

REFERENCES

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VYNE SCHOOL BIOLOGY FIELD TRIP — JULY 1979

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A party of 11 pupils from the Vyne School, Basingstoke, led by Andrew Cleave, Head of Biology, and accompanied by Margaret Bristow and Paul Sterry, visited Lundy in July 1979. The purpose of the visit was a general introduction to fieldwork and coastal ecology for pupils intending to study these subjects at a higher level. A week of superb weather and the excellent accommodation afforded by the Barn, greatly helped the party in their work. The main topics studied were the breeding birds, cliff flora and life between the tides. In addition a daily log of birds seen, weather conditions and other observations was kept.

Individual projects included night-time forays to search for shearwaters and an auk count for the whole island and a survey of dragonflies in Pondsburry.

1. Auk Count — Lundy, July 1979

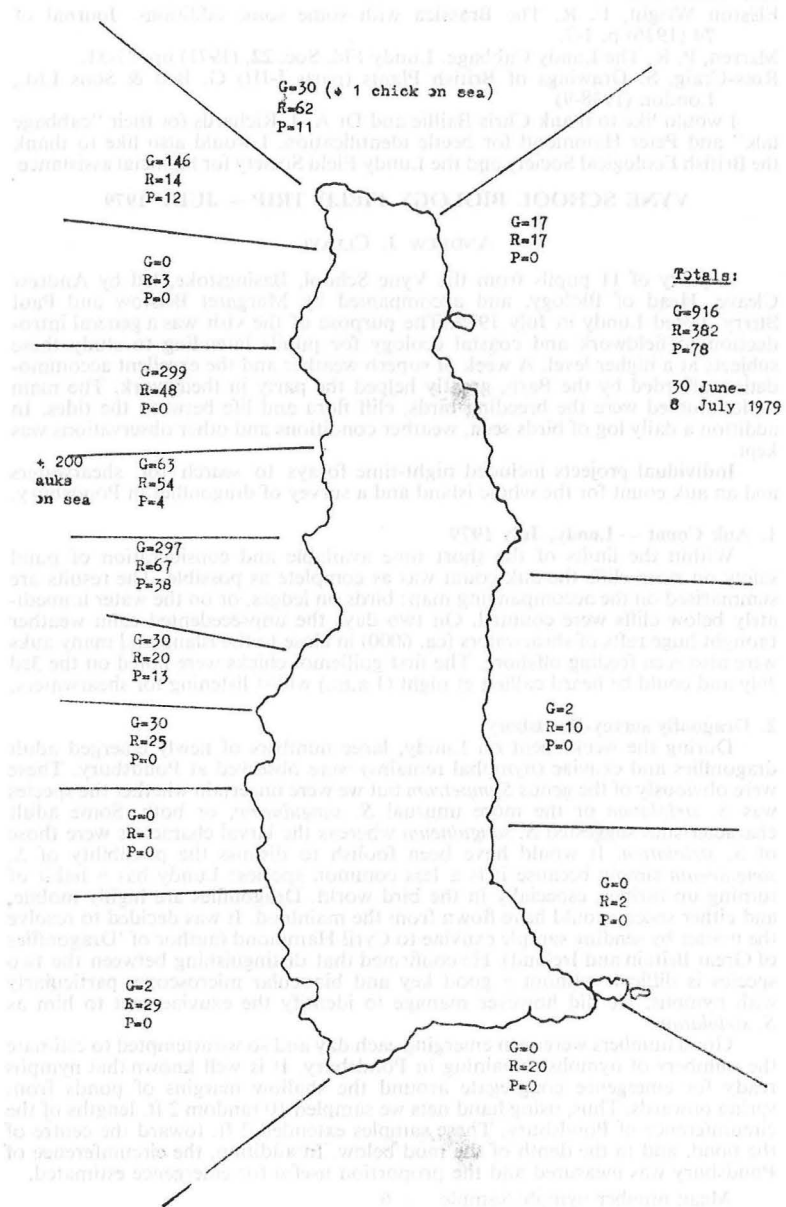
Within the limits of the short time available and consideration of pupil safety on steep cliffs the auk count was as complete as possible. The results are summarised on the accompanying map: birds on ledges, or on the water immediately below cliffs were counted. On two days the unprecedented calm weather brought huge rafts of shearwaters (ca. 6000) in close to the island and many auks were also seen feeding offshore. The first guillemot chicks were noted on the 3rd July and could be heard calling at night (1 a.m.) whilst listening for shearwaters.

2. Dragonfly survey-Pondsburry.

During the week spent on Lundy, large numbers of newly emerged adult dragonflies and exuviae (nymphal remains) were observed at Pondsburry. These were obviously of the genus *Sympetrum* but we were uncertain whether the species was *S. striolatum* or the more unusual *S. sanguineum*, or both. Some adult characteristics suggested *S. sanguineum* whereas the larval characters were those of *S. striolatum*. It would have been foolish to dismiss the possibility of *S. sanguineum* simply because it is a less common species: Lundy has a habit of turning up rarities, especially in the bird world. Dragonflies are highly mobile, and either species could have flown from the mainland. It was decided to resolve the matter by sending sample exuviae to Cyril Hammond (author of 'Dragonflies of Great Britain and Ireland'). He confirmed that distinguishing between the two species is difficult without a good key and binocular microscope, particularly with nymphs. He did however manage to identify the exuviae sent to him as *S. striolatum*.

Good numbers were seen emerging each day and so we attempted to estimate the numbers of nymphs remaining in Pondsburry. It is well known that nymphs ready for emergence congregate around the shallow margins of ponds from spring onwards. Thus, using hand nets we sampled 10 random 2 ft. lengths of the circumference of Pondsburry. These samples extended 2 ft. toward the centre of the pond, and to the depth of the mud below. In addition, the circumference of Pondsburry was measured and the proportion useful for emergence estimated.

Mean number nymphs/sample	= 6
Useful circumference	= 800 ft.
Number nymphs present	= 2,400



This is obviously an underestimate of the total number of *S. striolatum* nymphs present, and although a very rough estimate, it does indicate the great density that Pondsburry can support. Cyril Hammond commented that it is unusual to find quite so many *S. striolatum* emerging at one time. The emergence of this species is normally staggered and adults can be found from June to November in good years. In Pondsburry *S. striolatum* almost exhibits mass-emergence. This could be connected with the observation that the area of Pondsburry decreases during the summer months, as witnessed by the drought year of 1976. Thus, nymphs which have not emerged by late summer risk the partial drying up of their environment.

It was also noted that the nymphs of *S. striolatum* showed a distinct preference for *Juncus* stems for emergence. 2 adults of *Libellula quadrimaculata*, and 5 exuviae and 3 adults of *Anax imperator* were also seen at Pondsburry. An adult *A. imperator* was seen to catch and eat an adult *S. striolatum*.

3. Shearwater forays.

The night expeditions to search for Shearwaters were not as successful as hoped because of the beautiful, clear, moonlit nights. There was however a great deal of activity on one occasion when cloud obscured the moon at about 2 a.m. A large number of birds were calling near the north-west point, although none were seen on land.

The whole week was most enjoyable, and was made all the more so by the help of the island community, to whom we are all very grateful.