

ART. III – *Survey and excavations of a cropmark enclosure at Edderside, Cumbria 1989-1990.*

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THE cropmark site at Edderside (NY 0965 4576) was chosen for survey and excavation (Fig. 1) because it was one of the few sites in the Solway Plain which did not conform to any particular site group defined, during research, into prehistoric and Romano-British settlement in the Solway Plain (Bewley 1984 & 1994). The primary purpose of the excavation was to investigate the site to obtain a sequence of occupation. A secondary purpose was to establish the cause of the dark areas on the photographs inside the site (see Plate 1). These dark areas, or maculae (Edis, MacLeod and Bewley 1989), appear on many aerial photographs and very few have been investigated. The discoveries here suggest that they provide information about the state of preservation, and in this case represent a later use of what appears to be a multiperiod site. The site is protected as a scheduled ancient monument (Cumbria 186) and one of the reasons for undertaking the small-scale excavations was to test its state of preservation. The position of the site just below the crest of a ridge, at *c.* 25 m (82 feet) above OD (Fig. 2) was an indication that ploughing had not totally destroyed the site.

Survey

Geophysical Survey

In the research design for all the excavations on cropmark sites in the Solway Plain project (Bewley 1986), a number of survey techniques have been employed with varying degrees of success. At Edderside, fieldwalking found no pottery or other artefacts. The other techniques which were employed were a partial magnetometer survey (by Geophysical Surveys of Bradford) and, by chance, dowsing. The purpose of the geophysical survey was to see if the cropmark indications of the ditch, which show an incomplete circuit, are a product of differential cropmark formation or a true representation of the absence of a ditch. Only the area where the ditch is not visible as a cropmark was surveyed (see 'M' on Fig. 2). Time did not allow for a complete detailed geophysical survey of the whole circuit of the site or of the internal features, but further work in this area would be beneficial.

The main conclusions (after Bradford Surveys Report 90/67) are:

1. At most sites in the British Isles, except where igneous geologies are present, a detectable ditch will normally produce a positive magnetic response (or anomaly). At Edderside a clear (albeit weak, + InT) negative anomaly was recorded and this does not help the interpretation of the geophysical plots. The result suggests that the topsoil (or at least the fill of the ditches) is less magnetic than the subsoil. Usually human activity on a site produces an enhancement of the magnetic levels of the topsoil and therefore a positive anomaly would be recorded.



PLATE 1. Aerial photograph of Edderside taken in 1949. Crown Copyright.

