

THE RESULTS OF BAT BANDING IN THE NETHERLANDS IN 1957.

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The investigations into bat migration and hibernation in the Netherlands, which were started in 1936 by L. Bels (1952) have been continued since 1952 by the authors. The same technique was used in the artificial limestone caves of S. Limburg, which was described by Bels (1952) and Sluiter, Van Heerdt and Bezem (1956).

Since 1956 the banding practice has been changed to the extent that only *Myotis dasycneme*, *M. daubentonii*, *M. mystacinus* and *M. nattereri* were ringed.

The number of bats caught in the caves shows a still further decrease, as compared with previous years (Van Heerdt & Sluiter, 1953, 1954, 1956, 1957) (Table I). The percentage of recovery, available only for the 4 species mentioned, is about the same compared with 1956.

Longevity data are recorded in Table II. New maximum ages have been registered in *Myotis dasycneme* ♀ (15½), *M. daubentonii* ♂ (12½), *M. emarginatus* ♂ (14½), *M. mystacinus* ♂ (13½), *M. mystacinus* ♀ (12½), *M. nattereri* ♀ (13½), *Rhinolophus hipposideros* ♀ (14½).

A number of interesting "foreign returns" (for an explanation of this expression cf. Bels 1952), has been obtained (Table III):

M. emarginatus nr. 19117, banded in a cave in the St. Pietersberg was recovered in Westmalle (B) at a distance of 89 km. N.W. and holds the record for this species. Another Notch-eared Bat (nr. 16914) flew 43 km. in N.E. direction from the Geulvalley to Arsbeck near Erkelenz in Germany.

M. dasycneme nr. 21206, banded in the Cluysberg cave near Bemelen, was found dead on the 14th April at Vught (N.B.) apparently on its way to its summer quarters.

A second *M. dasycneme* nr. 21287, banded in the Geulvalley was recovered at Oostzaan (prov. N. Holland), at a distance of 180 km. N.N.W. This proved to be an interesting case, as it led us to the discovery of a nursery in a hollow wall of a house. According to the

inhabitants of the house, this nursery contained about 80 bats. When, however, a cage had been applied to the entry (a ventilation hole) the greater part failed to come out and only 21 exs., mostly juveniles, could be banded.

On 29th July 1957 the authors visited the nursing colony of *M. dasycneme* at Kollum (Friesland) which, this time, had not been disturbed previously. We captured 40 juveniles (21 ♂♂ and 19 ♀♀), 7 first year adult ♀♀ (small nipples) and 38 lactating adult ♀♀. Total 85 specimens. About 25 bats were unreachable. We recaptured 12 exs.: 9 for the first time, 1 for the second and 1 for the third time. One band had been severely damaged by gnawing and proved to be unreadable.

The Kollum colony produced two interesting "foreign returns": *M. dasycneme* ♀ nr. 19728, banded as a juvenile on 30-7-1955 was recovered by Jean Doucet, at Denée (prov. Namur, Belgium) at a distance of 330 km in S.S. W. direction; nr. 19754, also a ♀, was found by Herr J. Westrup at Fiestel (Kreis Lübbecke, Westfalen, Germany) at a distance of 195 km S.E. It still is a remarkable fact, that thus far never a Kollum Roughlegged Bat has been recaptured in the limestone caves in S. Limburg. Neither did we retake a bat of this species, banded in those caves, in the nursery at Kollum.

The authors also visited the nursing colony of the Lesser Horseshoe Bats (*Rhinolophus hipposideros*) at Ter Worm Castle near Heerlen (S. Limburg) (cf. Sluiter & Van Heerdt 1954) on 25 June and on 25 July 1957. We came upon 12 and 8 individuals respectively, 3 of which were probably carrying a juvenile at the last visit. It is hard to state, that this colony gets smaller every year. We did not try to catch the bats, as we did not want to disturb the colony. We also discovered a small summer colony of *Rhin. hipposideros* in the attic of Caestert Castle, which is situated just across the Dutch-Belgium frontier near Ternayen on the Meuse: 21 individuals were present, of which only 3 could be captured, as the animals were very active. They proved to be ♂♂.

The nursing colony of *Myotis mystacinus* in the church of Scheulder (cf. Sluiter & Van Heerdt, 1954), a small village near the

Margraten war cemetery (S. Limburg) has also been visited on 25 June and 25 July. The first time we found 20—30 individuals in a narrow fissure between the boards of the ceiling and the tower wall. In order not to disturb the colony we did not try to catch the bats, but as far as we could see about half the number were half-grown young. During the second visit the bats had disappeared, probably owing to the conclusion of the breeding season.

