

## **URQUHART BAY WOOD SPECIAL AREA OF CONSERVATION (SAC)**

### **CONSERVATION ADVICE PACKAGE**



## Site Details

Site name:	Urquhart Bay Wood
Map:	<a href="https://sitelink.nature.scot/site/8406">https://sitelink.nature.scot/site/8406</a>
Location:	Highlands and Islands
Site code:	UK0030298
Area (ha):	46.39
Date designated:	17 March 2005

## Qualifying features

Qualifying feature	Assessed condition	SCM visit date	UK overall Conservation Status
Alder woodland on floodplains	Unfavourable No change	2 September 2010	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:

Urquhart Bay Wood SSSI

## Key factors affecting the qualifying feature

### Alder woodland on floodplains

This habitat of riverine woods are often just narrow strips or lines of trees due to clearance of woodland along rivers that has removed most of the true alluvial forests, leaving just fragments. As such these residual alder woods on floodplains frequently occur in association with other woodland types or with other wetland habitats such as fens. Urquhart Bay Wood is one of very few intact floodplain woodlands remaining in the UK.

Alder woodland on floodplains comprises woods dominated by alder *Alnus glutinosa* and willow *Salix* spp. on flood plains on islands in river channels and low-lying wetlands alongside the channels at the deltas of the River Enrick and Coiltie. The habitat typically occurs on moderately base-rich, eutrophic soils subject to periodic inundation.

As this woodland habitat is dynamic in nature the structure and function are best maintained within a larger unit that includes the open communities, mainly fen and swamp, of earlier successional stages.

Key management issues at Urquhart Bay Wood SAC are over grazing and invasive non-native species which at present are preventing the site from being in favourable condition. Any changes in local and catchment hydrology could also have significant effects on the site.

Further information about the habitat of this SAC can be found on the [JNCC website](#).

### **Conservation Objectives for Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0] (Alder woodland on floodplains)**

#### **1. To ensure that the qualifying feature of Urquhart Bay Wood 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 Urquhart Bay Wood is restored by meeting objectives 2a, 2b and 2c for the qualifying feature.**

The aim at this SAC is to maintain, or where appropriate restore, the protected habitats in a favourable condition as a contribution to their wider conservation status. Therefore any impacts on 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 habitats are 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 habitat within the site**

The extent of the Alder woodland on floodplains feature, taken from the Standard Data Form, has been estimated at 36.18ha and represents the amount of complex, yet limited, mosaic of several individual stands of habitat. This should be maintained or allowed to increase through natural regeneration or restoration; there should be no measurable net reduction in the extent of the habitat and its distribution throughout the site.

This will include the avoidance of effects that could lead to a permanent reduction in the extent or distribution of the habitat such as further agricultural reclamation, minimising the risk of fire and preventing the dumping of waste.

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

#### **2b. Restore, the structure, function and supporting processes of the habitat**

This habitat depends on hydrological conditions that lead to a high water table, wet conditions and sufficient variation to allow channel dynamics and vegetation succession to occur. This should allow for an abundance of key tree species that

- Can colonise the floodplain substrate (wet, unstable) and thrive (tolerance of high water table) pioneer species recolonising riparian habitats after disturbances
- Can create important habitat structure for freshwater invertebrates and fish
- Can support a wide variety of terrestrial invertebrates, whilst overhanging the water surface (providing food for fish and other aquatic predators)
- Can provide leaf litter with a rapid decomposition rate, high levels of nitrogen, moderate levels of phosphorous and low levels of refractory carbon
- Provide moderate shade, especially over the water surface
- Can capture or fix nitrogen and make it accessible to other parts of the ecosystem

Restoring the original flow of the river where possible e.g. through reinstating back channels will help ensure the natural processes continue to shape the site.

A key measure that will restore the structure, function and supporting processes of the habitat at this site is addressing the widespread colonisation by non-native tree species and invasive species such as Himalayan balsam, Japanese knotweed and white butterbur which are prevalent on the site. Given the ongoing impacts of 'chalara' ash dieback any active removal of non-native tree species, such as sycamore, should be assessed against the future composition of woods.

