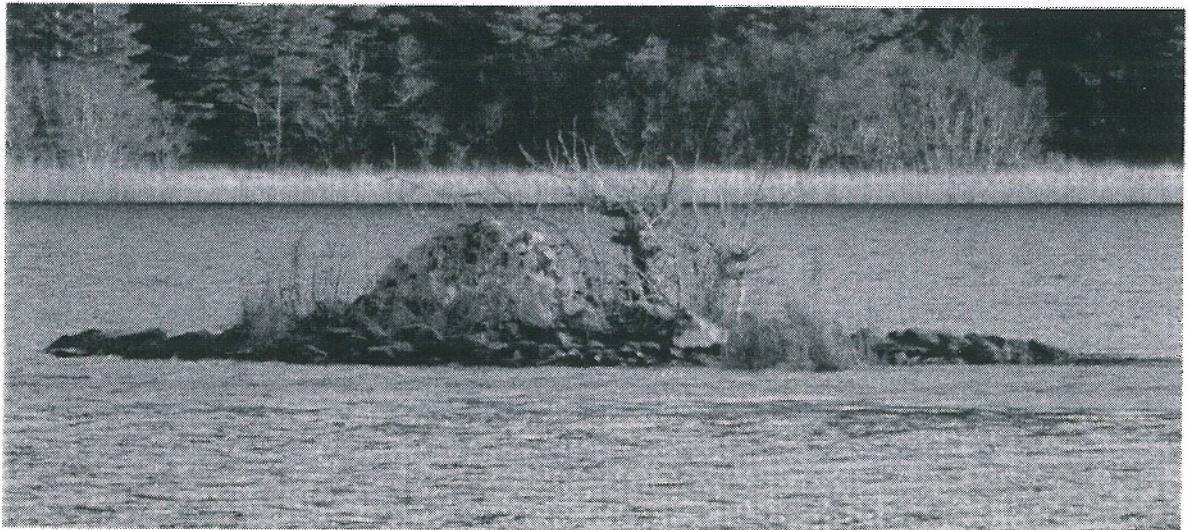


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ARCHAEOLOGICAL & ANCIENT LANDSCAPE SURVEY

**THE ARCHAEOLOGICAL EVALUATION AND
ASSESSMENT OF A CRANNOG SITE IN LOCH
ACHAIDH NA H-INICH, PLOCKTON, SKYE &
LOCHALSH DISTRICT**



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for

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The Archaeological Evaluation and Assessment of a Crannog Site in Loch Achaidh na H-Inich, near Plockton, Skye & Lochalsh District.

NGR NG 8117 3096

1.0 SUMMARY

- 1.1 *An archaeological evaluation including desk-based assessment, survey and evaluation, of a possible crannog site in Loch Achaidh na H-Inich, near Plockton, Skye & Lochalsh District, in advance of proposed adjustments to the water level of the loch. The desk-based assessment demonstrated that the site had tentatively been interpreted as an artificial island, comprising a pile of loose stones approximately 10 metres in diameter and built on oak piles. The results of the above and below water survey revealed the remains of a crannog site, consisting of a substantial mound of boulders and stones, with additional wooden structural elements.*

2.0 INTRODUCTION

- 2.1 In November 2002, Archaeological and Ancient Landscape Survey received a brief from Scott Wilson Scotland Ltd., to undertake a non-invasive archaeological evaluation and assessment of a possible crannog site within Loch Achaidh na H-Inich, near Plockton, Skye & Lochalsh District (see Figs.1 and 2). The brief required that a desk-based assessment, archaeological survey and site evaluation, be completed of the site in advance of proposed adjustments to the water level of the loch, which functions as a water supply for the area surrounding Kyle of Lochalsh.
- 2.2 The aim of the desk-based assessment was to establish the nature and extent of both the archaeological and written archive relating to the crannog site and its setting within the loch.
- 2.3 The archaeological survey and site evaluation of the crannog site was undertaken to establish the nature and extent of any surviving structures both above and below water. In particular, archaeological fieldwork was directed towards making a detailed survey of the site and its environs, taking into consideration the proposed changes to the water level within the loch including the amount of draw-down as envisaged by the Developers.

