

# A corn-drying kiln at Barbush Quarry, Dunblane, Perthshire

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## INTRODUCTION

In November 1981 the discovery of an underground structure during the removal of sand at Barbush Quarry near the N edge of Dunblane (NGR NN 78355 02305) was reported to the Inspectorate of Ancient Monuments. After a preliminary visit it was decided that the site, which appeared to be either a souterrain or a kiln, should be excavated.

MB has prepared the photographs, JSR the illustration and GJB the text of the report. We would like to thank Messrs I and K Fleming, owners of the quarry, and their employees for their invaluable assistance and their unflagging interest in the site. Also Mrs Lorna Main, the Central Regional Archaeological Officer, for sacrificing a day's leave to take part in the excavation. Thanks also to Dr D J Breeze for commenting on the manuscript.

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THE EXCAVATION

The structure was discovered 100 m to the SW of Barbush steading by Mr G Donachy, who noticed dry stone walling and large sandstone slabs as he was removing sand from a 4 to 5 m high face near the S edge of the quarry. Unfortunately considerable damage was done to the NW end of the structure in the process of discovery and an attempt to discover its extent led to further damage at the SE end prior to IAM being contacted.

The kiln was built within a pit of a shape similar to the completed structure. Both can be subdivided into three segments, starting at the SE with 'A' (see fig 1). There the pit measured a maximum of approximately 2.9 m by 2.4 m and 1.5 m deep at its NW end. In segment 'B' it

