

National Parks and Wildlife Service

Conservation Objectives Series

Glendine Wood SAC 002324



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

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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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|--------|--|
| 002324 | Glendine Wood SAC |
| 6985 | Killarney Fern <i>Vandenboschia speciosa</i> |

Supporting documents, relevant reports & publications

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

NPWS Documents

| | |
|-----------------|--|
| Year : | 2015 |
| Title : | Monitoring methods for the Killarney Fern (<i>Trichomanes speciosum</i> Willd.) in Ireland |
| Author : | Ní Dhúill, E.; Smyth, N.; Waldren, S.; Lynn, D. |
| Series : | Irish Wildlife Manuals, No. 82 |
| Year : | 2019 |
| Title : | The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments |
| Author : | NPWS |
| Series : | Conservation assessments |
| Year : | in prep. |
| Title : | Monitoring and assessment of Killarney Fern (<i>Vandenboschia speciosa</i> (Willd.) Kunkel) in Ireland, 2015-2018 |
| Author : | Ní Dhúill, E.; O'Neill, F.H.; Hodd, R. |
| Series : | Irish Wildlife Manuals |

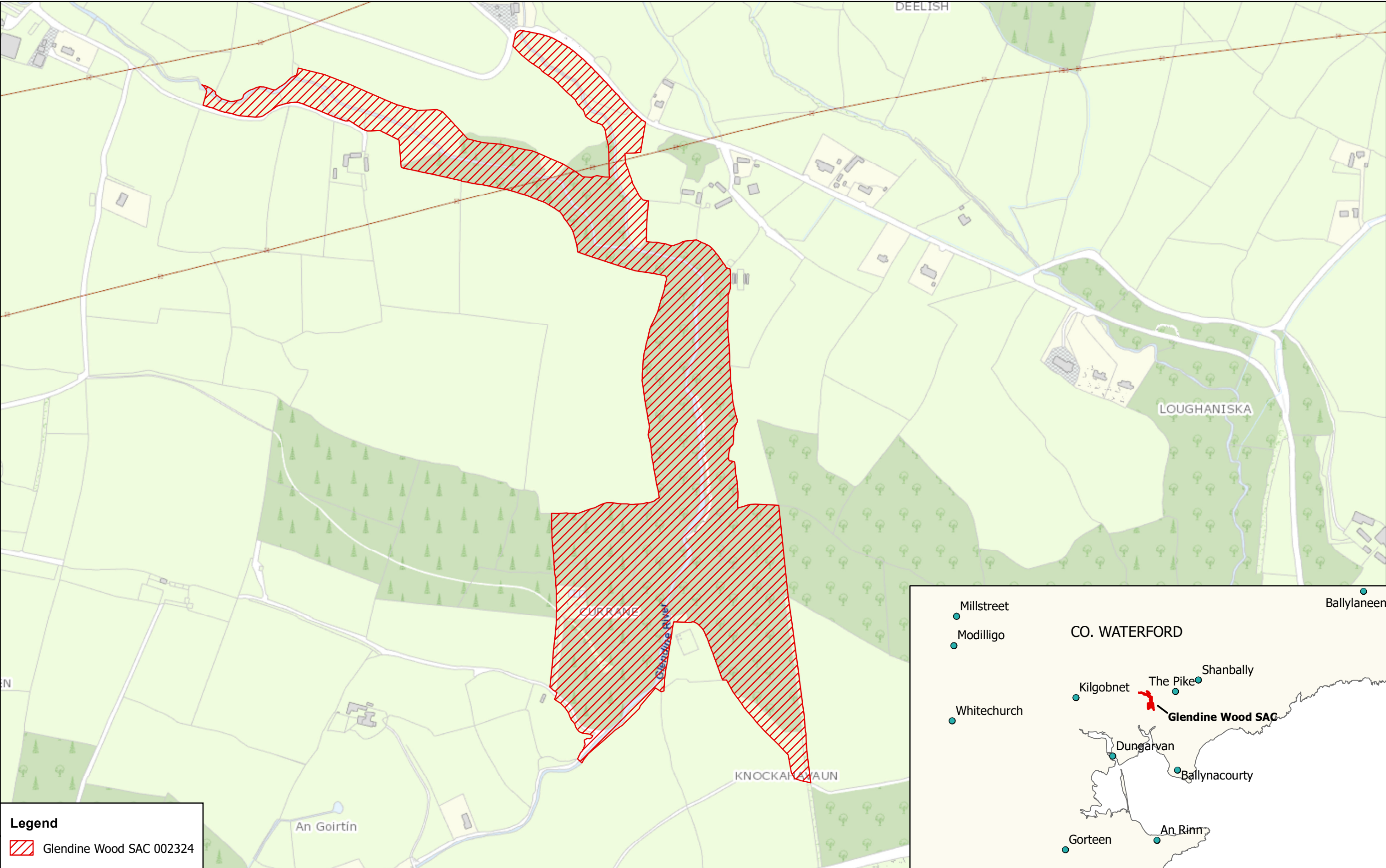
Conservation Objectives for : Glendine Wood SAC [002324]

