

## CITATION

### FOINAVEN SITE OF SPECIAL SCIENTIFIC INTEREST Highland (Sutherland)

Site code: 647

NATIONAL GRID REFERENCE: NC 315495

OS 1:50,000 SHEET NO: Landranger Series 9  
1:25,000 SHEET NO: Explorer Series 445, 446, 447

AREA: 14,946.15 hectares

## NOTIFIED NATURAL FEATURES

<b>Geological</b>	<b>: Structural and metamorphic geology</b>	<b>: Moine</b>
<b>Biological</b>	<b>: Bogs</b>	<b>: Blanket bog</b>
	<b>: Freshwater habitats</b>	<b>: Dystrophic and oligotrophic lochs</b>
	<b>: Upland habitats</b>	<b>: Upland assemblage</b>
	<b>: Woodlands</b>	<b>: Upland birch woodland</b>
	<b>: Birds</b>	<b>: Breeding bird assemblage</b>

## DESCRIPTION

Foinaven Site of Special Scientific Interest (SSSI) is in the far north-west of Sutherland, 5km south-east of Kinlochbervie. It covers a large area and encompasses a variety of habitats, including the peaks of Foinaven, Arkle and Cranstackie. The SSSI is notified for its nationally important peatland, upland, freshwater and woodland habitats, and the assemblage of breeding birds and Moine geology.

### **Moine (geology)**

Foinaven SSSI contains some of the best exposures in the British Isles of gently-inclined rock fractures called thrusts. These are part of the Moine Thrust Zone, which can be traced from Loch Eriboll to the Isle of Skye. It formed 430 million years ago when the continental plates containing modern Scotland and England collided. Within the site, deformed Moine rocks were pushed upwards and westwards along the Moine Thrust Plane, which runs through the Meall Horn area. A succession of smaller thrusts also developed to the west, within younger, undeformed Cambrian rocks. Each resulting stack of thrust slices, confined by major thrusts above and below is called a duplex. World famous cross-sections through the duplexes can be seen in the site's cliffs. The SSSI is internationally important for the study of these complex thrust systems.

### **Blanket bog**

Blanket bogs have formed over most of the flat or gently sloping terrain within the site. On the terraces alongside the River Dionard there are a series of small, well-defined valley bogs with patterned pools and hummocks. Heather *Calluna vulgaris*, deer sedge *Trichophorum cespitosum* and cotton grass *Eriophorum vaginatum*

dominate the vegetation, together with abundant bog moss *Sphagnum* spp., woolly-hair moss *Racomitrium lanuginosum* and other Atlantic bryophytes such as *Pleurozia purpurea* and *Mylia taylorii*.

### **Dystrophic and oligotrophic lochs**

On the lower moors there are numerous fresh water lochs. These range in size from dubh lochans to large, naturally nutrient-poor lochs. These support a range of aquatic vegetation including broad leaved pondweed *Potamogeton natans*, shoreweed *Littorella uniflora*, water awlwort *Subularia aquatica*, alternate water-milfoil *Myriophyllum alterniflorum*, water lobelia *Lobelia dortmanna*, intermediate water starwort *Callitriche hamulata* and the nationally scarce six-stamened waterwort *Elatine hexandra*.

### **Upland assemblage**

The varied geology on the site gives rise to a wide range of montane and submontane habitats. The higher parts of the site contain outstandingly large extents of **Alpine heath**, with a range of northern Atlantic liverworts. In the higher, more sheltered areas, rare, species-rich areas of **snowbed** vegetation contain tufted hair-grass *Deschampsia cespitosa*, heath bedstraw *Galium saxatile* grassland and the moss *Rhytidiadelphus loreus*. Foinaven SSSI hosts the largest extent of **Alpine moss heath** in the north of Scotland. **Rocky slopes (calcareous)** and **siliceous scree** are found on the exposed upper slopes. Species such as the nationally scarce rock whitlow grass *Draba norvegica*, Alpine saxifrage *Saxifraga nivalis* and glaucous meadow-grass *Poa glauca* are found on the calcareous rock faces while nationally rare curved woodrush *Luzula arcuata* is found on the siliceous scree. The cliffs support some of the best **tall herb ledges** in the Highlands. Locally, base-rich flushing from the Moine schists and Lewisian gneiss gives rise to small stands of **subalpine calcareous grassland**. The lower areas of the site contain extensive areas of both **subalpine wet heath** with *Erica tetralix* and **subalpine dry heath**.

### **Upland birch woodland**

Within the shelter of Strathbeg, a birchwood has developed on quartzite block-scrub. One of the most distinctive features of the wood is the unusual abundance of rowan *Sorbus aucuparia* and a rich, oceanic moss and lichen flora, with species that are at the northern limit of their range in Britain. These include *Isoetecium holtii*, *Frullania teneriffae* and *Harpalejeunea molleri*. The rich geology also supports hazel *Corylus avellana*. Alder *Alnus glutinosa* is found in wetter areas by the river. A typical woodland ground flora is present, including primrose *Primula vulgaris*, blaeberry *Vaccinium myrtillus* and wood-sorrel *Oxalis acetosella*.

### **Breeding bird assemblage**

A number of nationally important bird species breed on the site. The montane grasslands and heaths support species such as dotterel *Charadrius morinellus*, ptarmigan *Lagopus muta*, ring ouzel *Turdus torquatus*, snow bunting *Plectrophenax nivalis*, raven *Corvus corax*, peregrine *Falco peregrinus*, golden plover *Pluvialis apricaria*, dunlin *Calidris alpina shinzii* and golden eagle *Aquila chrysaetos*.

### **NOTIFICATION HISTORY**

First notified under the 1949 Act: 1971 as Foinaven and Meall Horn SSSI

Re-notified under the 1981 Act: 8 December 1986

Notification reviewed under the 2004 Act: 31 March 2011

## REMARKS

Measured area of site corrected from 14,905 ha.

Part of Foinaven SSSI is also designated as the Foinaven Special Area of Conservation (SAC) for the European habitats and species listed below and as part of the Foinaven Special Protection Area (SPA) for the bird listed below.

- Habitats : Acid peat-stained lakes and ponds  
: Acidic scree  
: Alpine and subalpine heaths  
: Blanket bog  
: Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels  
: Depressions on peat substrates  
: Dry heaths  
: Montane acid grasslands  
: Plants in crevices on acid rocks  
: Plants in crevices on base-rich rocks  
: Species-rich grassland with mat-grass in upland areas  
: Tall herb communities  
: Wet heathland with cross-leaved heath
- Species : Freshwater pearl mussels (*Margaritifera margaritifera*)  
: Otter (*Lutra lutra*)
- Birds : Golden eagle (*Aquila chrysaetos*)