

stop flight between west Florida and Panama (1400 miles). It would seem likely that the flight of birds which met disaster in Panama originated to the north in Central America; perhaps these birds were on a second lap in a trip from the southeastern United States to South America.

Acknowledgement is made to Dr. Horace Loftin, Director, Florida State University Canal Zone Program, and to Dr. Eugene P. Odum of the University of Georgia. These studies are supported by NIH Grant HE 08294-01 (MET) to Dr. Odum.—David T. Rogers, Department of Zoology, University of Georgia, Athens.

TABLE 1. WEIGHTS, EXTRACTED FAT AND ESTIMATED RANGE POTENTIAL OF 17 BIRDS KILLED IN A PRE-DAWN RAINSTORM IN PANAMA, OCTOBER 13, 1963.

Species	Wet wgt. gms	Fat wgt., gms			Estimated flight range miles ²
		Total ¹	Estimated Available ²	Fat-free wgt., gms	
<i>Hylocichla ustulata</i>	32.40	6.45	5.45	25.95	646
<i>Hylocichla ustulata</i>	32.86	9.60	8.60	23.26	1135
<i>Hylocichla ustulata</i>	34.20	8.27	7.27	25.93	864
<i>Hylocichla ustulata</i>	27.84	4.17	3.17	23.67	411
<i>Hylocichla ustulata</i>	39.01	11.49	10.49	27.52	1179
<i>Hylocichla ustulata</i>	28.74	6.29	5.29	22.45	724
<i>Hylocichla ustulata</i>	32.76	7.16	6.16	25.60	741
<i>Hylocichla ustulata</i>	31.04	5.84	4.84	25.20	591
<i>Hylocichla ustulata</i>	36.30	8.26	7.26	28.04	796
<i>Hylocichla ustulata</i>	34.11	6.35	5.35	27.76	593
<i>Hylocichla ustulata</i>	35.29	6.18	5.18	29.11	547
<i>Hylocichla ustulata</i>	37.60	7.90	6.90	29.70	715
<i>Vireo olivaceus</i>	16.36	2.37	1.87	13.99	412
<i>Piranga olivacea</i>	35.53	10.15	9.15	25.38	1109
<i>Piranga rubra</i>	31.81	5.73	4.73	26.08	558
<i>Spiza americana</i>	24.36	4.44	3.44	19.95	529
<i>Dendroica fusca</i>	9.41	1.87	1.37	7.54	562

