

# National Parks and Wildlife Service

---

## *Conservation Objectives Series*

---

Inishmaan Island SAC 000212



*An Roinn*  
*Ealaíon, Oidhreachta agus Gaeltachta*  

---

*Department of*  
*Arts, Heritage and the Gaeltacht*



**National Parks and Wildlife Service,  
Department of Arts, Heritage and the Gaeltacht,**

**7 Ely Place, Dublin 2, Ireland.**

**Web: [www.npws.ie](http://www.npws.ie)**

**E-mail: [nature.conservation@ahg.gov.ie](mailto:nature.conservation@ahg.gov.ie)**

**Citation:**

**NPWS (201 ) Conservation Objectives: Inishmaan Island SAC 000212. Version 1.  
National Parks and Wildlife Service, Department of Arts, Heritage and the  
Gaeltacht.**

**Series Editor: Rebecca Jeffrey**

**ISSN 2009-4086**

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

---

### 000212 Inishmaan Island SAC

---

- 1170 Reefs
- 1220 Perennial vegetation of stony banks
- 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts
- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shoreline with *Cladonia* (white dunes)
- 21A0 Machairs (\* in Ireland)
- 4030 European dry heaths
- 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)
- 6510 Lowland hay meadows (*Cladonia*)
- 8240 Limestone pavementsE

## Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: [www.npws.ie/Publications](http://www.npws.ie/Publications)

### NPWS Documents

<b>Year :</b>	1996
<b>Title :</b>	Biomar survey of Irish machair sites
<b>Author :</b>	Crawford, I.; Bleasdale, A.; Conaghan, J.
<b>Series :</b>	Irish Wildlife Manual No. 3
<b>Year :</b>	1999
<b>Title :</b>	National Shingle Beach Survey of Ireland 1999
<b>Author :</b>	Moore, D.; Wilson, F.
<b>Series :</b>	Unpublished Report to NPWS
<b>Year :</b>	2007
<b>Title :</b>	Grasslands monitoring project 2006. Volume I. Project report
<b>Author :</b>	Dwyer, R; Crowley, W; Wilson, F.
<b>Series :</b>	Unpublished report to NPWS
<b>Year :</b>	2009
<b>Title :</b>	Coastal Monitoring Project 2004-2006
<b>Author :</b>	Ryle, T.; Murray, A.; Connolly, K.; Swann, M.
<b>Series :</b>	Unpublished report to NPWS
<b>Year :</b>	2011
<b>Title :</b>	National survey and assessment of the conservation status of Irish sea cliffs
<b>Author :</b>	Barron, S.J.; Delaney, A.; Perrin, P.M.; Martin, J.; O'Neill, F.
<b>Series :</b>	Irish Wildlife Manual No. 53
<b>Year :</b>	2013
<b>Title :</b>	Irish semi-natural grasslands survey 2007-2012
<b>Author :</b>	O'Neill, F.H.; Martin, J.R.; Devaney, F.M.; Perrin, P.M.
<b>Series :</b>	Irish Wildlife Manual No. 78
<b>Year :</b>	2013
<b>Title :</b>	National survey of limestone pavement and associated habitats in Ireland
<b>Author :</b>	Wilson, S.; Fernández, F.
<b>Series :</b>	Irish Wildlife Manual No. 73
<b>Year :</b>	2014
<b>Title :</b>	Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland, Version 2.0
<b>Author :</b>	Perrin, P.M.; Barron, S.J.; Roche, J.R.; O'Hanrahan, B.
<b>Series :</b>	Irish Wildlife Manual No. 79
<b>Year :</b>	2014
<b>Title :</b>	Inishmaan Island SAC (site code: 212) Conservation objectives supporting document- coastal habitats V1
<b>Author :</b>	NPWS
<b>Series :</b>	Conservation objectives supporting document
<b>Year :</b>	2014
<b>Title :</b>	Inishmaan Island SAC (site code: 212) Conservation objectives supporting document- marine habitats V1
<b>Author :</b>	NPWS
<b>Series :</b>	Conservation objectives supporting document

## Other References

- Year :** 1988  
**Title :** The Irish red data book 1. Vascular plants  
**Author :** Curtis, T.G.F; McGough, H.N.  
**Series :** Wildlife Service, Dublin
- 
- 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 :** 2008  
**Title :** The phytosociology and conservation value of Irish sand dunes  
**Author :** Gaynor, K.  
**Series :** Unpublished PhD thesis, National University of Ireland, Dublin
- 
- Year :** 2013  
**Title :** Intertidal survey of Inishmaan Island SAC  
**Author :** MERC  
**Series :** Unpublished report to the Marine Institute and NPWS
-

## Spatial data sources

<b>Year :</b>	Interpolated 2014
<b>Title :</b>	2012 intertidal survey
<b>GIS Operations :</b>	Polygon feature classes from marine community types base data sub-divided based on interpolation of marine survey data. Expert opinion used as necessary to resolve any issues arising
<b>Used For :</b>	1170, marine community types (maps 2 and 3)
<b>Year :</b>	2005
<b>Title :</b>	OSi Discovery series vector data
<b>GIS Operations :</b>	High water mark (HWM) and low water mark (LWM) polyline feature classes converted into polygon feature classes and combined; EU Annex I Saltmarsh and Coastal data erased out if present
<b>Used For :</b>	Marine community types base data (map 3)
<b>Year :</b>	2011
<b>Title :</b>	National survey and assessment of the conservation status of Irish sea cliffs
<b>GIS Operations :</b>	Clipped to SAC boundary
<b>Used For :</b>	1230 (map 4)
<b>Year :</b>	2009
<b>Title :</b>	Coastal Monitoring Project 2004-2006. Version 1
<b>GIS Operations :</b>	QIs selected; clipped to SAC boundary; overlapping regions with Saltmarsh CO data investigated and resolved with expert opinion used
<b>Used For :</b>	2110, 2120, 21A0 (map 5)
<b>Year :</b>	2013
<b>Title :</b>	National Survey of Limestone Pavement and Associated Habitats in Ireland distribution data
<b>GIS Operations :</b>	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
<b>Used For :</b>	8240 (map 6)
<b>Year :</b>	2013
<b>Title :</b>	Irish Semi-Natural Grassland Survey
<b>GIS Operations :</b>	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
<b>Used For :</b>	6210, 6510 (map 6)
<b>Year :</b>	2006
<b>Title :</b>	Grassland Monitoring Project 2006
<b>GIS Operations :</b>	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
<b>Used For :</b>	6210, 6510 (map 6)

