

## CITATION

**BEN KLIBRECK  
SITE OF SPECIAL SCIENTIFIC INTEREST  
Highland (Sutherland)**

Site code:184

NATIONAL GRID REFERENCE: NC 590300

OS 1:50,000 SHEET NO: Landranger Series 16  
1:25,000 SHEET NO: Explorer Series 443

AREA: 8731.85 hectares

## NOTIFIED NATURAL FEATURES:

Geological: Structural and metamorphic geology: Moine

Biological: Upland habitats: Alpine heath  
Bogs: Blanket bog  
Freshwater habitats: Oligotrophic loch  
Woodlands: Upland birch woodland

## DESCRIPTION

Ben Klibreck Site of Special Scientific Interest (SSSI) is located in central Sutherland near Altnaharra, 30km south of Tongue adjacent to the A836. The site is centred around Ben Klibreck, and is designated for its nationally important geology, alpine heath, blanket bog, lochs and woodland.

### Moine (geology)

This site includes the type locality (the first place that a geological feature was described) for the regional-scale Naver Thrust. Overthrusting along this and other large fractures brought together three main groups of rocks. The Moine rocks originated as muddy and sandy sea-floor sediments that were later greatly altered by heat and pressure. The site is particularly valuable for research into parts of the Moine that were also partially melted, forming migmatites. Secondly, there are small outcrops of enigmatic older 'basement' rock, similar to the 2-billion-year-old Lewisian of the west coast. Finally there are granites and pegmatites formed from repeated intrusions of molten rock. The complex association of these rock types with the thrusts makes the site crucial to the understanding of the formation of the Caledonian mountain belt, around 460-425 million years ago.

### Alpine heath

The high slopes and summits of Ben Klibreck support a range of alpine heath communities. Heather *Calluna vulgaris* dominates the area forming a prostrate mat on windswept moraines and promontories. At higher elevations, heather is found alongside mountain azalea *Loiseleuria procumbens*, the nationally scarce alpine bearberry *Arctostaphylos alpinus* and lichens. Ben Klibreck supports one of the largest extents of this rare dwarf shrub community in Britain. Woolly hair moss *Racomitrium lanuginosum* heath is also well-represented on exposed ground above

670m and occurs with both stiff sedge *Carex bigelowii*, and mossy cyphel *Minuartia sedoides* on the main summit.

### **Blanket bog**

The lower slopes of Ben Klibreck are covered in a range of bog types, including those that have developed on watersheds, valleys and sloping ground. These give rise to different surface patterns and pool types, with a variety of blanket bog vegetation species, dominated by deergrass *Trichophorum cespitosum*, cottongrass *Eriophorum spp.* and crowberry *Empetrum nigrum*. A number of species of Sphagnum moss and lichen are found across the different bog types.

### **Oligotrophic loch (low nutrient loch)**

Two lochs on this site, Loch Choire and Loch a' Bhealaich, are nationally important examples of oligotrophic (low nutrient) lochs. Both these lochs lie in a glacial valley on the south side of Ben Klibreck. Loch Choire is one of the largest and most natural oligotrophic (nutrient-poor) lochs in northwest Sutherland. Both lochs contain the nationally scarce awlwort *Subularia aquatica*.

### **Upland birch woodland**

Relict birch and alder woodland fringe the southern shores of Loch Choire and Loch a' Bhealaich. There are areas of mature, open canopy birch and denser sections of woodland along rocky bluffs and in gorges. Other tree species include rowan *Sorbus aucuparia*, aspen *Populus tremula*, holly *Ilex aquifolium* and bird cherry *Prunus padus*. The relict alder woodland is confined to the course of the Allt Coire na Fearna. The field layer under the trees includes heath, grassland and species-rich flushes below the crags. In more shaded areas there is a good representation of northern birchwood mosses and ferns, including Wilson's filmy fern *Hymenophyllum wilsonii*.

### **NOTIFICATION HISTORY**

First notified under the 1949 Act: 1963 as Loch Choire Forest SSSI

Re-notified under the 1949 Act: 1971 as Ben Klibreck SSSI

Re-notified under the 1981 Act: 15 December 1988 with a 2,398 ha decrease in area

Notification reviewed under the 2004 Act: 12 August 2010

### **REMARKS**

Measured area of site corrected from 8568.7 ha.

Part of Ben Klibreck SSSI overlaps the River Naver Special Area of Conservation (SAC) which is designated for the European species listed below:

Species : Atlantic salmon (*Salmo salar*)  
: Freshwater pearl mussel (*Margaritifera margaritifera*)