

April 1981

Loch Ness & Morar Project

At the beginning of March I had a telephone conversation with Adrian Shine, the field leader of the LN & MP. He gave me a brief account of their 1980 work, and asked if I would be able to publicise their plans for '81. I told him I would be glad to, and he said he would send me full details. As it transpired it was even better, Berry Bell, Chairman of the Project, was on business in the North, and was able to visit us on the evening of March 18th. We spent the time exchanging views, and Berry brought me up to date with a first hand account of the Project's work, he let me have a copy of the 1980 Report. He also gave me details of their planned 1981 operations, and the following statement.

"The Project has been open to subscription for over a year and we have had to recognise reluctantly that it is unlikely that funds significant enough to make much of a contribution to field work will be raised from this source. However subscribers have, as with the Loch Ness Investigation, come from many different countries as well as within the United Kingdom, and their contributions are now such as to meet most of the running costs of exercises mounted.

This possibility was anticipated and as a result this year a significant supporter has come forward. This will enable us to purchase sonar equipment, which, linked with the 'Ness Flotilla', will enable us to put into operation one of our methods.

We have the means, we now need the field support to apply the method." But first a little about the Project.

They were established in 1974 following the findings of the Loch Morar Survey 1970-2 and the Loch Ness Investigation 1962-72, which they succeeded, through the encouragement of David James, and the aims of which they have adopted. Work was originally confined to Loch Morar because of some operational advantages but is now extended to Loch Ness.

Their primary aims are : a) To identify, if present, the unknown animals reported from the Scottish Lochs. b) To contribute to scientific knowledge of the freshwater environment and to develop methods of so doing.

They have taken a responsibility to pursue general scientific research as the lochs have been neglected in this respect, and a basic understanding of the environment is fundamental to any enquiry. The Project has collaborated with the Universities of Edinburgh, Cambridge, and London on specific projects and undertakes to support logistically or to obtain data and samples, for any work in the limnological field.

In past years they have received much support from commercial companies through the loan of a wide range of underwater cameras, TV, sonar and other instrumentation. Of necessity this has been short term, but has given them experience and the opportunity to assess equipment and has resulted in some very successful systems capable of supplying evidence of value.

They have given up the passive, long range, surface watch, coupled with cameras, as a productive means of gathering evidence. After all the LNI spent a great deal of time, and expended a tremendous amount of energy, on such a programme, without any really definite, usable results. The Project have gone underwater, with cameras and TV, in a passive role. But have used sonar in an attempt to hunt for the creatures in a more active manner. In this, they have carried on from the early work in the field done by the LNI, and others.

One of Berry's responsibilities has been to contact suitable people and to endeavour to get sponsorship from them. He could not give me any details, as even at this late stage he is still negotiating with a firm or two. Obtaining a sponsor for a scientific search is difficult, because it is the widespread impression that intensive research has already been conducted, with negative results. This has resulted from sympathetic media over-statement of the efforts so far mounted. This can only be worsened by further ineffectual expeditions which can only contribute to mounting scepticism. The Project itself does not claim to have done any valid 'monster hunting' since 1977.

They have carried out an extensive programme of bottom-coring, mainly in Loch Morar, but some work has been done in Loch Ness. It is important to establish that the lochs were open to the sea after the last short ice age, some 12,000 years ago. After all it is fundamental to any of the 'monster' hypotheses to explain how the species could have invaded the lochs in the first place. Assuming that there is a resident population. At the depths involved in Lochs Morar and Ness, coring is very difficult. Most equipment developed for freshwater is not suitable, and oceanographic devices, which could handle the deep water, require specialised vessels which either cannot be got into the lochs, or

if they could, would be prohibitively costly. Never-the-less the Project has worked with borrowed equipment, and have developed some of their own devices. They have been successful in obtaining a number of core samples, one of which came from a depth of 300 feet at the western end of Loch Morar. This particular one was important in that it had penetrated into the glacial clay. When it was analysed by Dr Birks of Cambridge University it was found to contain cysts of marine algae. This is good evidence that the loch was connected to the sea, possibly as recently as 6,000 years ago. Cores from deeper water were not long enough to penetrate to the glacial clays, and consisted of later lake sediments.

In 1980 two major modifications were made to their corer design. The system was used at Loch Morar and later at Loch Ness, where cores up to 12 feet long were obtained. These are being analysed at Edinburgh University by Mr Richard Grinvalds, whose work is partly supported by the Project.

