

National Parks and Wildlife Service

Conservation Objectives Series

Gortnandarragh Limestone Pavement SAC 001271



An Roinn Cultúir,
Oidhreacht agus Gaeltachta
Department of Culture,
Heritage and the Gaeltacht

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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*

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8240 Limestone pavementsE

Supporting documents, relevant reports & publications

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

NPWS Documents

Year :	2006
Title :	The Regional Red List of Irish Bees
Author :	Fitzpatrick, U.; Murray, T.E.; Byrne, A.; Paxton, R.J.; Brown, M.J.F.
Series :	Ireland Red List series, NPWS
Year :	2009
Title :	The development of methodologies to assess the conservation status of limestone pavement and associated habitats in Ireland
Author :	Murphy, S.; Fernandez, F.
Series :	Irish Wildlife Manuals, No. 43
Year :	2009
Title :	Ireland Red List No. 2: Non-marine molluscs
Author :	Byrne, A.; Moorkens, E.A.; Anderson, R.; Killeen, I.J.; Regan, E.C.
Series :	Ireland Red List series, NPWS
Year :	2010
Title :	Ireland Red List No. 4: Butterflies
Author :	Regan, E.C.; Nelson, B.; Aldwell, B.; Bertrand, C.; Bond, K.; Harding, J.; Nash, D.; Nixon, D.; Wilson, C.J.
Series :	Ireland Red List series, NPWS
Year :	2012
Title :	Ireland Red List No. 8: Bryophytes
Author :	Lockhart, N.; Hodgetts, N.; Holyoak, D.
Series :	Ireland Red List series, NPWS
Year :	2013
Title :	National survey of limestone pavement and associated habitats in Ireland
Author :	Wilson, S.; Fernandez, F.
Series :	Irish Wildlife Manuals, No. 73
Year :	2016
Title :	Ireland Red List No. 10: Vascular Plants
Author :	Wyse Jackson, M.; FitzPatrick, Ú.; Cole, E.; Jebb, M.; McFerran, D.; Sheehy Skeffington, M.; Wright, M.
Series :	Ireland Red List Series, NPWS

Spatial data sources

Year : 2013

Title : National Survey of Limestone Pavement and Associated Habitats in Ireland distribution data

GIS Operations : Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising

Used For : 8240 (map 2)

