# FIELD SURVEY AND EXCAVATION AT GOLDCLIFF 1992

#### by Martin Bell

A third fieldwork season took place on the largely intertidal wetland site at Goldcliff, previous work having been described by Parkhouse (1991a) and Bell (1992). That earlier work had concentrated on the total excavation of two waterlogged rectangular timber buildings. Work during 1992 was a much more broadly based survey of the archaeology of the foreshore west of Goldcliff (Figure 6). What made this summer's fieldwork so successful was a late August storm which swept away the intertidal mud revealing many new wooden structures. Virtually all of these were planned but only small-scale excavations were possible.

# The main peat shelf (Figure 7)

### Buildings 1 and 2

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Four radiocarbon dates have now been obtained for wooden posts and wattles which formed the walls of the previously excavated Buildings 1 and 2. These determinations were made by Dr. P.Q. Dresser, to whom we are grateful. The dates are as follows:- Building 1: 2100±60BP (CAR-1346), 2120±90BP (GU-2912); Building 2: 2160±70 BP (CAR-1348), 2220±60 BP (CAR-1352). These dates confirm that the buildings are of the later first millennium BC. In calibrated terms, using the curve of Stuiver and Pearson (1986), they are in the last four centuries CAL BC. The rectangular buildings are unique in the British Iron Age. Many of the posts appear to have been pointed by blows from an iron axe. Careful examination of the peat surface around Buildings 1 and 2 revealed several pieces of bone and two red deer antlers, one of which, from just outside the entrance to Building 1, was cut at the base. These finds extend the scatter of bones recovered immediately outside the two

buildings in 1991 and this contrasts with the absence of artifacts in the interiors excavated in 1991.

# Building 3

35 m north of Building 2 another rectangular structure (Building 3) had been planned in 1991 (Bell 1992, Figure 13). During the 1992 season the removal of mud revealed that the floor of this structure was virtually complete and consisted of pieces of roundwood, several with cut ends. The building, in common with the others at Goldcliff. was on a slightly raised area of peat surrounded by grey clay which overlay some flooring timbers. One wall, consisting of roundwood verticals and some wattles, was exposed and part of another wall was revealed below the grey clay by excavation. However, because of the overlying clay, the positions of the other walls and the overall dimensions of this building remain uncertain. No artifacts, other than worked wood, were found within the building but on the fen peat shelf to its south were some bones and a scatter of cut timber which looked as if it might have been the waste from the making, or destruction, of a building.

### Structure 4

This comprised roundwood vertical posts forming three sides of a rectangular area (Figure 8) with rounded corners and a length of 7.2 m. The other dimension is uncertain because the seaward side had been truncated by erosion. There was little trace of surviving flooring.

