Note on the Trap.

The Committee is very concerned about the difficulty of establishing and maintaining a Heligoland-type trap on Lundy. It is impossible moreover to ignore the view expressed at a recent meeting of the Bird Observatories Sub-Committee that the amount of cover available on the island renders it improbable that this type of trap can be operated to full advantage. It is possible, therefore, that we may have to abandon such a large stationary trap in favour of a variety of small portable ones which may be operated at any point on the island at which birds may congregate.

2. *Terrestrial and Freshwater Habitats.*

Several preliminary studies of various aspects of the ecology of the land surface and of the freshwaters of the island have been made during the course of the season. These may be summarized :—

(*a*) Mr. and Mrs. H. G. Morgan and Mr. and Mrs. E. D. Wiggins (July 26th to August 5th) report :—

" This year's visit, being our first, was largely exploratory of the island's geography. However, a certain amount of work was carried out, but it was of necessity rather fragmentary in view of the limited time available. It is hoped that others will join in extending the work commenced.

Survey. In order to provide an accurate series of reference points for use in subsequent survey work, the existing Ordnance Survey data marks, as indicated on the 6-in. sheet, were identified as far as possible. It was found that many of the bench marks had become obscured, and where these could be definitely identified, they were renovated with white paint. It was not possible to establish the identity of the indicated triangulation points.

As the network thus provided was scanty, further reference points were made available by a compass traverse of the numbered telegraph poles. The data thus obtained was recorded on a 6-in. sheet. Since the visit, details have been obtained from the Ordnance Survey Office of the incidence of the National Grid on the island.

Aquatic Habitats. As we were interested in certain aspects of freshwater biology, particular attention was paid to the aquatic habitats. As is known, these vary in extent considerably according to the season of the year, and as many as possible of those existing at the time of the visit were investigated. Collections were made of the aquatic Hemiptera and their

distribution amongst the various areas of water recorded. Connected with this, sketch maps of the marginal vegetation of certain of the larger ponds were produced.

Ecological. Floristic lists were compiled of three areas, namely the superficially burned area N.W. of Pondsbury, the siding flora around Kittiwake Gully, and the sward just South of Three-Quarter Wall at its Western end.

A permanent quadrat 10 yards square and subdivided into yard squares was set up in deep-burnt area West of Middle Combe in the North of the island. Only the definitely-established plants were counted and recorded, since it was deemed that the more or less uneven cover of small plants such as *Polytrichum*, *Radiola linoides*, *Sagina procumbens*, etc., would not add much to the general picture of the recolonization of this area. It is intended that this area be re-surveyed at least annually, if not oftener.

Entomological. In addition to the collection of aquatic Hemiptera noted above, specimens of as many as possible of the Aphididæ found on the island were collected and preserved and now await identification. Various Coleoptera were also taken. Careful records were made of all Butterflies seen and many of the moths.

Constructional. In the way of practical constructional work, an attempt was made to restore the level of Pondsbury by repairing the breaches in the western wall with stones and turf."

(*b*) H. J. Boyd (July 12th to 26th). In addition to much work on birds, made a survey of the land Isopoda. These were collected, mostly from under stones, etc., at seventeen different stations along the length of both sides of the island, including Rat island. It was impossible to assess accurately the numerical populations of the various species obtained, and the results must be treated as a preliminary survey only. The species found, together with the number of stations they occupied, are listed below :—

Oniscus asellus	.. .. ..	10 stations.
Porcellio scaber	.. .. ..	8 ,,
P. ratzeburgii	.. .. ..	8 ,,
Armadillidium vulgare	.. ..	8 ,,
Platyarthrus hoffmannseggii	..	2 ,,
Cylisticus convexus	.. ..	1 ,,
Ligia oceanica	.. .. ..	1 ,,

One other species, possibly of *Porcellio*, remains still to be identified, while another, from weed above high-water mark on the shore is probably a littoral rather than a land-living species.

A number of colour varieties were collected and preserved, of several species.