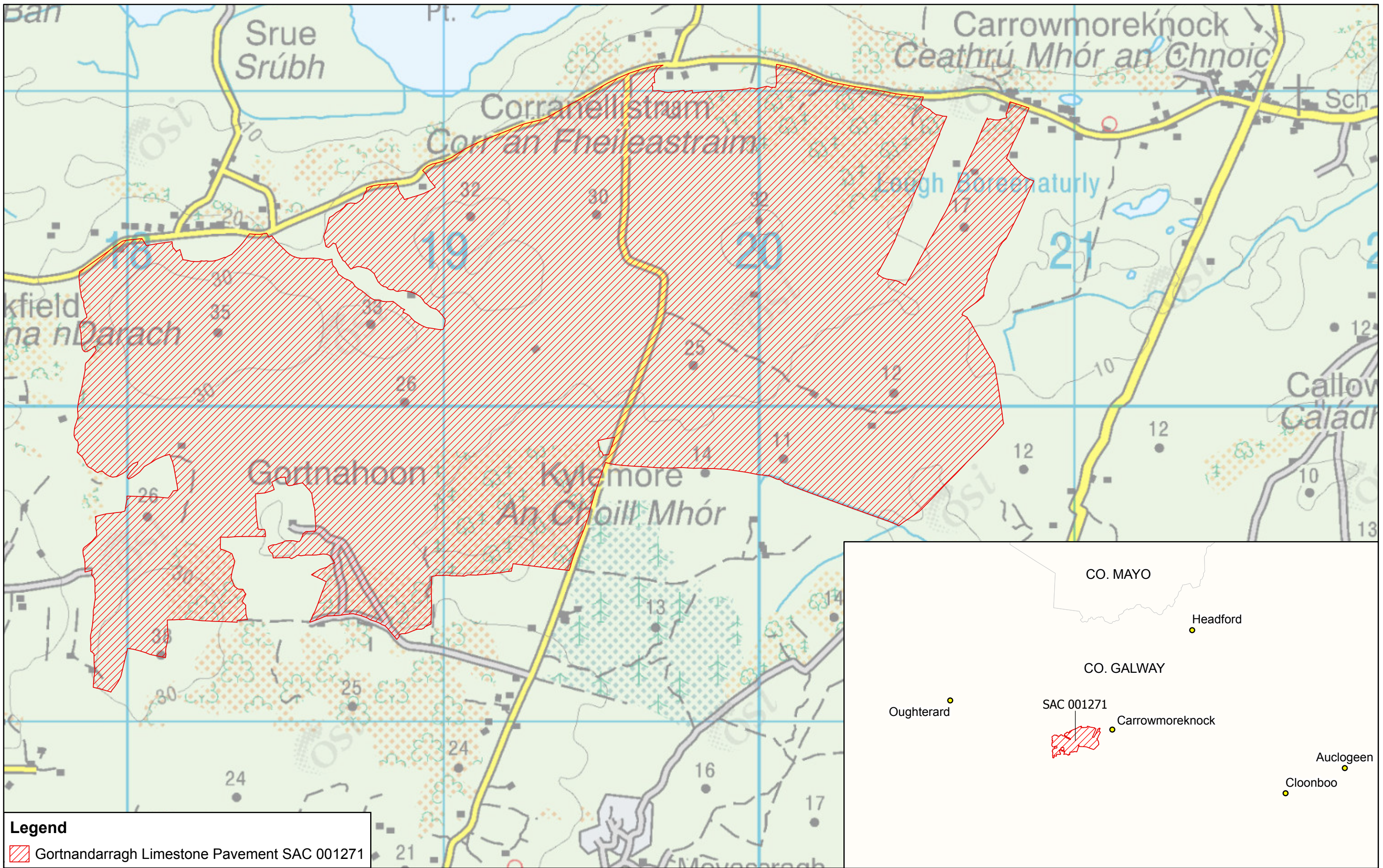
Conservation Objectives for : Gortnandarragh Limestone Pavement SAC [001271]