**1170 Reefs**

**To maintain the favourable conservation condition of Reefs in Inishmaan Island SAC, which is defined by the following list of attributes and targets:**

<b>Attribute</b>	<b>Measure</b>	<b>Target</b>	<b>Notes</b>
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 2	Habitat area estimated as 70ha from a 2012 intertidal survey (MERC, 2013)
Distribution	Occurrence	The distribution of reefs remains stable, subject to natural processes. See map 2 for mapped distribution	Based on information from a 2012 intertidal survey (MERC, 2013)
Community structure	Biological composition	Conserve the following community type in a natural condition: Intertidal reef community complex. See map 3	Reef mapping based on information from a 2012 intertidal survey (MERC, 2013). See marine supporting document for further details



## Conservation Objectives for : Inishmaan Island SAC [000212]

### 1220 Perennial vegetation of stony banks

**To maintain the favourable conservation condition of Perennial vegetation of stony banks in Inishmaan Island 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	Current area unknown. This site was not surveyed during the National Shingle Beach Survey (NSBS) (Moore and Wilson, 1999). See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes	Current distribution of this habitat is unknown. 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	Shingle features are relatively stable in the long term. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	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 the typical vegetated shingle flora including the range of sub-communities within the different zones	The red data book (Curtis and McGough, 1988) species sea kale ( <i>Crambe maritima</i> ) has been recorded in the SAC. 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 Moore and Wilson (1999). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. See coastal habitats supporting document for further details

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts

To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Inishmaan Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat length	Kilometres	Area stable, subject to natural processes, including erosion. For sub-site mapped: Carrowntemple - 1.80km. See map 4	Based on data from the Irish Sea Cliff Survey (ISCS) (Barron et al., 2011). Cliffs are linear features and are therefore measured in kilometres. One sub-site was identified using a combination of aerial photos and the DCENR helicopter viewer. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 4	Based on data from Barron et al. (2011). Cliffs are distributed along the west and south-west coastline of Inishmaan Island. See coastal habitats supporting document for further details
Physical structure: functionality and hydrological regime	Occurrence of artificial barriers	No alteration to natural functioning of geomorphological and hydrological processes due to artificial structures	Maintaining natural geomorphological processes including natural erosion is important for the health of a vegetated sea cliff. Hydrological processes maintain flushes and in some cases tufa formations that can be associated with sea cliffs. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of sea cliff habitat zonation including transitional zones, subject to natural processes including erosion and succession	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from Barron et al. (2011). 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 the Irish Sea Cliff Survey (Barron et al., 2011)	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation composition: bracken and woody species	Percentage	Cover of bracken ( <i>Pteridium aquilinum</i> ) on grassland and/or heath less than 10%. Cover of woody species on grassland and/or heath less than 20%	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 2110 Embryonic shifting dunes

**To maintain the favourable conservation condition of Embryonic shifting dunes in Inishmaan Island 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: Inishmaan - 1.56ha. See map 5	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Habitat is very difficult to measure in view of its dynamic nature. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 5 for known distribution	Based on data from Ryle et al. (2009). 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	Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation resulting in increased rates of erosion. 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). A range of coastal habitats occurs at Inishmaan. See coastal habitats supporting document for further details
Vegetation composition: plant health of foredune grasses	Percentage cover	More than 95% of sand couch ( <i>Elytrigia juncea</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover	Maintain the presence of species-poor communities with typical species: sand couch ( <i>Elytrigia juncea</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> )	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-native species) 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. Sea-buckthorn ( <i>Hippophae rhamnoides</i> ) should be absent or effectively controlled. See coastal habitats supporting document for further details

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)

To maintain the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') in Inishmaan Island 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: Inishmaan - 1.61ha. See map 5	Habitat was mapped from Inishmaan during the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Habitat is very difficult to measure in view of its dynamic nature. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 5 for known distribution	Based on data from Ryle et al. (2009). 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). Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Marram grass ( <i>Ammophila arenaria</i> ) reproduces vegetatively and requires constant accretion of fresh sand to maintain active growth encouraging further accretion. 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 Gaynor (2008) and Ryle et al. (2009). A range of coastal habitats occurs at Inishmaan. See coastal habitats supporting document for further details
Vegetation composition: plant health of dune grasses	Percentage cover	95% of marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). 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 the presence of species-poor communities dominated by marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> )	Based on data from 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. Sea-buckthorn ( <i>Hippophae rhamnoides</i> ) should be absent or effectively controlled. See coastal habitats supporting document for further details

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 21A0 Machairs (\* in Ireland)

**To restore the favourable conservation condition of Machairs in Inishmaan Island 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: Inishmaan-42.84ha. See map 5	Based on data from the Coastal Monitoring Project (Ryle et al., 2009). One sub-site was mapped, giving a total estimated area of 42.84ha. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5 for known distribution	Based on data from Ryle et al. (2009). 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 presence of an airport and football pitch have reduced the area of machair and fragmented the habitat. See coastal habitats supporting document for further details
Physical structure: hydrological and flooding regime	Water table levels; groundwater fluctuations (metres)	Maintain natural hydrological regime	Based on data from Ryle et al. (2009), Crawford et al. (1996) and Gaynor (2006). 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). 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). 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). Some light grazing by cattle has positive impacts on the machair. 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 Ryle et al. (2009). The CMP noted that the species diversity of the machair was low though moss cover was very high throughout. 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. 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). There is a high cover of bryophytes throughout the machair at Inishmaan. See coastal habitats supporting document for further details

