

CITATION

RIVER SPEY - INSH MARSHES SITE OF SPECIAL SCIENTIFIC INTEREST HIGHLAND (Badenoch and Strathspey)

Site code: 1364

NATIONAL GRID REFERENCE: NH 780013

OS 1:50,000 SHEET NO: Landranger Series 35
1:25,000 SHEET NO: Explorer Series 402

AREA: 1158.77 hectares

NOTIFIED NATURAL FEATURES

Biological

Fens: Flood-plain fen

Freshwater habitats: Mesotrophic loch

Vascular plants: Vascular plant assemblage

Invertebrates: Invertebrate assemblage

Birds: Breeding bird assemblage

Birds: Osprey *Pandion haliaetus*, breeding

Birds: Whooper swan *Cygnus cygnus*, non-breeding

Mammals: Otter *Lutra lutra*

Freshwater fish: Arctic charr *Salvelinus alpinus*

DESCRIPTION

River Spey - Insh Marshes SSSI is an internationally important wetland site. Some 15km long it forms the floodplain of the River Spey, between Newtonmore and Kincaig and includes Loch Insh. The site is one of the largest floodplain fens in northern Britain. The aquatic and marsh vegetation of the site is of exceptional interest and supports a range of vascular plants and invertebrates associated with these habitats. The site is particularly noted for its breeding and migrant birds and populations of otter and Arctic charr.

The River Spey section of the site runs from an altitude of approximately 240m to 220m over 16.5km. The River Spey is regarded as one of the largest, least polluted and least modified river systems in Britain. The marshes act as a natural sponge at times of flood, slowing the floodwater and allowing it to dissipate across the floodplain in an impressive body of water sometimes extending to 20km long. Loch Insh at the northern end of Insh Marshes is noted for its exceptionally rapid water turnover and is an excellent example of a mesotrophic loch.

The vegetation consists mainly of sedge dominated 'poor' fen communities but reed bed, herb-rich swamp and willow carr wetland habitats are well represented. Insh Marshes supports an extraordinary quantity of water sedge *Carex aquatilis*, which is a northern species, found locally in abundance. It is also the main UK stronghold for

string sedge *Carex chordorrhiza*. Other rare plants include the least water-lily *Nuphar pumila*, awlwort *Subularia aquatica*, cowbane *Cicuta virosa* and the shady horsetail *Equisetum pratense*.

One of the most important features of this area is the rich assemblage of breeding birds, including osprey *Pandion haliaetus*, rare ducks such as wigeon *Anas penelope*, shoveler *Anas clypeata* and goldeneye *Bucephala clangula* and a major concentration of breeding waders such as redshank *Tringa totanus*, common snipe *Gallinago gallinago* and Eurasian curlew *Numenius arquata*. During the winter the fens are used by up to 200 migrant whooper swans *Cygnus cygnus*.

This is the best site in Scotland for rare wetland invertebrates but also has an outstanding fauna associated with riverine habitats and woodland. The rare species includes flies (Diptera), beetles (Coleoptera), moths (Lepidoptera) and at least one species of spider (Araneae). Species include the aquatic beetle *Donacia aquatica*, the marshland fly *Tipula marginella* and other crane fly species, the horse-fly *Hybomitra lurida* and the snipe-fly *Thereva inornata*. The wetland spider *Wabasso replicatus* is known only at this site in Britain. Riverine flies include species associated with shingle such as the empid *Tachydromia acklandi* and the robber fly *Rhadiurgus variabilis*. Species of sandy river banks include the crane flies *Limonia omissinervis* and *Rhabdomastix laeta*. The outstanding fly fauna also includes rare species found in woodland fringing the marshland including the aspen hoverfly *Hammerschmidtia ferruginea*, part of an exceptional saproxylic fauna living on aspen. The moths Rannoch sprawler *Brachionycha nubeculosa* and Cousin german *Protolampra sobrina* both feed on birch foliage in the woodlands above the marshes.

There is a breeding population of Arctic charr *Salvelinus alpinus*, which closely resembles the form found in Lake Windermere, England and is markedly different from most Scottish forms. It is the only site in Scotland where charr are known to spawn in streams and they also spawn along the main stem of the River Spey, within the site.

The area is exceptionally important for its population of European otter *Lutra lutra*, providing a network of undisturbed ditches and water bodies with extensive linear connectivity via the River Spey.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1963

Re-notified under the 1981 Act: 6 June 1986 with a 176.4 ha increase in area

Notification reviewed under the 2004 Act: 29 June 2010

REMARKS

Measured area of site corrected from 1176.4 ha.

River Spey - Insh Marshes SSSI overlaps the lower section of the River Feshie SSSI notified for its fluvial geomorphology and quaternary geology.

River Spey – Insh Marshes SSSI is also Insh Marshes Special Area of Conservation (SAC) designated for the European habitats and species listed below.

Habitats: Alder woodland on floodplains
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
Very wet mires often identified by an unstable `quaking` surface

Species: Otter *Lutra lutra*

River Spey – Insh Marshes SSSI is also part of the River Spey SAC designated for the European species listed below.

Species: Atlantic salmon *Salmo salar*
Freshwater pearl mussel *Margaritifera margaritifera*
Otter *Lutra lutra*
Sea lamprey *Petromyzon marinus*

River Spey – Insh Marshes SSSI is also River Spey – Insh Marshes Special Protection Area (SPA) designated for the birds listed below.

Birds: Hen harrier *Circus cyaneus*
Osprey *Pandion haliaetus*
Spotted crane *Porzana porzana*
Whooper swan *Cygnus cygnus*
Wigeon *Anas penelope*
Wood sandpiper *Tringa glareola*