Maintaining grazing levels that allow trees, shrubs and ground flora to develop naturally to flower and fruit (which is particularly important on drier margins) is also important. In the long term, the site should have a low level of grazing by red and roe deer (or other native herbivores), which allows trees to regenerate and which helps to prevent too many trees of a single age from dominating the wood in dense stands in future decades.

#### **2c. Restore, the distribution and viability of typical species of the habitat**

Many Alder woods on floodplains are dynamic, being part of a successional series of habitats. At this site the following NVC types are dominant:

W7 *Alnus glutinosa* – *Fraxinus excelsior* – *Lysimachia nemorum* woodland and, W9(b) *Fraxinus excelsior* - *Sorbus aucuparia* - *Mercurialis perennis* woodland

The key tree species found at this site are alder (*Alnus glutinosa*), dominant on the wetter areas, and diverse broadleaved woodland of white willow (*Salix alba*), ash (*Fraxinus excelsior*), gean (*Prunus avium*), bird cherry (*Prunus padus*), rowan (*Sorbus aucuparia*), wych elm (*Ulmus glabra*) and blackthorn (*Prunus spinosa*) occurring on drier ground.

These transitions from wet to drier woodland and from open to more closed communities provide important ecological variation. The ground flora is correspondingly varied. Some stands are dominated by tall herbs, reeds and sedges, for example common nettle *Urtica dioica*, dog's mercury *Mercurialis perennis*, cleavers *Galium aparine*, hedge-woundwort *Stachys sylvatica*, common bluebell *Hyacinthoides non-scripta*, great wood-rush *Luzula sylvatica*, ground elder *Aegopodium podagraria* and creeping buttercup *Ranunculus repens*.

Non-plant typical species supported by this habitat include a rich collection of over 150 lichen species. Blackcap *Sylvia atricapilla*, willow warbler *Phylloscopus trochilus*, wood warbler *Phylloscopus sibilatrix*, spotted flycatcher *Muscicapa striata* and pied flycatcher *Ficedula hypoleuca* are all present at the site as well as mammals including roe deer *Capreolus capreolus*, otter *Lutra lutra* and bat species.

## Conservation Measures

Urquhart Bay Wood is notified as a Site of Special Scientific Interest and management changes described on the list of Operations Requiring Consent must have prior consent from SNH (NatureScot).

## Current and recommended management for Alder woodland on floodplains

Issue	Measure	Responsible party
Grazing	Ongoing communication with land owners with livestock to ensure sensitive stocking levels is occurring on some areas of this site. Other large parts are not used for livestock grazing.	Land manager
Maintenance (or, where feasible, restoration) of the natural hydrological regime	The current hydrological regime is very good at this site – with minimal impact from hydro schemes. Ensuring this situation does not change/any changes are sensitive to the site is key however.	Land Manager SEPA
Control of non-native species	A number of projects (notably a catchment wide project) have been in operation over the past 10-15 years. This site is at the bottom of a catchment. Significant work is still done	Land manager, NatureScot

	every year by the woodland trust and partners (Ness DSFB) to combat INNS on the site and this will need to be ongoing until species have been controlled upstream.	
Avoidance of introduction of known pathogens	Discussions on options available to avoid any introduction of known disease organisms	Land manager, NatureScot
Climate change	Discussions on options available and participation in available local, national and international initiatives	Land manager, Local authority, Scottish/UK government, NatureScot
Future threats	A coordinated resilience planning process should be developed to respond to anticipated future threats to the habitat. 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. At this site future threats are focussed on increased pressure from visitors; increased development of/linked to nearby settlements and how this may affect attitudes towards natural flooding processes.	NatureScot Land managers

Contact details:

NatureScot  
Fodderty Way  
Dingwall Business Park  
Dingwall  
IV15 9XB

Telephone: 01463 701 610

Approved on 11 December 2020 by:

**Greg Mudge**  
Principal Advisor  
International Designations

**Chris Donald**  
Area Manager  
South Highland