6985 Killarney Fern *Vandenboschia speciosa*


To maintain the favourable conservation condition of Killarney Fern in Glendine Wood SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|---|----------------------------------|---|--|
| Distribution | Occurrence | No loss in geographical spread of populations, subject to natural processes | The population of Killarney fern (<i>Vandenboschia speciosa</i> [formerly <i>Trichomanes speciosum</i> ; species code 1421]) is currently known from locations in Glendine Wood SAC within hectad X29. Exact locations are not mapped here on account of the threat posed by illegal collecting. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Number of populations | Number | No decline, subject to natural processes | One population of the species has been recorded in the SAC since 1960. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Number of colonies | Number | No decline, subject to natural processes | 40 colonies of the species have been recorded in the population in the SAC since 1960. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population: life-cycle stage | Type (sporophyte or gametophyte) | Maintain life-cycle stage composition of the population, subject to natural processes | Nine of the 40 colonies recorded since 1960 are composed of mature sporophytes (frond stage) with coexisting gametophytes (filamentous stage), 15 are composed of mature sporophytes only, six are composed of gametophytes only, two are composed of mature and juvenile sporophytes, two are composed of gametophytes and juvenile sporophytes and six are composed of mature and juvenile sporophytes coexisting with gametophytes. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population size: area of occupancy | Square metres | No decline, subject to natural processes | Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population size: living sporophyte fronds | Number | No decline, subject to natural processes | Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population structure: young and unfurling fronds | Occurrence | Young (not fully expanded) and/or unfurling (crozier) fronds present in populations previously observed to have these, subject to natural processes | Young and/or unfurling fronds have been recorded from Glendine Wood SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population structure: fertile fronds | Occurrence | Fertile fronds present in populations previously observed to have these, subject to natural processes | Fertile fronds have been recorded from the SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Population structure: juvenile sporophyte fronds emerging from gametophytes | Number | No decline, subject to natural processes | Juvenile sporophyte fronds emerging from gametophytes have been recorded from the SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Habitat extent | Hectares | No loss of suitable habitat, subject to natural processes | The species grows in deeply shaded, humid situations - dripping caves, overhangs and crevices on cliffs, rocky slopes, by waterfalls, in stream ravines and gullies, on rock or soil banks in woodlands and, occasionally, under fallen trees and on the floor of damp woodlands. Whilst also occurring in these habitats, the gametophyte stage can grow in drier areas that do not suit the sporophyte. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |

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|---|-------------------|---|--|
| Hydrological conditions: wet/damp microhabitats | Occurrence | Maintain hydrological conditions at the locations of known populations - visible water source, with dripping or seeping water present and/or substrate wet/damp to touch, subject to natural processes | Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Hydrological conditions: relative humidity | Percentage | Maintain relative humidity levels at known colonies at not less than 80%, subject to natural processes | Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Hydrological conditions: desiccated fronds | Number | No increase, subject to natural processes | Presence of desiccated sporophyte fronds and gametophyte mats is indicative of unsuitable conditions. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Light levels: shading | Shade index score | At least 4 for woodland sporophyte-only and mixed colonies; at least 5 for open upland sporophyte-only and mixed colonies; at least 6 for gametophyte-only colonies, subject to natural processes | Shade Index: 4. Moderate shade, e.g. light-medium deciduous canopy with sun flecks. 5. Permanently shaded from direct sunlight but otherwise open to sky. 6. Deep woodland (e.g. coniferous or in ravine) shade, no sun flecks. 7. Perpetual deep shade, e.g. cave entrance, beneath boulder. The species occurs in deep shade in woodland in Glendine Wood SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Woodland canopy cover | Percentage | No loss of woodland canopy at, or in the vicinity of, the locations of known populations and canopy cover here maintained at more than 33%, subject to natural processes | Woodland management at or near to locations of known populations of the species must take account of its habitat requirements, particularly with regard to maintenance of sufficient canopy cover. The species occurs in woodland in Glendine Wood SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |
| Invasive species | Occurrence | Maintain absence of invasive non-native and vigorous native plant species at the locations of known populations or, if present, maintain vegetation cover of these at less than 10%, taking into account the habitat requirements of <i>V. speciosa</i> | In order to avoid negative impacts on the Killarney fern (<i>Vandenboschia speciosa</i>), its habitat requirements (site hydrology, relative humidity, canopy cover, shading levels, etc.) must be taken into account in locations that are subject to or proposed for management actions to control invasive non-native and/or vigorous native plant species. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files |



Legend

 Glendine Wood SAC 002324