LOCH MORAR SURVEY 1972 REPORT

In our report for 1971 we concluded that passive surface watch alone was unlikely to yield results during such a comparatively short period, because the element of chance was too great; and that if we were to mount a third expedition in 1972 the emphasis must be on underwater search techniques. Through the generosity of a number of people who supported this view we were able to try out various types of equipment, though not to the extent that we had hoped; but no conclusive results were obtained, while paradoxically this year's Survey produced the most positive sighting yet recorded by a member.

It is disappointing to have to admit defeat but we have decided with regret that this year's results do not justify us in continuing to seek support and this will therefore be the last Survey, at least for the foreseeable future. It does appear that although the Loch Morar phenomena continue to be reported, and in our opinion fully justify investigation, a small group of independent volunteers has too little control over its own fortunes to challenge the odds with any great hope of success.

In saying this we do not in any way decry the immense amount of time, effort, generosity and good will that have gone into the three Loch Morar Surveys. Nor do we consider that they have been wasted. A substantial amount of information and experience has resulted and this is now on permanent record.

The point has been reached, however, at which all approaches open to volunteers have been tested and - good luck excepted - further progress could probably only be made by an officially backed expedition able to employ the newest and most refined equipment operated by highly trained specialists. We therefore feel that unless it can meet these requirements, organised voluntary effort should now be suspended.

Meanwhile we give below the results of the 1972 operational survey together with details of the four sighting reports received since January 1972. Once again we record our thanks to the many who have given help, support, encouragement and supplies, and in particular to the anonymous benefactor who gave £1500 towards the costs of the 1972 Survey.

Although ceasing to conduct active operations, the Loch Morar Survey will endeavour to remain in being as long as this is financially possible, as a voluntary information centre to receive reports and answer the ever growing number of enquiries from the Press and public.

In 1970 the Loch Morar Survey was set up with two objectives: to establish whether or not the Loch held a genuine mystery justifying investigation; and if so, to solve it. We have succeeded in the first, but not in the second. We can only hope that the information we have assembled will enable others to be more fortunate.

¹⁹⁷² Committee: Holly Arnold; David Connell B Sc; Alan Dance (Hon. Treasurer); Tim Dinsdale A R AeS; Michael Foxley; Graham Martin B Sc; Dip Cons; Elizabeth Montgomery Campbell MJI; Peter Matthiessen B Sc; Dick Raynor; Patrick Smith B Sc; David Solomon PhD; Jean Whyte BA.

Members, 1972 Survey (14 July - 12 August): Yvonne Hamlett; Roy Hill B Sc, ARCS, DIC, MIBiol; Jane Samson B Sc; Michael Shaw LRPS; Andrew French BA; John Rosser; Susan Roche BA; Barry Fowler B Sc; Ian Johnson B Sc; John Richards B Sc; Michael Palles-Clark B Sc; Sally Simpson B Ed; Paulette Unwin; Rachel Hamilton B Sc; Robin Hamilton B Sc; Christine Lock Dip Ind AD; Perry Moat; Geraldine Henderson B Sc; Tony Robson; Judy Allen; Hazel Martin SRN.

OPERATIONAL REPORT

The 1972 operational survey took place between 14 July and 12 August. Through the generosity of a number of organisations we planned this year to use two sets of high frequency sonar, hydrophones, and an underwater time lapse camera, supported by surface camera watch extended into the hours of darkness by the use of an image intensifier. To a great extent this was done, though not all the items could be made available when the time came.

The more sensitive sonar, of which we had great hopes, had been offered only if not in commercial use; an unexpected spell of good weather caused it to be fully booked and it could not be loaned to us. The underwater camera we were to use, which could remain on the loch bed for up to 24 hours at a time, had been damaged and could not be rebuilt in time (though we were extremely grateful that a different type of camera was substituted). Teams of experts were to have accompanied both items, and these too were lost to us.

Further problems were encountered on arrival at the loch, where we found that the Brinacory tenant was not prepared to allow us to camp at the site agreed with the landowner. We therefore set up camp at White Beach and altered our plans accordingly. The site was excellent in good weather but during the second half of the Survey there was heavy rain and drainage proved inadequate, causing some difficulty.

