

RADIOCARBON DATING SUBMISSION:

SAMPLE SHEET (2009)

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¹⁴C age

δ13C

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PROJECT NAME Kirk Ness, North Berwick **CODE / DATE** SSC 99-06

SAMPLE REFERENCE Small find no. ~~1097~~ 91 **CONTEXT REFERENCE** 1097 - ~~sheep~~

COLLECTOR DATE OF COLLECTION M Donnelly, 24 Jan 2005

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DESCRIPTION OF CONTEXT IN WHICH SAMPLE FOUND

Describe briefly what it was, what its fill was, what it cut or overlay, and what cut it or covered or sealed it.

The burnt deposits associated with the possibly early medieval kiln were overlain by a substantial build-up of a dark brown humic soil (1210); the uppermost 0.05m of this material (1097) was differentiated from lower levels by the presence of a very high concentration of dumped animal bone, otherwise it looked like dark top soil. This material extended across much of the central and western part of the site, but there was a notable concentration in the central, southern part of the excavated area. The matrix of (1097) was very similar to the underlying soil (1210) and, except for the well-defined presence of the bone in the upper level would have been indistinguishable. A possible shallow posthole (1265/1260) was also noted stratigraphically between (1210) and (1097) although this could just have been a socket of a removed stone.

The deposit was sealed by a later cobbled path (1069).

Within the context a probably early 14th century thick, Scottish White Gritty Ware body shard, was found, almost certainly from a globular vessel, the exterior is covered with a layer of black sooting. Probably used as a cooking pot.

HOW THE SAMPLE RELATES TO THE CONTEXT

Describe the one or more most probable ways in which the sample material may have found its way to where it was discovered. How much time probably passed between its death and its incorporation in the context in which it was found?

The bone would seem to represent a relatively late dump onto a pre-existing topsoil, becoming intermingled with it over an extended period. It is likely that this represents activity over a number of years shortly before the construction of the overlying (1069) path and associated make-up; the deposition of the bone is thus suggested to be of medieval date, and perhaps associated with the domestic use of the hospice, presumed to have been very near-by.

If the material could have been dead for a long time (decades / centuries / millennia) before it entered the context in which it was found, please describe how this may most probably have happened.

It is assumed that the time between the death of the animal, its consumption and dumping onto the soil occurred in a relatively short period of time, days or weeks, rather than months, and the dumping occurred certainly under a year.

Could a post-depositional disturbance process have brought the sample material into the context? If so describe how you will interpret the resulting date

It is not likely that this deposit was disturbed any later than the final deposits sealing this phase, i.e. the construction of path (1069).

If the resulting date is, for unforeseen reasons not as expected, it would then date the construction / use of the path (1069) which would at least give a terminus post quem for the midden layer.

HOW THE SAMPLE RELATES TO WHAT IS TO BE DATED

Please ~~take out~~ all but one of the following:

~~The sample is an integral part of the object to be dated (e.g. part of plank to date plank).~~

~~The sample is closely related to the object to be dated (e.g. encrustation to date an urn).~~

~~The sample is part of a concentration of charcoal in the context described above (e.g. from a hearth).~~

The sample is part of a general scatter of material of uncertain origin (**N.B.** special justification essential)

The bone has been found within the midden material (1097) that sits securely below the path (1069). It is not assumed to have been disturbed after the construction of the path

COLLECTION METHOD

List any preservative or other treatment used on sample. n/a

How was it collected? by hand when context was under excavation

How has it been stored? Lightly washed, dried and then securely packed in finds bag, stored in cold and dry store room.

Was the sample wet or dry when collected? Dry apart from moisture of soil ...

If wet how was it dried? n/a.....

List any related samples sent to another laboratory n/a.....

Can the entire sample be used for dating? yes

SPECIALIST IDENTIFICATION OF SAMPLE TO BE DATED

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SAMPLE AS RECEIVED BY THE SPECIALIST: ~~Unprocessed bulk sample / Sieve flots / Sieve residue / core or Kubiena sample / hand collected / other~~ (delete all but one)

Packaging: in finds bag, padded box

Organic constituents of what you received in the laboratory, in approximate order of weight. Please mention all organics, whether amorphous or identifiable. The information here should contribute to an understanding of how the sub-sample which is to be dated might have got to where it was found.

n/a?

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THE SINGLE ENTITY SUB-SAMPLE SELECTED FOR DATING

Please note that Historic Scotland will not approve the dating of subsamples containing more than one entity (with the exception of pot residues, peat and the like). HS has to pay a charge for samples which are found to be too small after processing at the radiocarbon laboratory. Charred or cremated bone should be listed as a specific type of material.

Sample material (bone, charcoal etc): bone

Sample species... pig, right scapula

weight XXX 12.7g

Minimum dry weights: antler: 200 mg; bone: 200 mg; shell carbonate: 15 mg; plant remains: 7 mg; wood: 7 mg; charcoal: 5 mg; charred seeds: 5 mg; peat: 7 mg

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Specialist evidence for age at death of the single entity chosen for dating. For charcoal, is it small roundwood (10 to 20 years old) or the outer rings of a trunk or branch?. Does it include sapwood?

Not possible to estimate as the articular end is broken off

Age at death summary: ~~Less than 2 yr / Up to 10 yrs / up to 20 yrs / Up to 50 yrs / Up to 100 yrs / More than 100 yrs~~ (delete all but the shortest provable estimate):

Evidence for condition of the sub-sample: Please describe any specialist evidence for what happened to the sub-sample after death. For instance, does it look fresh or abraded? Has it degraded?

The notes for all bone samples are slight to moderate abrasion or moderate.

The pig bone was gnawed, probably by a dog.

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Stable isotope measurements will be obtained for all bone samples.

May SUERC use the sample residue for in-house research without consultation? Yes / No

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Name printed in capital letters, please Signature

Identified by Catherine Smith

signed *C. Smith* date *17. Feb 2010*

Submitted by Thomas Addyman

signed *T. Addyman* date *8. Feb 2010*

Authorised for HS by Rod McCullagh

signed date

UNLESS OTHERWISE CLEARLY SPECIFIED THIS AUTHORISATION IS FOR DATING OF A SINGLE ENTITY ONLY, NOT FOR MORE THAN ONE PIECE OF ORGANIC MATERIAL.