Apart from the limestone caves, bat banding and recapture in the 19th century fortresses near Utrecht was continued.

Compared with the number of bats collected during the previous years expedition, the results of 1957 show a still further decrease. The ever dwindling numbers of bats in the S. Limburg limestone caves is a constant source of anxiety to us (c.f. Sluiter & Van Heerdt, 1957, 46, 12, p. 134).

We are devising measures to meet these setbacks by protection of the caves and by a more careful inspection of the bats, in order to prevent disturbance during the hibernation period.

The regular inspections into the summer colonies of the Noctule, (*Nyctalus noctula*) in the woods near Utrecht which were started last year, were continued. We banded a total of 88 bats (9 ♂♂, 79 ♀♀). On June 27th the same nursery in a hollow beech near Bilthoven as mentioned in a previous paper (cf. Van Heerdt & Sluiter, 1957) yielded 24 juveniles (6 ♂♂, 18 ♀♀) and 9 adult ♀♀, 2 of which had been ringed last year. *N. noctula* nr 5836 which had been banded in the same tree as a juvenile in 1956 was recovered dead on 12-VI-1957 at a distance of 20 m.

Samenvatting.

De auteurs melden de resultaten van het vleermuis-onderzoek in Nederland gedurende het jaar 1957.

Het aantal gevangen dieren is, vergeleken bij het vorige jaar, wederom enigszins teruggegaan, zie Tabel I, waarbij vooral de aantallen van de Gekorven Vleermuis (*Myotis emarginatus*) en de Grootoor (*Plecotus auritus*) bijna gehalveerd werden, terwijl het aantal Kleine Hoefijzerneuzen (*Rhinolophus hipposideros*) tot 2/3 terugliep. De Watervleermuis (*M. daubentonii*), de Baardvleermuis (*M. mystacinus*) en

de Franjestaart (*M. nattereri*) vertonen een lichte achteruitgang. De Meervleermuis (*M. dasycneme*) en de Vale Vleermuis (*M. myotis*) nam resp. iets toe en bleef constant (zie Tabel I). Als geheel genomen is het beeld, dat de overwinterende Vleermuizenbevolking in Zuid-Limburg geeft dus ongunstig. Alleen de soorten *M. dasycneme*, *M. daubentonii*, *M. mystacinus* en *M. nattereri* werden in 1957 nog geringd.

Nieuwe maximum leeftijden werden gevonden bij: *M. dasycneme* ♀ (15½), *M. daubentonii* ♂ (12½), *M. emarginatus* ♂ 14½, *M. mystacinus* ♂ (13½), dito ♀ (12½), *M. nattereri* ♀ (13½) en *Rhin. hipposideros* ♀ (14½), zie tabel II.

Wij ontvingen enige interessante terugmeldingen van buiten het grottegebied. Een Gekorven Vleermuis, geringd in een grot in de St.-Pietersberg werd teruggevonden in Westmalle (Prov. Antwerpen, België) op een afstand van 89 km N.W. en is hiermede de afstand-recordhouder voor deze soort. Een soortgenoot werd dood gevonden in een koestal te Arsbeck, prov. Erkelenz, Duitsland (afstand 43 km. N.O.).

Een Meervleermuis, geringd in de Cluysberg bij Bemelen werd op 15 april 1957 door J. Albertus dood aangetroffen in Vught, blijkbaar op weg naar zijn zomerkwartier. Belangrijker was de vondst van een andere Meervleermuis door W. J. Wals te Oostzaan, welke ons leidde naar een kraamkamer (afstand 180 km N.N.W.), zie tabel III. De kraamkamer van *M. dasycneme* in N. Friesland heeft ons nog steeds geen terugmeldingen in Limburg opgeleverd, wel één uit Fiestel, (prov. Lübbecke, Westfalen, 195 km Z.O.) en één uit Denée (prov. Namen, België, 330 km Z.Z.W.). Het vermoeden rijst, dat de dieren uit Friesland niet in Z. Limburg overwinteren. Het onderzoek in de forten rond Utrecht werd voortgezet. Holle bomen in de bossen van Groenekan en Bilthoven werden geregeld gecontroleerd, waarbij in totaal 88 exs. van de Rosse Vleermuis (*Nyctalus noctula*) werden geringd (vorig jaar 115) en 13 werden teruggemeld.