8240 Limestone pavements

To restore the favourable conservation condition of Limestone pavements* in Gortnandarragh Limestone Pavement 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	Gortnandarragh Limestone Pavement SAC contains one of the largest areas of limestone pavement habitat outside the Burren. The habitat in the SAC occurs in intimate association with species-rich calcareous grassland, heath and scrub/woodland habitats. Therefore, these habitats cannot easily be mapped or considered separately. Wilson and Fernandez (2013) mapped the indicative area of limestone pavement, including mosaics with associated habitats, as 251.3ha in the SAC (see map 2). As part of the National Survey of Limestone Pavement and Associated Habitats (Wilson and Fernandez, 2013), the sub-site Corranellistrum (site code NSLP03) was surveyed in detail. This survey should be consulted for further details
Habitat distribution	Occurrence	No decline. Map 2 shows indicative distribution, including mosaics with other habitats	See the notes for Habitat area above. Distribution based on data from Wilson and Fernandez (2013). This habitat can be split into exposed pavement and wooded pavement. In Gortnandarragh Limestone Pavement SAC, the pavement consists of a low, exposed limestone plateau with gently sloping flanks and includes shattered pavement in addition to areas with a well-developed system of clints and grikes. The surrounding slopes of the pavement are covered in scrub dominated by hazel (<i>Corylus avellana</i>) with occasional ash (<i>Fraxinus excelsior</i>). In places, this grades into woodland over limestone boulders (NPWS internal files)
Vegetation composition: positive indicator species	Number at a representative number of monitoring stops	At least seven positive indicator species present	Positive indicator species for exposed and wooded pavement are listed in Wilson and Fernandez (2013). Positive indicator species recorded by Wilson and Fernandez (2013) in exposed pavement in the SAC include blue moor-grass (<i>Sesleria caerulea</i>), juniper (<i>Juniperus communis</i>), herb-robert (<i>Geranium robertianum</i>), bloody crane's-bill (<i>G. sanguineum</i>), dark-red helleborine (<i>Epipactis atrorubens</i>), wall lettuce (<i>Mycelis muralis</i>), ivy (<i>Hedera helix</i>), wild thyme (<i>Thymus polytrichus</i>), wood sage (<i>Teucrium scorodonia</i>), hart's-tongue fern (<i>Asplenium scolopendrium</i>), maidenhair spleenwort (<i>A. trichomanes</i>), wall-rue (<i>A. ruta-muraria</i>), rusty-back fern (<i>A. ceterach</i>) and the mosses <i>Ctenidium molluscum</i> , <i>Fissidens dubius</i> , <i>Neckera crispa</i> and <i>Tortella tortuosa</i>
Vegetation composition: bryophyte layer	Percentage at a representative number of monitoring stops	Bryophyte cover at least 50% on wooded pavement	Attribute and target based on 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 are listed in Wilson and Fernandez (2013). Negative indicator species for wooded pavement overlap with non-native species (below)
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; on wooded pavement not more than 10% with no regeneration	Attribute and target based on Wilson and Fernandez (2013). Cotoneaster (<i>Cotoneaster microphyllus</i>) was recorded at two locations in the habitat in the Corranellistrum sub-site (site code NSLP03) by 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)
Vegetation structure: woodland canopy	Percentage at a representative number of monitoring stops	Canopy cover on wooded pavement at least 30%	Attribute and target based on Wilson and Fernandez (2013)
Vegetation structure: dead wood	Occurrence in a representative number of monitoring stops	Sufficient quantity of dead wood on wooded pavement to provide habitat for saproxylic organisms	Dead wood is a valuable resource and an integral part of a healthy, functioning woodland ecosystem
Physical structure: disturbance	Occurrence in a representative number of monitoring stops	No evidence of grazing pressure on wooded pavement	Attribute and target based on Wilson and Fernandez (2013). The quarrying/removal of pavement has caused some localised damage to the habitat in the SAC (Murphy and Fernandez, 2009; Wilson and Fernandez, 2013; NPWS internal files)
Indicators of local distinctiveness	Occurrence	Indicators of local distinctiveness are maintained	This includes species on the Flora (Protection) Order, 2015 and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.) and other rare or localised species, as well as archaeological and geological features, which often support distinctive species. The Near Threatened spring gentian (<i>Gentiana verna</i>) (Wyse Jackson et al., 2016) has been recorded in the habitat in the SAC (NPWS internal files). A number of Red Listed and Near Threatened invertebrates have been recorded in the limestone pavement and associated habitats in the SAC, including the Vulnerable bee species <i>Sphcodes hyalinatus</i> (Fitzpatrick et al., 2006)



Legend
 Gortnandarragh Limestone Pavement SAC 001271



**MAP 1:
 GORTNANDARRAGH LIMESTONE PAVEMENT SAC
 CONSERVATION OBJECTIVES
 SAC DESIGNATION**
 Map to be read in conjunction with the NPWS Conservation Objectives Document.

