Prehistoric Features at Llyn Morwynion, Ffestiniog

Archaeological Recording





Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

PREHISTORIC FEATURES AT LLYN MORWYNION, FFESTINIOG

Archaeological Recording

Project No. G2437

Report No.1290

Prepared for: Snowdonia National Park Authority

December 2015

Written by: Jane Kenney

Cyhoeddwyd gan Ymddiriedolaeth Achaeolegol Gwynedd Ymddiriedolaeth Archaeolegol Gwynedd Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT

Published by Gwynedd Archaeological Trust Gwynedd Archaeological Trust Craig Beuno, Garth Road, Bangor, Gwynedd, LL57 2RT

> Cadeiryddes/Chair - Yr Athro/Professor Nancy Edwards, B.A., PhD, F.S.A. Prif Archaeolegydd/Chief Archaeologist - Andrew Davidson, B.A., M.I.F.A.

PREHISTORIC FEATURES AT LLYN MORWYNION, FFESTINIOG

GAT PROJECT NO. G2437

GAT REPORT NO. 1290

Contents

UMMARY	2
. INTRODUCTION	2
. METHODOLOGY	2
. RESULTS	3
3.1. Natural feature resembling a cist (PRN 61246)	3
3.2. Round-hut (PRN 5144)	3
3.3. Possible Round-hut (PRN 61247)	4
3.4. Wall (PRN 61248)	4
3.5. Sheepfolds (PRNs 61249 and 61250)	4
3.6. Enclosed settlement (PRN 5143)	4
3.7. Water-side wall (PRN 61251)	5
3.8. Peat in the bay at the north end of Llyn Morwynion	5
DISCUSSION	6
. ACKNOWLEDGEMENTS	7
. REFERENCES	7
. FIGURES AND PLATES	8

Figures

Figure 1. Location of Llyn Morwynion

Figure 2. Bay at northern end of Llyn Morwynion and surrounding area (1998 survey (Smith 1998, Fig 14) combined with sites surveyed for current project. The numbers next to sites are PRNs)

Figure 3. Plan of round-hut PRN 5144 drawn from 3D photogrammetric data

Figure 4. Plan of exposed part of wall PRN 61248 drawn from 3D photogrammetric data

Plates

Plate 1. Location of cist-like feature (PRN 61246) on lake shore

Plate 2. Cist-like feature (PRN 61246) after investigation

Plate 3. Drawing of cist-like feature (PRN 61246) by WT Jones (September 2015)

Plate 4. Round-hut (PRN 5144) from south-east

Plate 5. Round-hut (PRN 5144) from south

Plate 6. Round-hut (PRN 5144) from north-east

Plate 7. Vertical plan image of round-hut PRN 5144 taken from 3D photogrammetric model

Plate 8. Possible wall remains on south side of PRN 61247

Plate 9. Possible wall remains on north side of PRN 61247

Plate 10. View of PRN 61247 from north-east showing proximity to PRN 5144

Plate 11. Vertical plan image of exposed section of wall PRN 61248 taken from 3D photogrammetric model

Plate 12. Wall PRN 61248 from north-west

Plate 13. Wall PRN 61248 from west

Plate 14. Sheepfold PRN 61249 from west

Plate 15. Sheepfold PRN 61250 from north-west

Plate 16. Recent "jetty"/fisherman's stance at north-east end of PRN 61251

Plate 17. Water-side wall PRN 61251 from north-east

Plate 18. Natural stones running across mouth of bay at northern end of Llyn Morwynion

Plate 19. Peat deposits in bay at northern end of Llyn Morwynion

Plate 20. Tree roots in north-west side of bay at northern end of Llyn Morwynion

PREHISTORIC FEATURES AT LLYN MORWYNION, FFESTINIOG

GAT PROJECT NO. G2437

GAT REPORT NO. 1290

SUMMARY

1. INTRODUCTION

Llyn Morwynion lies about 3km east of Llan Ffestiniog at about 450m OD. There are low rocky hills to the north reaching 552m OD and Afon Cynfal, into which the lake drains, runs to the south (figure 1). The area forms the western edge of the Migneint. Morwynion was a natural lake but from 1859 was used to supply water to Llan Ffestiniog and was converted into a reservoir (Gwyn and Davidson 1996, 1998). A small dam was built at the south-western end, raising its water level.

