
Some interesting additions to the Marine Fauna of Lundy

S. HAI SWORTH (Miss)

Field Studies Council, Oil Pollution Research Unit, Pembroke

The littoral and sublittoral flora of Lundy has been described in detail by Irvine *et al* (1972). During a brief visit to the island in September 1972 and more detailed investigations 5-20 July 1975, the sublittoral flora of the east coast was further investigated by direct observation using diving techniques. These species previously unrecorded for the area were collected (*Carpomitra costata*, *Asparagopsis armata* gametophyte and *Stenogramme interrupta*), and some obvious changes in abundance of other species since the original surveys 1969-1971 were noted.

Carpomitra costata (Stackh.) Batt.

This species has been previously recorded only very rarely from the south coasts of England and Ireland. Its presence in the Lundy sublittoral is a considerable northwards extension of the known distribution in Britain. Two healthy specimens were seen growing on boulders at 7m below Chart Datum off Quarter Wall Cottages. At Brazen Ward, *Carpomitra costata* was recorded as "rare" (1 or 2 plants only seen in one dive) on boulders below the laminarian zone at 10m. Off the south side of Gannets Rock the plant was locally common (more than 5% cover in places) on horizontal rock surfaces at 5-6m sublittorally. The Gannets Rock area was investigated by Irvine *et al* (1972) in the 1969-1971 surveys, but *Carpomitra costata* was not recorded. It is possible that the species has spread northwards to Lundy since the original surveys, perhaps as a consequence of a series of mild winters since that of 1962-3. All plants seen were healthy, forming a bushy growth up to 20cm long. No plants with receptacles were observed. Specimens of the Lundy material have been deposited in the British Museum (Nat. Hist.) collection.

Stenogramme interrupta (C.Ag.) Mont.

Occasional plants were found growing in clumps on pebbles at 12m below Chart Datum north of Mouse Island. Although a southern species, it has been recorded from Dale Road, Pembroke-shire (D.E.G. Irvine, pers. comm., and own records), and from Skomer Island, Pembroke-shire (P. Hunnam, pers. comm.). The specimens found on Lundy were large (12cm) and with pronounced midribs.

Asparagopsis armata Harv.

Asparagopsis armata has been previously recorded from Lundy only as the tetrasporic *Falkenbergia rufolancosa* phase, which was locally common off the east coast in July 1975. On 27.9.72. a single healthy plant of the gametophyte phase was found by snorkelling at low water of spring tides off the North Gates, in the Landing Bay. The same area was particularly searched for this species in July 1975, but only the sporophyte phase found. The original surveys were carried out earlier than mid-August, and it may be that the gametophyte phase develops only later on in the summer or early autumn.

Bonnesmaisonia hamifera Hariot

Recorded as rare at the North Gates by Irvine *et al* (1972), the gametophyte of *Bonnesmaisonia hamifera* was abundant in the same area in July 1975. Specimens could be collected in quantity at low water, particularly adjacent to the diving hut slipway, and occupied a narrow zone vertically becoming rare at 3m below Chart Datum. Many plants were washed up as drift material in the Landing Bay.

ACKNOWLEDGEMENTS

I am grateful to Keith Hiscock, who arranged the expedition, to Dr. D.E.G. Irvine and Dr. W.E. Jones who checked my identifications and to Dr. T.A. Norton for supplying prompt information regarding the distribution of species.

REFERENCE

Irvine, D.F.G., Smith, R.M., Tittley, I., Fletcher, R.L., and Farnham, W.F., (1972). A survey of the marine algae of Lundy. *Br.phycol.J.* 7:119-135