LUNDY AND TOXIC CHEMICALS

One might think that Lundy, being fairly remote from the mainland, could hope to escape the effects of toxic chemicals, but of course a few miles flight across the sea is nothing to many of the birds which are seen on the Island.

This fact was sadly brought to our attention when the Peregrine Falcon was found to be dead and after hope that, after many years, the birds may have been breeding it came as much more of a blow.

Two birds were seen around the eyrie during April, and later only one, but no inspection of the nest was made for fear of disturbing a sitting bird. After a suitable time I climbed down to the eyrie on 4th June only to find it deserted but for the tiercel lying dead. As the external symptoms indicated poisoning the body was sent off for analysis.

The results showed that there were 78 parts per million of total chlorinated hydrocarbon present in the liver. Experimental evidence makes it reasonable to suppose that this concentration was sufficient to cause the bird's death.

It is possible that the unsuccessful hatching of the Buzzard's eggs is directly due to chemical poisoning. From the records, a pair of Buzzards have laid a clutch each year since 1958 but none of these has hatched and the eggs have been discovered broken in the nest after a month or so. The incubation period of the Buzzard is from 27 to 30 days. The birds could obtain the poison by feeding from dead sheep which had previously been dipped with a dieldrin compound contaminating the wool which is also swallowed by these birds. Ravens on the Island are apparently unaffected but they do not take in wool when they are feeding off carrion.

In July a Mallard Duck and two ducklings were discovered dead in St Helen's Well. The drainage from the sheep dip seeps in this direction so it is likely that they too were poisoned. There is apparently no insect life in this pond.

MICHAEL JONES.

INVASION OF DRAGONFLIES

An impressive movement of the Four-spotted Libellula (Libellula quadrimaculata) was observed on the Island over the Whitsun weekend from 1st to 4th June. This appeared to be part of a widespread migration, for reports were heard of as far away as the Channel Islands.

The following notes were made:

1st June

Wind: ENE f4. *Cloud:* 6/8, *Visibility:* Moderate, hazy. *Temperature:* Warm.

Large numbers of insects were present along the West Side of the Island. First reports were from 1400 G.M.T., but the Dragonflies could have been present earlier. They remained all day, sheltering from the wind behind buildings, walls, etc., and along the sidelands. They were seen at sea level but highest concentrations were towards the top of the Island. The insects appeared to be tired, for they were easy to catch by hand and only took flight when disturbed. No direct movement was observed but there seemed to be a tendency to fly in an East or South-East direction.

2nd June

Wind: E f5-6 moderating after 1600 to f3-4 (increasing again after dark). *Cloud:* Nil or 2/8. *Visibility:* Moderate, hazy. *Temperature:* Warm in shelter.

Insects were still present as before, sheltering in sunny places.

Numbers appeared to be building up during the afternoon until, by 1600, thousands were present along the western sidelands with a tendency to concentrate in gullies. They were much more alert and difficult to catch and many were hawking along the rock faces. (Estimates of numbers: (1) along a rock face of 500 square yards, 300 or more; (2) on a wall of 100 square yards, 50.)

Again no direct movement was noted but still a tendency to move East or South-East. A few more were seen in Eastern parts of the Island.

3rd June

Wind: E f6 decreasing slowly until calm by late afternoon. *Cloud:* Overcast all day, slight showers after 1700. *Visibility:* Moderate, hazy. *Temperature:* Cool.

Insects still present but not in such concentrations, and much more scattered over the Island.

Towards evening, as the weather deteriorated, all the insects seen were resting on walls or vegetation. They became extremely lethargic and immobile, one could easily pick them up without their attempting to escape.

One found dead.

4th June

Resting insects had all moved off and none were found dead. Many fewer were seen than on previous days but they were seen all over the Island, with concentrations around ponds.

Behaviour was normal, i.e. the Dragonflies were hawking after food and mating was observed.

These notes were sent to Dr. N. W. Moore of The Nature Conservancy, along with some specimens. He commented that "Migrations of this species are rarely recorded in Britain".

In a 1951 search this species was not recorded on the Island and I have not noted it before. In Dr Moore's opinion these insects were "Young mature individuals and are therefore likely to breed, particularly as pairs in tandem were observed".

The birds took advantage of this ready food supply and the gulls were seen feeding off the insects. Even a Meadow Pipit was watched swallowing one, after carefully pecking the wings off. (The insects are about two inches long!)

Further Note

On Friday, 15th May, 1964, a large hatch of Libellula quadrimaculata was observed at Pondsbury.

Insect Note

A strong movement of Large Whites was observed on 2nd September, 1963, by D. B. Iles and H. P. Sitters. The Butterflies were moving South down the East Side with obvious and direct flight. The peak seemed to be about 1315, and two counts were made: thirty in five minutes and sixty in ten minutes.

Michael Jones.