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 4030 European dry heaths

To maintain the favourable conservation condition of European dry heaths in Inishmaan Island 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	Total area of dry heaths within the SAC has not been calculated but as it occurs in intimate association with other habitats including the priority Annex I habitats Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (6210) and Limestone pavements (8240) (NPWS internal files), they are difficult to map separately. Conservation objectives for the relevant habitats should be used in conjunction with each other as appropriate
Habitat distribution	Occurrence	No decline from current distribution, subject to natural processes	See notes for area above
Ecosystem function: soil nutrient status	Soil pH and nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Changes to soil nutrient status can occur from application of manure or fertiliser, high stock densities or supplementary feeding above appropriate levels
Vegetation composition: positive indicator species	Number and percentage cover at a representative number of monitoring stops	At least two positive indicator species, as listed in Perrin et al. (2014), with combined cover of at least 50%	Attribute and target based on Perrin et al. (2014). Bell heather ( <i>Erica cinerea</i> ) and ling ( <i>Calluna vulgaris</i> ) occur in the heathy areas in this SAC (NPWS internal files)
Vegetation composition: bryophyte and non-crustose lichen species	Number at a representative number of monitoring stops	At least three bryophyte or non-crustose lichen species present, excluding <i>Campylopus</i> and <i>Polytrichum</i> moss species	Attribute and target based on Perrin et al. (2014)
Vegetation composition: rare/scarce heath species	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order 1999 and/or the red data book (Curtis and McGough, 1988). Hoary rock-rose ( <i>Helianthemum oelandicum</i> ), a red data book species, is recorded in heathy areas in this SAC (internal NPWS files)
Vegetation structure: dwarf shrub species	Percentage cover at a representative number of monitoring stops	Cover of bog myrtle ( <i>Myrica gale</i> ), creeping willow ( <i>Salix repens</i> ) and Western gorse ( <i>Ulex gallii</i> ) collectively less than 50%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: negative indicator weed species	Percentage cover at a representative number of monitoring stops	Cover of negative indicator weedy species collectively less than 1%	Attribute and target based on Perrin et al. (2014), where weed species are also listed
Vegetation composition: non-native species	Percentage cover at a representative number of monitoring stops and in local vicinity	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: native trees and shrubs	Percentage cover in local vicinity	Cover of scattered native trees and shrubs less than 20%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: bracken	Percentage cover in local vicinity	Cover of bracken ( <i>Pteridium aquilinum</i> ) less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: soft rush	Percentage cover in local vicinity	Cover of soft rush ( <i>Juncus effusus</i> ) less than 10%	Attribute and target based on Perrin et al. (2014). Dense areas of soft rush can indicate disturbance
Vegetation structure: senescent ling	Percentage cover at a representative number of monitoring stops	Senescent proportion of ling ( <i>Calluna vulgaris</i> ) cover less than 50%	Attribute and target based on Perrin et al. (2014)

Vegetation structure: growth phases of ling	Percentage cover in local vicinity	Outside boundaries of sensitive areas, all growth phases of ling ( <i>Calluna vulgaris</i> ) should occur throughout, with at least 10% of cover in mature phase	Attribute and target based on Perrin et al. (2014), where sensitive areas and growth phases are defined
Vegetation structure: signs of browsing	Percentage at a representative number of monitoring stops	Last complete growing season's shoots of ericoids showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity	No signs of burning inside 'sensitive areas'	Attribute and target based on Perrin et al. (2014) where sensitive areas are defined
Vegetation structure: disturbed bare ground	Percentage cover at a representative number of monitoring stops and in local vicinity	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)

## Conservation Objectives for : Inishmaan Island SAC [000212]

### 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

To maintain the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco Brometalia*) in Inishmaan Island 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	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) occurs in intimate association with other habitats including Annex I habitats: Machairs (21A0), European dry heaths (4030) and Limestone pavements (8240). Therefore, they cannot easily be mapped or considered separately. Conservation objectives for all these habitats should be used in conjunction with each other as appropriate. Dwyer et al. (2006) and the Irish semi-natural grasslands survey (O'Neill et al., 2013) surveyed some areas of semi-natural grassland within the SAC in detail. See map 6 for indicative area of semi-natural grasslands
Habitat distribution	Occurrence	No decline, subject to natural processes	See notes for area above
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present, including two "high quality" species	List of positive indicator species, including high quality species, identified by the Irish semi-natural grasslands survey (O'Neill et al., 2013). This document should be consulted for further details
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%	List of negative indicator species identified by O'Neill et al. (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1%	Attribute and target based on O'Neill et al. (2013)
Vegetation composition: woody species and bracken	Percentage at a representative number of monitoring stops	Cover of woody species (except certain listed species) and bracken ( <i>Pteridium aquilinum</i> ) not more than 5% cover	Woody species that can occur above 5% cover include juniper ( <i>Juniperus communis</i> ) and burnet rose ( <i>Rosa spinosissima</i> ). Attribute and target based on O'Neill et al. (2013)
Vegetation structure: broadleaf herb: grass ratio	Percentage at a representative number of monitoring stops	Broadleaf herb component of vegetation between 40 and 90%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: sward height	Percentage at a representative number of monitoring stops	At least 30% of sward between 5cm and 40cm tall	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: litter	Percentage at a representative number of monitoring stops	Litter cover not more than 25%	Attribute and target based on O'Neill et al. (2013)
Physical structure: bare soil	Percentage at a representative number of monitoring stops	Not more than 10% bare soil	Attribute and target based on O'Neill et al. (2013)
Physical structure: disturbance	Square metres	Area showing signs of serious grazing or other disturbance less than 20m <sup>2</sup>	Attribute and target based on O'Neill et al. (2013)



