

Scottish Medieval Castles & Chapels C-14 Project

Proposed mortar sampling strategy at Castle Roy, Strathspey



SC14-CRS-PRE-02

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Introduction to SMCCCP

The Scottish Medieval Castles & Chapels C-14 Project (SMCCCP) is an archaeological research project investigating the palaeoenvironmental potential of Scottish medieval building materials. The project is joint-funded by Historic Environment Scotland and the University of Stirling, directed by Mark Thacker (Research Fellow, University of Stirling), and is scheduled for completion in 2019.

Document & Site Details

Site	Castle Roy, Strathspey
NGR	NJ 0065 2192
Document reference	SC14/CRS/PRE/02
Subject	Proposed Sampling Strategy
Previous reports	SC14-CRS-PRE-01 (Preliminary Survey)
Fao	Historic Environment Scotland, XXXXXXXXXX
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1 -INTRODUCTION

During the project's recent non-intrusive rapid survey of Castle Roy, it was noted that the primary mortar of the building was very visible and accessible, and initial characterisation suggested this material had high archaeological potential (see report SC14-CRS-PRE-01). A programme of further survey, sampling and materials analysis was therefore proposed and this document has been drafted to inform the subsequent Scheduled Monument Consent application.

2 – STATUTORY PROTECTION

Castle Roy is a Scheduled Ancient Monument. The site is not subject to any environmental statutory area protections (see figures for SNH protected areas information map), but in 2003 a brown long eared bat maternity roost was noted at a high level in the south-west wall (■■■■■ ■■■■■ SNH, pers. comm.). It has therefore been agreed with SNH that sampling in the south-west wall will be restricted to ground level only, whilst awareness of any possible bat activity elsewhere within the monument will be maintained, and any disturbance avoided.

3 - ACCESS TO FABRIC

It is possible to complete the majority of the proposed survey and sampling programme from ground levels with occasional use of a stepladder.

4 - SAMPLE CONTEXTS

All samples will be removed from contexts visible on the surface of the monument, and most will be from core rubble contexts made visible by historic masonry collapses (see figures).

The coordinates (x, y and z) of fixed samples will be recorded by hand measurement from fixed building features and level datum lines.

Sample contexts will be annotated onto a plan drawing for the final report, for which the project also hopes to use measured survey data recently commissioned by ■■■■■■■■■■

Sample contexts will also be recorded by scaled photograph.

5 - SAMPLE QUANTITIES

2-4 small mortar samples, each of approximately 50 x 50 x 50mm, will initially be sought and this is likely to include a core sample from at least three of the four walls. Additional small samples may be removed where further masonry survey suggests multiperiodicity, and loose ex-situ mortar fragments may also be collected.

10-25 very small fixed mortar samples with relict-fuel, generally up to approximately 0.5g or 1cm³, will also be sought for removal.

6 - SAMPLE REMOVAL

Samples will be removed and collected by Mark Thacker. Mortar samples will be removed using a masonry hammer and chisel or dremel, and a strong knife. No samples will be removed where the masonry is considered fragile or where sample removal is considered likely to spall face stones or accelerate the deterioration of the monument in any way.

7 - SAMPLE STORAGE

Samples will be stored immediately in well-labelled sealed bags, away from light or heat sources. Within 48 hours, all samples will be air-dried and re-sealed in sample bags at room temperature and isolated fuel-relict samples will be refrigerated at University of Stirling Dept. of Biological and Environmental Sciences.

8 - SAMPLE ANALYSIS

Mortar samples will be thin sectioned and analysed with a polarising microscope by Mark Thacker. Fuel-relict samples will be analysed microscopically in reflected light and characterised to genus level by Mark Thacker. Radiocarbon analysis will be undertaken at SUERC (East Kilbride).

9 - HEALTH AND SAFETY

Sampling is likely to be undertaken over two days. Mark Thacker, and any accompanying assistant, will wear standard construction site PPE including high-visibility vest, steel toe boots, hard-hat and (when sampling) impact-resistant glasses. Mark Thacker is a qualified stonemason licenced under the HSE's Construction Site Certification Scheme.

The site is not open to the public and so further demarcation or information is unlikely to be necessary. Any other contractors or particular visitors to the site will be verbally restricted from approaching sampling contexts during the proposed works.

The proposed sampling and analysis programme will be subject to University of Stirling risk assessment protocols.

10 – FIGURES

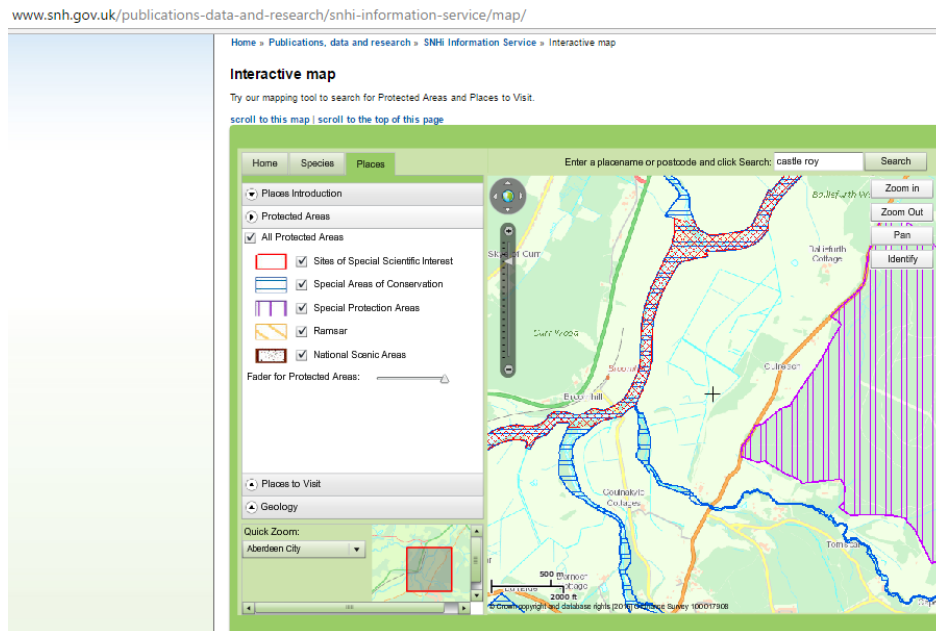


Figure 1 (above) – Screen shot of SNH protected areas; Castle Roy is marked by the cross + and is not in a protected area. www.snh.gov.uk, information accessed October 2016.