NPWS

Kilmuckridge-Tinnaberna Sandhills SAC
(site code: 001741)

Conservation objectives supporting document - coastal habitats

Version 1 - supplement 1

April 2026

IMPORTANT: This supplement, published in 2026, includes details relating to the EU habitat **2110 Embryonic shifting dunes** which was added as a Qualifying Interest for the site after the Site-Specific Conservation Objectives (Version 1) were published. This document should be read in conjunction with the Version 2 Site-Specific Conservation Objectives (NPWS, 2026), and with the Conservation objectives supporting document - Coastal habitats Version 1 (NPWS, 2014). Any references to this/these habitats in previously published Site-specific Conservation Objectives (SSCO), or SSCO supporting documents, including the mapping, are to be considered **superseded** by these updates.

Contents

Citation: NPWS (2026) Kilmuckridge-Tinnaberna Sandhills SAC (site code 001741) Conservation objectives supporting document - coastal habitats V1 - supplement 1. Conservation Objectives Supporting Document Series. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Dublin, Ireland.

1. Introduction

2110 Embryonic shifting dunes were added as a Qualifying Interest to Kilmuckridge-Tinnaberna Sandhills SAC (site code: 001741) after the Site-Specific Conservation Objectives (Version 1) were published. This document sets out the SSCO for the newly listed Qualifying Interest for the site and acts as a supplement to the original SSCO Supporting Document. Conservation assessments have been carried out in two separate areas within the SAC: Kilmuckridge and Tinnaberna.

2. Coastal habitats

2.1 2110 Embryonic shifting dunes

2.1.1 Site description of habitat

2110 Embryonic shifting dunes extend from the holiday resort of Morriscastle, southwards to the townland border of Tinnaberna and Ballynamona. Parts of the habitat are remote, particularly along the Tinnaberna stretch, which is fronted by clay cliffs of varying height and slope. Embryonic dunes are not extensive at Tinnaberna and have been associated with freshly eroded sand (Ryle *et al.*, 2009).

2.1.2 Overall objective

The overall objective for '*Embryonic shifting dunes'* in Kilmuckridge-Tinnaberna Sandhills SAC (site code: 001741) is to '*maintain the Favourable conservation condition*'.

This objective is based on an assessment of the recorded condition of the habitat(s) under a range of attributes and targets. The assessment is divided into three main headings: (a) Area (b) Range and (c) Structure and Functions.

2.1.3 Area

Habitat area

Coastal habitats are generally dynamic and increase and decrease in area due to natural processes. These natural changes are not taken into account in conservation status assessments. Changes associated with human activities including destruction and restoration do contribute to the assessment of conservation status.

The total area of 2110 Embryonic shifting dunes in SAC 1741 is calculated at 0.42ha.

No loss of 2110 Embryonic shifting dunes due to human activities has been observed at the site. Although the southern extent of the habitat at Tinnaberna was considered to be small and discontinuous by Ryle *et al.* (2009), this was attributed to the natural conditions and not associated with human activities. The embryonic dune habitat located at Kilmuckridge, which accounts for the majority of the habitat, was reported to be accreting.

Target: Area stable or increasing, subject to natural processes, including erosion and succession.

2.1.4 Range

Habitat distribution

The embryonic dunes at Kilmuckridge extend along the seaward side of the dunes from the holiday resort of Morriscastle, southwards to the townland border of Tinnaberna and Ballynamona. They form a narrow band with gaps in places and taper off towards the end of Kilmuckridge beach.

Target: No decline in the distribution of this habitat, unless it is the result of natural processes.

2.1.5 Structure and Functions

Structure and Functions for Embryonic shifting dunes are assessed on the basis of:

Physical structure: functionality and sediment supply

Target: Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs. Physical obstructions that have been in place and are unchanged since prior to 1994 are excluded from this target, unless they have a current adverse impact on sediment circulation.

Disturbance

Target: No more than 20% of the habitat should be subject to disturbance *e.g*. trampling, vehicle damage, and removal of substrate.

Flowering and fruiting of any positive indicator species

Target: Present in 40% or more of stops.

Vegetation composition: typical species (positive indicators)

Target: At least one species occurs with a frequency of more than 40% of stops.

Vegetation composition: native negative indicator species

Target: No negative species occurs at a frequency of more than 60% of stops and combined cover of all negative species across the habitat is 5% or less and highest % cover of any negative species within any stop is 25% or less.

Vegetation composition: non-native species

Target: No non-native species occurs at a frequency of more than 20% of stops and no evidence that % cover is increasing.

Indicators of local distinctiveness: site-specific target features (including rare and notable species)

Target: No evidence of decline since designation.

At Kilmuckridge, all criteria were satisfied during the Structure and Functions assessment for the 2110 Embryonic shifting dune habitat. The embryonic dunes here are well-formed and support a good vegetation cover. Sand Couch (*Elytrigia juncea*) was identified as the dominant species, while Lyme Grass (*Leymus arenarius*) was also present in several locations. Ongoing deposition of windblown sand supports the development and stability of foredune vegetation. At Tinnaberna, Structure and Functions were considered good on the basis of a visual assessment (Ryle *et al*., 2009).

3. References

Brophy, J.T., Perrin, P.M., Penk, M.R., Devaney, F.M. and Leyden, K.J. (2019) Saltmarsh Monitoring Project 2017-2018. Irish Wildlife Manuals, No. 108. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

Delaney, A., Devaney, F.M., Martin, J.R. and Barron, S.J. (2013) Monitoring survey of Annex I sand dune habitats in Ireland. Irish Wildlife Manuals, No. 75. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Martin, J.R., Daly, O.H. and Devaney F.M. (2017) Survey and assessment of vegetated shingle and associated habitats at 30 coastal sites. Volume 1: Main report. Irish Wildlife Manuals, No. 98. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin.

McCorry, M. and Ryle, T. (2009) Saltmarsh Monitoring Project 2007-2008. Unpublished report to the National Parks and Wildlife Service, Dublin.

Moore, D. and Wilson, F. (1999) National Shingle Beach Survey of Ireland 1999. Unpublished report to NPWS, Dublin.

NPWS (2014) Kilmuckridge-Tinnaberna Sandhills SAC (site code: 1741) Conservation objectives supporting document – Coastal habitats V1. Conservation Objectives Supporting Document Series. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Dublin, Ireland.

Perrin, P.M., Waldren, S., Penk, M.R. and O'Neill, F.H. (2017) Saltmarsh Function and Human Impacts in Relation to Ecological Status (SAMFHIRES). EPA Research Report, Wexford, Ireland.

Ryle, T., Murray, A., Connolly, K. and Swann, M. (2009) Coastal Monitoring Project 2004-2006. Unpublished report to the National Parks and Wildlife Service, Dublin.

Appendix 1 – Distribution map of Embryonic shifting dunes in Kilmuckridge-Tinnaberna Sandhills SAC (001741)