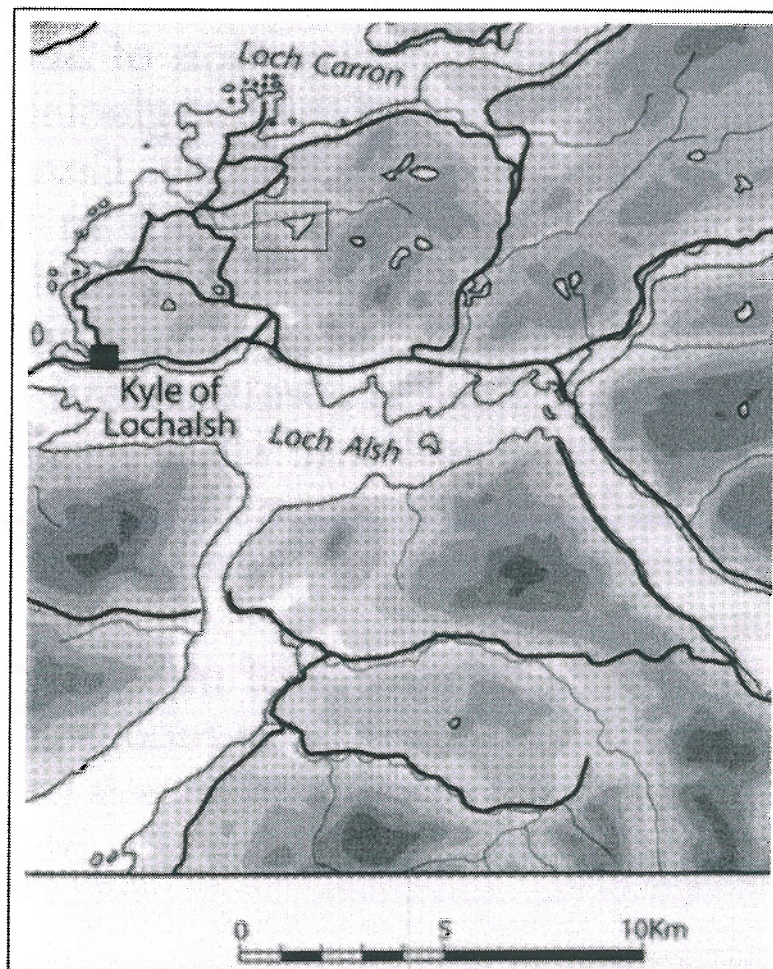
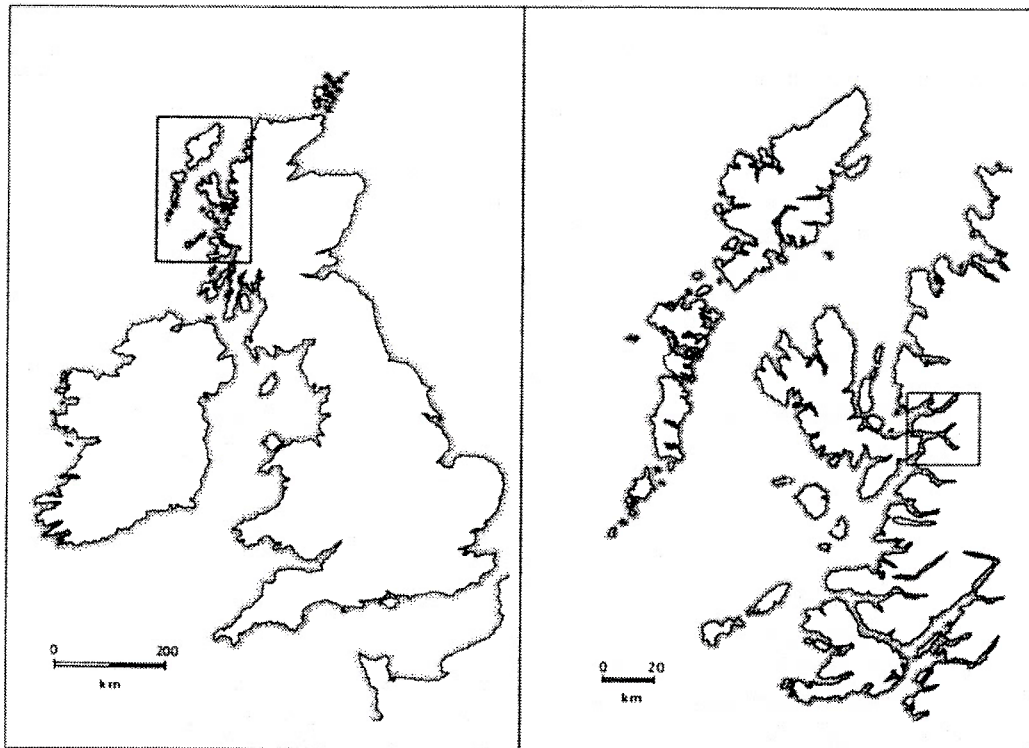


Fig.1 – Location Maps for Loch Achaoidh na H-Inich
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3.0 RESULTS OF THE DESK-BASED ASSESSMENT