## Conservation Objectives for : Inishmaan Island SAC [000212]

### 6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

To maintain the favourable conservation condition of Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) in Inishmaan Island SAC, which is defined by the following list of attributes and targets:

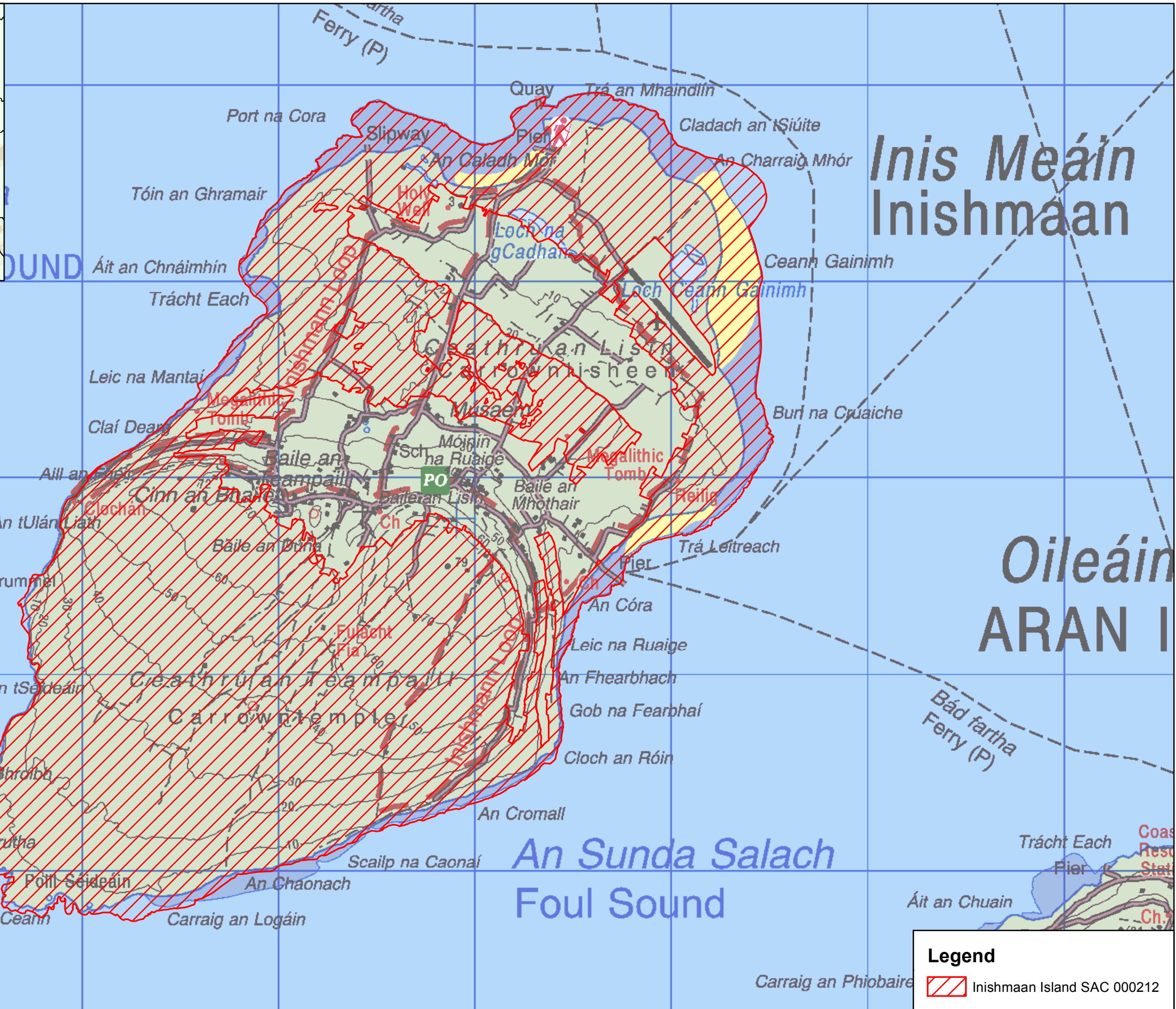
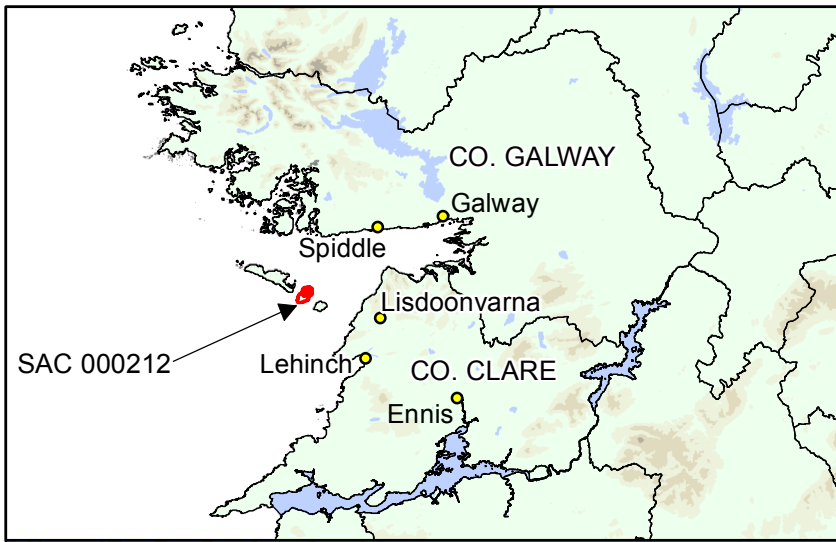
Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Extent of this habitat in this SAC is currently unknown. Internal NPWS files note the presence of floristically diverse meadows that occur in mosaic with other grasslands including Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) (6210). However, further work is required to establish the nature and extent of hay meadows in the SAC, including the requirement for management by mowing. Dwyer et al. (2006) and the Irish semi-natural grasslands survey (O'Neill et al., 2013) surveyed some areas of semi-natural grassland within the SAC in detail. See map 6 for indicative area of semi-natural grasslands
Distribution	Occurrence	No decline, subject to natural processes	Distribution of this habitat in this SAC is currently unknown. See notes for area above
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present, including one "high quality" species as listed in O'Neill et al. (2013)	List of positive indicator species, including high quality species, identified by the Irish semi-natural grasslands survey (O'Neill et al., 2013). This document should be consulted for further details
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%	List of negative indicator species identified by O'Neill et al. (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1%	Attribute and target based on O'Neill et al. (2013)
Vegetation composition: woody species and bracken	Percentage at a representative number of monitoring stops	Cover of woody species and bracken ( <i>Pteridium aquilinum</i> ) not more than 5%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: broadleaf herb: grass ratio	Percentage at a representative number of monitoring stops	Broadleaf herb component of vegetation between 40 and 90%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: sward height	Percentage at a representative number of monitoring stops	At least 50% of sward between 10cm and 50cm tall	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: litter	Percentage at a representative number of monitoring stops	Litter cover not more than 25%	Attribute and target based on O'Neill et al. (2013)
Physical structure: bare soil	Percentage at a representative number of monitoring stops	Not more than 5% bare soil	Attribute and target based on O'Neill et al. (2013)
Physical structure: disturbance	Square metres	Area showing signs of serious grazing or other disturbance less than 20m <sup>2</sup>	Attribute and target based on O'Neill et al. (2013)

