

IN the summer of 2000, the Lake District National Park Authority (LDNPA) proposed a programme of works to consolidate and display the remains of tan-yard features at Rusland Tannery, Rusland Cross, Cumbria (SD 3410 8870; Fig. 1). Prior to the commencement of the work, an archaeological investigation was needed in order to monitor site clearance operations and to record any archaeological remains uncovered. A geophysical survey was also required in a field immediately south of the tan-yard. Carlisle Archaeology Ltd was invited to carry out the work, which was completed during October 2000. GeoQuest Associates were commissioned by Carlisle Archaeology to undertake the geophysical survey.

The tannery is situated towards the northern end of the Rusland Valley, at a height of approximately 10 m OD, on the west side of the Rusland to Haverthwaite road. The Rusland Pool lies some 250 m to the west, and a small stream or channel, now partially culverted, flows approximately north-south through the centre of the tannery complex.

The site requiring detailed investigation comprised the eastern half of the former tan-yard lying immediately south of the upstanding tannery building and east of the stream (Fig. 2). In 1985, Lancaster University Archaeological Unit undertook a survey of the tannery, which involved the detailed recording of the standing building and the tan-yard.¹ Features identified within the building included a series of six stone-lined tan-pits, one of which was excavated. The tan-yard does not appear to have been cleared of vegetation or recent accumulations of debris, although all visible features were recorded and a lime pit was excavated. In addition, a search was made of relevant documentary material. This work demonstrated that the tannery probably originated in the second quarter of the 18th century and was later extended and modified. What evidence there is suggests that the complex ceased to function as a tannery around the turn of the 19th/20th centuries, after which the building was used mainly as a cattle byre.

Background

The greatly increased demand for leather in the 18th century prompted the emergence of many small tanneries throughout the Lake District. Rusland Tannery is just one of the 90 recorded by the mid-nineteenth century,² but is one of the few to survive to the present day in a relatively unaltered state. As at Rusland, the majority of tanneries were located close to running water and dense woodland,³ which was essential to make the charcoal required for the tanning process. Many tanneries were purpose built, and were located away from dwelling areas because of the pollution they created, though some would have made use of suitably converted farm buildings.

