Scottish Medieval Castles & Chapels C14 Project.

Site Castle Sween, Knapdale, Argyll.

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Subject Sampling strategy and methodology.

Previous reports Yes, CSA/PRE/01

Literature search Ongoing

Fao Historic Scotland

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Details of proposed mortar archaeology at Castle Sween.

Sampling Strategy

The mortar archaeology of Castle Sween was surveyed from ground level in April 2013 (SC14/CSA/PRE/01; Thacker, in prep). A range of historic mortars were noted here including contrasting limestone and shell-lime mortars in different constructional phases. A generally high concentration of wood charcoal relic-fuel was also noted in a number of core-masonry contexts, and these are considered to have high archaeological potential.

The sampling strategy proposed here includes the identification, recording and removal of those charcoal samples from each putative phase of the monument, as well as the recording and removal of a number of corresponding mortar samples. Sample quantity will respond to the survey but is likely to include up to 6 mortar samples of approximately 150g per sample. Loose samples may also be removed from the general site environs and wider environment.

Initial Sampling Methodology

Access: from ground and ladder. Preparation: brushing with a soft brush in some

contexts.

Method of removal: by hand, with a knife.

Context measurement: by hand, tape measured and levelled from fixed building features (wall faces, jambs or lintels etc.), to within 10mm.

Context recording: In elevation by photograph; in plan by Autocad annotation of plan (by kind permission RCAHMS); contexts listed by measured X, Y and Z coordinates from fixed building features.

Sample storage: in foil, in sealed and labeled plastic bags, in hard plastic container.

Time on site: two to three days.

Health and safety

Most of the masonry at Sween is stable and poses no significant risk of falls. Working at this site will require the usual hard-hat, hi viz, steel-toe PPE. No sampling of vulnerable contexts will be undertaken.

Sample Analysis

Sampling, thick-sectioning, thin section petrography, characterization of the mortars, and assessment of charcoal taxonomy will be undertaken by Mark Thacker.

Carbon Dating by Prof. Gordon Cook (SUERC, Glasgow University).

Proposed date of Completion: TBC.

Possible Further work

Given the importance of Castle Sween, it is suggested the site should be investigated as thoroughly as possible without extensive intrusion into primary fabric. This would include safe access to higher elevations and intrusion into some core contexts at present obscured by consolidation mortars. If this is considered appropriate then this may be undertaken with the agreement of the HES heritage manager and district architect.

Funding

The work proposed at Castle Sween, above, is to be undertaken as part of the Scottish Medieval Castle and Chapels C14 Project. A pilot phase of the project has been funded by HS/HES for the financial year 2015-16 and it is hoped that the work proposed in this document will be included within that.

Depending on the outcome of negotiations for ongoing part-funding of the project from 2016 onwards, however, further work at this site may also be included in later budgets.

Figures



Figure 1 – A likely sample context at Castle Sween - exposed core at ground level.