp soil conditions	Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter	<i>Petalophyllum ralfsii</i> grows in damp sand. Based on Campbell (2013)
Vegetation: open structure	Height and percentage cover of vegetation	Maintain open, low vegetation, with a high percentage cover of bryophytes (small acrocarps and liverwort turf) and bare ground	Petalophyllum ralfsii grows in compacted, sandy ground, maintained by grazing and trampling (by sheep). Only recorded along sheep track but plenty of other potentially suitable habitat available (Lockhart, 1998, unpublished data)



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Legend

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Inishkea Islands SPA 004004	
West Connacht Coast SAC 002998	
Inishkea Islands SAC 000507	

DESIGNATIONS

Map to be read in conjunction with the NPWS Conservation Objectives Do

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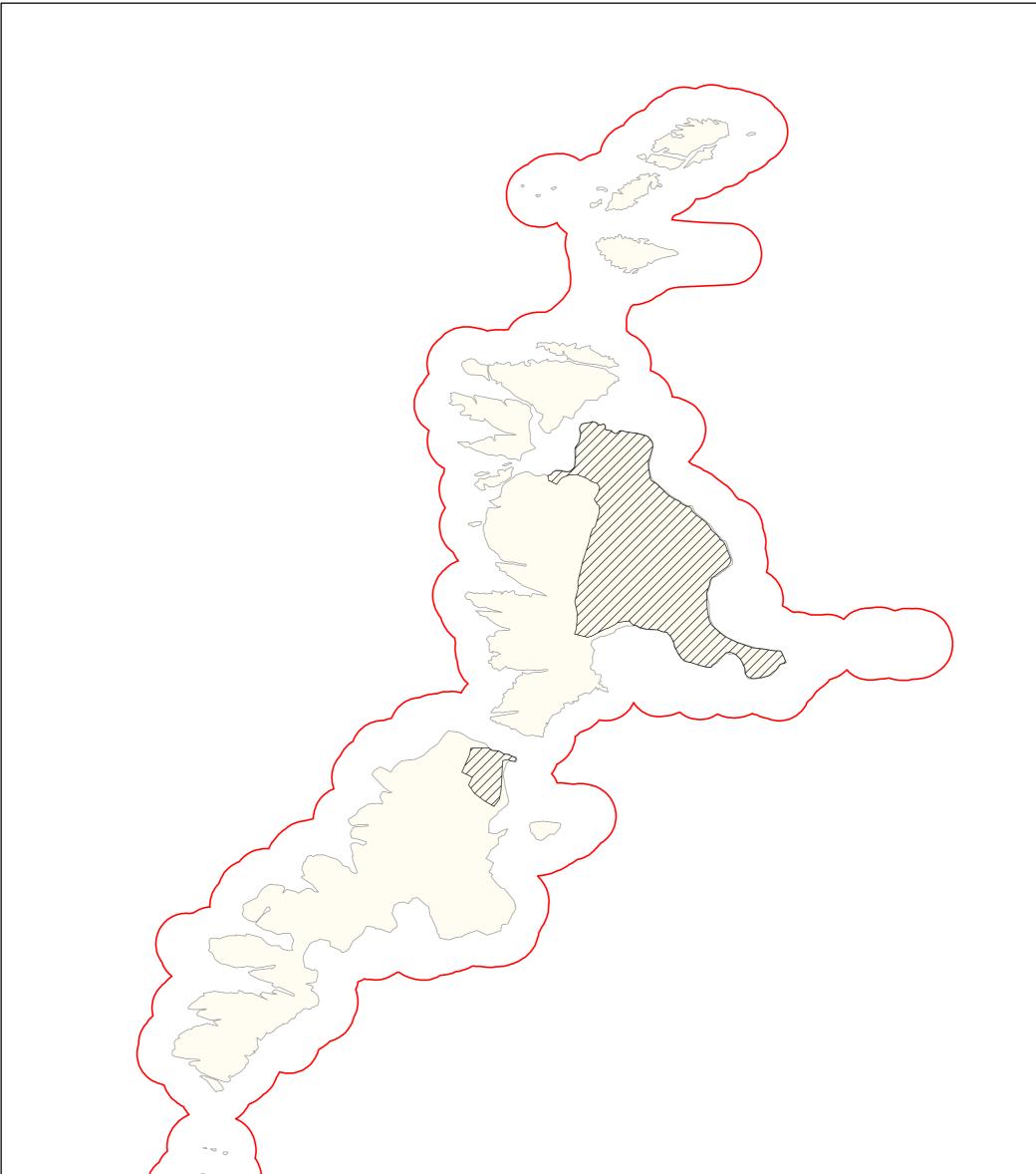
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The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland

