

# **QRA Field Meeting, Wester Ross, 18–21 May 2023**

The QRA Field Meeting in Wester Ross, NW Scotland, will be based Ullapool, Wester Ross. It will begin on the evening of Thursday 18 May, when participants will assemble at the Macphail Centre, Mill Street, Ullapool for a briefing and introduction to the Quaternary of Wester Ross, and conclude at ~1330 on Sunday 21 May. Organiser: Professor Colin Ballantyne ([ckb@st-andrews.ac.uk](mailto:ckb@st-andrews.ac.uk)).

## **Programme**

Excursions 1 and 2 will run concurrently; participants will be able to choose which to attend. Excursion 1 is weather-dependent.

### **Excursion 1: An Teallach (Full day)**

This excursion will traverse the northern plateau of An Teallach (1062 m), a Torridonian sandstone mountain near Dundonnell, and requires fitness in hillwalking. Highlights include asymmetric end and lateral moraines fronting the spectacular eastern corries, rock avalanche scars, high-level trimlines, relict talus accumulations, blockfields, a unique high-level erratic train, and the finest periglacial aeolian landsystem (deflation surfaces, niveo-aeolian sand deposits and turf-banked terraces) in the British Isles. The excursion will also visit the controversial Ardessie moraines, where a later system of moraines over-rides a lateral moraine deposited during the Wester Ross Readvance.

### **Excursion 2: Glacial landsystems of Wester Ross (Full day)**

The focus of this excursion will be the glacial landsystems associated with the Loch Lomond Readvance and the possible evidence for former glacier surges. The first stop will be at the Loch Droma Lateglacial site. Subsequent sites to be visited include the 'hill-hole pair' of Loch Gharbhraigh and its associated moraine, the Strath Vaich end moraine and outwash terrace, the Achnasheen ice-dammed lake landsystem and the iconic 'hummocky moraine' of Coire a' Cheud Chnoc (the 'Valley of a Hundred Hills'). The excursion terminates at the multi-ridged arcuate moraine ridges deposited by the Thraill glacier in lower Glen Torridon, another site of possible former glacier surging.

### **Excursion 3: The Wester Ross coastline (Full day)**

This excursion follows the coastline of Wester Ross from Little Loch Broom to South Erradale then inland to Glen Docherty. It focuses on coastal landforms (high

rock platforms, Lateglacial raised shorelines and Holocene raised beaches), and outlines the evidence linking former sea level to the Wester Ross Readvance. Highlights include the raised shorelines and outwash terrace at Dundonnell, the Lateglacial and Holocene raised shorelines at Little Gruinard, the Wester Ross Readvance moraine at Druim Breac, the Poolewe terraces and former ice limit, the Badachro isolation basins and the high rock platform, Lateglacial shoreline, outwash terraces and Holocene dunes at South Erradale. Following a stop at Loch Maree to consider the implications of the Holocene sediment sequence and pollen stratigraphy, the excursion terminates in Glen Docherty, a site of spectacular Holocene (and recent) debris-flow activity.

#### **Excursion 4: Loch Torridon and Applecross (half day)**

This excursion focuses on the stratigraphy of key sites at Loch Clair and Srath a' Bhathaich, making additional brief roadside stops *en route* at Coire a' Cheud Chnoc, lower Glen Torridon and a view of Beinn Alligin (knock-and-lochan terrain, lateral moraines and the largest rock avalanche in Scotland). A further stop at Couldoran provides a view of the spectacular Beinn Bhàn corries and an opportunity to visit the lateral moraines deposited by glaciers fed from these corries. At Coire nan Arr are TCN-dated rockslide boulders transported downvalley by the last glaciers. The excursion terminates at 625 m on the Bealach na Bà, with striking views over knock-and-lochan terrain, high-level glacier limits and the glacial and postglacial landforms of the adjacent corrie.

#### **Travel, accommodation and local facilities**

Travel during the Field Meeting will be by minibus, supplemented by private cars when necessary.

The nearest mainline railway station is Inverness, and there are regular bus services from Inverness to Ullapool (see [www.travelinescotland.com](http://www.travelinescotland.com)). It may be possible by prior arrangement for collection of participants from Perth railway station on 18 May and drop-off on 21 May.

Ullapool has a variety of accommodation, including hotels, B&Bs, AirBnBs, hostels and a campsite. A useful (but not comprehensive) list of accommodation can be found at <https://www.ullapool.com>. Ullapool is a popular tourist destination, so participants are recommended to book accommodation early.

Ullapool has a wide range of facilities, including a petrol station, three supermarkets and several restaurants, bars and cafés.