Wij danken allen, die aan het Vleermuis-onderzoek in 1957 hebben medegewerkt, in het bijzonder Ir. D. C. van Schaik, die ons, evenals andere jaren, veel hulp verleende.

Utrecht, december 1957.

Table I.

species	1—7 January 1956					1—7 January 1957				
	total	♂	♀	Rec.	Perc.	total	♂	♀	Rec.	Perc.
<i>Barbastella barbastellus</i>	5	3	2	1	—	2	1	1	—	—
<i>Eptesicus serotinus</i>	1	1	—	—	—	1	—	1	—	—
<i>Myotis bechsteinii</i>	2	1	1	—	—	1	1	—	—	—
<i>Myotis dasycneme</i>	80	40	40	19	25	88	34	54	21	24
<i>Myotis daubentonii</i>	109	52	57	41	37	94	48	46	33	35
<i>Myotis emarginatus</i>	97	51	46	21	—	39	21	18	6	—
<i>Myotis myotis</i> *)	37	19	18	5	—	39	21	17	—	—
<i>Myotis mystacinus</i>	170	113	57	64	37	155	106	49	57	36
<i>Myotis nattereri</i>	97	65	32	17	18	84	51	33	19	23
<i>Plecotus auritus</i> *)	45	20	25	7	—	23	10	11	—	—
<i>Rhin. ferrum equinum</i>	8	7	1	1	—	5	4	1	—	—
<i>Rhin. hipposideros</i> *)	91	37	54	21	—	60	28	30	4	—

*) a small number of specimens has not been sexed in 1957.

Table II.

Band nr	species	sex	banded	recaptured	age at least
4162	<i>Myotis dasycneme</i>	♀	3— I—1942	5—I—1957	15½
12675	<i>Myotis daubentonii</i>	♂	21— II—1945	6—I—1957	12½
6213	<i>Myotis emarginatus</i>	♂	30—XII—1942	19—I—1957	14½
10516	<i>Myotis mystacinus</i>	♂	27—XII—1943	3—I—1957	13½
12628	" "	♀	21— II—1945	6—I—1957	12½
10543	<i>Myotis nattereri</i>	♀	27—XII—1943	3—I—1957	13½
11944	<i>Rhin. hipposideros</i>	♀	29—XII—1942	4—I—1957	14½

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Table III.

Band nr	sex	species	date banded	place banded	cave nr	date recaptured	place recaptured	distance km	direction
19660	♂	<i>Myotis dasycneme</i>	30-VII-'55	Kollum (Nurs.) Fr.	—	1-XII-'56	Oostermeer Fr.	13	S.S.W.
19728	♀	<i>Myotis dasycneme</i>	30-VII-'55	Kollum (Nurs.) Fr.	—	26-XII-'56	Denée prov. Namur B.	330	S.S.W.
19754	♀	<i>Myotis dasycneme</i>	28-VII-'56	Kollum (Nurs.) Fr.	—	28-XII-'56	Fiestel G. Kreis Lübbecke	195	S.E.
19755	♂	<i>Myotis dasycneme</i>	28-VII-'56	Kollum (Nurs.) Fr.	—	22-XII-'56	Groningen	28	E.
21206	♀	<i>Myotis dasycneme</i>	10- I-'56	Bemelen L.	33	15- IV-'57	Vught N.Br.	95	N.W.
21287	♀	<i>Myotis dasycneme</i>	3- I-'57	Meerssen L.	163	20- VI-'57	Oostzaan N.H.	180	N.N.W.
16914	♀	<i>Myotis emarginatus</i>	2- I-'51	Houthem L.	91	24- X-'57	Arsbeck G. Kreis Erkelenz	43	N.E.
19117	♀	<i>Myotis emarginatus</i>	5- I-'53	Maestricht L.	22	24- IX-'57	Westmalle B. pr. Antwerpen	89	N.W.
23257	♀	<i>Myotis mystacinus</i>	6- I-'56	Maestricht L.	13/18	19-XII-'56	Melveren B. n. St. Truiden	33	W.
5859	♂	<i>Nyctalus noctula</i>	17- IX-'56	de Bilt U.	tree 27	...- IX-'57	de Meern n. Utrecht	9	S.W.

B = Belgium
 G = Germany
 L = prov. Limburg
 U = prov. Utrecht

N.Br. = prov. North Brabant
 N.H. = prov. North Holland
 Fr. = prov. Friesland

For an explanation of the
 Cave-numbers cf. Bels
 Thesis, Utrecht, 1952.