- 3.1 A search of the National Monuments Record for Scotland in Edinburgh and the Highland Sites and Monuments Record in Inverness, confirmed the existence of an artificial island within Loch Achaidh na H-Inich; the loch also being referred to as Loch Achnahinneach and Loch Ach-an-darrach (NMRS Number NG83SW 1). The latest visit undertaken to the site by the Royal Commission on the 13th October 1966, states that, *'The island, at NG 8117 3095, is as described by Blundell (see 3.2, below), and consists of a pile of loose stones. A small cairn of these stones has been erected in the centre. There are now no visible suggestions of a crannog, although the island appears to be artificial'* (OS [W D J] 13 October 1966).
- 3.2 Although the Rev. Odo Blundell, an antiquarian specialising in the investigation of artificial islands and crannogs during the early stages of the 20th Century, never visited Loch Achaidh na H-Inich during his travels around the Highlands of Scotland, he did mention the site in his paper to the Society of Antiquaries of Scotland in 1913:
'Loch Achnahinneach in Kintail is the same loch as that mentioned by Mr. Mackenzie as Loch Ach-an-darrach. It has been carefully investigated by Mr. George Forbes, Fernaig, Strome Ferry, and affords one of many instances of incorrect information supplied as to the recent date of an island, later found to be of much earlier date. The following are extracts from Mr. Forbes's letters: "I have been trying to see some of the oldest inhabitants of the estate, as I was told that the island was built in Sir Alexander Matheson's time, but the correct history I only obtained to-day when I visited the loch. The island is in Loch Achnahinneach, about four miles from here, in the parish of Lochalsh, county of Ross. It is quite small, and was disappearing altogether when they raised the level of the loch, and it was then that Sir Alexander did some repairs to it. It has been inhabited at one time, and the house has been built on oak piles; all that meets the eye now is nothing more than a pile of stones where about thirty or forty sea-gulls have their nests every year... The island is round, and not more than 30 feet in diameter, but I expect it had been much larger before the level of the loch was raised" (Blundell, 1913: 277-8).
- 3.3 Sir Alexander Matheson was the owner of the Balmacara Estate, on which the loch and the artificial island were situated, until 1880, after which it passed into the hands of Sir Daniel Hamilton. The estate was bequeathed to the National Trust of Scotland by Hamilton's widow in 1939. The Archives of the Matheson family are now retained by Mrs. Matheson of Duirinish, Lochalsh, and within the archive there is reported to be a document which indicates that the crannog site was inhabited as late as the 15th Century (Townend, *pers comm.*). Elsewhere, it is thought that crannogs were utilised as dwellings from the Late Bronze Age through into the Later Historic period (Morrison, 1985:22-5).
- 3.4 A search of the relevant Ordnance Survey map-based sources and Estate maps, failed to provide any additional information regarding the crannog site.