In September 2015work was required on the dam to prevent leaking. The maintenance work was carried out by BAM for Dŵr Cymru/Welsh Water. This work required the water level in the reservoir to be lowered. On 18th September a member of the public notified the Snowdonia National Park Authority (SNPA) archaeologist and Gwynedd Archaeological Trust (GAT) that a previously unidentified feature had been exposed by the lower water levels. The SNPA archaeologist decided that this should be investigated and any other sites also revealed should be recorded. GAT was commissioned to assist in the recording and production of illustrations and a report.

2. METHODOLOGY

John G Roberts (SNPA archaeologist) and Jane Kenney (GAT) met with representatives of Dŵr Cymru/Welsh Water and BAM to discuss access and health and safety issues on 1st October 2015. They also carried out a preliminary inspection of the shore of the reservoir, walking around the shore and noting any potential features. This revealed no significant features along most of the shore but a group of known sites at the northern end of the reservoir were more extensively exposed that normal. The feature reported by the member of the public was also inspected.

It was decided that the opportunity should be taken to record the exposed sites at the northern end of the reservoir in detail by survey and 3D photogrammetry. The survey was carried out by using a survey quality GPS to located stations and a total station theodolite to survey reference points and outlines of the features. A Nikon D40 digital camera set to maximum resolution (RAW) was then used to take a series of overlapping photographs of the two main sites, both from above and from lower angles.

The photographs were converted to JPEGs (2mb maximum size) and these were used to produce a 3D model of the two sites using photogrammetry software program (Agisoft PhotoScan). The surveyed reference points were used to accurately scale and georeference the resulting models which were output as georeferences tiffs and used to create conventional plan drawings of the two sites. The models were also output as 3D pdfs at reduced resolution.

Conventional photographs of all the sites were taken using Nikon D40 and D80 digital cameras and written notes were made. The recording was carried out on 6th October 2015.

Information recorded on the ground was supplemented by a survey done of a wider area in 1998 (Smith 1998) and by aerial photographs supplied to the Gwynedd Historic Environment Record (HER) by Natural Resources Wales (NRW). The sites at the north end of Llyn Morwynion were first recorded by Peter Crew (Crew 1985). The original grid references were approximate and this project has improved their precision. Information for this project has been compiled into an Access Database which will be submitted to the HER to enable the records to be enhanced.

3. RESULTS

3.1. Natural feature resembling a cist (PRN 61246)

The feature that had initially been reported is composed of several slabs of stone on edge that resemble a Bronze Age cist. The feature is located on the shore, below normal lake level at SH 73906 42321 (figure 1, plate 1). A large slab aligned c.NE-SW projects from the ground at an angle of about 60 degrees. Other roughly parallel but smaller slabs also project from the ground, lying roughly parallel to the large slab (plates 2 and 3). The large slab is 1.1m long and the whole group is about 0.9m wide. Although the layout of the stones does give the impression of a possible cist cleaning around the slabs showed that they were deeply embedded in compact, clean gravel. This gravel was the same inside and outside the area defined by the stones and appeared to be the natural glacial gravel.

In many places on the lake shore slabs can be seen projecting from this gravel and also eroding out of the lake edge cliffs at a variety of angles. The bedrock along the southern part of the lake is a slabby sandstone and this seems to have been moved by glacial action and slabs mixed into glacial gravels often at steep angles. It was concluded that this feature was entirely natural in origin.

3.2. Round-hut (PRN 5144)

See figure 2 for location and figure 3 for detailed plan.

An arc of a circle of stones can be seen where peat has been eroded on the lake shore (plates 4 to 6). The arc suggests a circle c.7m in diameter externally and possibly 3.5m internally. The stones are haphazardly heaped around the arc, although there are two flat slabs visible in the base on the north-western side. The largest stones are the flat slabs which are up to 0.75m long, other stones are less than 0.5m long. Also on the northern side are a few stones that are slightly more orderly that could indicate an inner face. This can particularly be seen where the stones extend under the peat. The arc is built over a natural boulder projecting from the peat on the north-western side.

This feature is on the south-eastern side of a small bay, much of which is full of peat. The edge of the peat is very close to the structure but does not quite reach it and the structure is built on an angular shaley gravel. Up to 0.6m of peat directly overlies the eastern part of the structure. No evidence of cut features was visible inside the arc of stones but the area was not cleaned.

