

TARBERT WOODS SPECIAL AREA OF CONSERVATION (SAC)

CONSERVATION ADVICE PACKAGE



The Ardpatrik and Dunmore Woods section of Tarberts Woods SAC © NatureScot

Site Details

Site name:	Tarbert Woods
Map:	https://sitelink.nature.scot/site/8390
Location:	Highlands and Islands
Site code:	UK0030286
Area (ha):	1,576.29
Date designated:	17 March 2005

Qualifying features

Qualifying feature	SCM assessed condition	SCM visit date	UK overall Conservation Status
Western acidic oak woodland (old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles) [H91A0]	Unfavourable Recovering	21 November 2008	Unfavourable - Bad

Notes:

Assessed condition refers to the condition of the SAC feature assessed at a site level as part of NatureScot's [Site Condition Monitoring \(SCM\)](#) programme.

Conservation status is the overall condition of the feature throughout its range within the UK as reported to the European Commission under Article 17 of the Habitats Directive in 2019.

Overlapping Protected Areas:

[Tarbert to Skipness Coast Site of Special Scientific Interest \(SSSI\)](#), [Ardpatrick and Dunmore Woods SSSI](#), [Glen Ralloch to Baravalla Woods SSSI](#) and [Artillgan and Abhainn Srathain Burns SSSI](#)

Key factors affecting the qualifying feature

Western acidic oak woods

This habitat type comprises a range of woodland types dominated by mixtures of oak (*Quercus robur* and/or *Q. petraea*) and birch (*Betula pendula* and/or *B. pubescens*). It is characteristic of base-poor soils in areas of at least moderately high rainfall. A key feature of importance within this habitat type is the well-developed Atlantic bryophyte communities it can support.

Tarbert Woods is made up of 4 SSSIs which comprise coastal strips of fragmented broad-leaved woodland with good stands of old sessile oak woods, which are very important for their oceanic bryophyte communities. The numerous streams which

traverse the site have in places cut deep ravines, and together with the sheltered north-east aspect these provide very humid conditions which support thriving populations of ferns and bryophytes. Amongst the 180 bryophyte species recorded are 47 Atlantic species, including *Sematophyllum micans* and *Plagiochila atlantica*. The woodland rises in altitude from sea level up to 150 m within around 450 m of the coast, and as a consequence shows marked community zonation. The lower slopes are dominated by oak-birch *Quercus-Betula* woodland, and downy birch *Betula pubescens* is the dominant tree throughout the woods with little sign of past management specifically as oak woodland, except around old settlements. Ash *Fraxinus excelsior* woodland is associated with many of the streams and ravines where more base-rich conditions prevail, whilst areas of alder and willow occur near the coast.

A key factor that can affect this habitat is inappropriate levels of grazing. The habitat requires low but not zero grazing. High levels of grazing can distort the structure and composition of the woodlands, especially leading to an impoverished ground flora, and restricting regeneration of the more palatable tree species such as oak, ash and holly. This eventually results in a woodland dominated by older trees, and by the less palatable species such as birch, and lacking normal representation of intermediate life classes. Too little grazing can result in a lack of structural diversity in the canopy and over shading which can impact negatively on important lichen and bryophyte communities. Tarbert Woods are grazed by deer. The presence of non-native species such as rhododendron and American skunk cabbage (*Lysichiton americanus*) can also impact the habitat, shading out ground flora and epiphytes, and preventing natural regeneration of native tree and shrub species. In the future new stresses to the feature, particularly from climate change and novel pests and pathogens such as chalara ash dieback, are anticipated.

The western acidic oak woods feature has been assessed through NatureScot's Site Condition Monitoring programme as being in unfavourable recovering condition at Tarbert Woods SAC due to extensive colonisation by rhododendron throughout the site. To address this, an eradication programme has been in place for over 10 years in an effort to remove most of this species from the site. Regeneration of native tree species is recorded as being very good. Some sections of the site also contain the garden escapee, American skunk cabbage (*Lysichiton americanus*).

Further information about western acidic oak woods can be found on the [JNCC website](#).