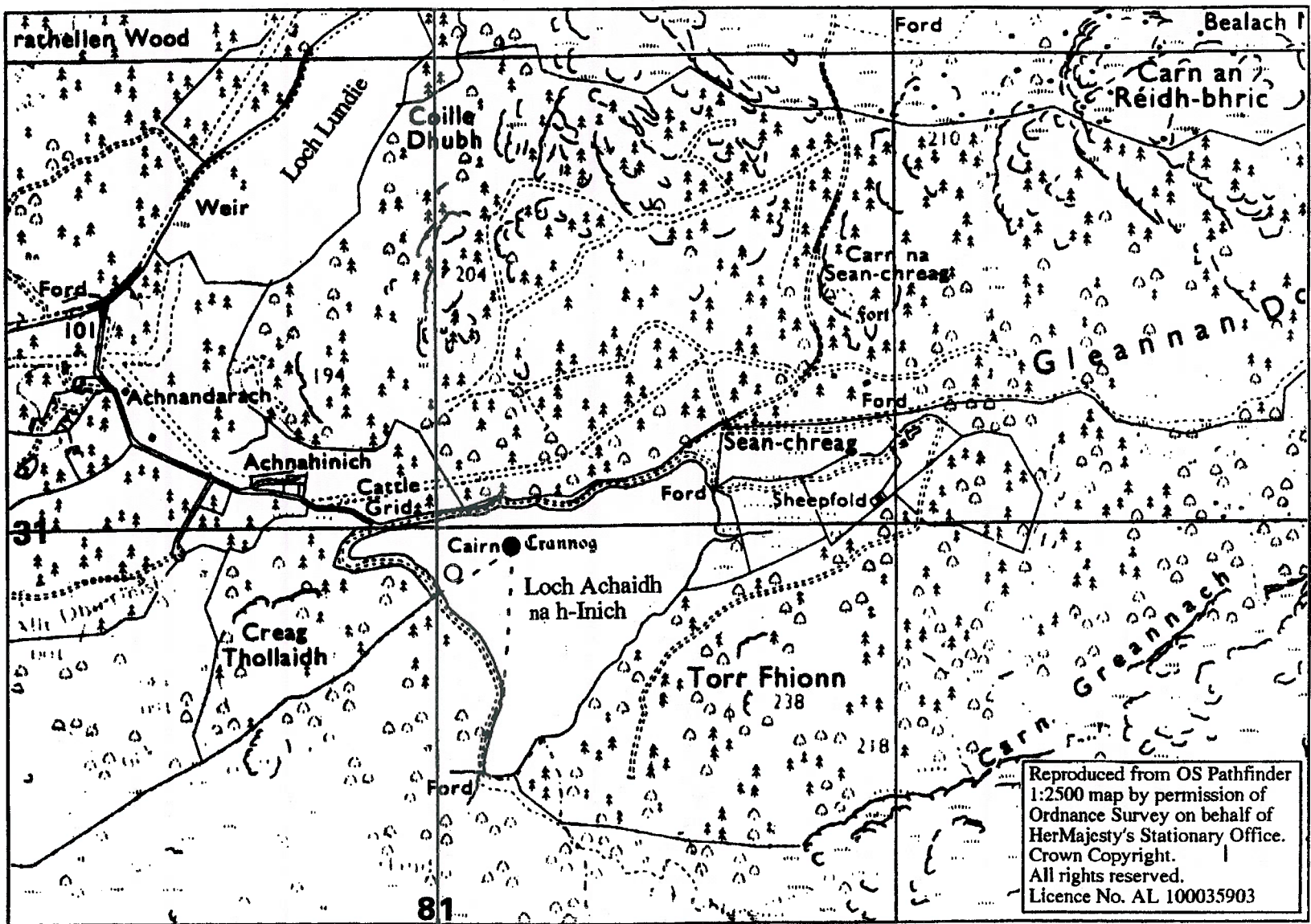


Fig.2 – Location Map for the Crannog Site – Loch Achaidh na H-Inich, Plockton, Skye & Lochalsh District (Note: Red Circle denotes second possible crannog/artificial island site in the loch-see section 5.8)

4.0 SURVEY PROCEDURES

- 4.1 The archaeological survey and evaluation of the site was carried out between the 22nd November and 3rd December 2002, in fine and dry weather. The island was accessed using a small fibreglass rowing boat, with the main survey station positioned on the island (see Fig.3). The measured survey was conducted using a Wild RK 1 Self-Reducing Alidade and Plane Table, in conjunction with a 3 metre long Range Scale. This equipment was used to record surface and submerged features on site, the submerged readings being taken by a dry-suit clad assistant utilising mask and snorkel equipment.



Fig.3 – Survey Station in position on the Crannog

- 4.2 A tendered/roped diver carried out the underwater assessment and survey of the site, the diving generally taking place in water with a maximum depth of 2 to 3 metres. The visibility underwater was generally good, being in the region of 2 to 3 metres, although the fine sediments comprising the lake-bed are prone to disturbance. However, it was noted that the particulates in suspension soon fine down after activities underwater ceased. The water temperature averaged 5.2 degrees Celsius during the underwater survey and evaluation work.
- 4.3 In addition to the visual assessment of the crannog structure and its immediate surroundings, gentle probing using a wooden rod was carried out in order to assess sediment depth on site and to evaluate the existence and survival of buried structural elements. A rapid underwater search was also made of the area between the crannog site and the shore, in order to assess the existence/survival of a stone or wooden causeway.