Weather continues to be a major problem at Morar and one which cannot be ignored. Prolonged rain and wind make camp life something of an ordeal and drastically reduce operational effective-ness; moreover, sightings have never been reported in such weather and could not be filmed if they occurred. Even underwater equipment becomes less efficient in such conditions and at times cannot be used at all. The Survey was fortunate to have good weather throughout the first half, which produced the two accounts recorded below; but predominantly bad weather was experienced in the second half.

Two 16 mm Bolex cameras with long lenses were used during the Survey, camera Site I being at or near White Beach, and Camera Site II at Swordlands. When manpower and conditions permitted, the Survey was operational from 4 or 5 am up to midnight.

Sonar

Through the kindness of Kelvin Hughes Ltd a Transit Sonar was hired at the nominal charge of $\pounds100$ for four weeks.

This machine operated at 50KHz, a sound frequency to which most aquatic animals are not sensitive. The apparatus included a heavy underwater transducer mounted on steel tubes, and a recorder unit utilizing a heat-sensitive paper roll. The sonar required a 24 volt supply from two 12 volt accumulators and theoretically could be operational for 24 hours before the paper and batteries needed replacing.

Testing. The transducer was mounted on the shore and a number of sonar targets were towed through the sound-beam at various depths. However, despite numerous attempts with different targets and with different tilt-angles of the transducer head, no consistent trace could be detected beyond about 50 metres. This procedure was repeated at four different sites with similar results. The local service agent for Kelvin Hughes was called in and he could find nothing wrong with either the machine or our method of operating.

These trials occupied nearly two weeks of the Survey.

Operation and Results. Despite the troubles with testing it was decided to mount the sonar on a boat and make some runs up and down the loch. This was done; experiment showed that the 275m. gave the best results but whilst it was possible to record shore features over the whole range, bottom features were lost below about 125-150m.

For the remaining fortnight the sonar was mounted on the shore at Camera Site II, ie midway between the main sighting areas. The machine still did not work entirely satisfactorily, but was allowed to run for about 12 hours a day in the hope that if any large aquatic animals were present they would pass close enough for detection.

Nothing was in fact recorded with the exception of a few small traces that might have been fish shoals.

Comment. The underwater probe by side-scan sonar had been a major part of the 1972 expedition research programme. The failure, because of the technical difficulties encountered, was a great disappointment.

In view of the operational problems it is recommended that similar use of sonar or other sophisticated equipment should be carried out with the assistance of an experienced operator.

The Survey considers that sonar still offers the best means of providing evidence for the existence of a large aquatic creature, although it is recognised that photographic evidence would be more conclusive.

Hydrophones

Following reports from Loch Ness in 1970 that Bob Love had recorded inexplicable underwater noises in Urquhart Bay around dusk, it was decided to employ a high sensitivity hydrophone recording apparatus at Morar. This it was hoped would be sensitive not only to sounds emitted for communication or echolocation, but also to the movement of a large body underwater.

The hydrophones were loaned by the Royal Navy, and had a sensitivity of 70 db re 1 volt/dyne/cm². They were used in conjunction with an amplifier with a 50 db gain, and a tape recorder with a 15 db gain. The amplifier was that of a Levell TM3A AC voltmeter, and the tape recorder a Kudelski Nagra III. The frequency response of the hydrophones was 10 Hz to 40 kHz, and of the tape recorder 30 Hz to 20 kHz at 15 in./sec, and 30 Hz to 15 kHz at $7\frac{1}{2}$ in./sec.

On maximum amplification, the set-up was extremely sensitive - stones thrown into the water several hundred yards away could be heard not only breaking the surface but also hitting the bottom. Outboard motors running within 2 miles precluded sensitive monitoring.

Although dozens of hours were put in running the equipment from a boat, no unusual sounds were heard or recorded. All operators were however very impressed with the performance of the equipment, and it did appear to be a promising operational tool.

Image Intensifier

Through the kind offices of Lord Glendevon and the generosity of Standard Telecommunications Laboratories Ltd, we were able to operate a low light level television unit for the second two weeks of the Survey. This would not have been possible without the skilled help of Mike Bedgood who was also on loan from STL.

This system makes use of the residual light that is almost always present at night by using a fast optical arrangement to collect light and focus it on the photocathode of an image intensifier, the output of which is picked up by a normal TV camera and displayed on a monitor.