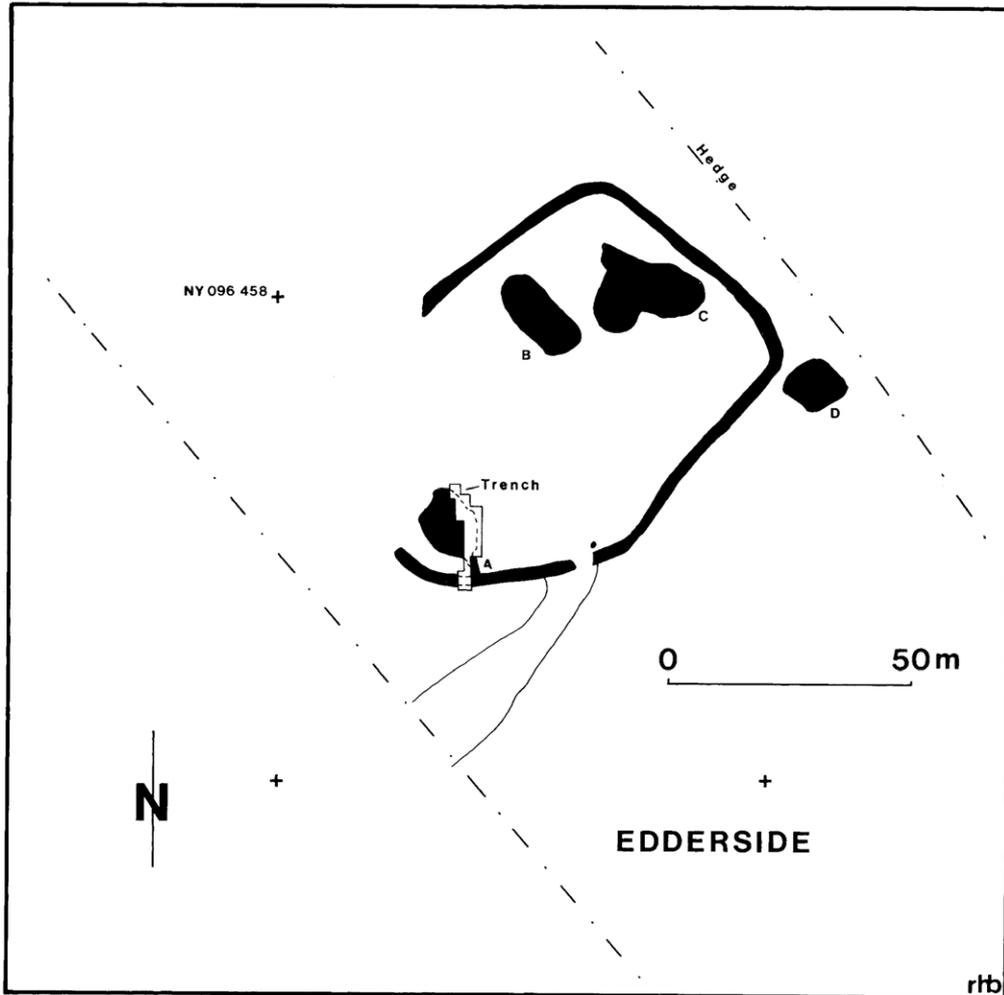


FIG. 1. Transcription from aerial photographs and trench plan.

2. The results clearly demonstrate that there is a break in the enclosure ditch which bears out the aerial photographic evidence (Figs. 1, 2 and Plate 1). However, the results suggest there may be a number of features which criss-cross this gap; either an entrance feature or possibly another enclosure.

Dowsing survey

This technique was not part of the original research design but one of the volunteers in 1989, Mr Brian Poole, happened to be a dowser. During the excavations he dowsed the field to test the location of the site. Having achieved a response from the dowsing rods we inserted bamboo rods at the relevant locations. Four interesting results emerged:

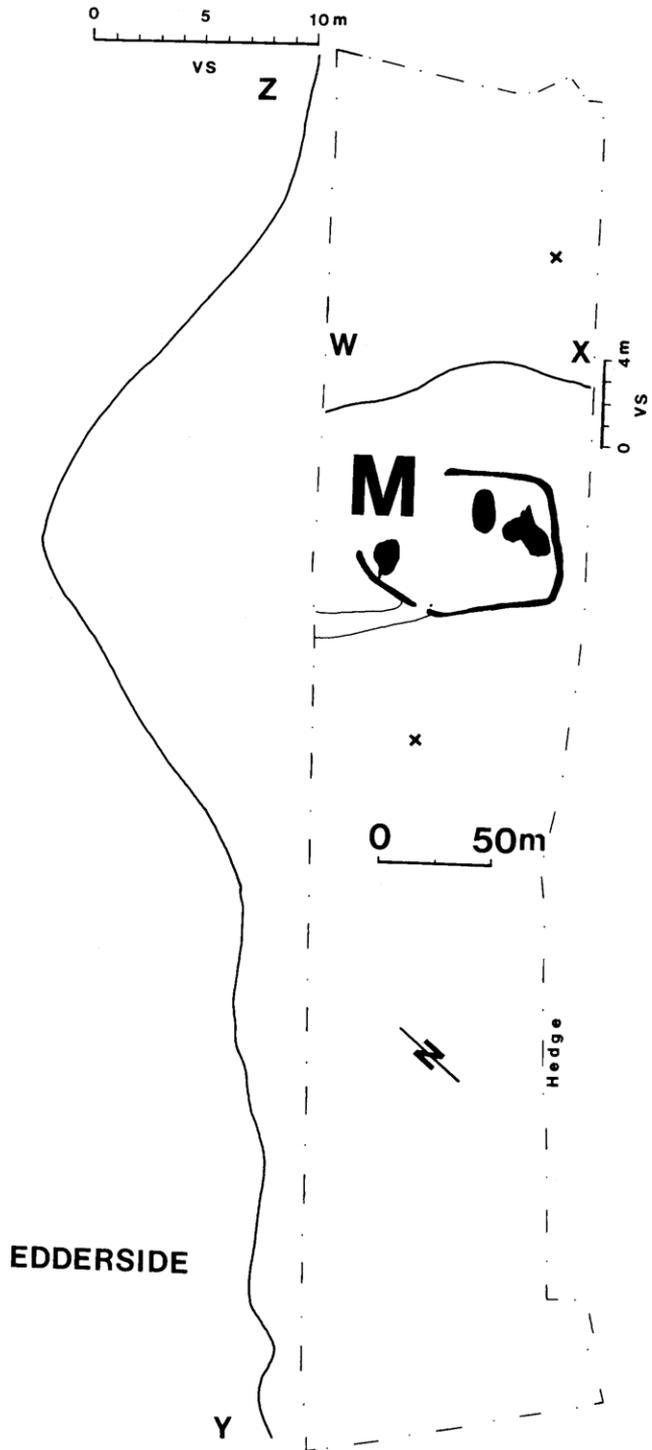


FIG. 2. Field profiles, site plan and location of geophysical survey.

1. There was a positive value of the technique in locating the ditch. This can be a very helpful and cheap method of finding a ditch so that an excavation can be located to section it (which is in fact what we did at Edderside.)
2. The dowsing rods behaved in a similar fashion with a number of different operators over the same place; one or two operators could not obtain any response.
3. The entrance of the site was also located; this was checked, by using the plan of the cropmark (see Fig. 1).
4. The western ditch, however, was seen to exist as a result of the dowsing, but not from the magnetometer survey or on the aerial photographs. Only excavation will finally prove the existence of the western ditch, but time did not allow for this.

Excavations

Originally the excavations at Edderside had been planned for one season in 1989. A combination of the weather, the nature of the ditch and a plethora of stones meant that a second season, in 1990, was necessary in order to understand the preliminary results from 1989.

Trench I

The plan (Fig. 3) shows the area of dark spread (cf. Fig. 1) when excavated. The stones form a wall, inserted in a scoop on the western edge of the site; this structure is approximately one metre deep and was full of silt. The stones themselves were covered with silt (Fig. 3, contexts 18, 21 and 43); the removal of the silt was a very time-consuming process. In 1989 the trench was too narrow and too short to make sense of the stones; the extensions of the trench in 1990 helped reveal three sides of this stone structure. The pottery recovered from the silt and within the structure is undoubtedly of a mid-second to mid-third century A.D. date. The structure is interpreted as possibly later than the original occupation on the summit of this ridge. Plate 2 and Fig. 3 show the substantial nature of the wall and the considerable amount of tumble. There was, however, no indication of the function of this structure; the final excavated layer, context 48, was a hard, partially cobbled surface and may have been for cattle. The amount of pottery is indicative of domestic activity within or near to the structure.

Trench II

This trench was cut in 1989 as an extension of Trench I (Fig. 1) to section the ditch, but in 1990 it was situated 50 cms west to obtain a further ditch section. The results of the two sections can be seen in Figs. 4a and b. The points for discussion are:

1. Did we cut through the extension of the dark area in 1989 (A on Fig. 1) which overlapped with the section through the ditch Fig. 4a? Early in the excavations in 1989 we thought we had bottomed the ditch when we had excavated contexts (3 and 12); the adjacent context (25) was so similar to the natural that we thought it was loose natural. Not satisfied with this interpretation of the loose material we sampled it further and its removal widened the ditch considerably. The natural,