There is no trace of an entrance in the exposed arc. The land rises to the east and an entrance on this eastern side would be unlikely, as water running down the slope would run into it. This raises the question whether the structure originally had an entrance at all.

A detailed stone-by-stone plan (figure 3) was produced of this feature from a 3D photogrammetric model (plate 7 and PRN5144.pdf).

Stones at the end of the small peninsula to the south-west of the round-hut were inspected because George Smith had suggested that there may have been an eroded round-hut in this area (Smith 1998, Fig 13). However this was not considered to be convincing. Some of the stones in this area are roughly aligned but this can be accounted for by the way that the bedrock erodes along bedding planes, with some stones possibly moved by water action.

The present HER and National Monument Record (NMR) grid references for PRN 5144 are currently incorrect. The correct grid reference is SH7379142548. This site is a scheduled ancient monument (Me 194) but the scheduled area as presented in the MapInfo polygon tables supplied to the HER does not cover the actual site. The centre of the circular scheduled area is 20m to the north-east of the site and the scheduled area just misses the edge of the site (figure 2).

3.3. Possible Round-hut (PRN 61247)

About 3.5m to the north-north-east of PRN 5144 (figure 2, SH 73796 42556) is an area of larger flatter stones than appear in the general gravel. George Smith marks a stony surface on his sketch plan in this area (Smith 1998, Fig 13). Close inspection of the eroded shore edge revealed rough piles of flat slabs at each side of this stony area (plates 8 to 10). Occasional stones suggested that these had extended further to the west but had been eroded away. The remains are very eroded and obscured but it is possible that this was the remains of another small round-hut, no more than possibly about 3m in diameter externally. Much of this feature must remain buried under the peat.

This site does fall within the scheduled area Me194 as currently presented and would be included even if the scheduled area is assumed to be centred over PRN 5144.

3.4. Wall (PRN 61248)

Exposed on the lake shore is a length of denuded wall (plates 11 to 13). This runs fairly straight north-west to south-east for about 8m after which there are only occasional scattered stones indicating that is originally ran to a group of natural boulders. The wall is about 2m wide where it is best preserved as it first appears from under the peat.

The largest stones are up to 1m long and are haphazardly arranged, although some are laid flat at the base of the wall, embedded in the underlying peat. Some of the overlying peat seems to have been left around some stones, but it is clear that the lower part of the peat deposit extends under the stones of the wall. The wall appears to sit on a very slight bank, which is where the peat has been protected by the stones while it has been more eroded elsewhere.

Only one stone directly projects from the bank so the relationship with the peat is less clear than for PRN 5144 but the upper peat must have covered the wall. This is proved by the traces of the wall that continue on land up the slope. Here the wall is hard to follow as only of few of the larger stones project from the peat, which largely obscures it. However it is possible to follow the wall and it was surveyed by George Smith in 1998 (Smith 1998), it is also visible on aerial photographs. The wall runs in a sinuous line up the hill for about 55m then turns to approximately follow the contours before descending the slope again (figure 2). It appears to have originally entirely enclosed the area containing the two sheepfolds built on presumed earlier hut platforms (PRNs 61249 and 61250). This whole complex is recorded as PRN 5143.

The exposed section of wall is located at SH7372042542. A detailed stone-by-stone plan (figure 4) was produced of this feature from a 3D photogrammetric model (plate 11 and PRN61248.pdf).

3.5. Sheepfolds (PRNs 61249 and 61250)

The current work did not record in any detail the features on the hillside on the north-western side of the lake, but these sites were briefly inspected and photographed. These two sites were surveyed by George Smith in 1998 (Smith 1998) (figure 2). The north-eastern site (PRN 61249) at SH7372042589 is a small sheepfold with two compartments and splayed walls at the north-eastern end to direct the sheep into the entrance (plate 14). It is partially collapsed but still stands to about 0.5m high. The south-western structure (PRN 61250) at SH7370842572 is more confused and while it appears to have been reused as a sheep fold or shelter it is possible that the remains of a stone round-hut are still traceable beneath the alterations (plate 15).

3.6. Enclosed settlement (PRN 5143)

The sheepfolds (PRNs 61249 and 61250) are constructed on platforms in the hill slope. These are heavily over grown and no attempt during the current work was made to study them in detail but it is likely that these were originally platforms for round-huts. George Smith also recorded another possible hut circle platform within the area surrounded by wall PRN 61248 and it is possible that more exist (figure 2). This seems to be the remains of a small settlement surrounded by the wall, which appears more of a field wall than a defensive structure.