The unit was set up on a knoll by White Beach for one week, and on White Beach itself for the other. Because of the delicate nature of the equipment, it could only be used in dry weather; but despite this limitation, the unit was operational for 8 nights out of the 14. In conjunction with a small hand-held intensifier, the loch was scanned from dusk onwards. On most nights, heavy overcast limited the useful viewing time to about 3 hours, but on one starlit night, sufficient light was available for a more protracted watch.

The system included a video-tape machine for recording, but nothing unusual was seen, although the intensifier was sensitive enough to pick up the Survey boat clearly at half a mile range in conditions that were essentially pitch-dark as far as the human eye is concerned.

It is thought that such a system, manned continuously in good weather, would be an invaluable part of any future investigation, provided that skilled technical assistance were again available.

Underwater Camera

It was hoped that a 2000 shot elapsed time underwater camera with flash would be available for the Survey. In the event this turned out not to be so, but in its place we were loaned a smaller camera suitable for taking photographs of the loch bed. These could be of interest from the point of view of the biology, geology and hydrology of the loch.

The apparatus incorporated a Minolta 16 mm still camera, with automatic film advance. Filming was commenced by a weight operated trigger when the tripod approached the loch bottom. Pictures were taken at 5 second intervals until the camera was raised. A synchronized flash unit was incorporated. A tripod was constructed of angle iron, with the camera pointed obliquely downwards, such that the distance between the lens and the centre of the field of view was 43 inches.

A total of 17 films were exposed, at depths ranging from 6 feet to 809 feet. Various detail of bottom topography was revealed, but no animals were photographed. Several frames showed dead leaves at depths of up to 400 feet, mainly oak and sycamore. These and the bottom generally were covered with a thin layer of very fine silt, which was often stirred up by the arrival of the camera

tripod to completely obscure all detail. The presence of this deposit indicates a complete lack of currents near the loch bed.

The film used was 160 ASA negative black and white, which was processed on the spot at the White Beach HQ. Half-plate prints of the more interesting frames were prepared, but the grain due to the small negative size and the fast film speed rendered them unsuitable for reproduction here.

Species List

A total of 112 species of flora, including all those listed in the 1971 Report, was collected by Robin and Rachel Hamilton and Jean Whyte. As these are of limited interest in the context of our objectives the list is not being published here but may be obtained from Graham Martin, Dept of Natural Sciences, Norwood Technical College, London SE27.

It is being submitted to The Biological Records Centre.

Plankton Sampling

No routine plankton hauls were made in 1972, in contrast to the previous two years. A special search was made, however, for the Mysid **Mysis relicta**, which was speculatively identified in collections made in 1970. It was not found, however. If it were demonstrated to be present, it would throw light on the marine and freshwater history of the loch.

SIGHTINGS

Three reports have so far been received for the nine months January to September 1972. In addition, witnesses of an incident occurring in August 1970 were traced and this report is also included.

All these reports were obtained through initiative on the part of the Survey, rather than by direct approach from the people concerned.

The reports are consistent with those obtained in previous years. They confirm and corroborate earlier evidence and do not introduce any new factors.

Two reports of water disturbances were also received but although these were of interest, they have not been included because of the difficulty of establishing whether or not they could have been caused by boats that were not visible to the witnesses.

? Thursday August 27 1970 - Dr A. Wilson and family

This report is put together from accounts by Dr A.Wilson MB ChB MRCPsych DPM (42), psychiatrist; his wife Dr F.M.Wilson MB ChB; their son David, at the time of the incident aged 11; and Mrs M.Davidson, mother of Mrs Wilson. The discrepancies in their accounts are considered to be of a normal degree, allowing for the lapse of two years since the sighting occurred.

The family were driving along the Bracora road in the early afternoon, on a fine sunny day, the loch surface calm with no wind noticeable. At a point where the road overlooked the loch from a high point they noticed a wake on the surface and stopped the car to have a closer look. Dr Wilson described it as going north west towards the headland on their left, travelling fairly slowly at "a few knots", and whereas it resembled a boat wake they could see nothing at its head that could account for it. He and his son both commented that its shape at the front was blunt, giving the impression that something was "pushing" the water rather than cutting through it. Distance was approximately half a mile.

