

NPWS

Duvillaun Islands SAC (site code: 495)

**Conservation objectives supporting document -
Marine Species**

**Version 1
December 2013**

Introduction

Duvillaun Islands SAC is designated for the Annex II species *Halichoerus grypus* (grey seal).

In addition to the records compiled from historical Wildlife Service site visits (Lyons, 2004), more detailed investigations of grey seal population status and seasonal habitat use within the site were conducted between 1994 and 2002 (Kiely, 1998; Kiely & Myers, 1998; BIM, 2001; Ó Cadhla & Strong, 2003). Thereafter wider scale summer and autumn seal population surveys (Cronin *et al.*, 2004; Cronin *et al.*, 2007) provided additional data on site use by the species within the western region. 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 pup production, habitat use and population composition within the site.

Aspects of the biology and ecology of the 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 Duvillaun Islands 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 site, 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 to grey seals.

Grey seals are vulnerable to disturbance during periods in which 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 one 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 185 pups were born in Duvillaun Islands SAC in 2005. The corresponding minimum population estimate for the site numbered 648 to 833 grey seals of all ages. Known and suitable habitats for the species in Duvillaun Islands SAC during the breeding season are indicated in figure 1. Current breeding sites in Duvillaun Islands SAC are broadly distributed around the islands of Duvillaun More, Duvillaun Beg and Keely Island among their numerous beaches, rock ledges, coves and gullies, where access for seals to intertidal shorelines and the area above high water mark is possible. Some breeding activity also takes place on the grassy summits of all three islands listed above.

Grey seal also occurs at the site 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. Known moulting haul-out locations at the site are indicated in figure 2, consisting of selected rock ledges, beaches and coves where access for seals to intertidal shorelines and the area above high water mark is possible.

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 habitats for resting by the species within the site are indicated in figure 3. Current sites described in Duvillaun Islands SAC broadly consist of selected rock ledges, beaches and coves where access for seals to intertidal shorelines and the area above high water mark is possible.

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 conservation objectives and targets for Annex II species to facilitate the appropriate assessment process:

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

Target 1	Species range within the site is not 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.

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.

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Figure 1. *Halichoerus grypus* - Known breeding sites in Duvillaun Islands SAC