### Linear post structures

A linear post alignment (1108) was traced for 100 m south of Structure 4

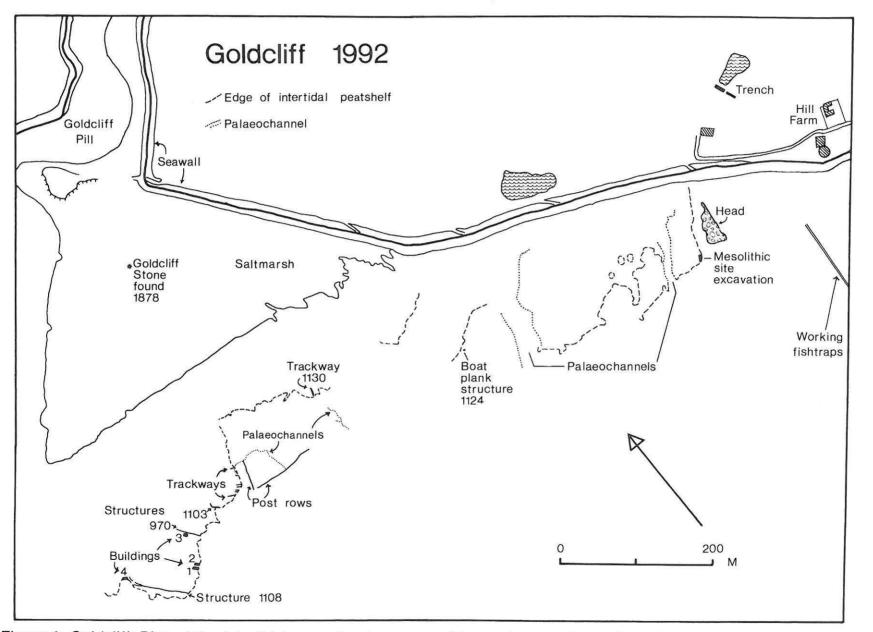


Figure 6. Goldcliff: Plan of the intertidal area showing some of the main areas investigated in 1992. Figure 7 shows the western part of this area at a larger scale.

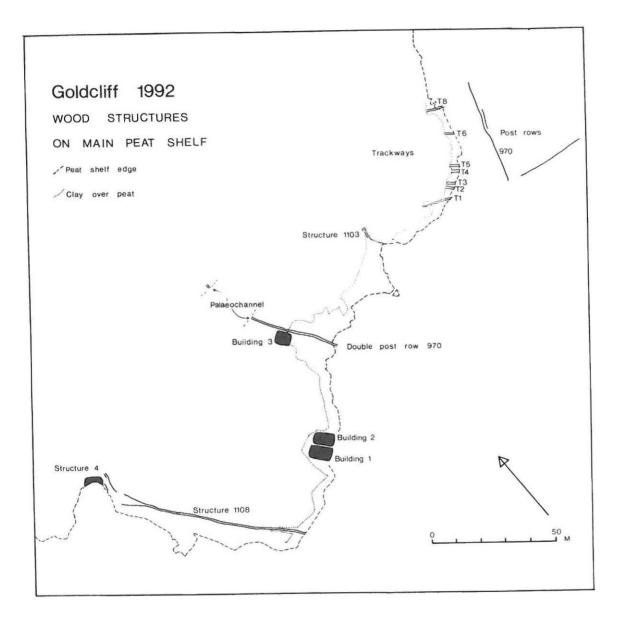


Figure 7. Goldcliff : Plan of wooden structures on the main peat shelf.

(Figure 7). It occupied a slightly raised linear area of peat protruding from overlying grey clay. The structure comprised two rough alignments of small posts 20-30 cm apart, between which were traces of brushwood, roundwood and a few fragments of plank (Figures 9 and 10). A small trench across the alignment showed that the posts had been driven in diagonally from either side of the structure, then brushwood had been lain in the V between the opposed diagonal posts. The most obvious interpretation of this arrangement would seem to be as a trackway, in which case it is quite different from the previously examined trackways on the same peat shelf at Goldcliff. It is also noteworthy among the many trackways of prehistoric Europe in that it leads to a definable focus of human activity, in the form of Structure 4.

Another linear post alignment 1103,

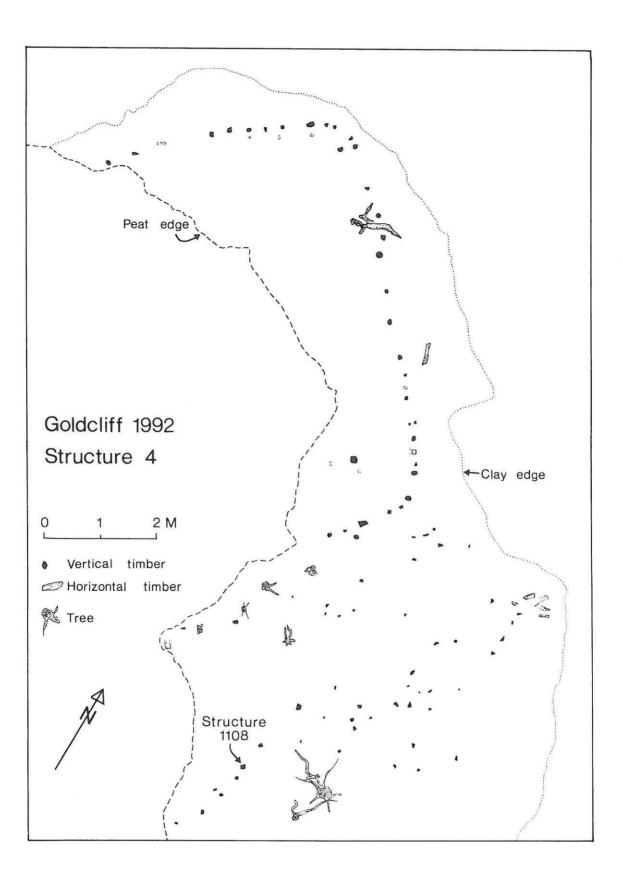


Figure 8. Goldcliff: Structure 4 and the west end of linear post alignment 1108.