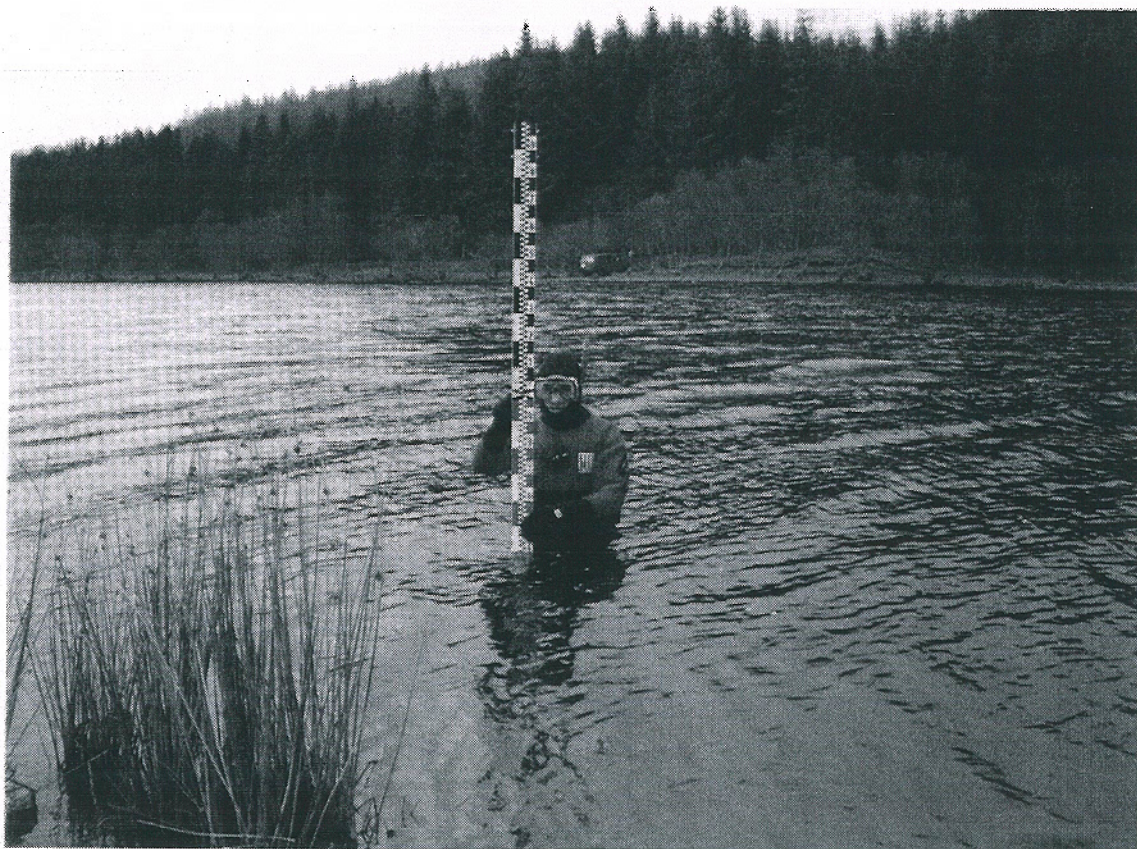


Fig.4 – Surveying the submerged features of the Crannog

5.0 RESULTS OF THE ARCHAEOLOGICAL SURVEY AND SITE EVALUATION

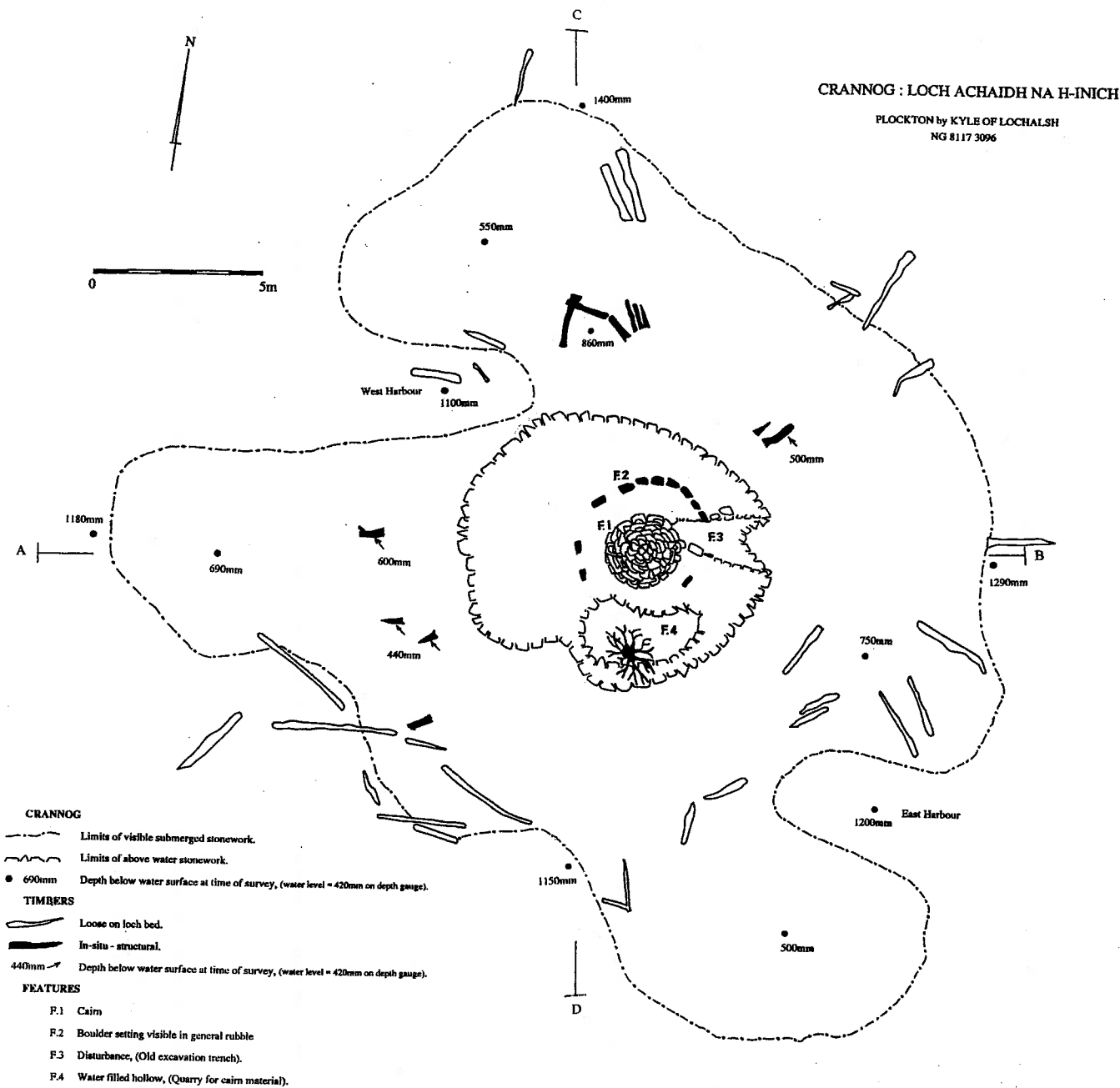
- 5.1 Loch Achaidh na h-Inich, (the loch of the field of gathering – a fair perhaps – or assembly), lies 2.5km to the south west of Plockton and is set amongst natural and planted woodland. The loch appears to be a natural feature, which has been modified in order to supply water to the area around Kyle of Lochalsh. From the notes of Blundell and Forbes (see 3.2 above), it would seem that the water level was initially raised early in the 20th Century, a photograph reproduced in the account showing the island site much as it seems today. A small dam at the loch outflow maintains the current water level.
- 5.2 The site in question is a small artificial island lying 75 metres from the north shore of the loch, the visible remains consisting of a small rocky platform some 5 metres in diameter with a smaller cairn of stones at its centre (see Fig.8). A ring of surrounding weed some 15 metres in diameter indicated the presence of additional sub-surface features, lying just below the artificially raised surface of the loch (see Fig.5).
- 5.3 At the time of the survey, the water gauge situated by the outflow of the loch recorded a level of 420mm (see Fig.9). The above water features of the site