Conservation Objectives for western acidic oak woods (old sessile oak woods with *Ilex* and *Blechnum* in the British Isles)

1. To ensure that the qualifying feature of Tarbert Woods SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status

Favourable Conservation Status (FCS) is considered at a European biogeographic level. When determining whether management measures may be required to ensure that the

conservation objectives for this site are achieved, the focus should be on maintaining or restoring the contribution that this site makes to FCS.

When carrying out appraisals of plans and projects against these conservation objectives, it is not necessary to understand the status of the feature in other SACs in this biogeographic region. The purpose of the appraisal should be to understand whether the integrity of the site (see objective 2) would be maintained. If this is the case then its contribution to FCS across the Atlantic Biogeographic Region will continue to be met. Further details on how these appraisals should be carried out in relation to maintaining site integrity is provided by objective 2 (including parts a, b and c). If broader information on the feature is available then it should be used to provide context to the site-based appraisal.

Note that “appropriate” within this part of the conservation objectives is included to indicate that the contribution to FCS varies from site to site and feature to feature.

2. To ensure that the integrity of Tarbert Woods SAC is restored by meeting objectives 2a, 2b and 2c for the qualifying feature.

The aim at this SAC is to restore the western acidic oak wood to a favourable condition as a contribution to its wider conservation status. Therefore any impacts to the objectives shown in 2a, 2b or 2c below must not persist so that they prevent the achievement of this overall aim. When carrying out appraisals of plans or projects the focus should be on restoring site integrity, specifically by meeting the objectives outlined in 2a, 2b and 2c. If these are met then site integrity will be restored. Note that not all of these will be relevant for every activity being considered. Any impacts on the objectives shown in 2a, 2b or 2c below must not persist so that they prevent the restoration of site integrity. Temporary impacts on these objectives resulting from plans or projects can only be permitted where they do not prevent the ability of a feature to recover and there is certainty that the features will be able to quickly recover.

This objective recognises that the qualifying habitat is exposed to a wide range of drivers of change. Some of these are natural and are not a direct result of human influences. Such changes in the habitats’ extent, distribution or condition within the site which are brought about by natural processes, directly or indirectly, are normally considered compatible with the site’s conservation objectives. An exception to this is when the favourable condition of a habitat is dependent on halting or managing natural succession. An assessment of whether a change is natural or anthropogenic, or a combination of both, will need to be looked at on a case by case basis.

2a. Maintain the extent and distribution of the western acidic oak woods habitat within the site

The extent of the western acidic oak woodland feature, taken from the Standard Data Form, has been estimated at 726.35ha. This should be maintained or allowed to increase through natural regeneration. There should be no measurable net reduction in the extent of the habitat and its distribution throughout the site.

To avoid any permanent reduction in the extent or distribution of the habitat, no habitat loss should take place from within or at the edge of the woodland, through non-native forestry planting, further agricultural reclamation, wild fires or dumping of waste.

This conservation objective is considered to be met if the conditions to ensure the habitats’ long-term existence are in place.

Whilst the presence of non-native species across the four component SSSIs is unlikely to

have reduced the extent and distribution of the western acidic oak woods feature of the SAC, they are likely to have reduced the regeneration potential of the woodlands.

2b. Restore the structure, function and supporting processes of the western acidic oak woods habitat

Woodland are extremely complex ecosystems, and in order to maintain and enhance the structure, function and processes supporting the habitat the key elements that should be in place include:

- Mixed age classes of trees, canopy cover, deadwood/fallen trees, understorey, ground flora & epiphytic plants. At this site native tree species regeneration remains good but only low levels of deadwood occur due to climatic stresses and poor soil conditions stunting tree growth.
- Large, long lived trees with the characteristics of existing species, especially the defining species of oak (bark chemistry and structure, shade, leaf litter, fruiting, senescence and deadwood development).
- Low levels of herbivore impacts to allow all species of trees and shrubs to regenerate and healthy growth of ground flora including flowering and fruiting. Deer are the main herbivore at Tarbert Woods.
- Natural hydrological conditions, including humidity, splash, mist and spate events, capable of supporting characteristic oceanic bryophyte and lichen assemblages in wooded ravines. Avoidance of abstraction that will alter these conditions where the characteristic bryophyte interest is known to be high e.g. hydro-electric development.
- Absence of invasive non-native species, especially rhododendron. At this site the presence of rhododendron is likely to have reduced the levels of native tree species regeneration and distribution/viability of typical species in the past.
- Prevention of pathogen arrival, establishment and spread e.g. chalara ash dieback.