80 m north-east of Building 2 was examined in some detail by excavation and proved to be a complex and perhaps multi-phase structure. It comprised rough alignments of small vertical posts with brushwood oriented along the axis of the structure and in places apparently woven round the verticals. It might equally be interpreted as several phases of a woven fence or another form of trackway. It was approached by Trackway 1 (Figure 7) but the junction had been eroded.

Double post row 970, which had been planned in 1991 (Figure 7), was also investigated by excavation of a small trench. It consisted of vertical posts about 40 cm apart. The function of this structure is unclear; superficially it resembles a scaled-down version of fish traps still in use at Goldcliff (Figures 30, 31 and 35). However, in common with all the other wooden structures on this peat shelf, it appears to be related stratigraphically to the fen peat and is overlain by grey clay. It appears, therefore, to relate to a terrestrial, rather than marine, phase.

#### Brushwood Trackways

Eight of these had been located in 1991 on the same alignment over a 44 m long area of the eroding peat face (Figure 7). The area in question was apparently a somewhat wetter area of reed peat at the time. Work in 1992 concentrated on tracing the routes of two of the tracks.

# Trackway 1

Figure 12 shows this structure as exposed by the sea and by cleaning but without any excavation. It consisted of brushwood laid along the axis of the track and held in place by roundwood laterals and vertical pegs. One peg excavated in 1991 has now been radiocarbon dated 2260±60BP (CAR-1349). The trackway disappeared where grey clay covered the peat, but it was traced for a total distance of 50 m by one 50 cm wide trench and a series of tiny 10 cm wide, non-destructive investigative slots. These showed that the trackway was much better preserved where it was covered by the grey clay. It extended as far as the post alignment 1103 but, as already noted, the junction had been eroded.

#### Trackway 8

This consisted of pieces of roundwood and brushwood laid along the axis of the track with vertical pegs along its edge (Figure 11). It was also wellpreserved where it was buried by the grey clay. The trackway was found to cross a narrow, sinuous and presumably natural palaeochannel, the course of which had been consolidated with brushwood and pegs where the track crossed.

### Trackway 1130

This trackway (Figure 6) was 145 m east of the brushwood tracks and was apparently on a continuation of the same peat shelf, although the track was of different construction and alignment. It was of corduroy construction, pieces of roundwood laid at right angles to the line of the track with occasional vertical pegs to hold the timbers in place. It averaged 0.9 m wide.

# Boat planks in Structure 1124

This structure was found 340 m east of the main exposure of peat shelf and in uncertain stratigraphic relationship with that peat. The structure was stratified in grey clay between two thin bands of reed peat. It comprised two wooden planks and some cut roundwood and brushwood laid parallel over an area roughly 1.6 m by 1.3 m with some associated pegs (Figure 13). Possible interpretations include a very short length of track to cross a particularly wet spot, or a small platform created for some particular activity such as hunting or fowling. What made this structure of particular interest was that the two planks (Figure 14) each had a raised ridge through which a mortise hole had been cut. Down the margins of the planks were tiny vertical holes containing fibres. Clearly these planks were derived from a sewn boat belonging to the same family of craft as that previously excavated nearby at Caldicot (Parry 1991; Parry and McGrail 1991), the Ferriby boats (Wright 1990) or the recently discovered Bronze Age boat found at Dover (Bennett 1992).