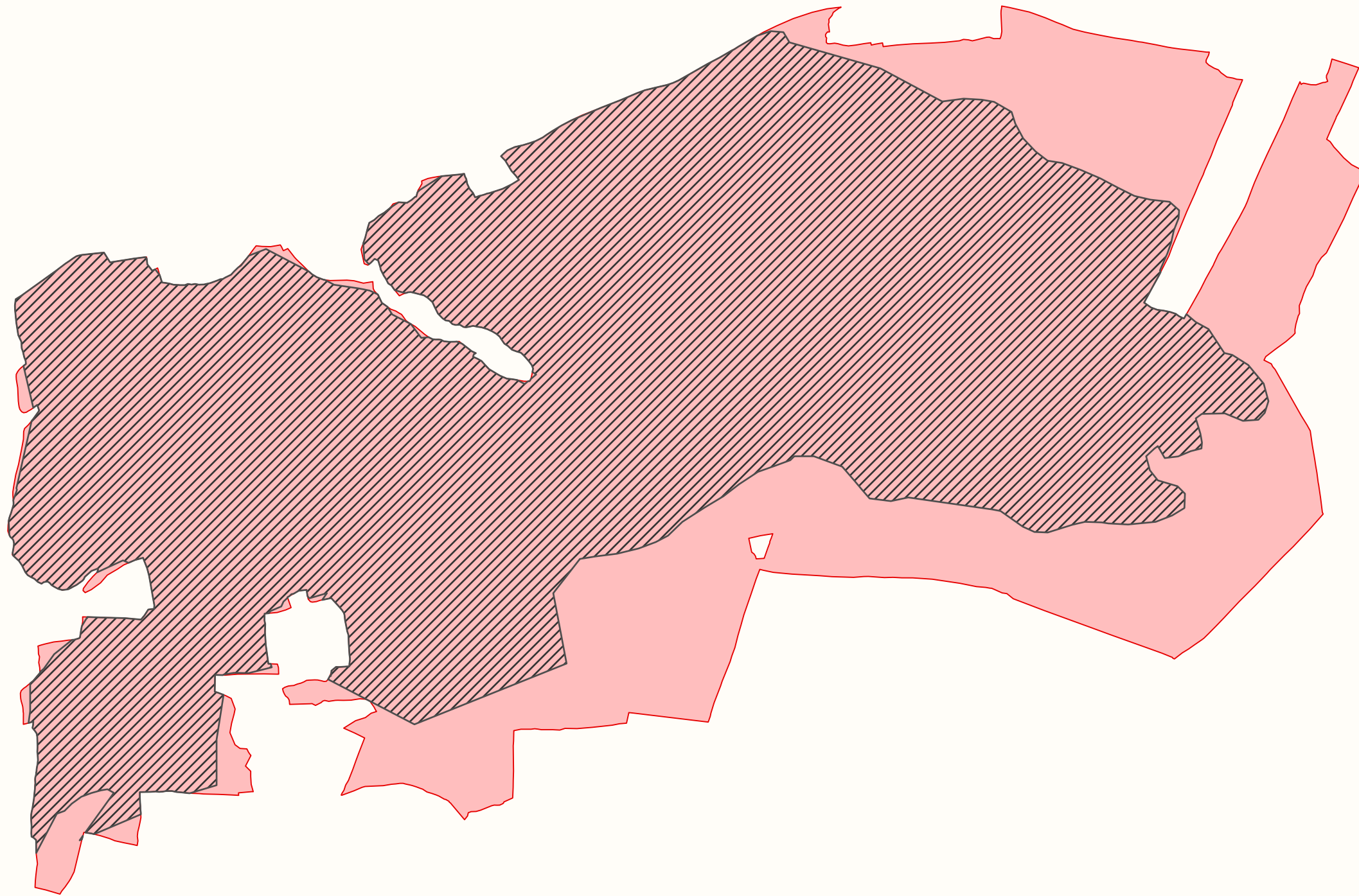
**SITE CODE:
 SAC 001271; version 3.02. CO. GALWAY**

0 140 280 420 560 Meters




The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision.
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Níl sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbheithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh OSI-NMA-014. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann





Legend

-  8240 Limestone Pavements
-  Gortnandarragh Limestone Pavement SAC 001271
-  OSi Discovery Series County Boundary