The main reason for the unfavourable status of Tarbert Woods SAC is the presence of rhododendron. The 2008 monitoring report stated "thickets of rhododendron are a serious problem in some of the SSSI woodland parcels, but the extent of this invasive species has been mapped and an eradication programme is being implemented". This program is already well under way.

Within the segment SSSIs that make up Tarbert Woods SAC this programme has been an ongoing challenge, with mixed results across the different sections. Removal at the Forestry and Land Scotland owned Artilligan and Abhainn Srathain Burns SSSI has been successful. Removal has also been successful at Glen Ralloch to Baravalla Woods SSSI; however plants are returning and follow up treatment is required. It is understood that the landowner has applied for assistance under the Agri-Environmental Climate Scheme (AECS) in 2019 to undertake more rhododendron control and follow up work within this SSSI. Some sections within Ardpatrik and Dunmore Woods SSSI have been treated with aspirations to work with landowners to clear the remainder of the site. Sections of Tarbert to Skipness Coast SSSI have been cleared and there is an ongoing management agreement in place to follow this up.

In order to avoid further encroachment and spread of rhododendron, and to support recovery of structure, function and processes, removal and follow up treatment by spraying across the entirety of the SAC is essential.

Coastal woodland sections of the Glen Ralloch to Baravalla Woods SSSI also contain dense populations of American skunk cabbage which are likely to have been garden escapees. The large leaves and dense stands of this plant can lead to it out-competing smaller plants and tree seedlings due to its shading effect as well as impacting on lower plants such as bryophytes and lichens. Since 2017, NatureScot has been working with a local contractor to trial different methods of control (mechanical cutting and chemical spraying), although it is too early to indicate which, if any, control methods have been successful in reducing the density and distribution of this plant.

2c. Restore the distribution and viability of typical species of the western acidic oak woods habitat

The habitat corresponds broadly to the western oakwoods described in previous accounts of UK woodlands; the principle NVC types at this site are :

- W11 *Quercus petraea* – *Betula pubescens* – *Oxalis acetosella* woodland
- W17 *Quercus petraea* – *Betula pubescens* – *Dicranum majus* woodland

Constant tree species are: pedunculate oak *Quercus robur*, sessile oak *Q. petraea*, downy birch *B. pubescens*, alder *Alnus glutinosa*, hazel *Corylus avellana*, and holly *Ilex aquifolium*.

The ground flora consists of: common honeysuckle *Lonicera periclymenum*, bracken *Pteridium aquilinum*, hay-scented buckler fern *Dryopteris aemula*, beech fern *Phegopteris connectilis*, Wilson's filmy fern *Hymenophyllum wilsonii*, Tunbridge filmy fern *Hymenophyllum tunbrigense*, blackberry spp. *Rubus fruticosus* aggr, common marsh bedstraw *Galium palustre*, blaeberry *Vaccinium myrtillus*, wood-sorrel *Oxalis acetosella*, common tormentil *Potentilla erecta*, dog-violet *Viola riviniana*, dog mercury *Mercurialis perennis*, creeping soft-grass *Holcus mollis*, common bent *Agrostis capillaris*, sweet vernal grass *Anthoxanthum odoratum*, wavy hair-grass *Deschampsia flexuosa*, common tamarisk-moss *Thuidium tamariscinum*, greater fork-moss *Dicranum majus*, red-stemmed feather-moss *Pleurozium schreber* and, bank haircap *Polytrichum formosum*.

