

THE RESULTS OF BAT BANDING IN THE NETHERLANDS IN 1955.

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The investigations into migration and hibernation of Dutch bats which were started by Dr L. Bels in 1936, have been continued by the authors. To this end we used the same methods of banding and we searched the same artificial limestone caves in the southern part of the Netherlands (prov. Limburg) (Bels, 1952, Van Heerdt & Sluiter, 1953, 1954).

According to Table I the species which were collected show a slight increase in numbers after their serious decline in the preceding year. The percentage of recovery remains practically constant, only *Myotis emarginatus* (Notched-eared Bat) shows a marked improvement. In *Rhinolophus hipposideros* (Lesser Horseshoe Bat) and *M. nattereri* (Natterer's Bat), however, there is a continuous decrease in numbers. No specimens of *Eptesicus serotinus* could be collected this year.

An interesting new datum on the longevity of bats has been provided by the recovery of *Rhinolophus ferrum equinum* (Greater Horseshoe Bat), no 6498, Berlin. This specimen had been banded by Bels on 1 March, 1938 with a German ring which was supplied by Dr Eisentraut from the Berlin Museum of Zoology, because at that time Bels did not yet possess bands stamped with his own address. This bat has worn its ring for 16 years, 10 months and 3 days. As bats are usually born in June, this Rhinolophe reached an age of at least 17½ years (cf. Van Heerdt & Sluiter, 1955).

In Table II a review has been given of the maximum ages in both sexes of the 9 species of bats which are found more or less in abundance, hibernating in the limestone caves of S. Limburg. As regards the three rare species no sufficient dates are as yet available. At the time of banding the bats are at least half a year old. So the lapse of time between "banding" and "recovering" has been increased by half a year according to the table.

The *foreign returns* (for an explanation of this expression cf. Bels, 1952, page 50) were

less numerous than in previous years, only data of 3 specimens being returned to us.

Myotis dasycneme (Rough-legged Bat) ♀ Nr. 20763, banded in "de Holstraat", cave Nr. 47, near Maestricht on 5 January, 1955, was recovered at Ooltgensplaat on the island Goeree Overflakkee (S. of Rotterdam, prov. S. Holland, distance 135 km N.W.) on 10 November, 1955, probably on its return journey to its hibernating quarters. So far this is the most westward recovery ever made of this species in the Netherlands.

A remarkable recovery was made on 7 November, 1955 by Mr. Van der Starre at Reeuwijk (centre of prov. S. Holland) who found a ♀ *M. dasysneme* wearing a ring Nr. 15247 from the Royal Belgian Institute of Natural History. The animal had been banded by Mr. A. de Martynoff in Furfooz, near Dinant (upper Meuse valley) on 14 August, 1955. As a rule the Dutch Rough-legged Bats spend the summer in the lower parts of the Netherlands, so the whereabouts of this straggler leave us somewhat confused. The bat covered a distance of about 218 km, N.N.W.

Nr. 20773, a female *Myotis nattereri* (Natterer's Bat), banded on the same date and in the same cave as the previously mentioned specimen Nr. 20763, was recovered on 15 April, 1955 at Meyel, a village near Helmond (prov. N. Brabant), at a distance of 57 km N.W. from its hibernating site.

A *Myotis mystacinus* (Whiskered Bat) ♂ Nr. 22709, banded in a cave near Valkenburg (Geul-valley, Nr. 76) on 5 January, 1955, was retaken at St. Odilienberg near Roermond at a distance of 33 km N. (date: 24 April, 1955).

On 30 July, 1955 the authors visited the nursing colony of *Myotis dasycneme* at Kollum (Friesland, Northern part of the Netherlands), and banded 116 bats (89 ♀♀ and 27 ♂♂), 57 individuals were adults, 59 juveniles. Estimated total population 200 specimens. The majority of the young were fully grown, only 3 individuals were about three quarters of the body size of the adults. Four bats which had been banded on the same site during the previous year of investigation were recovered. A specimen which was sent to Utrecht for identification and which was released in that town

on 28 May, 1954, has also been retaken during this visit. To our disappointment no bats banded in the hibernating quarters in S. Limburg were found.

