In September 2010, a sample from the main body of a previously identified aceramic shell midden was taken for radiocarbon dating as part of a wider project investigating the Mesolithic of the Western Isles undertaken by Durham University. The site was first located due to coastal erosion in the 1990’s (Armit 1994 in PSAS) and very little of the shell midden now remains due to the extremely active erosion. The dating sample was taken because it was thought that the site may relate to the Mesolithic period as the base of the midden graded into a possible early to mid Holocene soil in a similar fashion to the first Mesolithic site published from the Western Isles at Northton, Harris (Gregory et al. 2005 in The Holocene). The 2 litre sample was processed and contained hundreds of shells, hundreds of fish bones, some crab, a single hare bone and small numbers of burnt hazel nutshell and a single piece of charcoal. No evidence of any domestic animal or plant species or pottery was recovered. Two radiocarbon dates on carbonised hazel nutshells produced calibrated dates in the second half of the fifth millennium cal BC, or the very last centuries of the conventional British Mesolithic.

Therefore, a full coastal erosion assessment of the site was undertaken in September 2011, with the extent of the midden remains identified (Figure 1). Approximately 4 m² of midden remains in plan and the midden deposits are up to 0.3 m deep and capped by a thin layer of turf. The eroding section edge was stepped back by approximately 0.1 m along its edge, photographed, drawn and over 50 litres of shell midden sampled. The midden has little evidence for structural lamination and appears to have been accumulated relatively rapidly, perhaps over a few seasons. It rests on a possible old ground surface that grades into a largely inorganic sandy silt. The eroding edge was consolidated with gravel and turf but it is envisaged that the site will be completely eroded in a few years. Initial processing of the samples taken from the midden have produced a large ecofactual assemblage, including thousands of shell and fish bones, with fewer numbers of hazelnut, charcoal, crab and animal bone, including hare and bird bones. A few flint and quartz worked lithics were also recovered. Therefore, due to the erosion threat and the uniqueness of the site, further funds are being sought to fully excavate the midden and any underlying archaeology.

Funders: National Science Foundation of America (grant number 0732327), Historic Scotland and Durham University.
Figure 1: Excavation in progress at Tràigh na Beirigh. Copyright Peter Rowley-Conwy