# Western peat shelf

During 1992 further rectangular structures were found on a peat shelf to the west of those previously investigated. Structure 6 was particularly well-preserved (Figures 15 and 17). It was rectangular with rounded corners 7 m by 5 m. There was an entrance 0.8 m wide in the middle of the east wall and there may have been a 0.6 m wide entrance in the middle of the west wall. Two concentrations of vertical timbers on the long axis may represent roof supports by analogy with the much larger posts in this position in Buildings 1 and 2. Despite the fact that none of this structure has been excavated its method of construction is clear. It comprises roundwood verticals at intervals averaging about 0.6 m, between which the wall is formed of radially split timber, often planks. This method of construction contrasts with the wattlework of Building 1. Within the building there were a few vertical timbers representing internal features but little trace of flooring was preserved and the impression is that the building has been 'planed off' by erosion at a level below that of its floor. The building stood on a slightly raised area of peat which was defined in places by a shallow palaeochannel feature filled with grey clay. This contained some bones, a lath of worked wood, and a twisted withy tie (Figure 16), similar examples of which come from the Iron

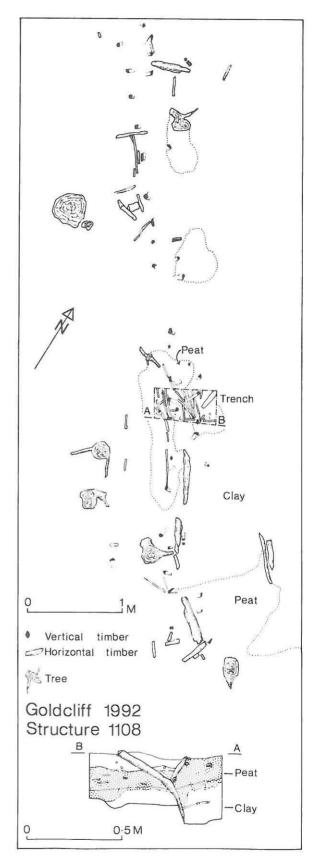


Figure 9. Goldcliff: Linear post alignment 1108 in plan and section.

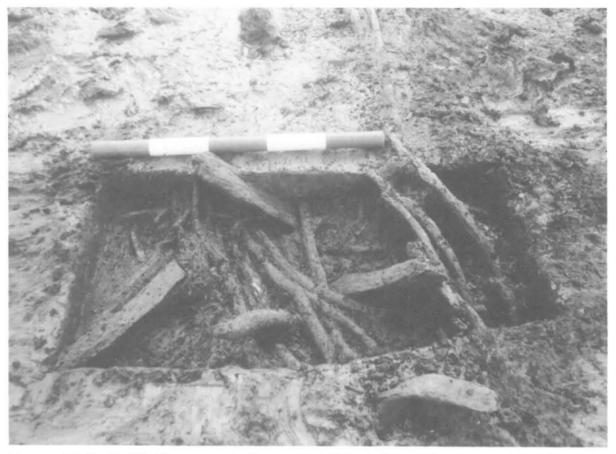


Figure 10. Goldcliff: Linear post alignment 1108 of diagonal posts and brushwood.



Figure 11. Goldcliff: Trackway 8.

Age cistern at The Breiddin (Musson 1991). This might have been used to join timbers in a building or boat or represent a bucket handle.

Nearby, Structure 7 comprised 13 posts delimiting a rectangular area 4.8 m by 4.2 m. In the centre down the longer axis were two larger posts with packing timbers, which, by analogy with the other better preserved structures, could represent roof supports. The wall posts of this structure are irregularly placed with wide gaps and it is thought to represent a smaller, more eroded structure of the same general type as the other rectangular structures.

Structure 8 (Figure 18) was rectangular with rounded corners 6 m by 8 m. There was evidence of two post settings down the long axis of the structure. The walls were formed of rather irregularly spaced vertical split timbers and roundwood. There was no trace of flooring. The structure sat on a clearly defined, slightly raised, area of peat, the edges of which were defined by shallow palaeochannel features which in this area formed a net-like and intersecting pattern. The base of these features was formed of peat, in the surface of which were many hundreds of animal footprints.