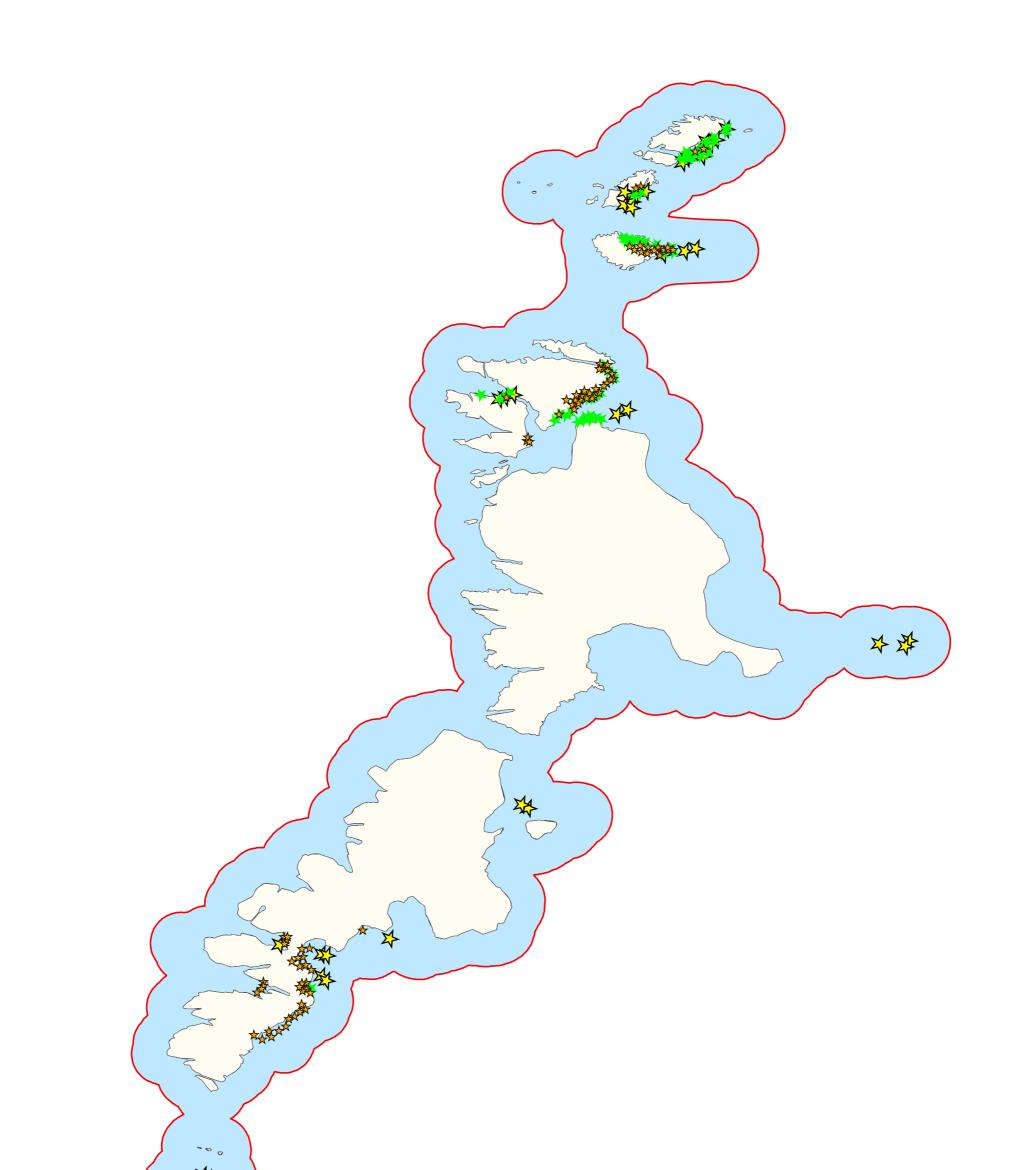
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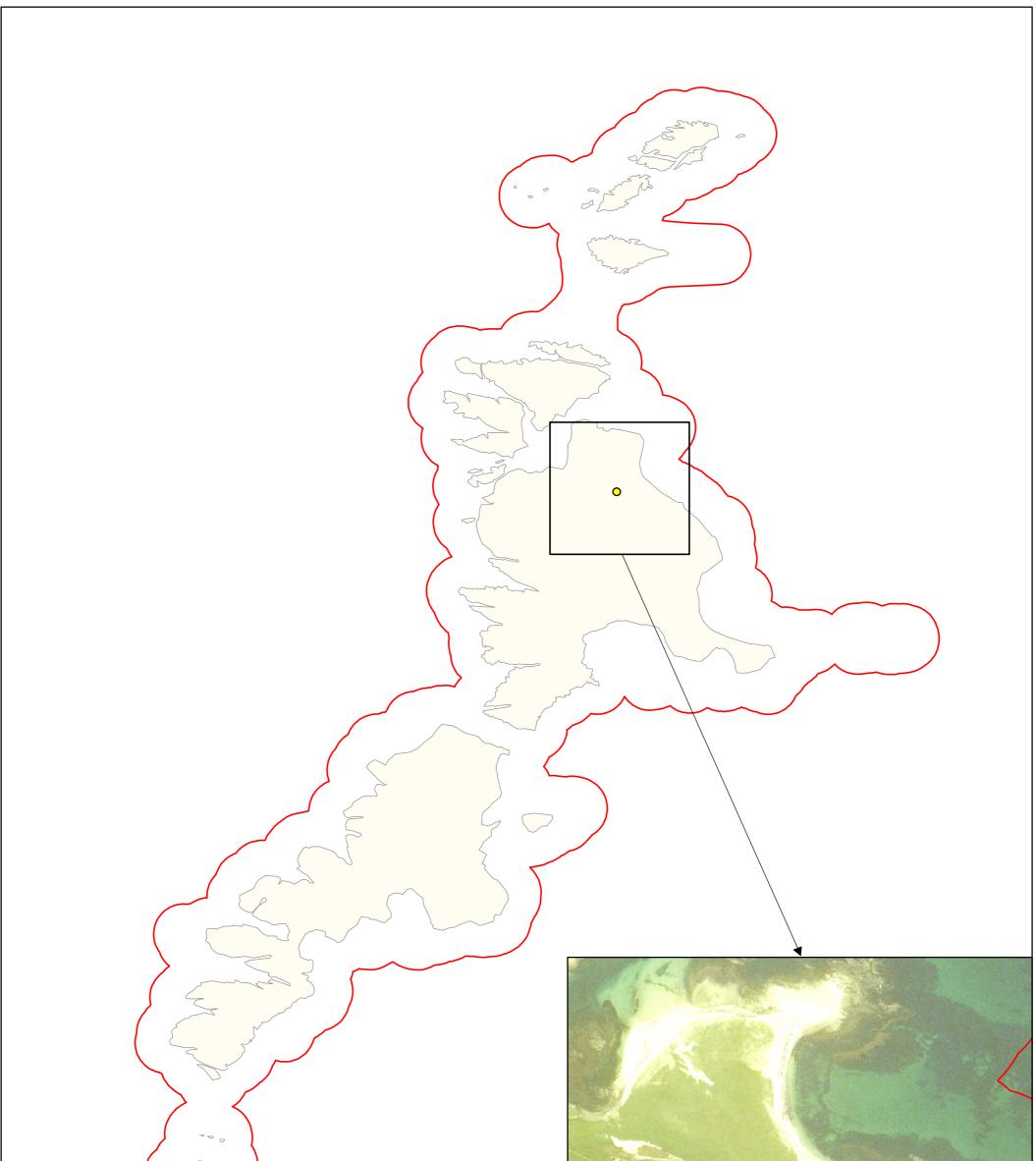
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			Legend Inishkea Islands SAC 000507 21A0 *Machairs OSi Discovery Series County Bounda	ary
An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht	MAP 3: INISHKEA ISLANDS SAC CONSERVATION OBJECTIVES SAND DUNE HABITATS Map to be read in conjunction with the NPWS Conservation Objectives Document.	SITE CODE: SAC 000507; version 3.01. CO. MAYO 0 0.25 0.5 0.75 1 km	The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland Nil sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Suirbhéarachta Ordonáis na hÉireann Ciadúnas Uimh EN 0059214. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann	



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An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht	MAP 4: INISHKEA ISLANDS SAC CONSERVATION OBJECTIVES GREY SEAL Map to be read in conjunction with the NPWS Conservation Objectives Document.	SITE CODE: SAC 000507; version 3.01. CO. MAYO	The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland	
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An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht	MAP 5: INISHKEA ISLANDS SAC	SITE CODE: SAC 000507; version 3.01. CO. MAYO		The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland	N	
	CONSERVATION OBJECTIVES PETALWORT Map to be read in conjunction with the NPWS Conservation Objectives Document.		0 0.25 0.5	0.75 1 km	Níl sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059214. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann	Map Version 1 Date: April 2015