PLATE 2. View of Trench I at the end of excavations in 1900.
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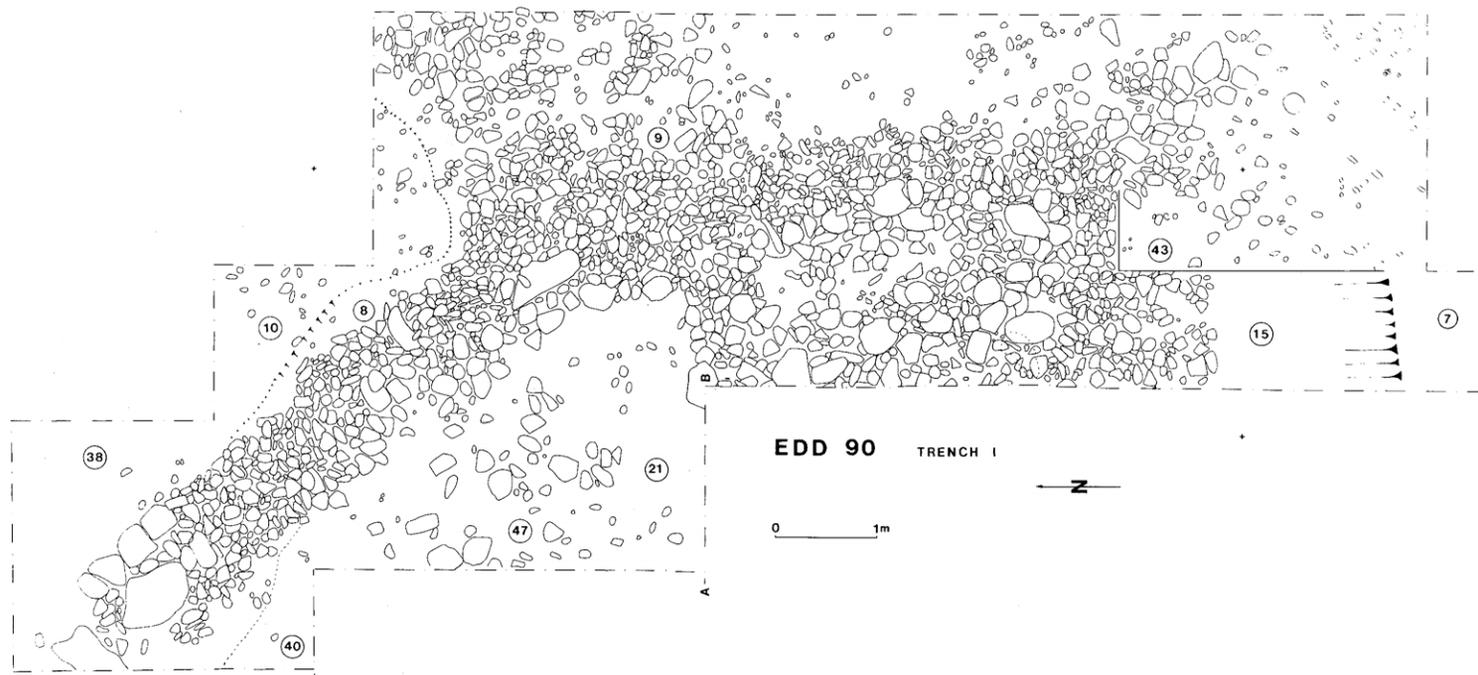


FIG. 3. Plan of Trench I at the end of excavations in 1990.

when we finally found it, was a very hard, compact sand and gravel. This raised the question of what was context 12? Was it a pit or a later Romano-British ditch? Rim sherds of a Huntcliff jar, dated no earlier than A.D. 340 came from this context as did a mortarium rim (Corder Type 6; Corder 1937).

The excavations of the new ditch section in 1990 (Fig. 4b) helped to solve the problem of the nature of this context. It is likely that context 12 is a pit or a post-hole only 50 cms in diameter. This latter intrusive feature, within the upper silt of the ditch, helps to confirm the interpretation that there is a later Romano-British phase of the site. The excavations did not provide any evidence for dating the earlier phase.

The Roman Pottery by John Dore

A total of 101 sherds of pottery were examined. The date range of the whole assemblage is roughly mid-second to mid-fourth century A.D. There are no examples of types which can be firmly dated to later than *c.* A.D. 340/50 (i.e. the latest Crambeck types). In view of the small size of the sample and in default of clear information on the trading mechanism whereby the pottery reached the site, it is difficult to assess the significance of this date range or to make any meaningful analysis of the intensity of occupation within the date range.