The technology of the tanning process employed at the time was relatively

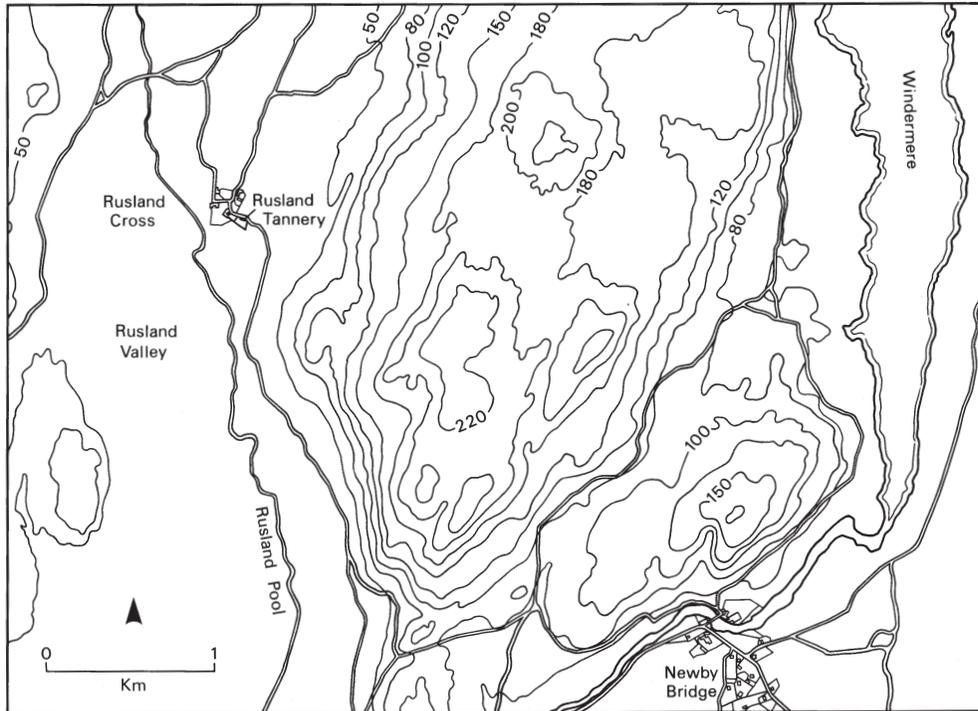


FIG. 1. Location of Rusland Tannery.

unaltered since the Medieval period.⁴ To prepare the hides for tanning the skins were washed and soaked in a lime solution to remove the unwanted layers. Any remaining matter would then be removed by scraping both surfaces with a knife. Softness and suppleness of the leather was achieved by immersion in a solution of dog or chicken manure,⁵ and the preparation of the hide was completed by washing in either water or a mild acid solution. The actual tanning of the hides involved submersion in a series of pits containing various strengths of tanning liquor, water containing different amounts of oak bark. To complete the process the hides were packed with oak bark and finally oiled and dried.

Archaeological Investigation of the Tan-yard (Fig. 3)

The initial site clearance involved the rapid removal of undergrowth and modern accumulations of soil and other debris by LDNPA Voluntary Wardens working under archaeological supervision. Features and deposits were then cleaned, defined, and recorded by archaeological personnel, and a small number were subjected to partial excavation, although the remains were mostly left unexcavated.

The First Edition Ordnance Survey 6-inch map of 1848 depicts the tannery buildings as a continuous L-shaped complex, with a north-south range extending south from the eastern end of the main building. The map suggests that the main building originally extended further east than is the case today, and this was proved

on site by the discovery of a levelled wall (122) extending eastwards on the line of the existing buildings' south wall. The eastern end of this feature was bonded into the base of what is now the eastern boundary wall of the site. For the most part, the boundary wall is clearly a later rebuild, constructed after the eastern end of the tannery was demolished. However, the basal fragment bonded with wall 122 almost certainly formed part of the original east wall of the tannery. A rafter-line in the external face of the tannery's present east wall provides further evidence that the building once extended further eastwards.

Maps indicate that the eastern end of the main building was demolished prior to 1888. The excavation demonstrated that this area subsequently became a small cobbled yard, within which two curving fragments of drystone walling (117, 120) were located. These features appear to have served as compartments for the storage of materials, since the southernmost contained a deposit of lime. Quantities of late 19th-century pottery, bottle glass and ironwork were recovered during the site clearance, suggesting that this area was used as a rubbish dump late in the life of the tannery.

Both cartographic and archaeological evidence indicates that the north-south range continued in use after the demolition of the eastern end of the main building. Wall 122 must have been retained at this time to serve as the north wall of this structure. The south end of the range was represented by a collapsed drystone wall (112), whilst another foundation (116) marked the position of an internal partition. The existing boundary wall formed the east side of the structure, although this wall was clearly rebuilt sometime after the building was demolished. Howard-Davis's suggestion⁶ that the range may have been open-fronted on the west was confirmed by the excavation. It is assumed that the structure had a slated roof, although no evidence for the roof had survived, except (perhaps) for some slates re-used in part of the floor.

Internally the range measured approximately 13.5 m north-south by 2.5 m, and was subdivided by wall 116 into two rooms or compartments with internal north-south dimensions of approximately 7.5 m (in the case of the northernmost room) and 5.4 m. There was some stratigraphic evidence to suggest that this range was added on to the east side of the main building at a later date, a hypothesis supported by the recovery of a few sherds of 19th century pottery from the construction trench of wall 116.

