

CITATION

MEALL AN T-SITHE AND CREAG RAINICH SITE OF SPECIAL SCIENTIFIC INTEREST

Highland (Wester Ross)

Site code: 1135

NATIONAL GRID REFERENCE: NH 142764 and
NH 097752

OS 1:50,000 SHEET NO: Landranger Series 19, 20
1:25,000 SHEET NO: Explorer Series 435

AREA: 245.97 hectares

NOTIFIED NATURAL FEATURES

Geological: Structural and metamorphic geology: Moine

DESCRIPTION

Meall an t-Sithe and Creag Rainich Site of Special Scientific Interest (SSSI) is located in Wester Ross, 17km south of Ullapool. This site is in two parts. It contains nationally important exposures of metamorphic rocks belonging to the Moine Supergroup.

This site is of national importance for research and education as the type locality for the Meall an t-Sithe pelite, and for containing unique evidence for the relative timings of movement of the Sgurr Beag Thrust and the Moine Thrust.

These rocks were originally formed around 1000 million years ago on an ancient seabed as sands and muds. Later (probably around 800 million years ago) they were metamorphosed at high temperatures and pressures. This turned the sandstones into 'psammites' and the mudstones into 'pelites'. However, the rocks in the east part of the site ('Glenfinnan Division' rocks) were partially melted, forming a rock type called 'migmatite'. The type area for part of this 'Glenfinnan Division migmatite', known as the 'Meall an t-Sithe pelite', is found in the eastern part of the SSSI.

In the west portion of the SSSI, two thrust faults occur – the Sgurr Beag Thrust (known geologically as the Sgurr Beag slide) lying to the east of the Moine Thrust. Both faults formed during a mountain-building event around 430 million years ago and both caused rocks from the east to move up and over rocks to the west. The importance of the site lies in its unique evidence for the relative times that movement occurred on these two faults. Intrusions of a pale, coarse grained 'pegmatite' rock have been deformed by movement on the Moine Thrust but not by movement on the Sgurr Beag Thrust. This demonstrates that movement on the Sgurr Beag Thrust occurred first, that the pegmatites were then formed by intrusion of molten rock from deep within the earth and that finally movement occurred on the Moine Thrust.

NOTIFICATION HISTORY

First notified under the 1981 Act: 29 October 1987

Notification reviewed under the 2004 Act: 16 September 2008

REMARKS

Measured area of site corrected from 247.4 ha