Behind the wake, as it came closer, they could see two dark objects. To Dr Wilson these appeared as shadows, cylindrical in shape, with a distinct gap between them. His wife, mother-in-law and son recalled them as solid humps, showing above the surface. Mrs Davidson also thought she saw a head. Their estimates of the total length including both objects varied from about 15 to 20 feet. All the witnesses thought the two objects were part of one whole, as their movement was perfectly synchronised. Mrs Wilson thought that a separate wake came from the second object, parallel with the first wake.

No boats were visible on the loch at the time. The only creatures they could think of that could have approximated to what they saw were seals, but Dr Wilson was familiar with the appearance of seals and was confident that this explanation was not possible.

The witnesses were familiar with the Highlands though not with Loch Morar in particular. The incident lasted two or three minutes by which time the objects had gone out of sight behind a head-

land, and though they drove in that direction, by the time they reached another vantage point there was nothing visible.

(In connection with this incident it is of interest that two years ago the Survey received a report of a head, neck and hump having been seen at Bracora on the same date. The report was not accepted as the witnesses concerned did not reply to follow-up letters.)

July 19 1972 - Mr J McCabe and Mr F Koch

The two men, both in their twenties, were fishing from a small inflatable dinghy which was drifting in Caravan Bay - a small bay to the east of the White Beach promontory. The time was 1 am, it was dark with no wind or rain and the water was "like a sheet of glass". Suddenly their boat was rocked by "bow waves as though from a large boat". This happened three times in all, the last time at about 2.30 am. There was no sound of engines or any sign of a boat on the loch. Mr McCabe added that they got no fish, although on the previous night they had been "pulling them out one after the other".

July 19 1972 - Mrs E Montgomery Campbell (Survey member)

(Personal statement)

Later in the same morning as the above incident (which had not then been reported to us) I was on watch at the camera site on the White Beach promontory. It was a very warm sunny day there had been a hot spell lasting about a week - and the loch was flat calm with a few patches of wind ruffling the surface in the distance.

At 1007 am I logged a very long thin black object just visible on the surface of the water off the rocky point to the east of Caravan Bay. The object was stationary and remained so for so long that I wondered if it was a log of wood or the top of a reef of rocks which I might not have noticed previously - even though I felt sure I would have noticed it. I also noticed a long white streak trailing back from the object. I estimated that the object was 6 to 7 feet long and not more than a few inches high. It was about 700 yards away and I was examining it through 20 x 50 binoculars.

Detailed examination was difficult as I was looking into the sun, though as sunrise was at about 4.30 am the sun was now some way up in the sky. There were no boats on the loch except our own which were over by the islands.

At 1028 I saw, and noted, that the object had vanished. The wind coming from the west had by now reached the Bay and was ruffling the surface; I thought the ripples might be obscuring a "reef" and made a note in the log to check this.

At 1035, by which time the surface was rippled overall, I saw what looked like the same long thin object, further away. I got the binoculars and now saw a clearly visible low lying hump-shaped object moving slowly round the headland. There was a low white wash and the speed appeared to be about 1-2 knots. The object itself was about 5-6 feet across and not more than 18 inches high. Speed and dimensions were difficult to estimate as it was moving diagonally. The position of the sun made it impossible to observe colour, but the object was dark with a definite shine on top.

Unfortunately the whole incident only lasted from 10 to 15 seconds and by the time I had observed and examined the object, and come to the conclusion that no known explanation was possible, it was already clear that it would be out of sight within a very few seconds and filming would be impossible. I therefore concentrated on observation and recorded details in the log immediately.

One Survey boat together with Tim Dinsdale in his boat Hunter were on the spot within 15 minutes and remained there for nearly two hours, but saw nothing to account for the sighting and confirmed that there were no boats in the area.

E. Montgomery Campbell.

Thursday 14 September 1972 - Mr and Mrs C.Godson

Extracts from a statement by Mr Godson made within three weeks of the sighting. Mr Godson has considerable experience in the Royal Navy.

Approximate time: 1100 hrs

Weather conditions: Clear, sunny, no wind, loch surface almost glassy calm.