Uphill from the enclosure there are further small stone features that George Smith also surveyed (figure 2). These seem to be fairly regular and squared off and are probably late and related to the sheepfolds rather than to the earlier settlement.

3.7. Water-side wall (PRN 61251)

To the south-west of the exposed section of wall PRN 61248 there is a line of stones that when inspected were located just above the water's edge but which are normally submerged. These start from a small rough "jetty" running 1.2m out into the water from a large boulder and constructed of stacked slabs (plate 16). This feature is similar to occasional others around the lake shore and appears to be a fairly recent structure to provide a platform for fishing from, presumably largely underwater when in use.

Running south-west from this are four stones, up to 0.6m long, set on edge in the gravel. The line of these stones is continued by other less deliberately placed stones to form a rough line running for about 20m (plate 17). It was noticed that there are linear concentration of larger stones at about this level around the lake shore. It seems likely that this is was the natural level of the lake before the construction of the dam and that erosion and water movement have caused stones to be exposed or deposited particularly along this contour. However this particular line of stones seemed more coherent and especially the first four stones more deliberate placed than at other points round the lake. It seems likely that this is the remains of a wall, probably related to wall PRN 61248.

It initially appeared that a similar water-side wall continued across the northern bay, as there is a rough linear collection of stones running across part of the mouth of the bay. However these are more scattered and haphazard than PRN 61251. They also seem to continue a line of boulders running down the small hill to the east of the bay (plate 18). Although these form quite a straight line they appear to be entirely natural and it is assumed that a dyke or other geological feature runs through the bedrock here causing this line of surface eroded rocks.

3.8. Peat in the bay at the north end of Llyn Morwynion

At the northern corner of Llyn Morwynion is a small bay created where two streams, one a very short drain from a bog, enter the lake (figure 2, plate 19). The larger stream has deposited a fan of gravel creating a bank of firmer ground through which the stream cuts. The peat within the stream channel was probed and was up to 1m deep but generally shallower.

The north-western part of the bay appears to be essentially part of the peat bog which extends inland to the north-east. Here the small stream runs over the top of the peat and has deposited gravel over the peat in places obscuring its extent. When the peat was probed in this area it was considerably deeper than the 1.2m probe used and could be of much greater depth. The rough location of the peat is shown on figure 2 but the limits of the peat in the bay have not been surveyed and only a sketch of the peat location is provided. George Smith noted a tree stump in the peat close to the round-hut (PRN 5144) (Smith 1998, fig 13). That is no longer visible but there are other tree roots visible eroding out of the peat on the north-western shore of the bay (plate 20).

Most of the sites described above are on or close to this bay. Some of the peat in the area clearly covers the sites but the lower part of the peat can be seen extending beneath the wall (PRN 61248). Peat deposits bracketing the archaeological activity therefore clearly exist in the area. The most productive location for a pollen core might be on land within the main area of the bog but close to the area of settlement. A full program of coring would be necessary to investigate the depth of the peat over the area and locate the best undisturbed deposits for sampling.

4. DISCUSSION

With the proposed cist discounted the archaeological sites at the north end of Llyn Morwynion would appear to represent an area of settlement with at least one enclosure, although it is likely that more are buried under the peat. The density of activity in the area is enhanced by a hut circle further north (PRN 5142), which was not inspected during the current work and possibly others in the area as George Smith notes another possible hut platform uphill from PRN 5142 (figure 2). The reuse of the enclosed settlement (PRN 5143) to construct sheepfolds has confused the evidence but it appears that considerable archaeology has survived, in many cases protected by overlying peat. The current work has enabled the exposed elements to be recorded in more detail than has been done previously. These elements are vulnerable to further erosion and to disturbance by anglers and other lake users when lake levels are low, so a detailed record will enable the preservation of this information for the future in case of damage to the sites.

The area is of particular interest in that the settlement sites lie along the edge of a valley mire. The evidence of wall PRN 61248 shows that the lower part of the peat in this marsh pre-dates the settlement activity but later peat deposits also clearly over lie most of the sites. This means that there is a record of vegetational change in very close proximity to settlement that spans the use of the settlement.

