

NPWS

**Inishbofin and Inishshark SAC
(site code: 278)**

**Conservation objectives supporting document -
marine species**

**Version 1
April 2015**

Introduction

Inishbofin and Inishshark SAC is designated for the Annex II species *Halichoerus grypus* (grey seal).

In addition to records compiled from historical Wildlife Service site visits (Summers, 1983; Lyons, 2004), preliminary investigations of grey seal population status, distribution and seasonal habitat use within the site were conducted in the summer of 2003 (Cronin *et al.*, 2004), the autumn of 2003 (NPWS, unpublished data) and autumn-winter of 2004-05 (Ó Cadhla *et al.*, 2005). A comprehensive nationwide survey of Ireland's grey seal breeding population was subsequently carried out in 2005 (Ó Cadhla *et al.*, 2008) and a follow-up moult season survey was conducted in 2007 (Ó Cadhla & Strong, 2007). These facilitated the further investigation of seasonal population composition within the site, annual pup production and habitat use. National Parks & Wildlife Service surveillance of the grey seal population within the site has continued on a regular basis through the annual efforts of regional staff, a regional monitoring programme for the species (Ó Cadhla *et al.*, 2013) and ancillary data collected during summer population surveys for harbour seal (*Phoca vitulina*) (Duck *et al.*, 2013).

Aspects of the biology and ecology of Annex II species are provided in Section 1. The corresponding site-specific conservation objective will facilitate Ireland delivering on its surveillance and reporting obligations under the EU Habitats Directive (92/43/EC).

Ireland also has an obligation to ensure that consent decisions concerning operations/activities planned for Natura 2000 sites are informed by an appropriate assessment where the likelihood of such operations or activities having a significant effect on the site cannot be excluded. Further ancillary information concerning the practical application of the site-specific objectives and targets in the completion of such assessments is provided in Section 2.

Section 1

Annex II Marine mammals

HALICHOERUS GRYPUS (GREY SEAL)

This marine mammal species occurs in estuarine, coastal and offshore waters but also utilises a range of intertidal and terrestrial habitats for important life history functions such as breeding, moulting, resting and social activity. Its aquatic range for foraging and inter-site movement extends predominantly into continental shelf and slope waters. Grey seal occupies both aquatic and terrestrial habitats in Inishbofin and Inishshark SAC, including intertidal shorelines and skerries that become exposed during the tidal cycle. It is present at the site throughout the year during all aspects of its annual life cycle which includes breeding (August to December approx.), moulting (December to April approx.) and non-breeding, foraging and resting phases. In acknowledging the limited understanding of aquatic habitat use by the species within the SAC, it should be noted that all suitable aquatic habitat is considered relevant to the species range and ecological requirements at the site and is therefore of potential use by grey seals.

Grey seals are vulnerable to disturbance during periods when time is spent ashore by individuals or groups of animals. This occurs immediately prior to, and during, the annual breeding season, which takes place predominantly during the months of August to December. Pups are born on land, usually on remote beaches and uninhabited islands or in sheltered caves. While there may be outliers in any year, specific established sites are used annually for breeding-associated behaviour by adult females, adult males, newborn pups and weaned pups. Such habitats are critical to the maintenance of the species within any site since pups are nursed there for a period of several weeks by the mother prior to weaning and abandonment. During this period, adult females also mate with adult males at or adjacent to breeding sites. In addition to delivering information on breeding dynamics, pup production (i.e. the number of pups born each year) can be measured or estimated in order to deliver an assessment of population size. However, the relationship between pup production and total population size is not well known. An estimated 420 pups were born in Inishbofin and Inishshark SAC in 2011. The corresponding minimum population estimate for the site is 1,470-1,890 grey seals of all ages. Known and suitable locations for the species in Inishbofin and Inishshark SAC during the breeding season are indicated in figure 1. Current breeding sites in Inishbofin and Inishshark SAC are distributed among several islands, namely Glassillan, Inishshark, Inishgort, Inishskinnymore, Inishskinnybeg and Davillaun. Breeding takes place among the numerous beaches, rock ledges, coves, gullies and some caves on these islands, where access for seals to intertidal shorelines and the area above high water mark is possible.