## Conservation Objectives for : Inishmaan Island SAC [000212]


### 8240 Limestone pavements

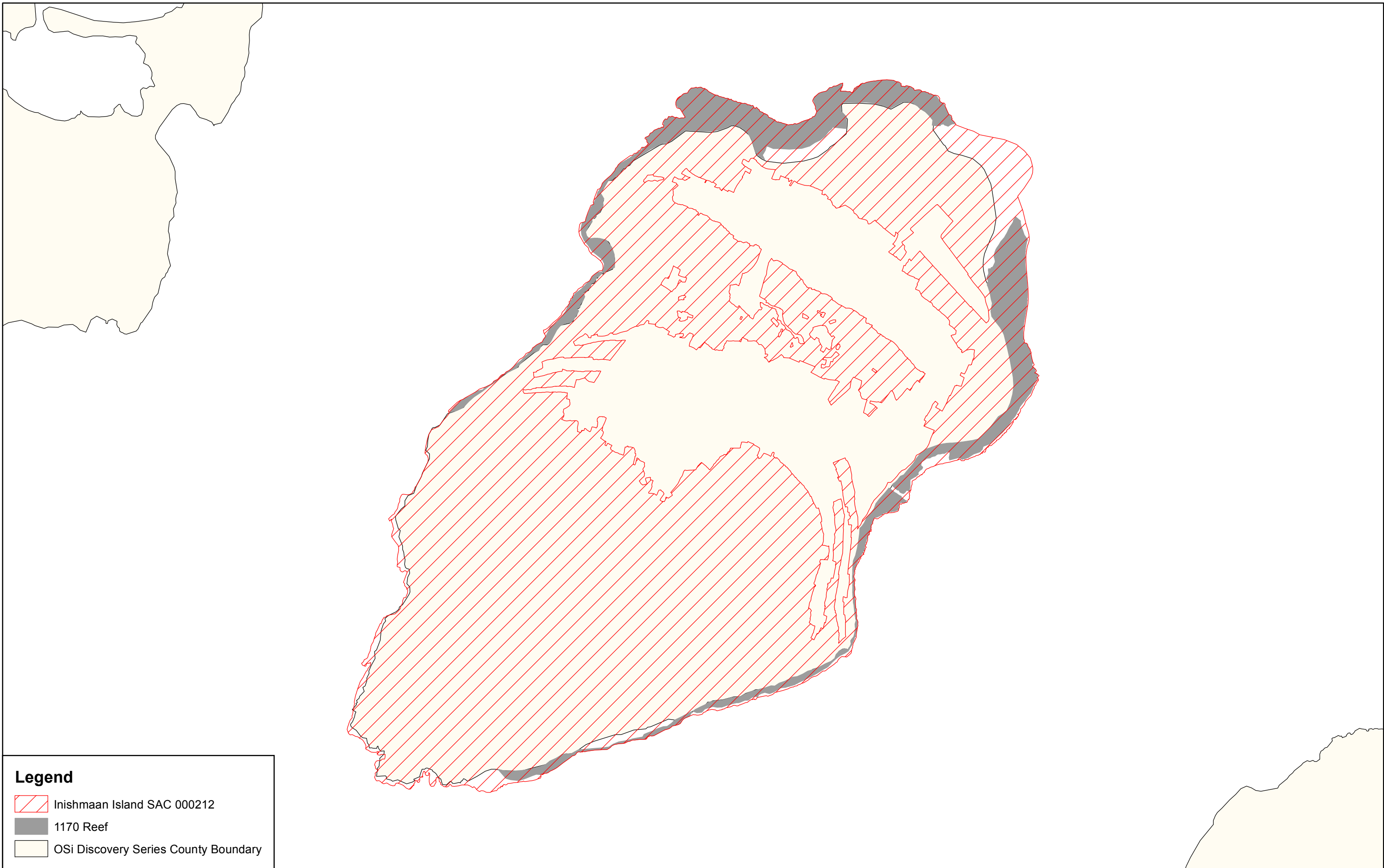
**To maintain the favourable conservation condition of Limestone pavements in Inishmaan Island SAC, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Limestone pavements occurs in intimate association with other Annex I habitats in this SAC including Machairs (21A0), European dry heaths (4030) and Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) (6210). Therefore, these habitats cannot easily be mapped or considered separately. Conservation objectives for all these habitats should be used in conjunction with each other as appropriate. Wilson and Fernandez (2013) mapped the indicative area of limestone pavement, including mosaics with other habitats as 388ha (map 6). This survey should be consulted for further details
Distribution	Occurrence	No decline. Map 6 shows indicative distribution, including mosaics with other habitats	See notes for area above. Based on data from Wilson and Fernandez (2013)
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present	Positive indicator species listed in Wilson and Fernandez (2013)
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Collective cover of negative indicator species on exposed pavement not more than 1%	Negative indicator species listed in Wilson and Fernandez (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1% on exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Vegetation composition: scrub	Percentage at a representative number of monitoring stops	Scrub cover no more than 25% of exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Vegetation composition: bracken cover	Percentage at a representative number of monitoring stops	Bracken ( <i>Pteridium aquilinum</i> ) cover no more than 10% on exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Indicators of local distinctiveness	Occurrence	Indicators of local distinctiveness are maintained	Includes red-data and other rare or localised species as well as archaeological and geological features, which often support distinctive species. Hairy violet ( <i>Viola hirta</i> ), a species listed in the Flora (Protection) Order, 1999 and the red data book (Curtis and McGough, 1988) is noted for this SAC (NPWS internal files)