Pollen investigation has been carried out in this area (Caseldine *et al* 2001) but this concentrated on the roundhut (PRN 5144) and the longest column obtained was only 0.8m long. Peat in the bay is much deeper than this and peat within the valley mire is likely to be very much deeper, with probably very good preservation.

The palynological work that was carried out in 1999 provided valuable evidence for understanding the area (Caseldine *et al* 2001). One core was taken in the peat below normal water level to the north-west of hut PRN 5144. This was found to contain only the later sequence of deposits, demonstrating that not all the lower lying peat within the bay is early in date. A core taken on land immediately to the north-east of the hut circle also contained only later deposits, from the early medieval period, showing that peat depth and date can vary significantly within a few metres, especially on land rather than in the valley mire. A series of soil monoliths taken from the eroded peat face directly over the hut circle succeeded in recovering a pollen record back to the original development of the peat over this site. Radiocarbon dates show the earliest peat to date to about cal BC 2470-2040. Two dates were taken at 75.5 to 77.5 cm below the surface (3820+/-70 BP Beta-136981) and 73.5 to 74.5 cm (3830+/-60 BP Beta-158560). These calibrate using Oxcal version 4.2 (Bronk Ramsey 2009) at 95.4% probability to Beta-136981 cal BC 2470 (90.4%) 2122, 2093 (5%) 2042 and Beta-158560 cal BC 2470 (95%) 2134, 2071 (0.4%) 2064. It should be noted that the two samples, one physically above the other, returned dates that are statistically indistinguishable. This confirms an early date for the initiation of the peat but does not assist in calculating a rate of growth of the peat.

The radiocarbon dates demonstrate that the round-hut went out of use, collapsed and peat started growing over it by sometime within the early Bronze Age, making this the earliest dated roundhouse in North Wales. The pollen in the earliest peat suggests a mixed deciduous woodland with carr woodland probably around the lake. Fluctuations in the arboreal pollen suggest temporary clearances within the woodland. More extensive permanent clearance of the woodland only seems to occur towards the end of the Bronze Age with an open landscape developing in the medieval period (Caseldine *et al* 2001).

The continued clearances of the woodland in the immediate area after PRN 5144 went out of use suggests that other parts of the settlement continued in the area throughout t the Bronze Age and possibly into the Iron Age. The development of peat over the hill slopes seems to be very variable in date and settlement PRN 5143 might have been buried at a much later date than PRN 5144.

However, the lack of an entrance on the downslope side of PRN 5144 raises a slight question about its function. It is unlikely that a hut would have an entrance on the uphill side as water could flow into the interior. Perhaps the stones have been moved since being exposed by the lake and the location of the entrance has been obscured. This would explain the rather unstructured state of the stones and lack of obvious facing stones. However it is also possible that this was not a hut circle but possibly a small ring cairn. Ring cairns tend not to have entrances and although many have facing stones or kerbs this is not necessary. It is possible that the feature was always a low bank of fairly casually placed stones rather than a built and roofed structure. It may then have gradually been covered by peat from soon after its construction. The exposed part of the feature is too eroded to solve this question, as any artefacts and possibly any internal features are likely to have been eroded away or to have been severely disturbed. However the part remaining under the peat is likely to be well preserved and potentially holds the evidence of the precise date and use of the site.

The presence of another possibly similar feature adjacent to it (PRN 61248), also largely preserved under the peat adds to the potential for exploring what activity was being carried out here. However any investigation of these important features should only take place as part of a detailed scheme of investigation to obtain the maximum evidence from these important features and would require scheduled monument consent, even though the digital polygon of the scheduled area is slightly off set.

Palynological investigation on the valley mire could improve the understanding of the vegetational history of the area, especially the earlier history, perhaps establishing whether there was human activity in the area before PRN 5144 was built.

5. ACKNOWLEDGEMENTS

This project is funded by SNPA and GAT would like to thank John G Roberts for his surveying skills and other assistance with the project. They would also like to thank Dŵr Cymru/Welsh Water for permission to access the sites and BAM for Health and Safety assistance. Mr William Jones is thanked for bringing the exposure of the sites to the attention for SNPA and GAT and for providing the impetus to initiate the project.