Although few internal deposits were recorded north of the partition wall, preservation was far better in the southernmost room, where the beam-stones recorded in 1985 were located.⁷ Here, hides that had already been washed and treated in lime pits could be stripped of extraneous skin and matter.⁸ The room was floored with cobbles and roughly-hewn slabs of local slate (105), together with a few re-used roof slates (108). A complete beam or hogback of Penrith sandstone (111) was positioned close to the south wall of the room. The beam measured 1.52 m by 0.89 m by 0.24 m, and rested at an angle of approximately 45°. It was supported at the rear (east) by a vertical slate slab 0.7 m in height, and was retained at the front by a smaller slab 0.23 m high acting as a "toe" or revetment. Supports for a second beam-stone were situated some 1.5 m to the north, although the beam itself had been removed some time prior to the 1985 survey.

Both beam-stones were probably worked from the north. A large slate slab (101)

had been laid in the floor to provide a suitable surface on which to stand whilst working at the northernmost beam. Removal of this slab revealed that it overlay a small, slate-lined pit filled with cobbles and rubble. Spatially, it seems unlikely that the pit can have been open at the same time as the beam-stones were in use, for it would have compelled those working at the beams to do so back-to-back in a very confined space. It is possible, therefore, that this feature was associated with a phase of activity pre-dating the insertion of the beam-stones.

Immediately west of the north-south range were the remains of a cobbled surface (102) and a slate-kerbed drain (129) running north-south just outside the building. It is unclear whether the cobbling was the remnant of a more extensive tan-yard surface that had been partly removed when the tannery went out of use. Displaced kerbstones and occasional cobbles were observed elsewhere, although the edges of the surviving cobbling were quite sharply defined, suggesting that they may originally have been edged, perhaps with slate slabs. Towards the extreme south-east corner of the site, immediately south of the east range, was a circular stone-lined well (114) that had also been recorded in 1985.

A little over 3 m west of the east range, and beyond cobbled surface 102, were a pair of back-to-back, slate-lined lime pits, separated by a large, vertical slate slab

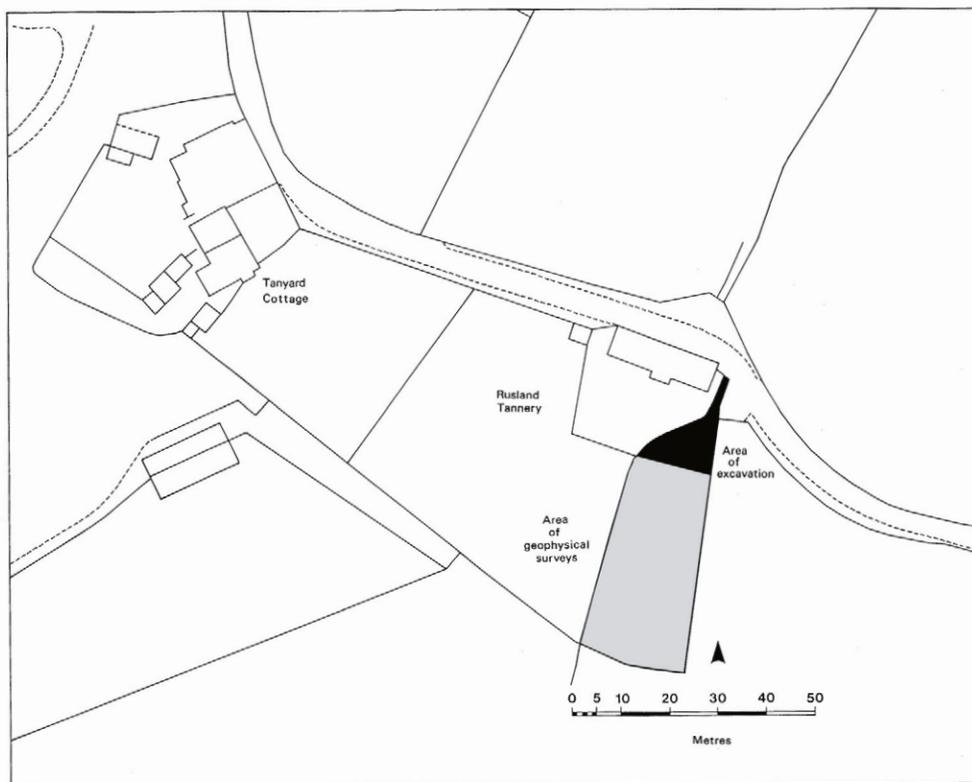


FIG. 2. Layout of tannery and yards, showing area of excavation and geophysical surveys (scale 1:750).