I was in a car with my wife, parked in the layby at the foot of the hill going up to Bracora, and looking across the loch in the direction of Eilan a'Phidhir, the largest and most easterly of the group of islands in Loch Morar, when I saw what appeared to be the wash of a motor-boat heading west. This seemed rather strange as, apart from a yacht lying moored and apparently unmanned, close inshore at Ceann an t-Saideil, no other craft of any description was in sight. It reminded me of the time when I saw a submarine cruising at periscope depth (under escort) in the Firth of Clyde in similar weather conditions, at about 6 or 7 knots.

The wake ceased, and then a few second later, a long, whitish looking object appeared roughly midway between the shore and the island. It remained in view for about two to three minutes, and then gradually disappeared for a similar length of time before re-surfacing. It appeared to be moving very slowly back in the direction it had originally come from.

On its third and last appearance, I decided that what we were looking at was worth taking a snap of; unfortunately, it only obliged with half the length of back than it did on first sighting, and had moved closer to the island.

As the distance from our position in the layby to the point where it first appeared would be, according to our Ordnance Map, between 600 and 700 yards, and also in view of the fact that we were quite a height above water level, estimation of its size was not easy, but it appeared to be 30 to 40 feet long, and the ratio of its height/width to its length would be about 1; 10. How much more was below the surface can only be guessed at.

I should add that its back appeared, if not actually in humps, at least irregular, since on each occasion that it submerged, it seemed to break into three pieces, which were always the last to disappear. Never at any time did we see anything of its head, though that might well have been the cause of the bow wave which we noticed in the first instance.

(The photograph was taken with an old fold-up type Kodak "Brownie" using a 620 Kodacolor film. It is just possible to make out the object described by Mr Godson but distance and the dark reflection of the island in the water make further examination out of the question.

Mr Godson later suggested that reflected sunlight on a wet surface could have created the impression of a whitish colour.)

Conclusion

During three years' work the Loch Morar Survey has now recorded 37 sightings which have passed the evaluation test. Four of these were reported by Survey members, two of whom were on camera watch at the time but were unable to record their sightings on film because these were of only a few seconds' duration.

In two cases where members of the public had cameras to hand and sufficient time for photography the distance involved was too great for an ordinary snapshot camera to be capable of photographing anything of value.

The above indicates the difficulties involved and the odds faced by anyone hoping to obtain a filmed record of the Loch Morar phenomena.

We can only express the hope that the work of the Loch Morar Survey will have stimulated enough interest in the subject to ensure that a higher proportion of people are alert to the possibility of obtaining film or even a still photograph, and will carry cameras when visiting the loch. One of these may one day be fortunate enough to obtain the evidence that is needed.

Meanwhile the Survey will be glad to continue receiving reports of sightings to add to the record; but it must be said that unless students of the phenomena continue to take the initiative in asking for information, it seems unlikely that reports of sightings will be submitted, since witnesses have in the past shown so little desire to make their experiences known.

PUBLICATIONS

<u>1970 Report.</u> Out of print. <u>1971 Report 25p post free to UK enquirers. <u>1972 Report</u> 10p post free to UK enquirers. (Overseas enquirers will be charged appropriate postage rates.)</u>

The Search for Morag by Elizabeth Montgomery Campbell and David Solomon B Sc PhD, with a foreword by the Rt. Hon. Lord Glendevon, P.C. (Tom Stacey, £1.90). Contains full details of sightings up to and including 1971 Survey. Obtainable direct from the Loch Morar Survey at £2 to include postage and packing (cheques and P.O.s payable to Loch Morar Survey please). Also available in USA from Walker & Company, Fifth Avenue, New York.

LIST OF DONATIONS

The Loch Morar Survey acknowledges with much appreciation the following donations, without which the 1972 Survey could not have taken place (listed in order of receipt):

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	L.
Mr Tony Chicklas	2,15
Anonymous	1500.00
Mr J. Cadbury	50.00
Miss J.R.Butter	3.00
Mr C. Moore	10.00
Mr Lewis Dickinson	3.00
Mr D.Raynor	5.00
Miss A Montgomery Campbell	15.00
Mr R.M.Leonard	4,50
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Since Survey members are dispersed in many parts of the country it is possible that some benefactors may not be included above. If this is so we offer our apologies and sincere appreciation for their help.

November, 1972