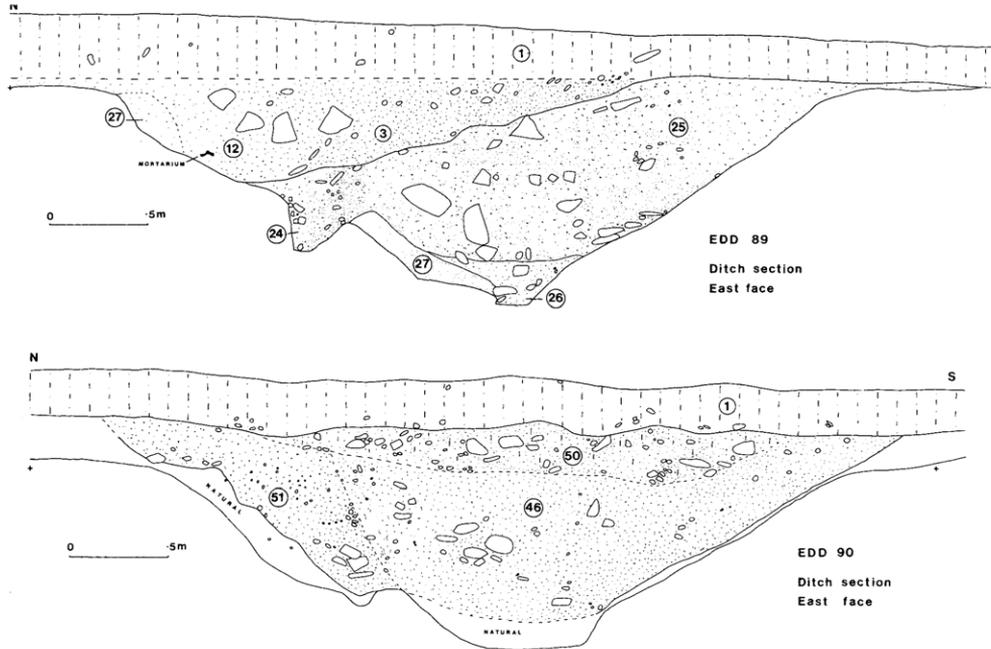
Conclusions

From the pottery evidence of these small scale excavations at Edderside it is clear there was occupation at the site no later than the mid-fourth century A.D. and no earlier than the mid-second century A.D. This is entirely plausible given the nature and extent of Roman activity in the area (Bewley 1994). What is surprising is that research into the size and shape of cropmark enclosures (Bewley 1994, 34-35, 40) shows that this site would not have fallen into a possible Roman/Romano-British category. The small square enclosures (interpreted as Romano-British farmsteads) usually have an area of between 440 and 1400 sq. metres (Bewley 1994, 27). The Edderside enclosure has a very unusual shape and an area of 4800 sq. metres.

This however does not provide the full dating picture. It is entirely possible that the Romano-British occupation is a re-use of the site and that its origins are in the prehistoric period. The size and cleanliness of the ditch suggest that it had been substantially filled in by the time of Roman occupation. This is in part corroborated by the very shallow pit/hearth in the top of the section excavated in 1989. The proximity of the early neolithic site at Plasketlands (Bewley 1993), only 600 metres due north on the adjacent ridge, also suggests that these low, glacially-deposited ridges were important locations for prehistoric occupation sites.

Environmental samples were taken but having been analyzed have not provided any meaningful results.

These results have provided positive dating for a small part of the site and have raised questions about a sequence of occupation there. Small-scale excavations have a limited value and on a protected ancient monument it would have been hard to justify any greater destruction. However the excavations did show just how good the



Figs. 4a and b. Trench II. Ditch sections 1989 and 1990.

preservation of features within the enclosed area were and that the use of the term “plough-levelled” should be used with caution when referring to sites revealed as cropmarks.

Small-scale excavations, as a research tool should be used more than they are today and techniques for dating soils (without having to find radiocarbon samples) should be developed.

Contexts

The list of contexts and dating based on pottery evidence is provided below. The pottery was examined by John Dore (Dore 1995).