(*c*) Mr., Mrs. and Margaret Harvey (August 20th to September 3rd) spent a proportion of their time in supplementing the observations of the Morgan—Wiggins party. A survey of burned and unburned areas at the North End was made by means of random half-metre squares, so obtaining comparative records of the vegetation of the deeply-burned ground and of areas which escaped devastation by fire. These figures will be available for comparison with future counts.

Collections of insects, myriapods, isopods and snails were taken from beneath loose stones at various points on the surface of the island. These have still to be analysed, as have also samples of the faunas of some of the boggy streams draining down the west side.

Records were kept of some of the more prominent insects. Among butterflies should be recorded the extraordinary abundance of Red Admirals and Painted Ladies throughout the period, and also the fact that, as on the mainland, it was a " Clouded Yellow year ". The only Orthopteran seen was the shorthorn grasshopper, *Chorthippus bicolor*. This was present in small colonies only, among the coarser grasses, and a well-established colony was to be seen on the grass verge of the road just above the Landing Beach, near the Black Shed.

(*d*) Thanks to the good offices of Dr. D. S. Thomas a sticky trap was maintained over the latter part of the season at a point on the cliff edge near the Old light. The catches have been forwarded to Dr. Broadbent at Rothamsted Experimental Station, and we are awaiting his reports on them.

(*e*) Mr. L. H. Hart, of the South Light, has collected butterflies and moths and a few other insects, for the most part at the lantern at night, but also elsewhere both by night and by day. His collections have been sent to Major A. B. Gay at the R.A.M. Museum, Exeter, and he has very kindly identified the species and is preparing a reference collection of mounted specimens for the convenience of entomologists who may visit Lundy. So far the collection has included twelve species of butterfly, seventy-six of moths, four of Diptera, five of Coleoptera, two of Odonata and one each of Neuroptera and Trichoptera. Among the moths in particular are many which have not hitherto, according to the " Ilfracombe Fauna and Flora," been recorded on Lundy, and some which are rare, or have not been seen in North Devon. We have also been able to furnish, through Mr. Mervyn G. Palmer, a number of records of migratory species for the national annual survey conducted by Captain Dannreuther. It is obvious that it must be many years before a complete picture of the insects of Lundy can be formed, but

this is a very promising start for which the Society is indebted to all those who are participating in it.

(*f*) Many individual observations on insects and on the distribution and times of flowering of plants have been recorded in the log. It is not considered necessary to record them here. They are available for inspection in the log, and until more have accumulated it is not possible to present any collated pattern.

3. *Marine Ecology.*

Preliminary surveys have been made of such shores as have proved accessible, (*a*) by L. A. Harvey (April 5th to 14th), (*b*) by Mr., Mrs. and Margaret Harvey (August 20th to September 3rd). The lists of littoral animals and seaweeds are too long to be included here, but have been forwarded to Mr. M. G. Palmer for inclusion in any subsequent edition of the "Ilfracombe Fauna and Flora," and copies are also in the Secretary's files and may be consulted by anyone so desiring. The most interesting features of the shores are :—

(i) The marked contrast in both physical and biological conditions between the indented slate gullies below Rat Island and the South Light, the boulder-strewn flats of granite along the eastern shore from the Miller's Cake to Brazen Ward, and probably as far as Gannets' Combe (although the latter proved too difficult of access to be worked during the short periods of time available), and lastly the bare, scoured rocks of the western coast. Unfortunately these latter also remain to be examined in detail. The accumulation of quantitative data on the distribution and numbers of plants and animals on these various shores will provide occupation for interested workers for several years to come.

(ii) The great abundance of *Enteromorpha intestinalis* on the granite boulders between high-water mark and mid-tide level. It has been suggested that this may be the result of a heavy mortality among the more normally occurring fucoid weeds at this level during the late spring frosts which characterized 1947. If this is so it will be of interest to watch the recovery of these weeds in 1948 and future years.

Future needs.

As a result of our experiences during this season, and also of discussion of our problems with members of the Bird Observatories Sub-Committee and with other workers engaged on similar investigations, it is possible to enumerate certain pressing needs which must be satisfied before we can hope to make full progress. These include :—