In 1979 they visited Loch Ness to do some hydrographic work. They are anxious to confirm the depths in excess of 750 feet, reported by the Vickers 'Pieces' submersible during her freshwater trials in 1969. They had a negative result, and continued the work in 1980, unfortunately with similar results. They were using a Kelvin Hughes MS44 echo sounder, calibrated and tested as usual. A series of runs were made from Urquhart Castle to the northern limit of the bay. But as yet they have been unable to find depths in excess of 720 feet.

Last year they also undertook a series of trials to ascertain the amount of light needed for photography under Loch Ness water conditions. This was during their first large scale visit to the loch, from 26th July to 20th August 1980.

The main purpose of the visit was to establish a base camp and depot at the loch. The prime requirement in selecting a base at Loch Ness is one of finding a sheltered beach from which vessels may work. Coupled to that is the need for sheltered flat ground for tents, road access and electricity. These conditions are available at Balacладаich Farm, which lies between the road and loch $1\frac{1}{2}$ miles south of Dores. Mr & Mrs Ayton have had a camp site on the croft for many years, and have made the Project welcome. Barry has done valuable work by contacting the local council and sorting out the situation with them. They have no real objection to the Project using the field for camping and storing equipment, they could even use a 'Porta-Cabin' type of building for limited periods. I feel that keeping the council in the picture from the beginning is most important, the LNI did not and it caused friction as the H. Q. site grew.

Having established a base, the next item is what type of vessel to use. Boats of a suitable size would be very expensive to purchase. If they were chartered, they become a drain on the financial resources. They are also difficult to adapt to the type of work the Project has envisaged. Loch Ness can be dangerous for boats owing to the proximity of steep, rocky shores with few beaches. Conventional vessels with engine failure can very quickly run into serious trouble. If they were to run aground the crew would very probably make it ashore, but the boat would be damaged, probably beyond repair. The Project also require craft on Loch Morar, and transport from one loch to the other has to be considered, as has winter moorings or stowage. All these requirements would seem to indicate an inflatable, but commercially available craft do not meet all the specifications. So the Project has developed its own to meet the requirements. They are based on 18 foot long pontoon units, with a diameter of 2 feet. Each basic unit is constructed of conventional boat materials and is sub-divided into two compartments for safety. The unit can support a load of over 1,000lb., and when deflated can be handled by one man. The units can be linked in any configuration by deckings built on site. The deckings can be of relatively cheap materials, so they can have decks stowed at both lochs. All that needs to be carried from one to the other is the inflatable pontoons. Additional units can be obtained as funds allow, and they can be adapted to most needs. Two prototype units have now seen service at both Loch Ness and Morar and have survived all tests, from being fitted with square sailing rigs, for silent sonar runs, to having 35 hp. motors for fast communications. Deflation tests were also carried out, and suggest a high proportion of reserve buoyancy. So the Project has developed a system from which vessels of various size may be put together at short notice, and comparatively cheaply. They have plans for two 40 foot, and three 18 foot catamarans, plus a reserve of units for special purposes. They will form the basis of "The Ness Flotilla".

The Project is now ready, after a steady and careful period of preparation, to mount a 'hunting' expedition. They need manpower, and have advertised for field-workers. Sending out the following information to anyone who is interested.

This season (1981) the Project shall undertake a major sonar monitoring exercise at Loch Ness, in order to investigate the cause of large sonar contacts which have previously been recorded there. The Project has a base camp at Balachladaich Farm near Dores off the B852 on the south shore of the loch, approximately ten miles from Inverness, which provides tented accommodation.

The sonar work will be conducted from a specially constructed 40 foot inflatable catamaran, which is equipped with a cabin providing working accommodation for a crew of six. The vessel is powered by a combination of engines and sail. Other craft are used for scientific work, underwater photography trails and support. A permanent staff is responsible for administration, training and maintenance, however, the main work of the expedition shall be carried out by volunteer crews of six under a suitably experienced group commander. Three crews shall be maintained at any one time in order to allow the following cycle : one day will be spent as crew for the sonar search vessel, which will include night work, one day on camp duties and one day will be left entirely free during which time members may either stay on camp or explore the surrounding area.

The Project will be at the loch from 31st May until the 30th August. Please state on the application form your preferred dates. Should people wish to apply as a group, every effort will be made to incorporate the party within the crew system.