### **Mesolithic site**

Close to Goldcliff (Figure 6) an intertidal Mesolithic site was located by Derek Upton and Bob Trett in 1987 (Parkhouse 1991b). The site consisted of a 10 cm thick band of charcoal overlain by 25-40 cm of marine clay and then by fenwood peat. The charcoal has been radiocarbon dated 6430±80BP (GU-2759). In 1992 a small trench was cut back from the eroding face to enable excavation of the charcoal horizon. It proved to be rich in pieces of worked flint and chert and bones.

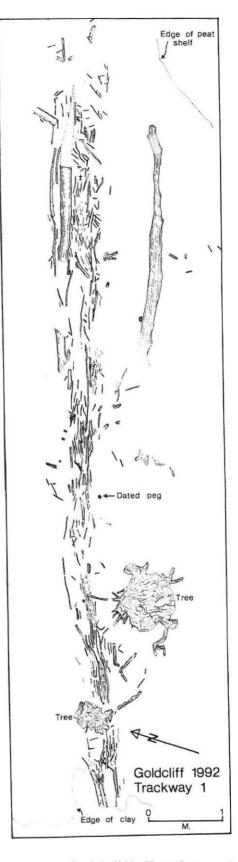


Figure 12. Goldcliff: Trackway 1, the area exposed between the edge of the peat shelf (top) and the overlying clay (bottom).

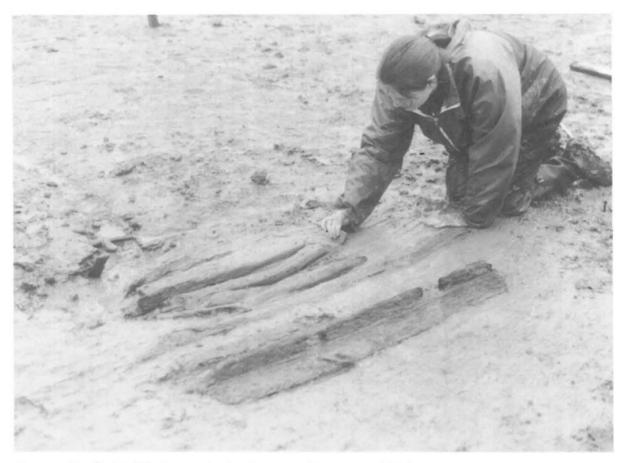


Figure 13. Goldcliff: Boat planks forming Structure 1124.

# Hill Farm

A trench was opened up adjacent to the farm buildings at Hill Farm (Figure 6). This trench (Figure 19) was placed to investigate the interface between the bedrock area of Goldcliff, which would have been an island in prehistory, and the sedimentary sequence of the surrounding levels. Unfortunately the upper part of the sediment sequence had been cut away by a large postmedieval pond up to 2 m deep. However, at the west end of the trench the disturbance was only superficial. Here, at a depth of 2.4 m, lenses of charcoal were located separated by lenses of marine clay. Worked flint, including one microlith, and bone was associated with this charcoal spread. It remains to be established whether it is contemporary with the charcoal deposit on the intertidal Mesolithic site 227 m away.

The charcoal spread poses questions about the extent of human manipulation of the environment here in the later Mesolithic. At Goldcliff these questions are of special interest in view of the pollen record published by Smith and Morgan (1989), and obtained from a peat shelf 600 m west of Goldcliff, which produced evidence for various Neolithic episodes of human activity which almost certainly took place on the bedrock rise of Goldcliff. Thus the site offers opportunities to compare the nature of people/environment relationships and economic activities on either side of 5000BP.

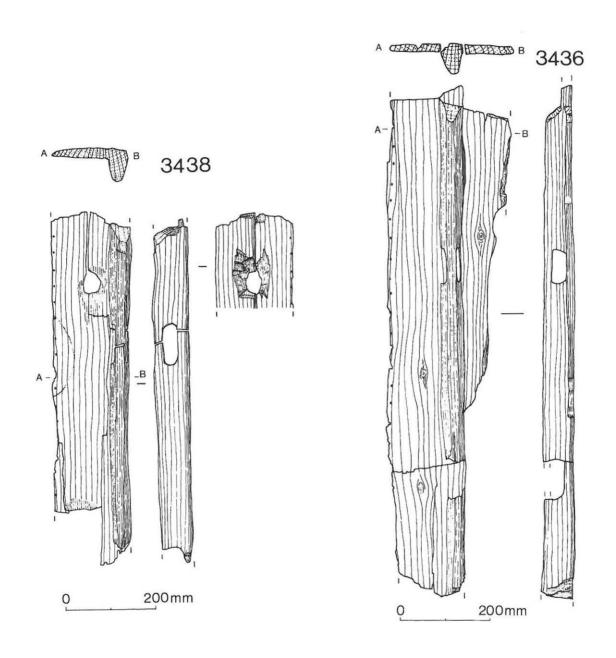


Figure 14. Goldcliff: The boat planks from Structure 1124.

