## REPORT ON THE MANX SHEARWATER

Puffinus Puffinus

With the help of several other members I spent some weeks, from mid-April, making observations on the activities of the Shearwaters. A few birds were first heard calling during the early part of April over Puffin Slope, and on the nights of 18 th, Igth and 26th over Landing Bay; also on the latter date over the coast between Benjamin's Chair and Goat Island (a rough estimate of thirty-fifty birds). From April 27 th, observations were divided between the following areas:

Benjamin's Chair Slope: Between Marisco Castle and SouthWest Point, immediately west of Benjamin's Chair. Twelve burrows under observation, three of which contained a small amount of nest material and on a number of occasions (day and night) one bird, or a pair. During the first half of June three of the birds picked up at night were recoveries of individuals ringed here in April. Also one recovery, AT 3707, ringed as an adult at skokholm Bird Observatory, 23.6.46.

In all, twenty burrows were excavated on this slope, the last, on June 24th, contained one bird which had been ringed here on April 29th. These twenty burrows represent the total of likely breeding burrows, and although they were abandoned with apparently no attempt to lay, the area of this slope was attractive to the birds throughout Day and June-regularly at first, intermittently later.

Total of birds ringed: forty-six.
West Battery Slope: South of the Battery, on the west coast. Attention was drawn to this area by the discovery on May 3rd of the rat-eaten corpse of a Shearwater in a burrow. Five burrows were placed under observation, four containing oddments of nest materials and feathers, the fifth, labelled E, having a considerable amount of material. Rats were evidently at work here; as cvidenced by a quantity of clean feathers found at early morning on several occasions, and a total of ten corpses discovered in burrows. An incubating bird found in burrow E, May gth. On May Ifth, the egg was unfortunately broken by a clod of earth falling from the roof of the burrow during inspection. (The bird, 330548, was picked up dead at Cymyran Bay, Anglesey, June 27 th.) One month later this same burrow was occupied by a second Shearwater, which laid an egg on June 6th. This bird's mate never arrived to share incubation, and after sitting for six days she (presumably) left the egg for a day. Interrupted incubation continued until July 8th, on which day the egg was found broken-in Mr. Boyd's opinion, the work of a rat.

This slope seems very suitable for Shearwaters, and were it not for the rats might be successfully colonized.

Three birds ringed here.

Puffin Slope: At North End, between Constable Rock and North-East Point. In past years eggs have been found here by the light-keepers and shown to Mr. Gade. One chick was found here in 1942 by Mr. W. B. Alexander and party. Observations made in 1948 at night during April, May and June. Varying numbers of birds were seen in the beam from the lighthouse, which crosses the seaward cdge of the slope. On clear nights these fluctuated greatly in number, but on June ith and I3th, when fog considerably roduced visibility there were at a rough estimate thirty-fifty birds over the slope between II p.m. and I a.m.

Birds were sometimes heard in burrows, but of six opened the contents were nil. On June Ifth two birds were found in a burrow, which also contained the sternum of an immature bird, probably a last year's nestling. Rats were active, to judge from numerous broken puffin eggs.

Four Shearwaters ringed here.
These obscrvations throw little light on the problem of Lundy's Shearwaters; but the evidence accumulated suggests that the presence of rats is a serious obstacle, and that while their numbers $r \in$ main unchecked the Shearwaters will have the greatest difficulty in cstablishing colonies. There is the possibility that the majority of the visiting birds are immature, but in this case the situation as we found it in 1948 has prevailed for many years.
(On the other hand, the bird, AT 3707, was ringed as an adult on Skokholm in 1946, and this indicates that some birds at least are mature. Further work seems to be necessary before any firm conclusions may be drawn on this, and on the possibly related problem of either visiting or exchange between the populations of Skokholm and Lundy.--Ens.)

Among the many members who assisted in the work, particular acknowledgement is made to Daphne ffrench Blake, A. D. G. Smart and M. I. Smith.
R. E. Studpy.

## THE FULMAR PETREL ON LUNDY IN 1948

As a result of observations by many members a good deal of information on the status of the Fulmar was obtained this year. Breeding activity was again restricted to two areas, the south end of Jenny's Cove, and Ganncts' Rock, though individuals were seen around the cliffs in several other places on various occasions.

Birds were prcsent at both brecding stations when observations began at the end of March. At Jenny's Cove four were sitting, on sites used last year, on April 5th. On April I7th, 20th, and 22nd six sitting birds were noted. On the 25 th fourteen were seen about this area, and eighteen on the 2gth, this being the largest number recorded. No eggs were seen until May zist, when one was seen