Grey seal also occurs in the SAC during the annual moult (i.e. hair shedding and replacement), a protracted period during which individual animals spend significant periods of days or weeks on the shore. Moulting is considered an intensive, energetically-demanding process that all seals must undergo,

incurring further vulnerability for individuals during this period. Terrestrial or intertidal sites where seals can be found ashore are known as haul-out sites. Moulting locations may be preferentially selected by the species. Those currently described in Ireland are remote from human habitation and interference, being on uninhabited islands or remote beaches, with specific established sites used annually by moulting adult females, adult males and juveniles. In Ireland, the moulting phase in the annual life cycle occurs predominantly during the months of December to April. A single point estimate of 270 grey seals was recorded among various islands within the site in early March 2007. Known moulting haul-out locations at the site are indicated in figure 2, comprising the islands of Black Rock, Glassillan, Inishgort, Inishshark and Lecky Rocks where more sheltered beaches and rocky ledges provide access for seals to intertidal shorelines and the area above high water mark. However the full extent of terrestrial habitat use within the site during the moulting season is not well known.

Grey seal is a successful aquatic predator that feeds on a wide variety of fish and cephalopod species. For individual grey seals of all ages, intervals between foraging trips in coastal or offshore waters are spent resting ashore at terrestrial or intertidal haul-out sites, or in the water. Resting locations selected by grey seals may be more variable and dispersed than those used during the breeding or moulting seasons. While outliers may occur for very small numbers of animals, there is nevertheless a tendency for recurrent selection by grey seal of particular habitats and sites for terrestrial/intertidal resting behaviour (e.g. low-lying rocks and skerries). Known and suitable locations for resting by the species within the site are indicated in figure 3, broadly consisting of the following islands: Carrickmore, Black Rock, Glassillan, Inishgort, Inishshark, Inishskinnymore, Inishbofin and Lecky Rocks where rock ledges, beaches, coves and caves provide access for seals to intertidal shorelines and the area above high water mark.

Section 2

Appropriate Assessment Notes

Many operations/activities of a particular nature and/or size require the preparation of an environmental impact statement of the likely effects of their planned development. While smaller operations/activities (i.e., sub threshold developments) are not required to prepare such statements, an appropriate assessment and Natura Impact Statement is required to inform the decision-making process in or adjacent to Natura 2000 sites. The purpose of such an assessment is to record in a transparent and reasoned manner the likely effects on a Natura 2000 site of a proposed development. General guidance on the completion of such assessments has been prepared and is available at www.npws.ie.

Annex II species

The following technical clarification is provided in relation to specific the conservation objective and targets for the Annex II species to facilitate the appropriate assessment process:

Objective **To maintain the favourable conservation condition of grey seal in Inishbofin and Inishshark SAC, which is defined by the following list of attributes and targets**

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| Target 1 | Species range within the site should not be restricted by artificial barriers to site use. |
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- This target may be considered relevant to proposed activities or operations that will result in the permanent exclusion of grey seal from part of its range within the site, or will permanently prevent access for the species to suitable habitat therein.
- It does not refer to short-term or temporary restriction of access or range.
- Early consultation or scoping with the Department in advance of formal application is advisable for proposals that are likely to result in permanent exclusion.

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| Target 2 | Conserve the breeding sites in a natural condition. |
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- This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) breeding behaviour by grey seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used during the annual breeding season.
- Operations or activities that cause displacement of individuals from a breeding site or alteration of natural breeding behaviour, and that may result in higher mortality or reduced reproductive success, would be regarded as significant and should therefore be avoided.

