DOON VALLEY WETLANDS

SITE OF SPECIAL SCIENTIFIC INTEREST

SITE MANAGEMENT STATEMENT

Site code: 8629

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Purpose

This is a public statement prepared by NatureScot for owners and occupiers of the SSSI. It outlines the reasons it is designated as an SSSI and provides guidance on how its special natural features should be conserved or enhanced. This statement does not affect or form part of the statutory notification and does not remove the need to apply for consent for operations requiring consent.

We welcome your views on this statement.

Description of the site

Doon Valley Wetlands represents one of the largest continuous, and relatively undisturbed areas of flood-plain fen in Scotland, occurring unusually in close association with a range of other wetland habitats, including wetlands of loch margins, raised bogs and willow carr.

Parts of the site were previously designated as the Bogton Loch SSSI and Dalmellington Moss SSSI; the current SSSI represents the merger and extension of these areas to take in the whole interconnected complex of wetlands occurring along both sides of the River Doon.

The River Doon originates at the southern end of Loch Doon and, after flowing through the wooded ravine of Ness Glen, approaches Bogton Loch via surrounding wetlands. As it nears the loch, it passes through notable stands of wet woodland dominated by willows, with some birch and alder. The fringes of the loch support a range of vegetation types transitional to open water.

Continuing downstream from Bogton Loch, the River Doon winds for several miles through low-lying wetlands that extend all the way to Waterside. This flood-plain fen includes extensive tall-herb vegetation characterised by fragrant stands of meadowsweet, valerian and wild angelica, interspersed with areas dominated by reed canary-grass. In the wettest areas closest to the river, these plant communities give way to swamps dominated by sedges and water horsetail.

North of Bogton Loch, two areas of raised bog have developed on either side of the Muck Water where, over thousands of years, decaying remains of wetland plants have accumulated to form elevated domes of peat soil. The northern, larger bog is known as Dalmellington Moss, while the smaller bog south of the Muck Water is marked on some maps as Sillyhole Moss. These raised bogs now sit effectively above the level of groundwater such that the upper layers of peat receive all of their moisture from rainfall. As a consequence, the peat contains few nutrients or minerals and the plant community comprises plants adapted to both wetness and nutrient scarcity, such as carnivorous sundews, bog asphodel, and sponge-like *Sphagnum* bog mosses.

The site contains a variety of notable plant species, including narrow small-reed, which is nationally rare, and purple small-reed and wood small-reed, which are both locally rare.

The site is also important for its breeding bird community, as the mosaic of wetland habitats support a diverse range of breeding birds, including song thrush, sedge warbler, grasshopper warbler, spotted flycatcher, willow tit and reed bunting. A small breeding colony of black-headed gulls has occasionally been recorded, however this seabird, which sometimes breeds inland, is sensitive to disturbance.

Also of interest, but not notified features of the SSSI, are locally important numbers of wintering wildfowl which use the wetlands, as well as passage migrants such as thrushes and finches which stop off in the UK to feed and rest in the wet woodland during their migration north or south. Additionally, the site's extensive and varied wetland habitats make it a rich location for invertebrates such as moths, water beetles, dragonflies and spiders.

Natural features of Doon Valley Wetlands SSSI	**Condition of feature** (date monitored)
Flood-plain fen	Favourable (July 2025)
Open water transition fen	Unfavourable – recovering (August 2024)
Raised bog	Unfavourable – recovering (November 2009)
Breeding bird assemblage	Favourable – maintained (November 2011)

The flood-plain fen feature is considered to be in favourable condition at the time of designation (baseline assessment). There is no new or recent drainage, willow carr

does not appear to be expanding, and the full range of vegetation communities is present and in healthy condition.

The open water transition fen around Bogton Loch is considered to be in unfavourable condition, mainly due to the abundance of tall grass species – common reed and reed canary-grass – in some areas. This is thought possibly to have resulted from a historical period of lower water levels, and these grasses do not appear to be expanding; with positive management in place the feature is considered to be recovering.