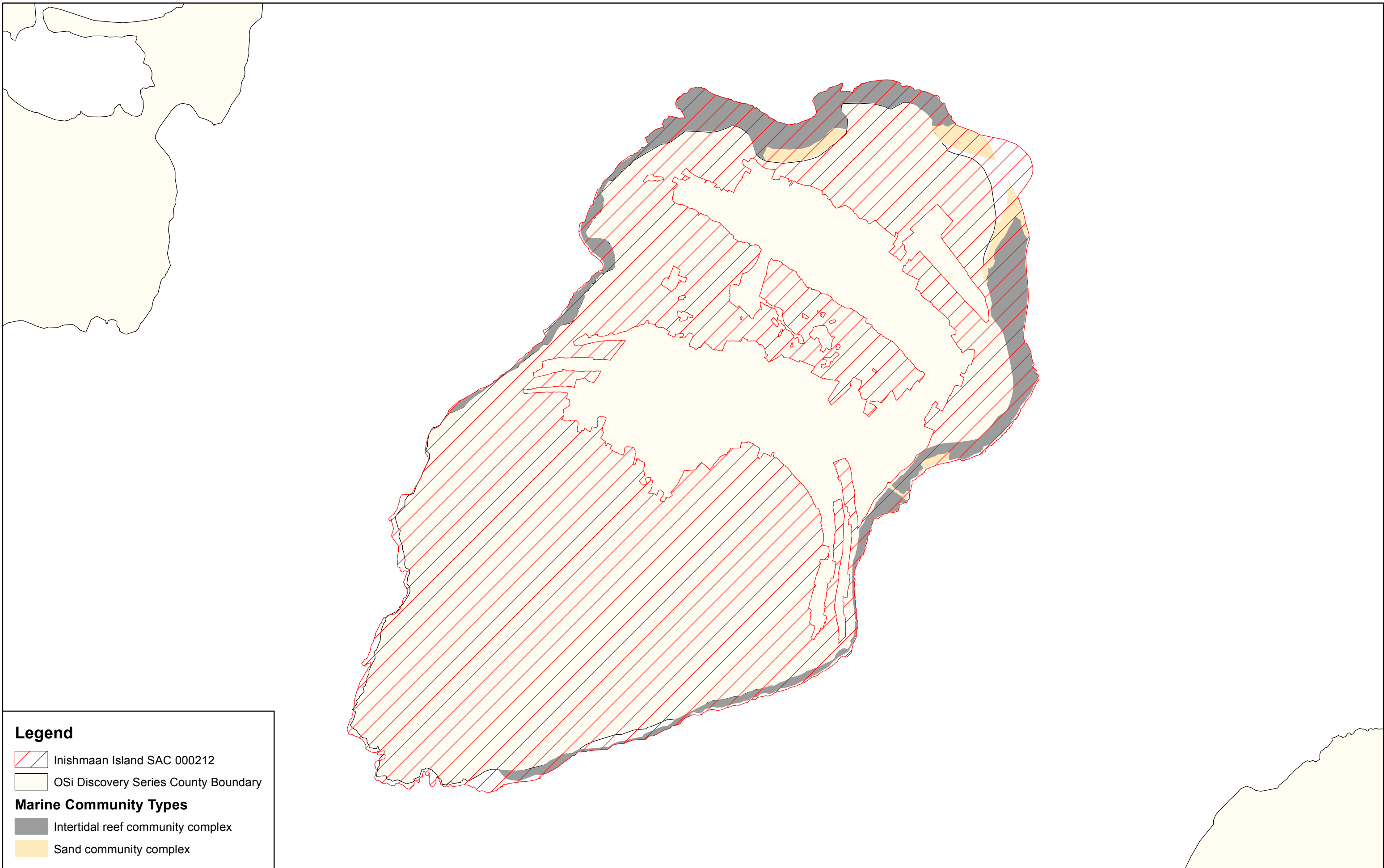
**Legend**

 Inishmaan Island SAC 000212





**Legend**



- Inishmaan Island SAC 000212
- 1170 Reef
- OSi Discovery Series County Boundary



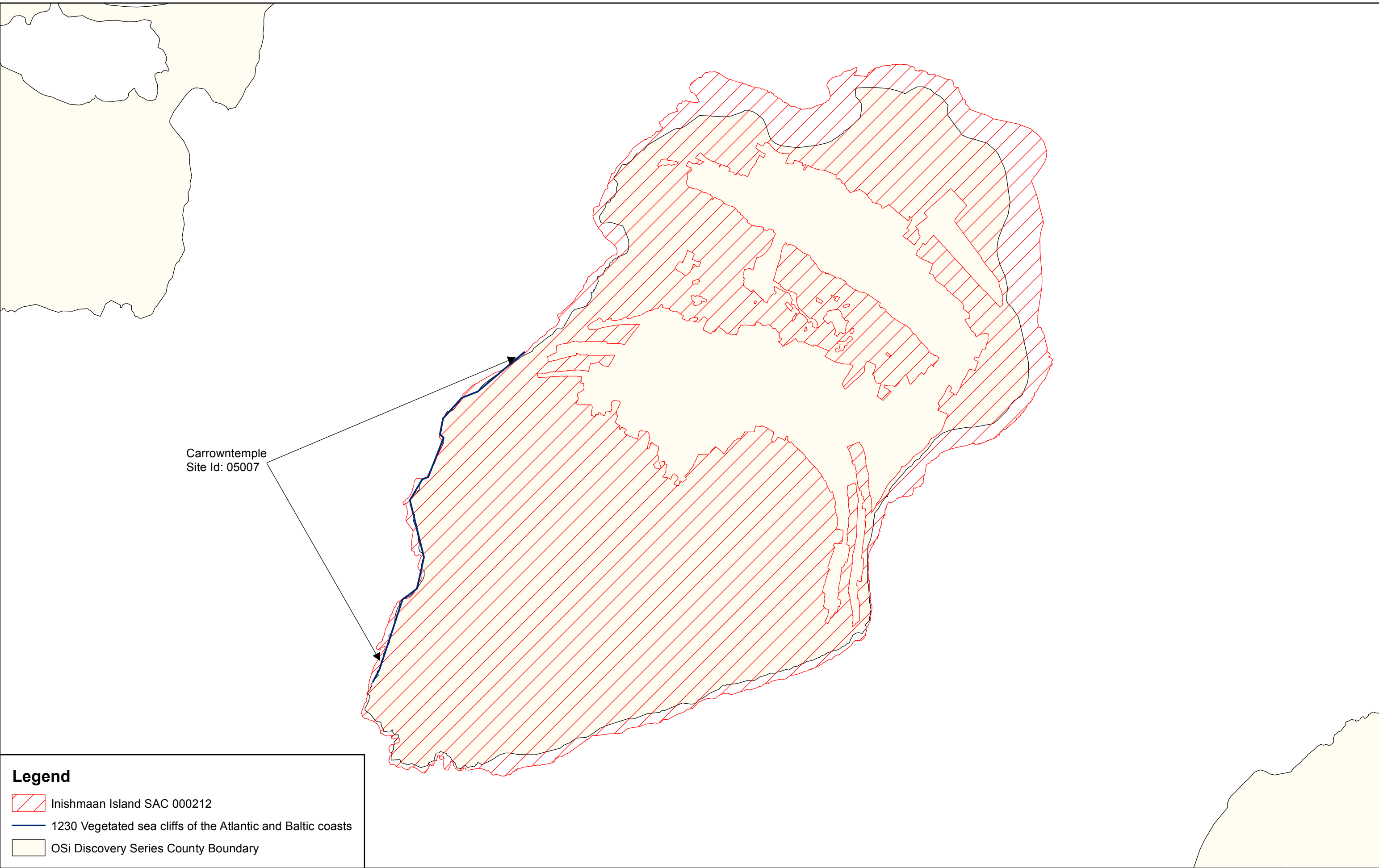