Target 3 Conserve the moult haul-out sites in a natural condition.

- This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) moulting behaviour by grey seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used during the annual moult.
- Operations or activities that cause displacement of individuals from a moult haul-out site or alteration of natural moulting behaviour to an extent that may ultimately interfere with key ecological functions would be regarded as significant and should therefore be avoided.

Target 4 Conserve the resting haul-out sites in a natural condition.

- This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) resting behaviour by grey seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used for resting.
- Operations or activities that cause displacement of individuals from a resting haul-out site to an extent that may ultimately interfere with key ecological functions would be regarded as significant and should therefore be avoided.

Target 5 Human activities should occur at levels that do not adversely affect the grey seal population at the site.

- Proposed activities or operations should not introduce man-made energy (e.g., aerial or underwater noise, light or thermal energy) at levels that could result in a significant negative impact on individuals and/or the population of grey seal within the site. This refers to both the aquatic and terrestrial/intertidal habitats used by the species in addition to important natural behaviours during the species annual cycle.
- This target also relates to proposed activities or operations that may result in the deterioration of key resources (e.g., water quality, feeding, etc) upon which grey seals depend. In the absence of complete knowledge on the species ecological requirements in this site, such considerations should be assessed where appropriate on a case-by-case basis.
- Proposed activities or operations should not cause death or injury to individuals to an extent that may ultimately affect the grey seal population at the site.

Bibliography:

- Cronin, M., Duck, C., Ó Cadhla, O., Nairn, R., Strong, D. & O'Keeffe, C. (2004). Harbour seal population assessment in the Republic of Ireland: August 2003. Irish Wildlife Manuals No. 11. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin. Ireland. 34pp.
- Duck, C. & Morris, C. (2013). An aerial survey of harbour seals in Ireland: Part 1: Lough Foyle to Galway Bay. August 2011. Report to the National Parks & Wildlife Service of the Department of Arts, Heritage and the Gaeltacht, Dublin. Sea Mammal Research Unit, University of St. Andrews. 19pp.
- Lyons, D.O. (2004). Summary of National Parks & Wildlife Service surveys for common (harbour) seals (*Phoca vitulina*) and grey seals (*Halichoerus grypus*), 1978 to 2003. Irish Wildlife Manuals No. 13. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. 67pp.
- Ó Cadhla, O., Strong, D. & O'Donnell, G. (2006). Exploratory surveys for grey seals on islands off northwest Galway and southwest Mayo, 2004-05. Report to the National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. Coastal and Marine Resources Centre, University College Cork. 9pp.
- Ó Cadhla, O. & Strong, D. (2007). Grey seal moult population survey in the Republic of Ireland, 2007. Report to the National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. Coastal & Marine Resources Centre, University College Cork. 22pp.
- Ó 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. & Hiby, A.R. (2008). An assessment of the breeding population of grey seals in the Republic of Ireland, 2005. Irish Wildlife Manuals No. 34. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. 60pp.
- Ó Cadhla, O., Keena, T., Strong, D., Duck, C. & Hiby, L. (2013). Monitoring of the breeding population of grey seals in Ireland, 2009 - 2012. Irish Wildlife Manuals, No. 74. National Parks and Wildlife Service, Department of the Arts, Heritage and the Gaeltacht, Dublin, Ireland. 18pp.
- Summers, C.F. (1983). The grey seal, *Halichoerus grypus*, in Ireland. Report to the Minister for Fisheries, Forestry and Wildlife. 13pp.