(138). The southernmost pit, which had been partially excavated in 1985, was lined with large slate slabs (139) retained by a number of fragmentary slates acting as wedges. The northern pit was less well preserved, the slate lining (142) having survived only along its western edge, although it appeared to be much the same size as its twin. A large slatestone slab (135) located nearby is thought to have been part of the pit lining.

The Finds

Since little actual excavation took place, few finds were retrieved during the course of the archaeological work. Most of the artefactual material was recovered from the external area at the north-east corner of the site, between the ends of the north and east ranges, which appears to have been used as a rubbish dump towards the end of the 19th century. The ceramic assemblage from here and elsewhere on the site consists almost exclusively of 19th-century coarse red earthenwares, including some glazed examples, although small quantities of better quality tablewares were also present. A single sherd of 18th-century white salt-glazed stoneware was recovered during the topsoil clearance. In addition to the ceramics, a large assemblage of iron objects was retrieved, comprising bucket handles and strakes, lengths of chain, horseshoes, nails, and other items presumably related to the tannery.

The Geophysical Survey

The geophysical survey of the field immediately south of the tan-yard was undertaken by GeoQuest Associates.⁹ The site was surveyed using both a fluxgate gradiometer and a soil resistance meter. The survey recorded significant anomalies over most of the study area, suggesting that the tannery complex may once have extended into this field (Fig. 4). Features possibly present here included wall-footings, a row of infilled pits adjacent to the eastern boundary wall, and what may be either a water-filled culvert or a lime-filled feature. The possible wall-footings pose a particular problem, since none of the 19th-century maps depict buildings in this area. This suggests either that the features represent something other than buildings (a trackway or the remains of terraces next to the stream are suggested in the survey report), or that they are the remains of structures pre-dating the earliest maps of the site. This part of the complex must, however, have fallen into disuse by 1888 at the latest, since the Ordnance Survey map of that date depicts what may be a small orchard occupying the field.

Acknowledgements

I am most grateful for the help, enthusiasm, and hard work of the LDNPA Voluntary Wardens who assisted in the initial site clearance, namely Peter Bevan, Tony Bushby, Graham Christey, John Diavin, Tony Hill, Alan Kirby, Bob Rhodes, Peter Skinner, and Richard Webster. Thanks are also due to John Hodgson, LDNPA Archaeologist, for facilitating the work, to Mark Noel and GeoQuest