6. **REFERENCES**

Bronk Ramsey, C., 2009. Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360

Caseldine, AE, Smith, G and Griffiths CJ, 2001. Vegetation history and upland settlement at Llyn Morwynion, Ffestiniog, Merionnydd, *Archaeology in Wales* 41, 21-33;

Crew, P, 1985. Llyn Morwynion, Ffestiniog, Archaeology in Wales 25, 24-25

Gwyn, D. and Davidson, A., 1996. Llyn Morwynion Pipeline Archaeological Assessment (G1394), unpublished GAT Report No. 206

Gwyn, D. and Davidson, A., 1998. Llyn Morwynion Assisted Refill Archaeological Watching Brief, unpublished GAT Report No. 282

Smith, G., 1998. Hut Circle Settlement Survey, unpublished GAT report 357

7. FIGURES AND PLATES

Figures

Figure 1. Location of Llyn Morwynion

- Figure 2. Bay at northern end of Llyn Morwynion and surrounding area (1998 survey (Smith 1998, Fig 14) combined with sites surveyed for current project. The numbers next to sites are PRNs)
- Figure 3. Plan of round-hut PRN 5144 drawn from 3D photogrammetric data
- Figure 4. Plan of exposed part of wall PRN 61248 drawn from 3D photogrammetric data

Plates

- Plate 1. Location of cist-like feature (PRN 61246) on lake shore
- Plate 2. Cist-like feature (PRN 61246) after investigation
- Plate 3. Drawing of cist-like feature (PRN 61246) by WT Jones (September 2015)
- Plate 4. Round-hut (PRN 5144) from south-east
- Plate 5. Round-hut (PRN 5144) from south
- Plate 6. Round-hut (PRN 5144) from north-east
- Plate 7. Vertical plan image of round-hut PRN 5144 taken from 3D photogrammetric model
- Plate 8. Possible wall remains on south side of PRN 61247
- Plate 9. Possible wall remains on north side of PRN 61247
- Plate 10. View of PRN 61247 from north-east showing proximity to PRN 5144
- Plate 11. Vertical plan image of exposed section of wall PRN 61248 taken from 3D photogrammetric model
- Plate 12. Wall PRN 61248 from north-west
- Plate 13. Wall PRN 61248 from west
- Plate 14. Sheepfold PRN 61249 from west
- Plate 15. Sheepfold PRN 61250 from north-west
- Plate 16. Recent "jetty"/fisherman's stance at north-east end of PRN 61251
- Plate 17. Water-side wall PRN 61251 from north-east
- Plate 18. Natural stones running across mouth of bay at northern end of Llyn Morwynion
- Plate 19. Peat deposits in bay at northern end of Llyn Morwynion
- Plate 20. Tree roots in north-west side of bay at northern end of Llyn Morwynion



Figure 1. Location of Llyn Morwynion





Figure 3. Plan of round-hut PRN 5144 drawn from 3D photogrammetric data





Plate 1. Location of cist-like feature (PRN 61246) on lake shore

Plate 2. Cist-like feature (PRN 61246) after investigation







Plate 3. Drawing of cist-like feature (PRN 61246) by WT Jones (September 2015)



Plate 4. Round-hut (PRN 5144) from south-east



Plate 5. Round-hut (PRN 5144) from south



Plate 6. Round-hut (PRN 5144) from north-east



Plate 7. Vertical plan image of round-hut PRN 5144 taken from 3D photogrammetric model



Plate 8. Possible wall remains on south side of PRN 61247



Plate 9. Possible wall remains on north side of PRN 61247



Plate 10. View of PRN 61247 from north-east showing proximity to PRN 5144



Plate 11. Vertical plan image of exposed section of wall PRN 61248 taken from 3D photogrammetric model



Plate 12. Wall PRN 61248 from north-west



Plate 13. Wall PRN 61248 from west



Plate 14. Sheepfold PRN 61249 from west



Plate 15. Sheepfold PRN 61250 from north-west



Plate 16. Recent "jetty"/fisherman's stance at north-east end of PRN 61251



Plate 17. Water-side wall PRN 61251 from north-east



Plate 18. Natural stones running across mouth of bay at northern end of Llyn Morwynion



Plate 19. Peat deposits in bay at northern end of Llyn Morwynion



Plate 20. Tree roots in north-west side of bay at northern end of Llyn Morwynion



Gwynedd Archaeological Trust Ymddiriedolaeth Archaeolegol Gwynedd



Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT Ffon: 01248 352535. Ffacs: 01248 370925. email:gat@heneb.co.uk