Figure 1. *Halichoerus grypus* - Known breeding sites in Inishbofin and Inishshark SAC

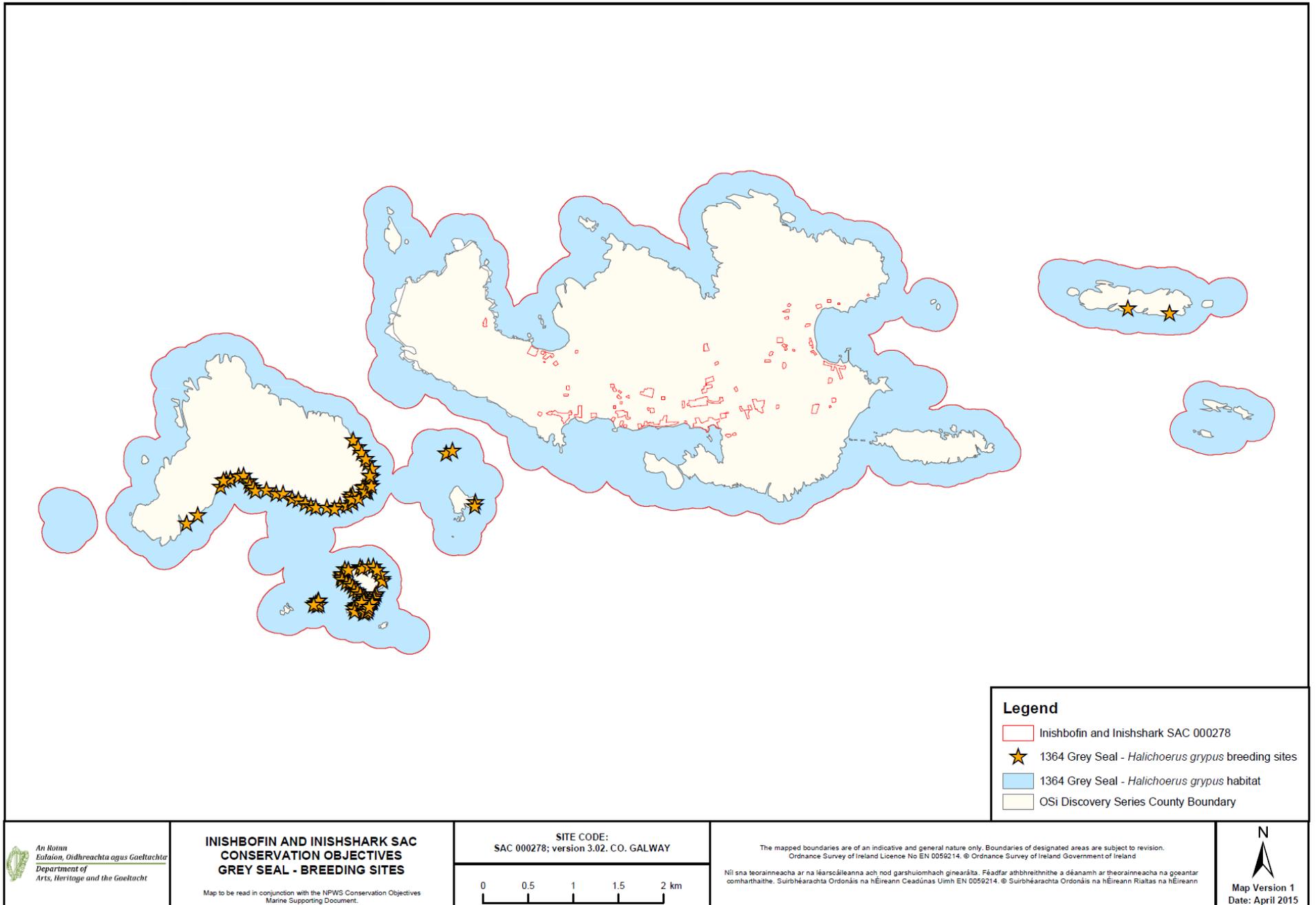


Figure 2. *Halichoerus grypus* - Known moult haul-out sites in Inishbofin and Inishshark SAC