There follows a list of equipment required, such things as, sleeping bag, wellies, warm clothes, etc. The comes the crunch, the cost, for individuals will be £32.00. for the first week, then £12.00. a week thereafter. There is reduction for self formed groups of six, the first week will cost £25.00. per person, with following weeks at the £12.00.

If you are interested in joining the expedition please write to the Project at : 61 Bramfield Road, Clapham, London SW11 6RA.

When I spoke to Aidrian on the telephone, and he told me that the expedition was to be primarily a sonar exercise, I expressed doubts. I have always felt that sonar will not give us adequate information to identify the creatures, and after all this is what we are interested in. To some extent Aidrian agreed with me, but pointed out that sonar is just part of an overall plan. Berry Bell gave me further details when we talked. They have studied the results of previous sonar hunts, and have noted that the better organised ones have come up with one target contact for about 60 hours search. They have based their plans on this. If they can keep their sonar vessel operational for almost the 24 hour cycle, they could make sonar contact once every three days. The chance of this is increased because they are using very good new equipment. It has a scanning beam with a spread of just 6 degrees, and a range of just under a mile. This should give accurate information about the target, depth, speed, size, distance. It also has a degree of 'automatic lock' on to target. Over the years of surface watch, no real pattern of behaviour emerged. The Project hopes that perhaps a pattern will show in the creatures underwater movements. If this is so, they will be able to pinpoint the positions for siting their underwater cameras, with the maximum chance of success.

This is, I feel, an exciting move in the active 'hunt', and a good chance for members to help. One other little point, if anyone would like to take a family, but feel they would not like to work on the expedition, free camping could be made available for the non-working members.

Academy of Applied Sciences

I have a little news from the Academy. They now have completed six sets of sonar-triggered miniaturized 35mm elapsed time strobe cameras, of the type that dolphins may ultimately carry, if their '81 plans for deploying them as an array of bouyed systems does not prove encouraging. They plan to work at Loch Ness in the autumn, when the boat traffic should have subsided somewhat. Last year they had trouble with the raft moored off Temple Pier. Age had affected it, and it developed a list, so they used the small 'Dolphin' units from bouys and boats. They did have some exciting results. One of the units produced a dozen triggered underwater shots, of sizeable bodies. Unfortunately the quality of these was even poorer than those in 1972. But exciting, and the first break-through in several years, also confirming that the animals are still there.

Professor Edgerton, John Mills and Ian Marrison of Edinburgh University, continued sonar surveying during late July last year. They also continued work on diver-sonar co-ordination techniques, looking for underwater crannogs and for possibly submerged

dredges from the era of making the canal, the 1820's.

Once more we must hope that they are rewarded for all their effort.

NIS at the Lochside

I have word from four members about their planned trips to the loch. Ken Ward, of Lower Dicker, Hailsham, will be at the loch for 5 days from 30th May. I have no further information, as to which area he will be in, or how he is travelling.

Roger Acraman, of Ruislip, Middlesex, hopes to be going to the loch from August 16th to the 30th. He will be accompanied by David Calvert, driving an emerald green Avenger, number XGF 206N. He has done a great amount of research and testing of film and equipment, and says he only uses the best at the loch. He has a Pentax Me Super, with 50mm F1.7 lens, with an autowinder. He has a 2x Tamron converter and a selection of telephoto lenses, these he uses with Skylight IA filters. The films he takes are Ilford's XP-1 and Kodachrome 25, these are low speed but give high quality.

Jeffery Watson, has another busy season planned. He hopes to make eleven trips to 'monster' locations, from Falmouth to Barmouth and on to Loch Ness and Morar.

Murray Barber, of Bournemouth, hopes to be up at the loch sometime during the autumn. I have no further details.

I hope to be at the old Abriachan pier, with the family, from July 26th until 7th August. We still have the Bedford Dormobile (Nellie) CXG 583K.

That is all for this Newsletter, news of a very exciting expedition, and a chance to help. Even if you are unable to go on the expedition but are visiting the loch, please drop in and look the Project members up. Your news and views are always needed, my address is : Huntshildford, St Johns Chapel, Bishop Auckland, Co Durham, DL13 1RQ. Tel Wearhead 359. Subscriptions are still, U. K. £2.00., U. S. A. \$8.00.

Rip.