comprise a mound of random sized stones forming a platform 7.5 metres on the N-S axis and 9.0 metres on the W-E axis, projecting 0.75 metres above the surface, with the built cairn (see Fig.6, Feature F.1) projecting a total of 1.2 metres above water level. Immediately to the northeast of the cairn, and partially underlying it, is a shallow trench (see Fig.6, F.3). It is anticipated that the trench and cairn may be related to fieldwork undertaken on the site by Mr. Forbes of Fernaig, Stromeferry, or by Sir Alexander Matheson and it is possible that the trench uncovered wooden structural elements, which enabled Mr. Forbes to suggest that the former dwelling on the island had been built on oak piles (see 3.2, above). A shallow, water-filled hollow (see Fig.6, F.4) situated to the south of the cairn may also be related to these investigations and would also have provided material for the construction of the cairn. A small tree is presently growing out of this depression in the surface of the island.



Fig.5 – Photographic Image showing the location of the Site

- 5.4 Below the level of the cairn, and recessed slightly into the summit of the artificial island, are the remains of a boulder-built structure measuring 4.0 metres in diameter (see Fig.6, F.2). The remaining structural elements comprise an arc of boulders that have been truncated by the more recent disturbances, which have taken place on the island.
- 5.5 The underwater survey of the site confirmed the initial interpretations that the ring of weed surrounding the island might be related to sub-surface features. Survey of the perimeter of the mound revealed an irregular shaped artificially formed island constructed from a wide range of stone sizes, some of these being of a significant size. The maximum dimensions of the mound of stones



measures 27.5 metres on the NW-SE axis by 24.5 metres on the W-E axis, although it was not possible to obtain measurements of the mound where it disappears below the fine sediments of the loch bed. Indents have been formed into the mound of stones comprising the site to the northwest and southeast, which are devoid of stone, and may be the remains of small harbours that could be utilised irrespective of prevailing winds (see Fig.6).

