

on behalf of SWAAG

Daggerstones Swaledale Yorkshire

faunal remains analysis

report 2978 August 2012



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1. Summary

The project

- 1.1 This report presents the results of a faunal remains analysis and radiocarbon dating of a red deer antler, excavated during archaeological works at Daggerstones, Swaledale.
- 1.2 The works were commissioned by SWAAG and conducted by Archaeological Services Durham University.

Results

1.3 The antler is from a stag aged 4-5 years at death. The stag was carrying antlers at death, which would have occurred between September and February. The placing of the antler within the wall is curious and suggests clandestine disposal.

2. Project background

Location and background

2.1 Archaeological works were conducted by SWAAG at Daggerstones, Swaledale. During reconstruction of a sheep stell in High Pasture field a red deer antler was found in the footings of a dry-stone wall. This report presents the results of analysis of the antler.

Objective

2.2 The objective was to date and analyse the faunal remains in order to provide information about the antler and to place the findings in a regional context.

Dates

2.3 Samples were received by Archaeological Services in April 2012. Analysis and report preparation was conducted between May and July 2012.

Personnel

2.4 Faunal analysis and report preparation was conducted by Louisa Gidney.

Archive

2.5 The red deer antler is currently held in the Environmental Laboratory at Archaeological Services Durham University awaiting collection or return.

3. Radiocarbon dates

Methods

3.1 A small sample (21.2g) was removed from the red deer antler for AMS radiocarbon dating. The sample was sent to the radiocarbon lab at the Scottish Universities Environmental Research Centre, East Kilbride. The material selected for dating is listed in Appendix 1. The radiocarbon results are presented in Appendix 2.

4. Faunal analysis

Results

4.1 The antler is from a Red Deer (*Cervus elaphus*) and is the left side antler with the brow, trez and one terminal tine present, indicating that this was a stag of six to eight points carrying its third or fourth set of antlers and aged 3-5 years at death (Schmid 1972, 89). The antler has been removed from the pedicle with chop marks on the medial and lateral borders. The stag was carrying antlers at death, which would therefore have occurred between September and February (Schmid 1972, 90). The method of chopping the antler from the pedicle suggests that the antler was removed from a dead animal rather than a curated trophy head, which would have split down the frontal suture. There is no indication of any further modification to the antler. The antler has weathered on the surface with longitudinal cracks down the beam. The cross section, where the trez tine was removed for C14 dating, shows that the interior of the antler has yet to suffer leaching of the mineral content.

Discussion

4.2 The placing of the antler within the wall is curious and suggests clandestine disposal. Antler is a versatile raw material for the manufacture of artefacts, such as knife handles. In the 18th century antler, known as "hartshorn", had a culinary use in making jellies. Antler therefore had some monetary value.

4.3 The deer of the medieval forests and wastes in the North Pennines had largely been replaced by domestic livestock prior to the 16th century (Drury 1978). The expansion of the lead mining industry resulted in the destruction of much of the woodland habitat necessary for red deer in the production of charcoal for smelting lead ore. Assuming that this antler derives from a stag killed locally, such hunting pressure would have assisted in the local extermination of the species. Game preservation in the 18th century uplands favoured wild quarry such as the grouse. The game laws were harsh and a poacher who took one of the remaining red deer would wish to conceal the evidence. This is one possible explanation of the find. An alternative is the long association between emblems of virility, such as antler, and sympathetic magic (Merrifield 1987, 188). Again, such superstition and witchcraft could attract penalties, requiring the concealment of the antler.

5. Conclusions

5.1 The antler dates to the post-medieval period. This find is of interest in demonstrating that red deer may not have been extinct in the region at the time of the construction of the wall. The concealment of the antler suggests some form of clandestine activity, though whether this was an illegal killing or superstitious practice to ensure the good standing of the wall is unclear.

6. Sources

Drury, J L, 1978 Durham Palatinate Forest Law and Administration, specially in Weardale up to 1440. Archaeol Aeliana (fifth series) 6, 87-104
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Reimer, P J, Baillie, M G L, Bard, E, Bayliss, A, Beck, J W, Blackwell, P G, Bronk Ramsey, C, Buck, C E, Burr, G S, Edwards, R L, Friedrich, M, Grootes, P M, Guilderson, T P, Hajdas, I, Heaton, T J, Hogg, A G, Hughen, K A, Kaiser, K F, Kromer, B, McCormac, F G, Manning, S W, Reimer, R W, Richards, D A, Southon, J R, Talamo, S, Turney, C S M, van der Plicht, J, & Weyhenmeyer, C E, 2009 IntCal09 and Marine09 radiocarbon age calibration curves, 0-50,000 years cal BP. Radiocarbon 51(4), 1111-1150
Schmid, E, 1972 Atlas of Animal Bones. London

Appendix 1: Material selected for radiocarbon dating

Site	Radiocarbon sample code	Weight of radiocarbon sample	Material dated	Species
High Pasture, Daggerstones	HP6/1	21.2g	Antler	Red Deer (<i>Cervus elaphus</i>)

Appendix 2: Radiocarbon dating results

Site	Radiocarbon sample code	Laboratory code	Weight of radiocarbon sample	δ¹³C	Radiocarbon Age BP	2 sigma calibrated age range
High Pasture, Daggerstones	HP6/1	SUERC- 40794 GU27567	21.2g	-21.3 ‰	210 ± 35	1641 (29.9%) 1693 cal AD 1727 (48.6%) 1812 cal AD 1919 (16.9%) 1955 cal AD

[The calibrated age ranges are determined using OxCal 4.1 (Reimer et al. 2009)]