# Conclusions

1992 saw a considerable expansion of the spatial extent of prehistoric structures at Goldcliff. The radiocarbon dates so far obtained for the wooden structures on the main peat shelf are all in the later first millennium BC. The rectangular buildings are virtually unique in the British Iron Age. Seven of these structures have now been found. The wooden structures so far found are scattered along 1.4 km of the peat shelf on what appear to have been slight peat rises. This year's discovery of a probable trackway leading to one of the buildings is of special interest and emphasises that what is exposed by erosion on the foreshore is an exceptionally preserved strip of Iron Age landscape on which it is possible to map the relationships between



Figure 15. Goldcliff: Structure 6 with clay filled palaeochannel to the left.

buildings, trackways, other structures, trees and the vegetation patterns making up the peat itself.

Despite the quality of the archaeological record there are still unresolved questions about what brought people to this wetland site which was liable to episodic flooding. The buildings do not seem to have been part of an ordinary domestic settlement: there are no hearths or charcoal and although fieldwork during1992 did produce more artifacts than 1991 the site is very impoverished by comparison with dry land Iron Age sites, even by Welsh standards. The concentration of cattle hoof-prints outside Building 8 supports the view that the buildings might relate to the seasonal utilisation of coastal pastures. However, neither phosphate analyses (by Dr John Crowther) nor beetle studies (by Mr. Peter Osborne) have, so

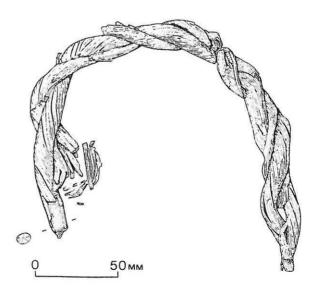


Figure 16. Goldcliff: twisted withy tie from palaeochannel north of Structure 6

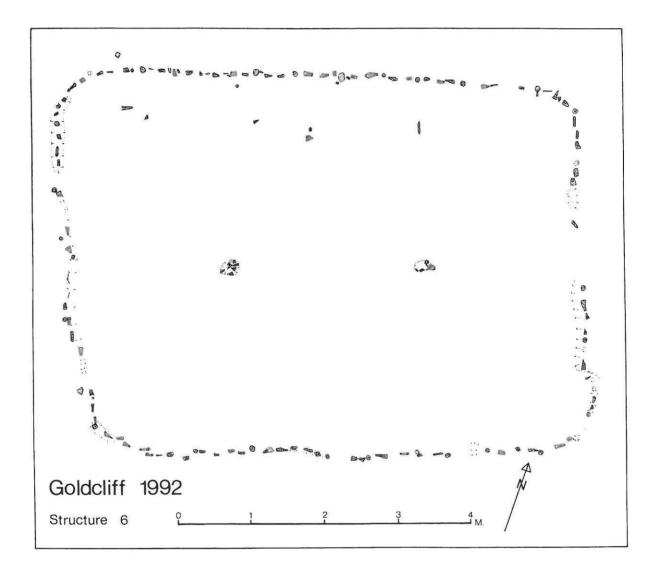


Figure 17. Goldcliff: Structure 6.

far, produced conclusive evidence of dung in, or around, the previouslyexcavated Buildings 1 and 2. Another possibility which needs to be considered is that the buildings relate to fishing activities; a salmon fishery still exists at Goldcliff (Figures 6, 30, 31 and 35). The trackways would make sense in terms of the need for regular safe passage, perhaps at all hours of the day or night, depending on tides, between buildings and fish traps. The boat, of which planks were found this

year, might also have been used in fishing, but they also suggest another possibility, that the concentration of human activity at Goldcliff could be explained by a crossing place of the Severn Estuary. These various hypotheses are not, of course, mutually exclusive, they will be evaluated by continuing fieldwork in 1993 and by the ongoing post-excavation programme on a wide range of well-preserved environmental evidence. Already it is clear that the site represents aspects of