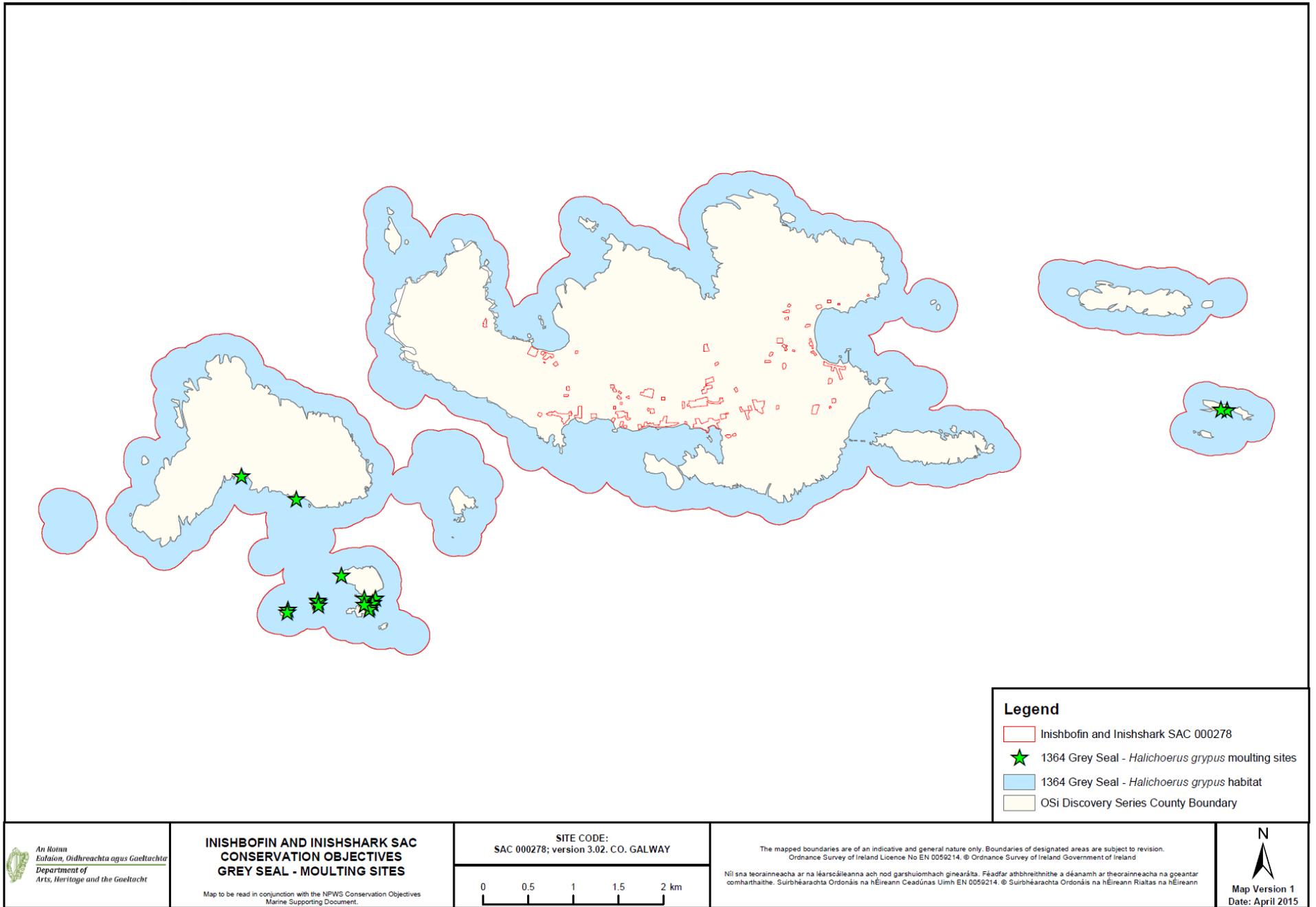


Figure 3. *Halichoerus grypus* - Known resting haul-out sites (non-breeding) in Inishbofin and Inishshark SAC