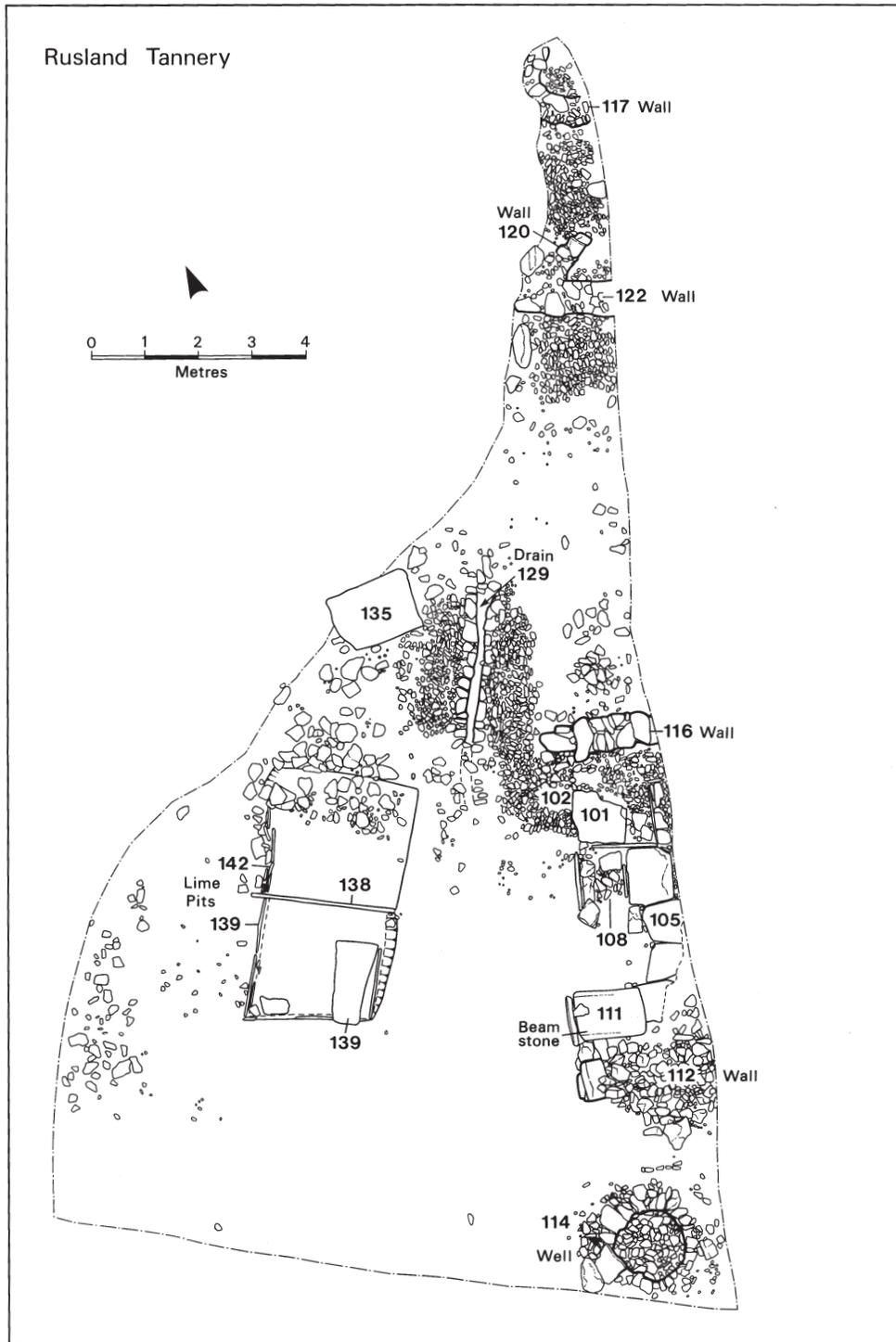


FIG. 3. Plan of excavation of tannery yard (scale 1:125).

Associates for permitting the publication of a summary of their report here, and to the excavation team of Claire Shaw and Don Wilson. The pottery and the other artefacts from the site were examined by Cathy Brooks and Gill Craddock respectively, and the illustrations used in this report were prepared by Philip Cracknell.