**Legend**

-  Inishmaan Island SAC 000212
-  OSi Discovery Series County Boundary

**Marine Community Types**

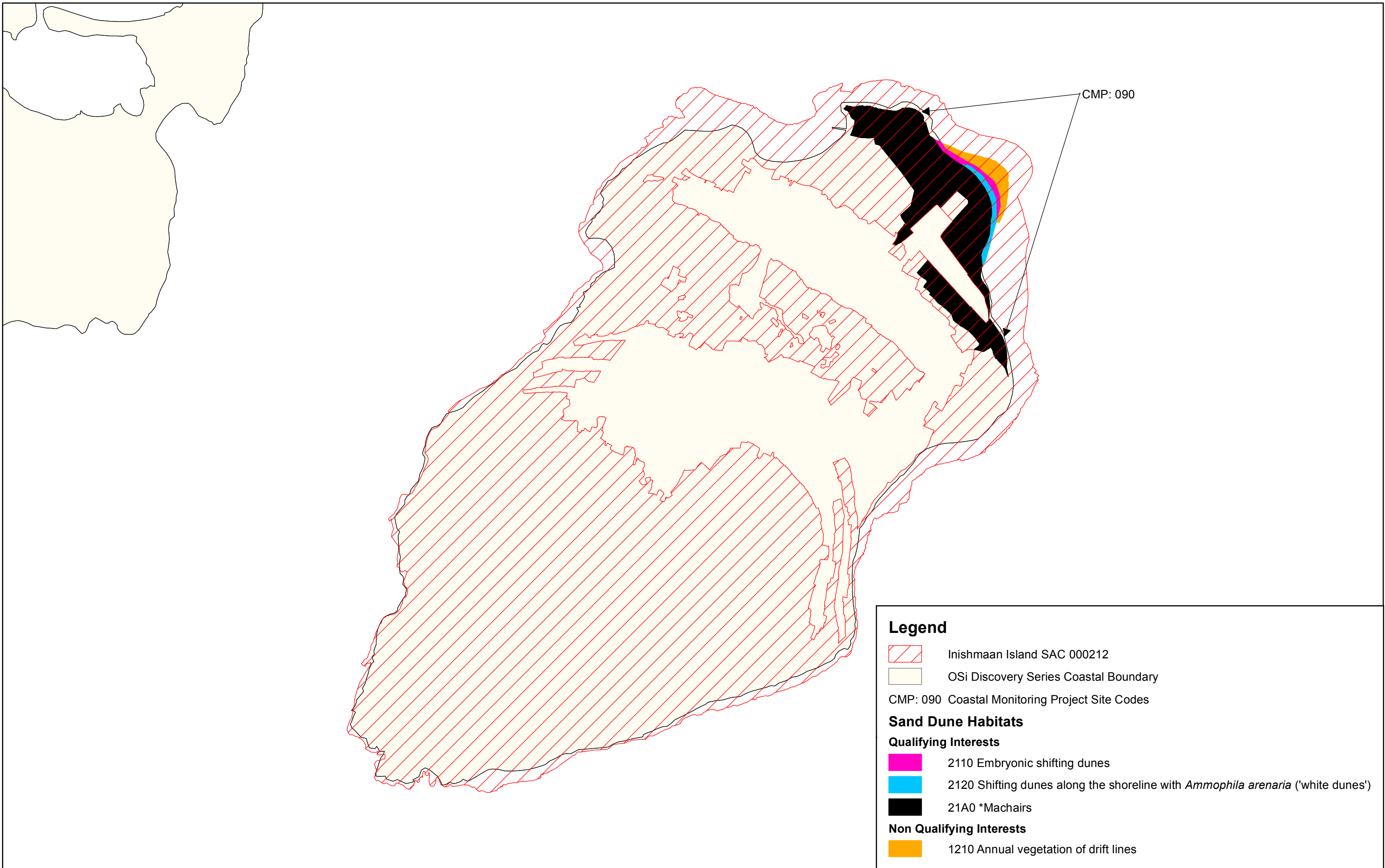
-  Intertidal reef community complex
-  Sand community complex