The authors paid a visit to the nursery of the Lesser Horseshoe Bats at Ter Worm (cf. Sluiter & van Heerdt, 1954) on 16 August, 1955. A total of 28 individuals were present, 23 of which could be caught with some difficulty as the temperature in the attic was fairly high and the bats were wide awake. The bag consisted of 14 adults and 9 juveniles; the young were all able to fly, although the smaller ones were sometimes carried by their mothers.

We recovered 9 specimens, 7 of which had been banded on this site during the preceding summer and 2 on their hibernating sites, Nr. 22739 in cave Nr. 68/72 near Valkenburg and Nr. 188... (ring damaged) probably in a cave in the Jeker-Valley, section Louwberg (distance 19 km). On the other hand, 3 Lesser Horseshoe Bats, which were banded on 6 July 1954 in this nursery, were recovered during the winter expedition of January 1955: ring Nr. 22474 in the Vallenberg (Nr. 57) near Sibbe (a small village 2½ km S. of Valkenburg); Nr. 22477 in the Sibbergroeve (new entrance Nr. 141a) and Nr. 22480 in the Flesschenberg (Nr. 143) also near Sibbe. In these three cases the distance between nursery and hibernating site is approx. 10 km.

Afterwards it has been reported to us that the animals were not disturbed by our activities and stayed in the attic until the first of November. About 15 November all had disappeared, probably to their winter haunts.

Other nurseries in the S. part of Limburg (*Myotis mystacinus*, *P. pipistrellus* and *Eptesicus serotinus*) appeared to be left by the bats owing to the conclusion of the reproduction season.

Apart from the limestone caves bats were banded and recovered in the buildings of 19th century fortresses near Utrecht. Results will be published elsewhere.

Compared with the numbers of bats collected during the previous year, the results of the expedition of January 1955 show a slight improvement. We do hope that this increase will continue next winter.

References:

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Samenvatting:

De auteurs melden de resultaten van het onderzoek naar de Vleermuizenbevolking in de mergelgrotten van Zuid-Limburg gedurende de winter 1954/1955, benevens enige terugmeldingen van buiten het grottengebied en een bezoek aan zomerverblijven gedurende het jaar 1955.

Vergeleken met de resultaten van het vorige jaar is het aantal gevangen dieren enigszins toegenomen, hoewel het niveau van vroegere jaren lang niet bereikt werd, terwijl dezelfde grotten met een ongeveer even groot aantal medewerkers werden onderzocht.

Bijna alle soorten tonen een — zij het kleine — vooruitgang, alleen *Rhin. hipposideros* (Kl. Hoefijzerneus) en *M. nattereri* (Fanjestaart) namen nog iets af. Het percentage terugmeldingen bleef meestal constant, doch nam bij *M. emarginatus* (gekorven vleermuis) toe van 22 tot 36.5%.

Een interessante vangst was Nr. 6498 *Berlin*, een Grote Hoefijzerneus ♂, geringd op 1 maart 1938 door Bels met een Duitse ring, daar hij in de beginperiode van het onderzoek nog niet over eigen ringen beschikte en ringen gebruikte, welke hem door Eisentraut ter hand waren gesteld. Het dier droeg deze ring, waarvan het nummer nog goed leesbaar was, dus gedurende 16 jaar, 10 maanden en 3 dagen, en bereikte een leeftijd van minstens 17½ jaar, daar wij aannemen, dat vleermuizen, die in het winterkwartier geringd worden, tenminste een leeftijd van een half jaar hebben bereikt.

Op deze plaats willen wij allen danken, die ons behulpzaam waren bij het ringonderzoek, in de eerste plaats Ir D. C. van Schaik, die ons evenals de vorige jaren, steeds met raad en daad terzijde stond.

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