Rare species are:

Scott's fork moss (moss)	<i>Dicranum scottianum</i>
Irish crisp-moss (moss)	<i>Trichostomum hibernicum</i>
Pale scalewort (liverwort)	<i>Radula voluta</i>
Rock fingerwort (liverwort)	<i>Lepidozia cupressina</i>
Deceptive featherwort (liverwort)	<i>Adelanthus decipiens</i>
Wedge flapwort (liverwort)	<i>Leptoscyphus cuneifolius</i>
Deceptive featherwort	<i>Plagiochila heterophylla</i>

Western acidic oak woodland supports an important component of Britain's oceanic bryophyte flora and lichen mycota. The distribution and viability of these assemblages should be maintained with particular focus on nationally rare, scarce and/or threatened species and on assemblages that indicate a long period of ecological continuity.

Conditions needed for lichens include maintaining sheltered but open old-growth conditions where the impact of shade, due to regeneration and climber growth, is balanced at the site scale against the need for continued woodland regeneration.

Colonisation by invasive species, such as rhododendron, sitka spruce, western hemlock and American skunk cabbage on the site could result in the loss of typical species through shading and competition for resources. Control is carried out as outlined in Conservation Objective 2b, above.

Low levels of herbivore grazing/browsing by deer at Tarbert Woods SAC should be maintained to ensure that: native tree seedlings can establish, a mixed age classes of trees are present, and a healthy understorey plus groundflora can develop, which is not dominated by bracken and dense scrub (both of which can impact upon lichen and bryophyte communities). Deer numbers should be monitored and control measures implemented if necessary.

This habitat also supports badgers, pine martens, tawny owls, woodpeckers and treecreepers.

Conservation measures

Tarbert Woods SAC also contains areas notified as Sites of Special Scientific Interest and management changes described on the SSSI list of Operations Requiring Consent must have prior consent from SNH (NatureScot).

Current and recommended management for western acidic oak woods

Issue	Measure	Responsible party
Hydrology	Ensure natural hydrological processes are maintained where they support significant populations of typical wooded ravine bryophytes and lichens.	Landowner, SEPA, Scottish Water, NatureScot, FLS
Herbivore impacts	<p>Ensure that herbivore impacts are low based on the FCS/SNH (NatureScot) Herbivore Impact Assessment Process and do not prevent the regeneration of oak and other native species or the development of, an understorey, ground flora, and epiphytic plants within the SAC.</p> <p>Low grazing/browsing pressure from deer is necessary to maintain the habitats structure.</p> <p>Monitor deer population. Deer management measures may be necessary in the future.</p>	Land managers, NatureScot, FLS
Invasion by non-native species	<p>Management measures are in place to remove rhododendron from parts of the site.</p> <p>Discussions with land owners to facilitate rhododendron removal across the remainder of the site is required.</p> <p>Continue follow-up treatment of rhododendron by spraying to avoid recolonization.</p> <p>Continue working to trial methods of skunk cabbage removal.</p>	Land manager FLS
	Land Management Contracts - Rhododendron removal and follow-up treatment by spraying.	Land managers, NatureScot, SGRPID (GEAC)

Habitat Management	<p>Maintain plans as required, for example; Forestry and Land Scotland management plan, SSSI deer management plans, etc.</p> <p>Implement Forestry and Land Scotland management plan on Artilligan and Abhainn Srathain Burns SSSI, including control of rhododendron, sitka spruce and western hemlock.</p> <p>Promote/leave dead wood/fallen trees on the woodland floor.</p>	NatureScot, FLS
Future threats	<p>A coordinated resilience planning process should be developed to respond to anticipated future threats to the habitat e.g. chalara ash dieback.</p> <p>Management actions arising from the resilience planning process, and site-level plans, should be implemented to anticipate future threats to the habitat on the site This resilience work may also include further research to understand the vulnerabilities of the habitat.</p>	NatureScot Land managers
Climate change	Discussions on options available and participation in available local, national and international initiatives	Land manager, Argyll and Bute Council, Scottish/UK government, NatureScot
Research and monitoring	To identify emerging impacts on the habitat and their causes, in order to understand the long term issues, identify refugia, review site-level resilience plans in the light of updated future threat projections and to inform future management of the habitat across Scotland.	NatureScot, Universities, Land managers

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