- 5.6 The underwater survey also identified detached and in-situ structural timbers relating to the artificial site, these taking the form of tree trunks and split logs. Located at depths of between 0.44 metres and 0.86 metres, the in-situ structural timbers were found projecting out of the mound of stones. Some of these structural elements have been cut and shaped, and may relate to a primary occupation level of the island site. Towards the base of the site, which we may now term a crannog, a significant number of detached timbers were recorded, some of these in excess of 3.0 metres in length and may be surviving structural timbers. The tree species from which the timbers were manufactured was not identified during this survey.
- 5.7 Probing of the fine sediments surrounding the crannog with a wooden rod, revealed buried structural material including timbers and stones. Therefore, it is anticipated that the crannog is of a greater size than is shown on the enclosed plan (see Fig.6 and 7).
- 5.8 During the closing stages of the survey, a photographic record was made of the crannog site. The water was calm and while travelling by boat out to the crannog, a patch of weed was noticed just off the southwest shore of the loch some 120 metres away. Although our brief did not cover other potential sites in the loch, we thought that it would be good practice to assess the area of weed in case it represented a second site that may be affected by the changes to the water level of the loch. A rapid evaluation of the area of weed revealed a second artificially formed island, lying 28 metres off the southwest shore at NGR NG 8103 3089 (see Fig.2).
- 5.9 Although no structural timbers were identified during the evaluation of this site, a large mound of boulders and stones were found rising from a maximum depth of 1.5 metres, to within 0.2 metres of the lochs surface (Water Gauge reading on day = 420mm). Some of the larger slabs of stone seemed to be laid as paving, or some form of level surface, while possible boulder alignments within the top of the island may also relate to structural details. Distinct areas between some of the large stone slabs on the surface of the artificial mound, were also found to be interspersed with smaller compacted stones. The water surrounding the site quickly drops to an average depth of 1.4 metres, with fine silts covering the loch bed.
- 5.10 In light of these findings other areas of weed in the loch were investigated, although the results of this survey proved negative.

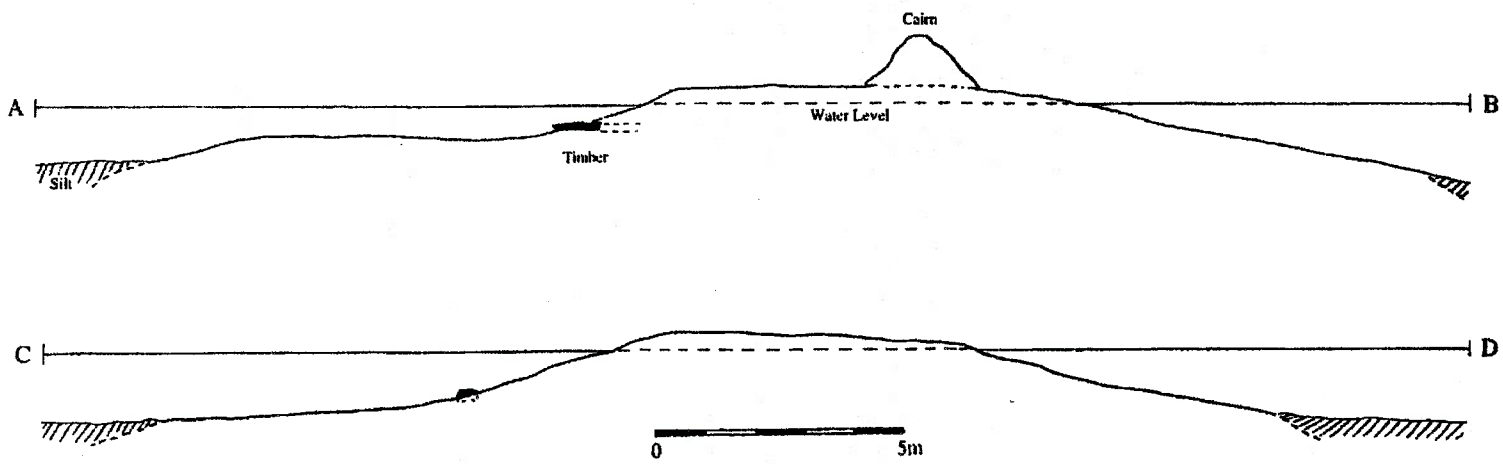


Fig. 7 – Profiles of the Crannog Site – (see Fig 6 for locations)
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6.0 **CONCLUSIONS**

(See illustrations 6 and 7).

6.1 The survey was carried out on a calm day with the water level at 420mm on the loch's depth gauge. However, water levels encountered on subsequent visits to the site have been adjusted, so as to conform to that of the first visit (i.e. 420mm on the lochs water level gauge).

6.2 The survey was non-intrusive and did not therefore ascertain the level at which structural timbers survived within the crannog structure.

6.3 **The Survey**

6.3.1 The survey and recording of the crannog demonstrated that structural timbers survived, in-situ, at only 440mm below the water surface on the day of survey – i.e. only 20mm below zero on the loch's depth gauge. In addition other in-situ timbers were recorded at depths varying from 500mm to 860mm below the water surface. Many other timbers lie detached, both above and below the silt line, in random distribution around the site. The recorded timbers were spongy and very fragile; they will therefore be prone to rapid decay under a drying/wetting regime. The remains of a circular structure, a small cairn, a robber trench and a possible excavation trench were recorded on the summit of the mound.

