

age. They may have had some structure as kames or outwash when first deposited, but if so this structure was destroyed by frost action during the last glaciation, and as in the Isles of Scilly the gravels now appear as a thin and featureless spread.

ECOLOGICAL EXPEDITIONS TO LUNDY BY BARNSTAPLE GRAMMAR SCHOOL

For the past four summers students of the Barnstaple Grammar School have been using the Old Light as a centre for ecological work, supplementing the accommodation with tents, and this year, with the additional occupation of Signal Cottage.

Ecological study is essential in the 'A' level Biology Syllabus, and it has been found worthwhile to give sixth-formers a week of introduction to biological field studies, far from parental and academic distractions. Some of our students came to the island without even the ability to recognise a woodlouse, apart from having a limited knowledge of the most common of birds (so much for the advantages of living in a rural area!).

The advantages of doing this sort of exercise were soon apparent, and although we could have visited one of the mainland Field Centres, these are just as hard to get to as Lundy is from Barnstaple, and certainly do not have the same attractions.

We have visited the island each year in May, and because of our numbers, twenty-four plus staff, it has been necessary to travel by "Campbells" rather than the "Lundy Gannet". The numbers of sixth-form biologists are continually increasing, indicating Lundy's recruiting powers for the biological department. Time, weather and enthusiasm dictate the amount of work achieved on an expedition. The students are divided into parties of five or six for working, and for domestic duties. Each group must be composed of both boys and girls, and be balanced between those with strictly botanical or zoological interests. Groups take it in turn to be responsible for the day's cooking, cleaning, taking weather readings, etc. Less is expected of them in the field if they have been involved in such duties that day.

The first day is spent in making a tour of the island to get a mental picture of the island's features. A packed lunch is taken, as it is on most fine days. A wet first day can present a problem, but somehow we get out, if not on the full tour. Subsequent days are spent on making a detailed survey of a very limited area of the island. The area is mapped in some detail with main vegetation zones and any relevant matter. Various techniques of analysis of abundance are used and they learn trapping methods etc. The conservancy angle is stressed. An attempt is made to construct hypotheses, and as far as possible, devise experiments to test them, which might account for any limitation on colonisation in their area, or in their area compared with a previous year's findings, or with that of another group in a different area. Worksheets are provided to help them and staff (on at least a 1:10 basis) walk around to visit students and help them where necessary.

They are encouraged to make detailed records, keeping a personal log. (An informal, social log is also kept—but not for publication!) A herbarium and animal collection is built up year by year from abundant specimens and photographs and identification pressing and tracking through the various keys available goes on mainly in the evening by artificial light in the Old Light, when records are written up, using statistical methods, belt transect histograms (showing soil depth/pH/ground cover/etc.) metre by metre.

Day by day arrangements are dependent largely on the weather and a daily programming is discussed. Students bring other work across to the island in case the weather does become really bad.

After their rather formal introduction to ecology students are encouraged for the remainder of their stay on the island to make more varied investigations. In the past, some littoral investigations have been carried out, also the study of the movement of deer around the island. Sea watches, the counting bird passage

in either direction along a cliff and bird photography have been attempted, and caterpillars have been collected and subsequently hatched.

Nothing very original is done but at least the work is original to the students and they come away surprised at their own powers of observation and astonished at finding the same species for the first time on the mainland.

We all learnt a tremendous amount from Cliff Waller when he was in residence as Warden, and students (and staff) who were lucky enough to accompany him on his rounds (if we could keep up with his pace!) learnt a tremendous amount from him. The absence of this resident fund of bird knowledge both from this aspect and for the break in continuity of the scientific records that the Field Society was achieving is very much regretted.

In spite of lighting by 'Tilley' and drainage by 'Elsan', the sixth-formers seem to get 'hooked' on Lundy, joining the Lundy Field Society themselves, and revisiting the island at every possible opportunity. So at least we must be achieving something !!

JOHN FOSTER.

LUNDY ARCHAEOLOGICAL INVESTIGATIONS 1967

K. S. GARDNER

Preliminary Summary: (25/9/67. K.S.G.)

I. Between 15 and 20 people were engaged on excavation and surveying from 23rd August to 20th September 1967. The weather was quite favourable on the whole although strong winds caused some delays in transportation and Tuesday, 5th September, when Storm Force 10 winds gusted to Hurricane Force 12, will doubtless be remembered by those dwelling within the granite walls of the Old Lighthouse.

II. Archaeological activity fell into 3 classifications:-

- (i) Field Surveying.
- (ii) Trial Excavations.
- (iii) Main Excavation.

111. (1) Survey.

(a) **South Farm.** The "Celtic Field" system was followed from the Hut Circles on Beacon Hill (c. 500 B.C.) and shown to have covered the entire area covered by South Farm today, and indeed to have extended north of Quarter Wall. Extremities traced to: SS./130 to 139 and SS./438 to 450 (6" map).

(b) **Middle Park.** Field boundaries (ploughed out) have now been plotted N.W. of Hut MPI (SS. 136.460). Associated with this extension are the sites shown on the O.S. 6" map as "Ciarn Circles" (SS/1355.4632 and SS/1354.4622) which we interpret as Hut sites. Further probable Hut sites have been noted on Tibbets Hill at SS/1380.4628 and SS.1385.4635.

(c) **Acland's Moor.** The "Celtic Field" system seems to have once covered the moor but intensive agricultural activity (in antiquity) appears to have obliterated many of the field banks. An alignment of monoliths and a circle of stones are considered to be secular in purpose. (SS/1315.4475).

(d) **North End 'B'.** Detailed plans were prepared of:

- (i) John O'Groats' House (SS/1330.4795)
- (ii) Puffin Slope (SS/1335.4805)
- (iii) N.E. Battery (SS/1360.4805)
- (iv) N.E. Watch (SS/1345.4793)

(e) **Brazen Ward** (SS/1390.4680). Survey of gun platforms, store-rooms and revetments.

2. Trial Excavations

(a) **North End 'A': Hut 6.** Elliptical hut, c. 25 ft. × 30 ft.: Bed recess formed by a chord of orthostats. Pottery of late Bronze Age type (SS/1325.4790).