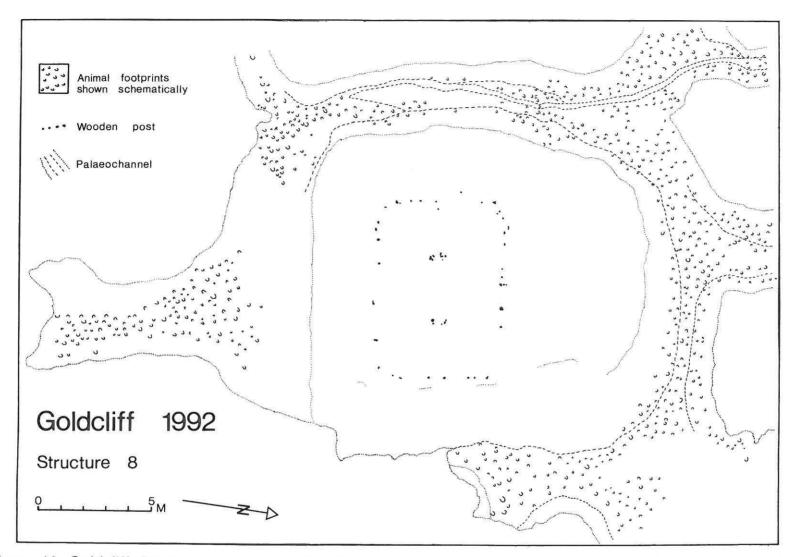


Figure 18 Goldcliff: Rectangular wooden Structure 8 surrounded by palaeochannels on the floors of which are many animal footprints.



Figure 19. Goldcliff: Trench at Hill Farm. The rectangular area in the foreground shows a layer of charcoal within marine clays.

an Iron Age way of life and settlement pattern never before revealed in such well-preserved detail.

# Warning

All the archaeology at Goldcliff is on a Site of Special Scientific Interest and is accessible only from private land. The sites cannot be visited. Furthermore the intertidal area is dangerous and its archaeology very vulnerable to damage by casual visitors. Because of these factors the area can only be visited with an experienced guide. A guided visit for SELRC members will be arranged during the 1993 excavation season.

# Acknowledgements

The main acknowledgement must go to Derek Upton who not only found the site originally with Bob Trett but worked with us whenever his other commitments allowed and discovered many of the new structures which were planned and recorded in 1992. The work was funded by Cadw; Saint David's University College, Lampeter; The National Museum of Wales; Newport Museum and the European Science Foundation (Dublin team). I am particularly grateful to our advisers Professors John Allen FRS and John Coles FBA. Valued advice was also provided by Rick Turner of Cadw; Jonathan Parkhouse, who was originally responsible for demonstrating the potential of this site, and Dr Stephen Aldhouse-Green.

That so much was achieved after the mud was swept away in late August is entirely due to the dedication of the excavation team. The field staff were Hazel Riley (surveyor), Steve Allen, Kathren Henry and Kath Buxton (planners), Andrea Selley, Robin Taylor-Wilson, Bill Timmins, and Su Johnson (supervisors), Kate Dowse (sieving and finds), Dr. Jennifer Foster (finds and administration), Susan Ripper (wood) and John James (auger survey). A team of 16 undergraduate students from Lampeter also worked extremely hard and we were also assisted by a team from University College, Dublin wetlands training programme. The catering was in the ever capable hands of Ben Lowe and Jeanette Ward.

We appreciate the hospitality of the local community at Goldcliff, particularly Mr. Martin Hazell who allowed us to excavate on his land. We are also grateful to Mr. Walters who allowed access across his land. The community at Goldcliff and Witson allowed us to use their community hall as our base and campsite and I am particularly grateful to Mrs. Jill Jones for her help.

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