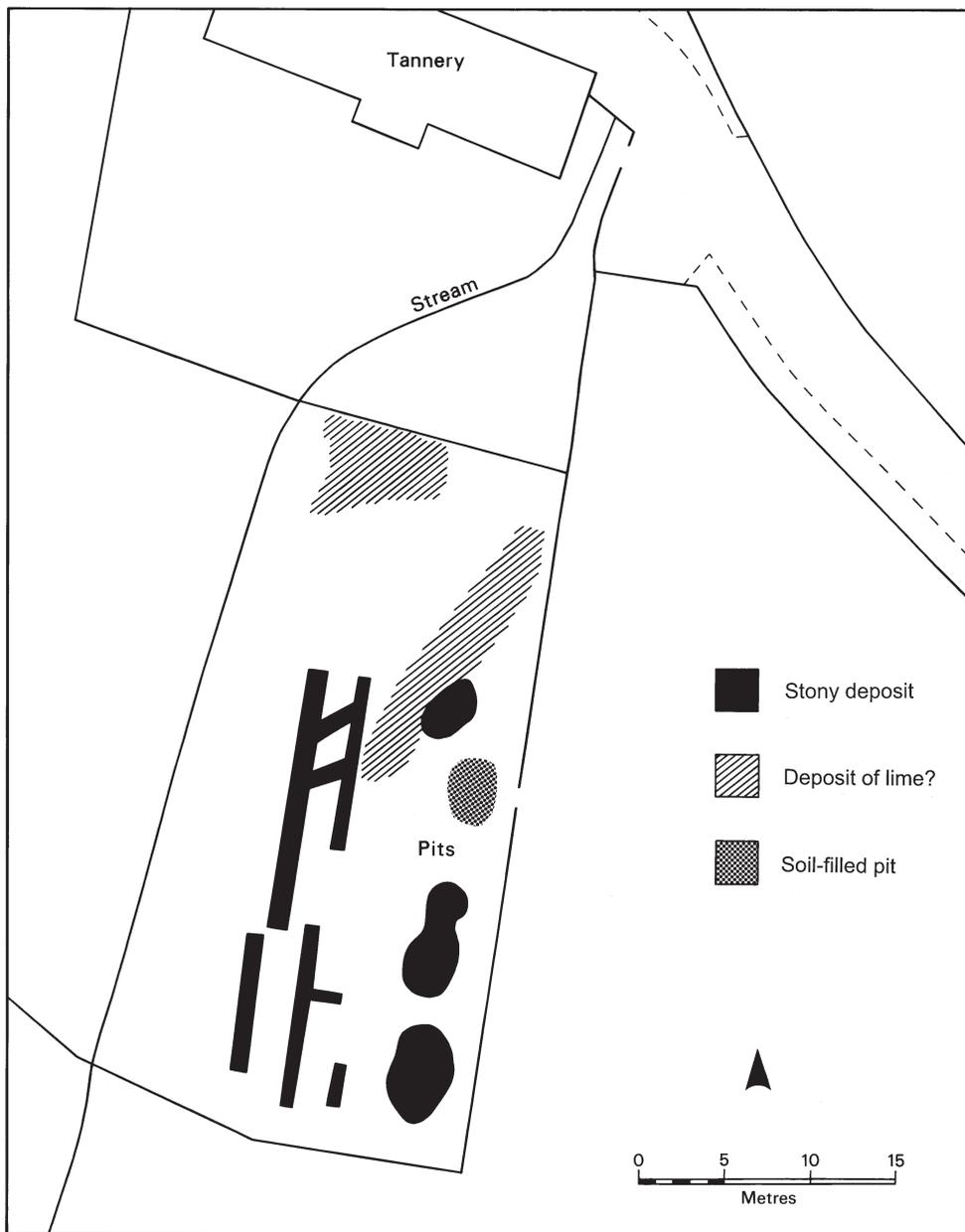


FIG. 4. Plan of features revealed by geophysical surveys (scale 1:500).

Notes and References

- ¹ C. Howard-Davis, "The Tannery, Rusland", *CW2*, lxxxvii, 237-250.
- ² *Ibid.*, 238.
- ³ *Ibid.*, 238.
- ⁴ *Ibid.*, 239.
- ⁵ *Ibid.*, 239.
- ⁶ *Ibid.*, 244.
- ⁷ *Ibid.*, 244 and Plate 1.
- ⁸ *Ibid.*, 239.
- ⁹ M. J. Noel, 2000: "Geophysical Surveys on an Area of Land Adjoining the Tannery, Rusland, Cumbria", unpublished.