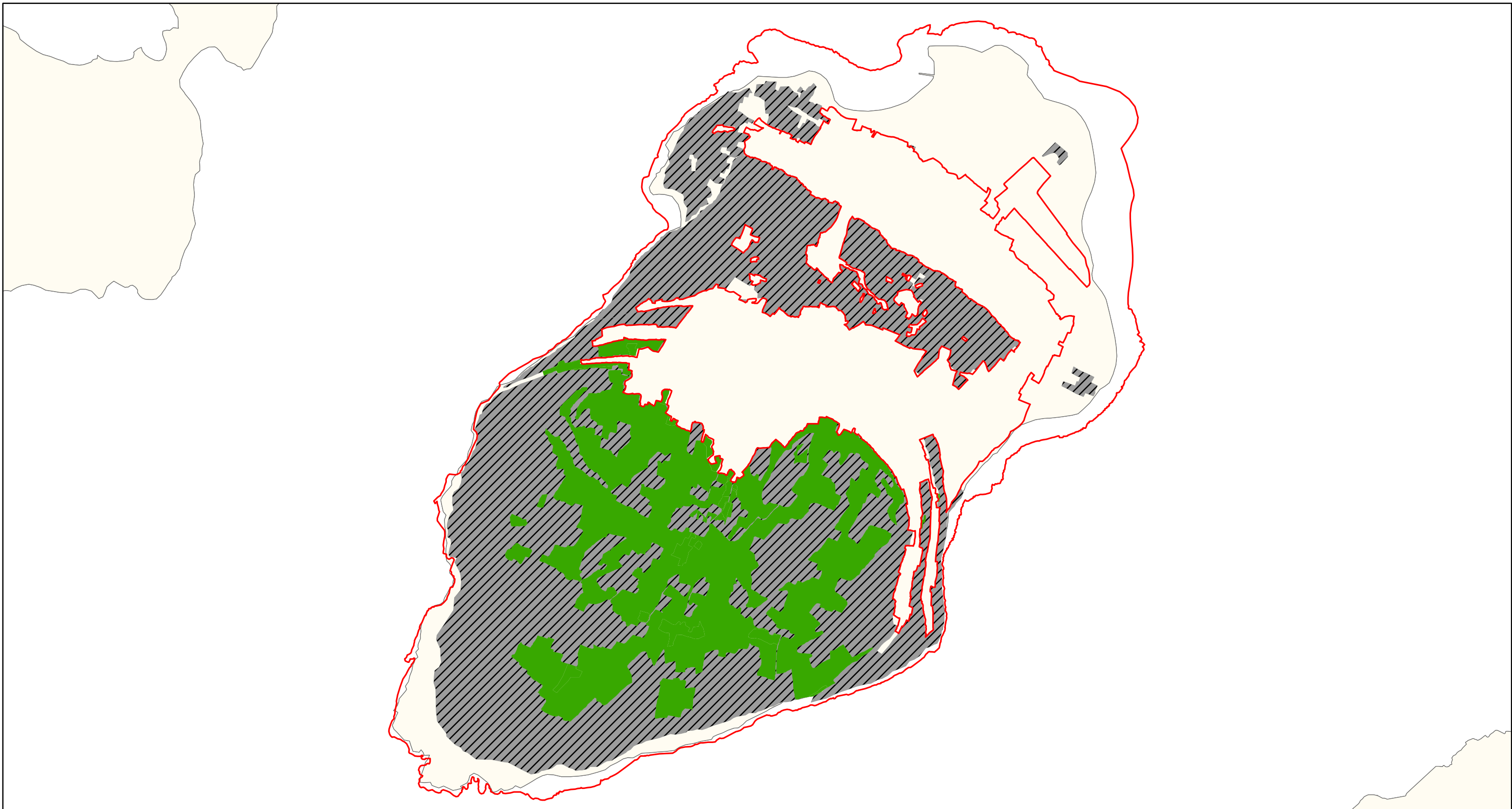




**Legend**

- Inishmaan Island SAC 000212
- 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts
- OSi Discovery Series County Boundary





**Legend**

- Inishmaan Island SAC 000212
- 8240 Potential Limestone pavements including associated habitats
- Semi Natural Grassland including 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometea*) (\*important orchid sites) / 6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)
- OSi Discovery Series County Boundary