1. Ploughsoil. Sandy Loam. Very dark brown.
2. Subsoil. Sand. Strong brown.
3. Ditch/pit fill revealed in ditch section 1989. Not seen in 1990 section (only 50 cms to east of 1989 section). Sandy silt. Dark brown, cf. contexts 12 and 50. (Fig. 4a). Dated to no earlier than A.D. 340 on the basis of a Huntcliff-type cooking pot on the evidence of the Womersley Hoard (Pirie 1971).
4. Plough furrow.
5. Silting layer on top of stones, contexts 8 and 9. Sandy, loamy silt in north end of trench. Dark brown.
6. = to and merges with 25.
7. Presumed to be natural. Same as 31. Sandy subsoil. North of ditch cut. Strong brown.

8. Construction trench for stone wall, context 9, cf. context 23.
9. Linear arrangement of stones. See Fig. 3 and Plate 2.
10. Sandy subsoil, cut by context 8. Strong brown to yellowish red. Thought to be natural in 1989 but might be inside (floor?) of structure.
11. Silty layer beneath 5. Very dark brown sandy silt.
12. Ditch fill: = 3. Sandy silt. Dark brown, cf. context 50. Dated to *c.* A.D. 340 by sherds of Huntcliff type jar.
13. Silting layer. Sandy silt. Very dark brown with black patches.
14. Silting layer; adjacent to 13. Sandy silt. Brown.
15. Between contexts 7 and 16. Interpreted as construction trench for wall.
16. Stony layer north of context 15. Sandy silt. Dark reddish brown.
17. Silting layer around stones. Sandy silt. Dark reddish grey.
18. Silting layer adjacent to context 17. Sandy silt. Very dark brown.
19. Silting layer adjacent to contexts 20 and 9. Sandy silt. Dark reddish grey.
20. Decayed turf, perhaps. Adjacent to context 19 and 21. Silty sand. Dark grey.
21. Similar and adjacent to 20 and above 9, but darker patches of burnt material. Sandy silt. Very dark grey.
22. Layer through which wall, context 9, was cut. Silty sand. Reddish brown.
23. Fill of construction trench 8. Sandy silt. Dark reddish brown.
24. Layer of ditch fill above northern slot of ditch, beneath 3. Almost indistinguishable from context 25. Silty sand. Reddish brown.
25. Ditch fill, beneath context 3. Silty sand. Reddish brown.
26. Primary silt of ditch; flecks of charcoal. Sandy silt. Reddish grey.
27. Natural. Sand. Brown. Adjacent to 12 and also beneath 25 and adjacent to 26.

1990

28. Post hole as part of revetment for a bank. Sandy loam. Dark red brown with charcoal flecks.
29. Arbitrary cleaning spit above ditch in 1990.
30. Subsoil in south end of Trench II. Silty sand. Dark red.
31. Layer into which post hole, context 28 and ditch were cut. Sand. Dark brown. Natural.
32. Silting layer above and in between stones in eastern extension of context 9. Dated to mid-second to mid-third century A.D. on the evidence from sherds of a BB2-fabric type jar.
33. Layer within context 28. Sandy silt with loam and mica flecks. Dark reddish brown.
34. Layer within 28, below 33. Charcoal, sand and decayed mica. Shades of grey to black.
35. Charcoal lens within 28. Black.
36. Sandy silt layer in 28. Strong brown.
37. Sandy silt layer in 28. Dark stains, worm casts. Very dark brown.
38. Compact sand/silt, possibly floor in side stones, cf. context 10. Sandy silt, hard. Yellowish red.
39. Silting of area within stones (context 9).
40. Silting layer in west corner, adjacent to stones, context 9. Sandy silt. Dark brown.

41. Silt above the wall. Sandy silt. Dark reddish brown.
42. Sandy silt amongst stones. Sandy silt. Very dark grey.
43. Fill of construction trench in eastern extension. Unexcavated. Sandy silt. Dark reddish brown. See Fig. 3.
44. Clay and pebbles beneath stones (context 9).
45. Tumble of large stones from wall.
46. Fill of ditch, same as 26. Silty sand. Yellowish red.
47. Silty layer above the stones in 48. Wind blown silt. Sandy silt. Very dark grey.
48. Basal layer in bottom of trench. Silty sand with pebbles. Yellowish red.
49. Silting between stones, with charcoal.
50. Ditch fill above context 46. Silty sand, partly defined by pebbles. Strong brown.
51. Ditch fill in north part of trench, cut by 46. Sandy silt. Strong brown.
52. = 47.

Acknowledgements

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