ECTOPARASITES

By Gordon B. Thompson

During the past five years the collection of ectoparasites from birds and mammals on Lundy has become an important part of the work of the Warden. This aspect of the work was pioneered by Peter Davis and continued by Barbara Whitaker to both of whom I should like to pay a tribute for their unfailing energy. The amount of material collected and the information derived from it have, in my opinion, fully justified the time spent. It is always so much better to receive ectoparasites collected from a living bird or mammal than it is from a host which has been killed. There is still a considerable amount of knowledge to be gained from the ectoparasites which are so intimately bound up with the life of the birds and it is the observatories which are in a position to fill many of the gaps in our knowledge. I do not propose to give a long list of records in this note but merely to summarise briefly the achievements to date. Some indication of the increase in the amount of material collected may be gained from the number of specimens of ticks taken during the last five years: 1952, thirty-one specimens, 1953, one hundred and twenty-four specimens, 1954, two hundred and five specimens, 1955 five hundred and five specimens, 1956, three hundred and eighty-seven specimens. The information available from all this material is considerable and will be published separately. Meanwhile, it can be said that the extent to which birds act as hosts for the immature stages of the sheep tick, Ixodes reduvius (=ricinus) Linn. is very considerable and this was comparatively unknown until the collection of ticks was started at the observatories. The majority of the ticks collected are nymphs and larvae of I. reduvius. The remainder have included representatives of (I) I. frontalis (Panzer), established as recently as 1952 as a British species and found on Whitethroat and Blackbird. (2) Ceratixodes uriae (White) a seabird tick found on Shag and Puffin and (3) Ornithodoros sp., the adults of which are unknown, found on a nestling Shag. This tick is of particular interest since it was first found on Puffin Is. and is now known from Skokholm and Lundy. The previous known range of this group of ticks was south of latitude 45°. It is hoped that the adults will be found around our coasts. One other tick, I. thompsoni Arthur, described as a new species in 1955, has been found on Lundy and is of considerable interest. All the specimens, which include both sexes, have been found on cats and it is not yet certain if its normal host is a mammal or a bird. The occurrence of Dermacentor reticulatus (Fabr.) on a Meadow Pipit was also of interest since it was only previously recorded from Devon, Somerset and the Aberystwyth district of Wales. It is a common species on the Continent.

In the case of the flat flies or Hippoboscidae both species of *Ornithomyia* have been taken on hosts which lend support to the views on the breeding hosts of the species in the British Isles. *O. avicularia* L. the larger species has been collected from Linnet, Chiffchaff and Meadow Pipit. These two parasites are much commoner on Fair Isle and Skokholm where there are considerable breeding populations of their hosts.

Three specimens of *O. avicularia* and one specimen of *O. fringillina* have been collected from Cuckoos and Blackbirds, with Mallophaga attached to their abdomens. This association of Mallophaga with flies is a phenomenon known as phoresy and

whether it is fortuitous or not is a debatable point.

Two species of flea have now been taken. Dasypsyllus g. gallinulae (Dale), a common flea in the British Isles which has been taken more often on the bodies of birds than any other flea and seems to prefer nests in low positions in which to breed, has been collected from Garden Warbler, Willow Warbler, Grasshopper Warbler, Sedge Warbler, Whitethroat, Wren, Linnet and Meadow Pipit. Ceratophyllus vagabunda insularis Rothschild, are latively rare flea which has been recorded from nests of Jackdaws and rock-dwelling sea birds was taken for the first time in 1956 from Shags' nests.

With regard to the bird lice or Mallophaga it is regrettable that they are for the most part available in very small numbers because they cannot be collected satisfactorily from living birds in the same way as the other groups. I do not intend to convey the idea that it is a waste of time because over a considerable period a reasonable collection will be built up. Meanwhile, however, it is not practicable to spend the time required to determine them on the basis of single specimens. Barbara Whitaker has made some observations on the transfer of Mallophaga from parent Shag to

the offspring and this should be continued.

All the ectoparasites mentioned in this note constitute new records for Lundy and add considerably to our knowledge of distribution and the species. I am convinced there are many new discoveries to be made and in view of the records of the past five years I have every hope for the future.