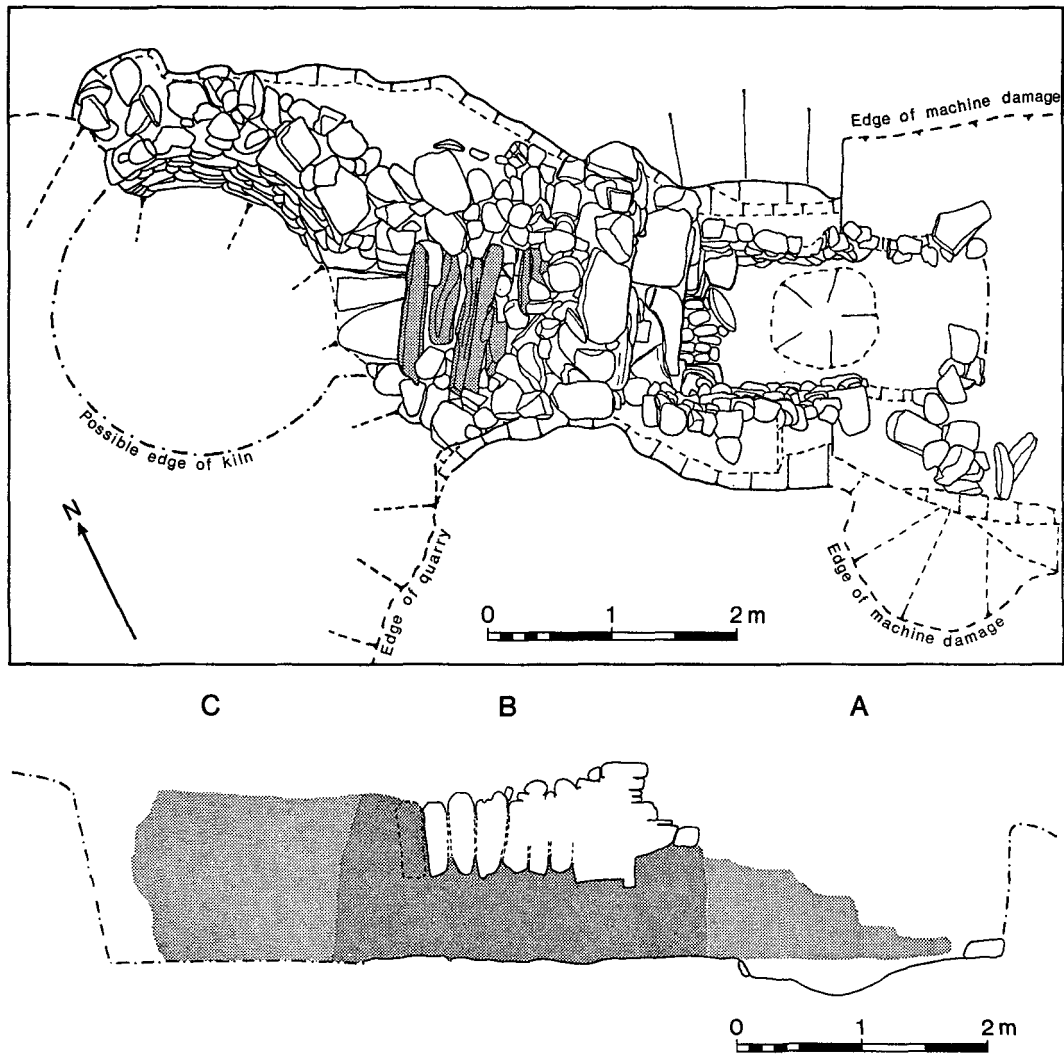


FIG 1

measured 2.2 m broad widening to the NW, to 3.2 m, c 1.6 m long and 1.6 m deep. So much of segment 'C' had been destroyed that only the depth could be measured (1.6 m).

In segment 'A' of the pit a dry-stone wall was constructed on the NE and SW sides rising with the contour of the hill to the NW, to a maximum of 1 m above the bottom of the pit (pl 43a). The arrangement of walling at the SE end was not clear because of the machine disturbance, but from the little surviving evidence it seemed likely that there was a vertical stone lining of the pit and that the pit did not open on to the hillside on the SE. At the NW end of the NE wall a slab had been deliberately set out from the wall forming a step. At the NW end of segment 'A' a wall of a different, more massive form was constructed. In the centre of this wall was a roughly square opening measuring 0.5 m by 0.6 m surmounted by a shelf formed by a single, now broken, slab above which were three courses of walling rising to the level of the subsoil surface. This wall marked the boundary between segments 'A' and 'B'. A shallow pit filled with discoloured sand was found in the centre of segment 'A'.

From the opening in the wall a tunnel of broadly similar dimensions extended c 3 m to the NW, linking segments 'A' and 'C'. The tunnel was roofed using large slabs c 0.2 m thick set on edge. These were all cracked to a greater or lesser extent and showed signs of burning, as did the walls at the SE end. Two ranks of stone setts, which showed signs of severe burning formed the floor at the SE end. To the NW the floor was flagged. Ashy deposits filled the corners between the floor and the walls. The roofing slabs were covered with small boulders to a level below that of the wall dividing segments 'A' and 'B'.

At the NW end the tunnel opened out into segment 'C' which seems to have been a round or oval chamber floored with massive sandstone slabs. Only 2 m of the wall of the chamber to the N of the tunnel mouth survived and the author is indebted to Mr Donachy for a description of the chamber during its destruction (pl 43b). The reconstructed edge on fig 1 has been extrapolated from the surviving wall fragments. Mr Donachy believes that the chamber was more oval than circular.

## DISCUSSION

The functions of the three segments can be clearly identified. Segment 'A' appears to have been a stoke-hole for a fire laid on the setts just inside the tunnel of segment 'B'. The tunnel carried warm air to the chamber in segment 'C' above which would have been built a drying floor, either of wood or iron with a straw bed interposed between it and the grain. Access to the stoking pit was probably gained by the step at the NW end of the NE wall of segment 'A'.

The two sherds of green glazed pottery found in the fill would imply a late-medieval or post-medieval date though the general design of the kiln can be paralleled from Roman times. The Barbush example is more substantial than most known post-medieval kilns; however the majority of excavated examples lie in the N and W, where kilns might be expected to be smaller than the lowland examples.

The kiln at Barclosh in Dumfriesshire is comparable, though in common with most of the known examples the chamber under the drying floor narrows considerably towards its bottom, unlike Barbush. The possible stone step tied into the wall of the stoke hole at Barbush is paralleled by a similar arrangement, though in the drying chamber, at Barclosh. The Dumfriesshire site also lay a similar distance from the farm steading, but had been covered by a rectangular building. No evidence of a covering structure was found at Barbush but this may have been the result of the destruction wrought during the discovery of the site.

Corn-drying kilns near steadings were still in active use in the late 18th and early 19th

centuries in W Perthshire and Stirlingshire (Graham 1812, 20; Robertson 1799, 99). Given the size and sophistication of the Barbush kiln it may be tentatively dated to the 18th century.

#### REFERENCES

- Graham, P 1812 *General View of the Agriculture of Stirlingshire*. Edinburgh.  
Maxwell, W J 1890 'The Old Cornkilns at Barclosh, Kirkgunzeon', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 6 (1887-90), 58-9.  
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a Stoke-hole and flue from SE



b Surviving portion of segment 'C' from SW