seed will be available to colonise suitable areas elsewhere on the island. As the prevailing winds over the island are westerlies, I would guess that the plateau Rhododendron's originate from these plants.

(b) Quarterwall Cottages

The area referred to comprises a shallow, badly-drained area just west of the quarry pond and the cottages, in the position marked on the map. To the western end of this depression are signs of former peat digging. Similar conclusions were reached from the area, and it would be tedius to repeat them all in detail. The Rhododendron clumps, which forms two low $(4\frac{1}{2}-5')$ but very dense thickets, grow on the drier, more open communities, slightly above the wet Sphagnum bog. Again, the bushes evidently thrive neither in the bogmass, nor among the fringing bracken. The clumps are procumbent in habit, as a result of increasing exposure to strong westerlies, and the roots seem often to be prostrate, lying preferentially in the drier peat. The age of the larger clumps was again difficult to estimate, but would appear to be at least 10 years old. This area was also mapped out in as much detail as possible. Both maps show the locations of all the individual plants I could find, although their numbers will no doubt vary from year to year, not least due to their being pulled up by conservationists.

Summary and Eradication

(i) The bulk of the island's Rhododendrons were in existence by the 1930s, as a result of the former vegetation being stripped by a fire.

(ii) Of the factors governing the spread of the Rhododendron, probably the most critical are the availability of open communities, some degree of shelter, and the presence of deep soils. The bushes favour very acid, mineral poor soils, particularly warm, damp peaty substrata.

(iii) Apart from the sideland thickets, several flowering bushes occur at other locations on the island, of which the best placed for seeds to disperse and

colonise other areas is at Pondsbury.

(iv) The area the Rhododendron is capable of colonising on Lundy is limited, but much of the remaining east sideland, and Gannet's Coomb must be regarded as threatened. In the absence of control measures, there is likely to be a cumulative increase in the plant until most or all of the available niches are filled.

Unfortunately there are no really effective ways of eradicating Rhododendrons. The Forestry Commission recommend cutting the bushes and spraying the foliage of the regrowth with ammonium sulphate at 5 lb. per gallon—applied at the rate of 50 gallons per acre. The task is too enormous to contemplate with the East Sideland thickets, and it would appear that these are there to stay, for better or worse. For the remainder, the areas are too small and isolated for spraying to be worthwhile, and in any case, many people would feel that Lundy is not a suitable place to use poisonous sprays. On the other hand, it might be possible to chop down a few bushes and apply the compound with a paint brush, as an experiment. At present, the best method of control is probably to follow the wise practise of the warden, and pull up the seedlings whenever they are found.

Acknowledgments

I should like to thank the field society for financing this brief study of the Rhododendron, and for the friendly help I was given whilst on the island. In particular, my thanks are due to Mr. F. W. Gade and to Mr. Colin Taylor, without whose valuable assistance, much of the above would never have been written.

ADDENDA TO THE LUNDY CABBAGE. P. R. MARREN.

As many members must be aware, I considerably underestimated the distribution of the Lundy Cabbage on the east coast of the island. Although the area described in the 1971 report is probably where the plant is commonest, it also

occurs at intervals along the east coast, northwards to Tibbett's Point. Whilst on the island in August 1972, at a time when most of the Lundy Cabbage was overflower, I saw a few individuals on the lighthouse rock, which I had previously missed, and a number on steep sea cliffs and rocks visible from the lower sideland path. I am also advised that the cabbage is common on the Quarry Bay cliffs, in some years, and occurs in smaller numbers along the cliffs of the Inner Anchorage. It probably occurs along the greater part of the east coast, in areas visible only from a boat, although, so far as I know, Tibbett's Point is its northern limit. In all of these localities the Lundy Cabbage appears to be very much a plant of rock crevices with a south or eastern exposure.

THE LICHEN FLORA OF LUNDY

R. A. Noon* and D. L. HAWKSWORTH**

* Department of Cryptogamic Botany, University of Manchester, Manchester M13 9PL.

** Commonwealth Mycological Institute, Kew, Surrey TW9 3AF.

The first records of lichens we have been able to trace from Lundy are those of Mr. W. A. Gliddon who reported twenty four species in 1948 and 1949 (Gliddon, 1948, 1949). Gliddon's specimens have unfortunately been mislaid and probably destroyed and were identified by the collector in consultation with the late Dr. W. Watson (Gliddon, in litt. 17th August 1972). Dr. R. M. Brown (née Cox) visited Lundy in August 1959 and published a list of twentyseven species of which seventeen had not been found by Gliddon (Cox, 1960). Dr. Brown's specimens are now in her husband's (Dr. D. H. Brown's) herbarium at Bristol University. Mr. I. Tittley made extensive collections of lichens on Lundy in 1969 and 1970 which were subsequently determined by Mr. P. W. James and are now in the herbarium of the British Museum (Natural History), London (BM). Mr. D. J. Browning visited Lundy in 1970 and 1971 and noted forty-six species of lichens but did not retain any voucher specimens. This paper provides an annotated list of all lichens recorded from Lundy by the above mentioned collectors together with data obtained by one of us (R.A.N.) on a visit to the island in July 1972 (specimens in Herb. Noon).

142 species have been reported from Lundy (national grid 10km square 21(SS)/14) of which nine are considered to be erroneous or doubtful and three have not been noted since 1960. With at least 130 extant species Lundy has a somewhat limited lichen flora as compared to that of comparable areas along the north Devon coast. Saxicolous and terricolous lichen species predominate in the list. Granite inland and at sea level, walls, damp granite underhangs and exposed faces support characteristic communities and some saxicolous species are restricted to the smoother small areas of slate which occur in the south-east portion of the island. Only a very few trees are represented (by Millcombe House and at the Old Quarry) and this largely accounts for the relatively few records of corticolous species. Calluna, Erica, and Armeria cushions are sometimes colonised by corticolous lichens. Terricolous lichen communities are best developed in areas where the peaty grassland slopes have been eroded by rabbits.

We are very grateful to Mr. I. Tittley and Mr. D. J. Browning for allowing us to incorporate their records into this paper; to Dr. D. H. Brown for the loan of some of his wife's collections; and to the Lundy Field Society for their financial

support.

The nomenclature adopted here follows that of James (1965, 1966) with later amendments. Where a name used differs from that in James' check list the name used in that list is indicated in brackets. Names used in published reports of lichens from Lundy which are not now accepted are also placed in parentheses. Records which are considered to be erroneous or doubtful have been placed in square brackets. The following abbreviations have been used in the species list:

DJB = D. J. Browning 1970/71 RAN= R. A. Noon 1972 RMC = R. M. Brown 1959 IT = I. Tittley 1969/70

WAG = W. A. Gliddon 1948/49