The raised bog at Dalmellington Moss was found to be in unfavourable condition when last monitored, chiefly due to relatively low cover of Sphagnum bog mosses. However, peatland restoration works since carried out (see next section) are likely to have improved conditions for the growth of bog mosses, and with ongoing management in place to remove birch scrub the feature is considered to be recovering. The smaller raised bog south of the Muck Water has not been formally assessed, but is considered to be in favourable condition, with a healthy cover and variety of bog mosses, an appropriate range of positive indicator species, a lack of drainage, and little scrub encroachment.

The breeding bird assemblage is considered to be in favourable condition, noting that the most recent assessment covered only the former Bogton Loch SSSI; a future survey of the much wider Doon Valley Wetlands SSSI could be expected to find additional species.

Sedge warbler © Lorne Gill	Oblong-leaved sundew © Lorne Gill
	

Past and present management

Historically, the integrity of the wetland has been a little disrupted by human activity – chiefly the construction of the public roads between Dalmellington and Waterside (A713) and Dalmellington and Straiton (B741). The A713 may have slightly truncated the original extent of wetland habitat to the north (mainly where it cuts across the northern edge of Dalmellington Moss), while the B741 and associated roadside drainage continues to disrupt the hydrological connection between the areas of fen on either side. Notwithstanding this, comparison with historical maps suggests that there has been no loss or additional disruption of wetland habitat since the mid-

1800s, apart from what appears to be some infilling of land (roughly 6 hectares) at Acre Mulloch some time in the early- to mid-1900s.

Indeed, the extent of wetland vegetation appears to have increased since the 1800s, with an area of roughly 35 hectares to the north of Bogton Loch – currently an area of fen – appearing as enclosed agricultural land until the mid-1900s. There appears to have been little or no new drainage activity since the 1800s, with many historical ditches now substantially vegetated and thereby reduced in activity.

Currently, most of the flood-plain fen between Waterside and Dalmellington is not actively managed, although livestock are grazed on some areas on the southern side of the River Doon, where the fen occurs in mosaic with drier grassland. This provides some valuable variation in habitat structure across the site.

Livestock grazing and/or vegetation cutting has also been carried out on areas of wetland around Bogton Loch, with support from the Scottish Government's Agri-Environment Climate Scheme (AECS).

Dalmellington Moss is managed as a nature reserve by the Scottish Wildlife Trust, who carry out management and monitoring with the help of volunteers. Key management activities have included removal of birch scrub and damming of artificial drainage ditches. In recent years a key project has been the installation of a clay bund within the bog's northern margin to retain water within the peat dome and so undo the effects of historical drainage along the southern edge of the main A713 Ayr – Dalmellington road. This work was funded through NatureScot's Peatland ACTION programme and completed in 2015.

Recreational fishing occurs along the River Doon and is managed by a local fishing club. This helps to maintain the accessibility of parts of the site for the local community.

Invasive non-native species are generally scarce or absent, but Himalayan balsam has been found in small quantities adjacent to the Muck Water. Coordinated action among land managers and interested parties is planned to eradicate the species.

Objectives for Management (and key factors influencing the condition of natural features)

We wish to work with the owners and land managers to protect the site and to maintain and where necessary enhance its features of special interest. NatureScot aims to carry out site survey, monitoring and research as appropriate to increase our knowledge and understanding of the site and its natural features.

1. **To maintain the condition and extent of the flood-plain fen, open water transition fen and raised bog** by supporting beneficial grazing regimes where practical, encouraging scrub control on areas of raised bog, controlling invasive non-native species where present, and ensuring that there are no significant damaging influences from

agriculture or other land management practices (such as drainage, and the application of fertilisers).

2. **To maintain the population and diversity of birds breeding within the site** by supporting the conservation of the wetland habitats and a continued diversity in management regimes, as some species will favour unmanaged wetland, while ground-nesting species such as waders will favour areas subject to livestock grazing.

Front page photograph: Flood-plain fen with flowering meadowsweet and valerian, near Waterside.

Version 1 – October 2025