

Bats travel far more than we normally suspect. Bat-banding has been carried out in this country by small groups of enthusiasts since the war—notably in Devon by the Devon Speleological Society, and by a few naturalists working on their own. The results have been encouraging on the whole, as shown by the number of “refinds”, which prove that there is a good deal of movement between one cave and another even during mid-winter. These journeys, so far as is known at present, do not appear to exceed about twenty miles and much more work will have to be done before our knowledge is reasonably complete.

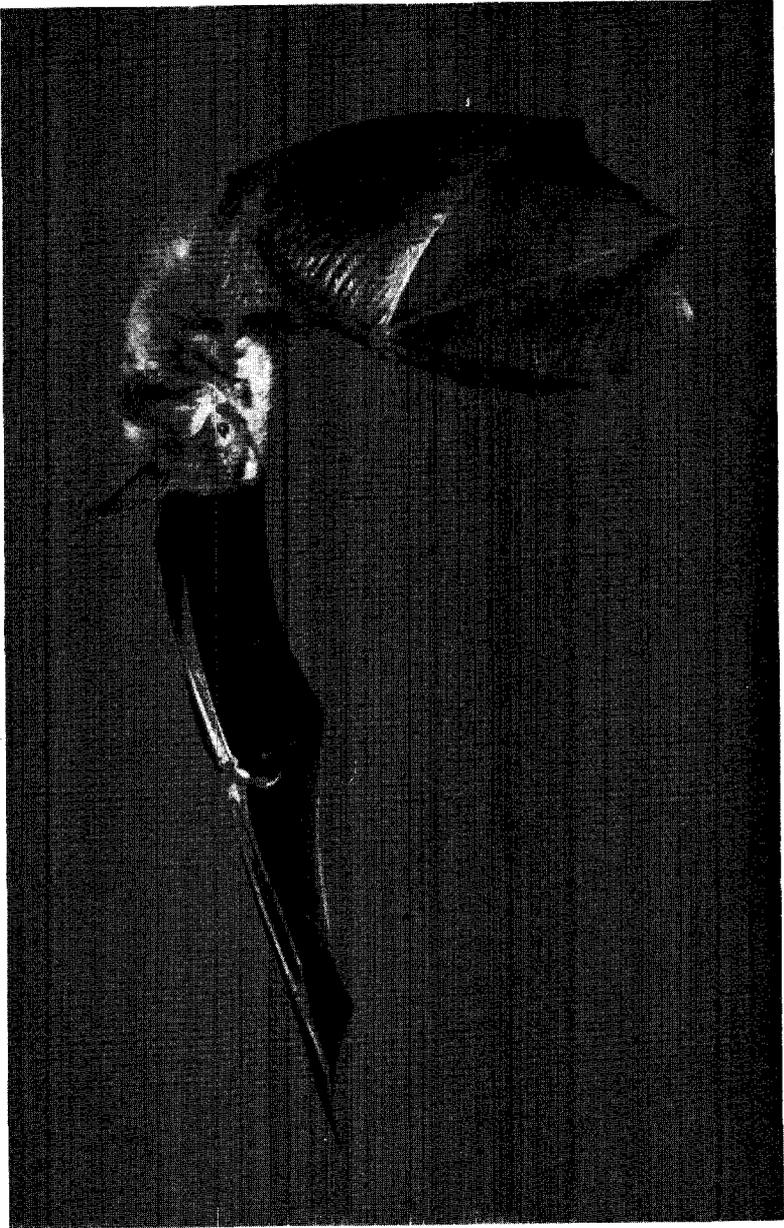
True migration does, however, occur among British bats. A group of long-eared bats (*Plecotus auritus*) was observed on 4th November, 1948, travelling (presumably from Scandinavia) towards the east coast of Britain. They were first seen 45 miles off Spurn Point and alighted on board ship after having travelled across the open sea from a north-easterly direction. After resting on the vessel they continued their journey westwards in broad daylight. Migrations of the noctule (*Nyctalus noctula*) from Germany to Lithuania and Poland have been known to occur, and it is possible, though by no means certain, that this species also migrates between Britain and the Continent. Intensive observation may well produce further data. The particoloured bat (*Vespertilio murinus*) has also been recorded here as a rare vagrant. Its last known occurrence (31st March, 1927) was on the Scottish island of Whalsay, 13½ miles north of Lerwick. The bat was picked up alive after a strong easterly wind; so it had probably been drifted across the North Sea, but the possibility of deliberate migration cannot be overlooked. The fact that the species was taken at Plymouth and also on board ship in Yarmouth Roads about 120 years ago suggests that it may occasionally try to reach our shores of its own accord.

The above notes indicate some of the lines on which intensive research might usefully be done in the future.

SHORT NOTES

BECHSTEIN'S BAT IN SHROPSHIRE

On 3rd September, 1953, a male Bechstein's bat, *Myotis bechsteini* (Kuhl), entered an open window of a training and



Eric Hosking

BECHSTEIN'S BAT.

camping centre belonging to the National Association of Boys' Clubs at Nash Court, near Ludlow, Shropshire. There are few previous occurrences of this species in Britain, and until the Shropshire record specimens have been obtained only in Hampshire, Sussex, Berkshire and on the Isle of Wight.

In general form and colour Bechstein's bat resembles its close ally, Natterer's bat, *Myotis nattereri* (Kuhl). The ears of the former when laid forward extend beyond the animal's muzzle for about half their length, in contrast to those of *M. nattereri* which extend only slightly beyond the nose-tip. Natterer's bat also has a fringe of short stiff hairs along the posterior border of the interfemoral membrane. There is no ciliated border in Bechstein's bat. The flight is slow, the wings being raised high above the body on the upward stroke and brought well below it on the downward one. The full extent of the wing-beats is hardly visible to the naked eye but was very evident when the bat was photographed with high-speed flash equipment.

The Shropshire specimen is being kept alive in captivity. It readily accepts moths, vanessid butterflies, craneflies, spiders and grasshoppers. Unnatural foods which have proved palatable include locusts (kindly supplied by the Zoological Society of London), mealworms and minute scraps of raw liver. The bat also drinks milk and water copiously from the tip of a small paintbrush. Its weight was not recorded at the time of capture, but on 27th September it was 13.45 grammes. Weights of captive specimens are, however, of little value because a plentiful supply of food and lack of normal exercise make them much heavier than they would be in a natural state. Ryberg, in "Studies on Bats and Bat Parasites" (*Svensk Natur*, 1947), gives a weight of 9 to 11 grammes for an unspecified number of Swedish examples found by him during winter, but the weights of all insectivorous bats are subject to so much fluctuation during the year that much more data is required before extremes can be assessed for each species.

I noticed that when the captive Bechstein's bat reached about 13 grammes it became disinclined to fly. Accordingly I reduced its food supply slightly until, on 17th October, the weight dropped to 11.17 grammes, since when the bat has taken much longer flights. At the time of writing (28th October) it shows no sign of hibernating but feeds regularly each evening. From the first day of its captivity it has never been active throughout the whole night. After a meal it sleeps for several hours, waking for a second feed just before dawn.—MICHAEL BLACKMORE.