6.3.2 A search of the visible weed patches within the loch resulted in the discovery of a second artificial island site at NGR NG 8103 3089. A visual assessment only was carried out on this structure.

6.4 **Crannog 1 (see Black Circle on Fig.2)**

6.4.1 Survey and evaluation has demonstrated that the Loch Achaidh na h-Inich crannog is structurally larger and of more importance than was previously thought. The remains are stone built, in a random fashion, with timbers visible at 650 - 810mm below the summit of the crannog mound. The timbers may represent either a primary occupation level or perhaps the timber lacing required to maintain the structural integrity of the stone mound. In addition the crannog has been constructed so as to provide two boat harbours, one to the east side and one to the west side of the structure. Both these harbours lie at a slightly lower level, (circa 900mm below the summit of the mound), than the above mentioned timber platform. Traces of a timber quay appear to survive close to the west harbour. At some unknown time, post dating the construction of the timber platform, the crannog structure was raised by the addition of circa 650mm of rubble stone. The outline of a circular, (circa 4.00 metres diameter), stone built, structure can be made out amongst this additional material. The circular structure was later replaced/overlain by the small cairn visible today. A close search of the area between the crannog and the north shore of the loch produced no evidence for a stone or timber causeway.

6.5 Crannog/Artificial Island 2 (see Red Circle on Fig.2)

- 6.5.1 The discovery of the second possible crannog site came as a surprise as there is no mention of a second structure in the archaeological record, or indeed within the written or oral tradition. It is possible that this structure was a grass-covered mound prior to the raising of the lochs water level in the early 20th century, and that it therefore escaped attention. The site may have appeared, to the casual observer, to be a natural island.

7.0 RECOMMENDATIONS

- 7.1 A small exploratory excavation, (1 metre square), should be carried out on the above water section of the crannog to ascertain the level to which timbers survive within the body of the structure. This excavation should not extend beyond the first encountered timber.
- 7.2 Once timber survival has been ascertained draw down should be restricted so as to leave at least 150mm of water above the highest surviving timber.
- 7.3 If it is deemed necessary to draw down water levels below the highest surviving timber then the upper levels of the crannog should be excavated prior to first draw-down. The excavation should proceed to a level at least 150mm below the maximum planned draw-down level.
- 7.4 Any excavation of the crannog structure should be carried out by trained underwater archaeologists to a standard agreed with the National Trust for Scotland's archaeologists, before the works commence.
- 7.5 If motorised craft are to be used on the loch then a buoyed 50-metre exclusion zone should be placed around the visible artificial island/crannog.
- 7.6 On a purely archaeological note the small tree, which has become firmly established on the south side of the crannog, should be cut back and poisoned to prevent further damage to the underlying structure and stratigraphy.
- 7.7 The discovery of the second possible crannog site poses some interesting problems, as it cannot be assumed that the lack of visible structural timbers means that there are no surviving timbers within the body of the mound. Additionally, the position of the structure below the waters surface provides complications in undertaking any proposed invasive investigations, to clarify this situation. Therefore, if the structure is to be treated with a similar methodology to Crannog 1 then draw-down must be restricted to a level consistent with the bottom of the surviving paving on the summit of the artificial island, or circa 250mm below the recorded water surface at the time of survey. This level of draw-down will ensure the survival of any structural timbers and other possible organic materials, which may survive within the body of the crannog.

- 7.8 The above recommendations do not take into consideration possible summer drought conditions – a time when natural replenishment of the loch is at a minimum and draw-down is potentially at a maximum. If these conditions occur a watching brief should be maintained, on water levels, to ensure that if timber elements of the crannog are exposed immediate action might be taken to ensure their survival within the archaeological record. If drought conditions were to persist and water levels remained low, then excavation of the crannog may become necessary.

8.0 **REFERENCES**

Blundell, F.O. (1913) *Further notes on the artificial islands in the Highland area*. Proceedings of the Society of Antiquaries of Scotland, **47**, 1912-13, 277-8. Edinburgh.

Morrison, I. (1985) *Landscape with Lake Dwellings: The Crannogs of Scotland*. Edinburgh.

9.0 **LOCATION OF RECORDS**

- 9.1 All records and field notes relating to this survey are held in the archive of:-
Archaeological and Ancient Landscape Survey.

c/o Martin Wildgoose
Tigh an Dun
Dunan
Broadford
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End.



Fig.8 – The stone-built cairn on the summit of the island (Scale = 1.0m)



Fig.9 - Photographic Image of the in-situ Depth Gauge for the Loch, showing the reading of 420mm taken on the day of the Site Survey