

## **Provisional Note on Geomorphology on SFS4**

### **Geology**

The dominant lithology is Torridonian Sandstone which forms a cliff with an altitude of 130m OD. The cliff trends N-S overlooking a valley. Exposed within the cliff is an intrusive Tertiary dyke of basalt. This is exposed both within a quarry in the side of the cliff with further outcrops on the road leading to Applecross. Site SFS4 is an overhanging outcrop of Torridonian sandstone capped with a mantle of peat. The outcrop and shelter roof has an altitude of about 36m OD. The shelter site faces eastwards overlooking a valley floor which comprises fluvio-glacial drift (boulder clay). Large rounded boulders and cobbles are exposed within the base of a borrow pit to build the nearby car-park. Towards the south a dune complex overlooks a wide shallow sandy bay. Alongside the track leading to the RN establishment a terrace associated with the Late Glacial Shoreline which extends northwards as a more distinct sinuous platform overlooking a level area leading to the sea. The shoreline consists of rock platform and deep gulleys formed as a result of continued erosion, the coast being exposed to wave impact from westerly and south westerly winds.

### **SFS4**

The rock shelter has been carved in the first instance by fluvio-glacial deposits that formed an outwash deposit along the valley floor, in all probability this carved a notch within the side of the rock outcrop. As a result of this initial carving out during the demise of the Loch Lomond Readvance the outcrop has been constantly weathered by wind. The bedding planes within the sandstone trend north-south and the continued attrition by wind has blasted the face lifting out the weaker areas within the beds. Cracks within the rock face are further effected by freeze-thaw processes leading to frost shattering and continued rock fall. This is attested by the talus slope running down from the mouth of the shelter (at 32m OD). The talus consist of angular fragments of sandstone intermixed with soil derived from cover vegetation. Within Kirstys box-trench the tales material appeared to underlie the midden material.

The fluvio-glacial outwash deposit with the valley floor was seen to be rich in quartz pebbles possibly a local source for tool manufacture?

### Ashaig 1 Test Pit (Trench 1)

#### **Aims and Objectives**

A small trench measuring 1m by 0.5m was opened to determine the depth of midden deposits at the base of the escarpment on the east side of Ashaig cemetery wall where shell was locally exposed by cattle erosion.

The trench exposed shell immediately below the turf-line down to a section depth of c.0.35m. This deposit overlay a series of large boulders of varying size but in general these appeared to be sub-rounded and around 0.40m by about 0.30m is size. These appear to have been displaced from further up the slope and may have originated from a collapsed revetment from earlier structures pre-dating the present cemetery. Midden material was extensive and present within the soil matrix between the

sandstone boulders. The shells were located to a depth of 0.76m where rock impeded any further work.

### **Organic remains**

The midden material is well preserved and dominated by Periwinkle shell (c.90%) with occasional fragments of animal bone and limpet shell. No other finds such as pottery were located to help provide a relative date for the site. Coring with a post auger established that some shell was present about 1m from eastwards from the test section thus showing that the site is very extensive indeed.

Photographs (M Cressey's personal camera)

### **Film 2**

Shot1-2 general shot below turf-line clean up layer

Shot 3-5 Clean up layer at spit 8 level

Shot 6-8 Clean up layer showing position of boulders and the midden in section (shot 8 oblique with in relation to slope) all take from the east.