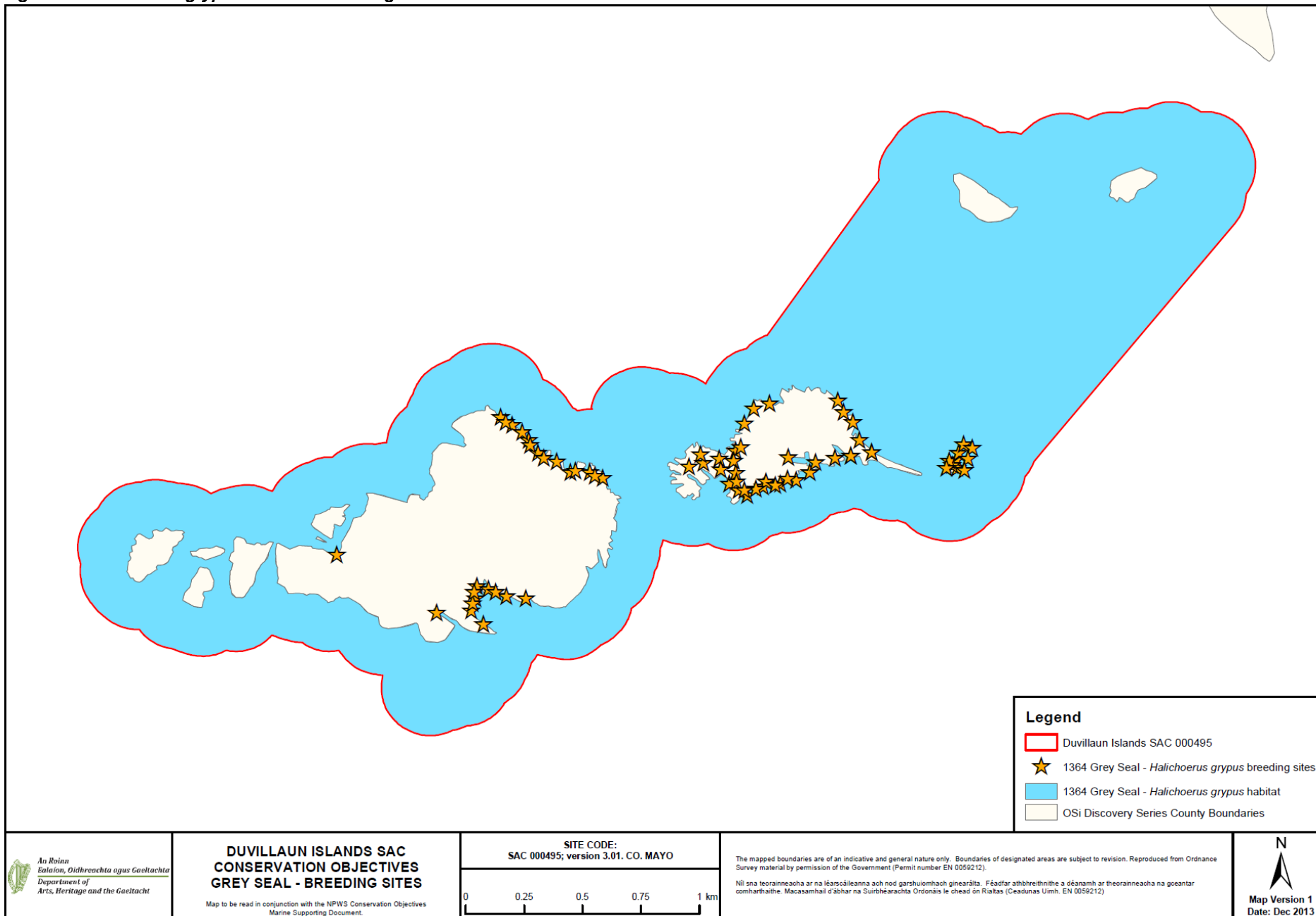


Figure 2. *Halichoerus grypus* - Known moult haul out sites in Duvillaun Islands SAC

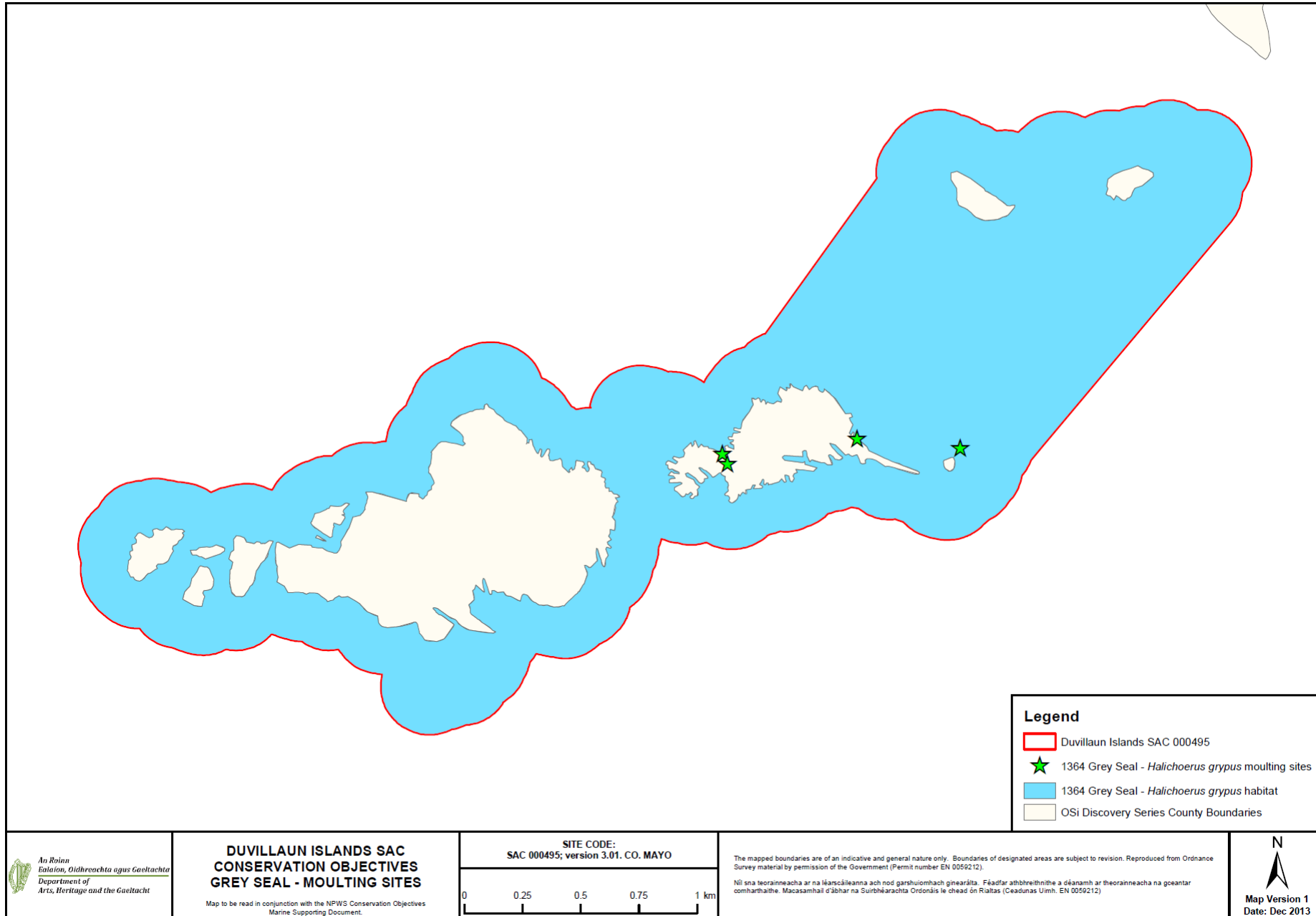


Figure 3. *Halichoerus grypus* - Known resting haul-out sites (non-breeding) in Duvillaun Islands SAC