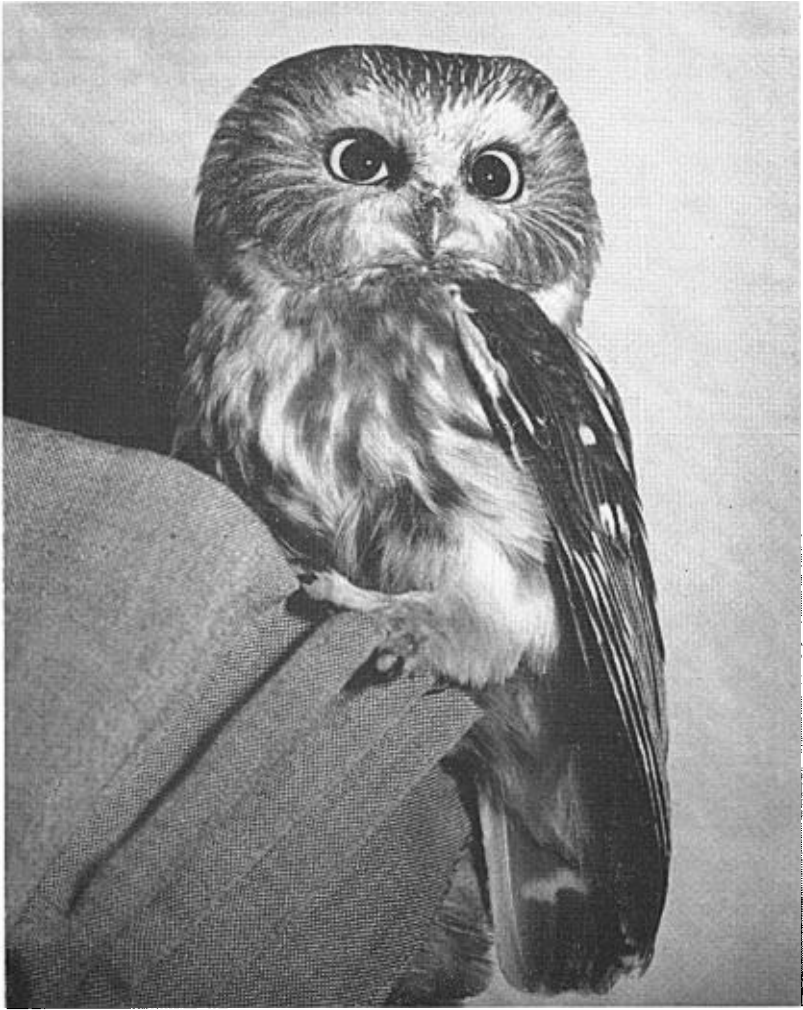
¹Dry weight of extract fat

²See text

Band Recovered from Owl Pellet.—In 1947 (*Bird-Banding*, 18: 129), I reported the recovery of two bands used on Black-capped Chickadees (*Parus atricapillus*), from the pellet of a Screech Owl (*Otus asio*) which had been using a nest-box in our yard as a winter roost. There have been several subsequent reports in *Bird-Banding* of bands recovered under similar circumstances (Berger, 24: 19; Nichols, 24: 110; Root, 24: 110), and I am now able to add another.

Early in November 1964, Mrs. George H. Hart, Wayland, Mass., reported to me the discovery of a roost of Long-eared Owls (*Asio otus*) in a pine grove near her home. On 28 December, 1964, she collected a quantity of pellets for examination and found a band (743-86630) still encircling a bird's leg bone. As the number sounded familiar to me, I checked my banding records and discovered that it had been used on 4 July 1964 to band a local young Blue Jay (*Cyanocitta cristata*) at my home station. The recovery location in Wayland is about two and one-half miles, airline, west-southwest of the banding location in Weston.—Charlotte E. Smith, 75 Westland Road, Weston, Mass.

Mist-Netting Saw-Whet Owls.—I began mist-netting birds during the summer of 1957. At first I used only one net and took it down before dark. During 1958, I placed it in the front yard of our summer home on Scenic Drive, about one mile north of Muskegon State Park, Laketon Township, Muskegon County, Michigan. I found that when I put up the net or nets in the morning I was often frightening birds from the area. Thus I began putting the nets up before dark. I always examined the nets at night after dark and just prior to daybreak in the morning. For several months they caught nothing at night. Then I caught an occasional



Whip-poor-will when these birds were in migration. None of them showed any physical problem from being caught and I soon found they were getting into the nets either in the late evening prior to dark or at dawn. Thus I was able to keep them in the net only a few minutes. Seventeen Whip-poor-wills have been captured there since that time and three Nighthawks.

On the evening of 6 November 1960 I placed a net in our back yard at Battle Creek. I was very surprised the next morning when I looked at the net just prior to daylight finding in it a Saw-whet Owl (*Aegolius acadicus acadicus*). He was very much alive and the accompanying photograph shows him in my study where I released him. Within the hour he was banded and released outdoors. On 14 October 1961 at our Muskegon yard I examined my nets at break of day finding them empty. But at 0740 I found two Saw-whet Owls in one net. Both were banded and released. Since then I have caught six more at Muskegon and one at Battle Creek.

The Saw-whet Owls were always captured between 0500 and 0700 in the morning and in an open or semi-open area where there were a few small evergreens. Considering one net up during an entire night at a net-night, I have had nets up 903 net-nights between 1 July and late November since 1960 (1960, 224; 1961, 245; 1962, 132; 1963, 141; and 1964, 161 nights.). Considering the average night period as eight hours, the number of night-net hours was 7,224 and only three species (30 individuals) were captured. The Saw-whet Owls were captured 7 November 1960, 14 October 1961 (2), 22 October 1962, 24 October 1962, 12, 13 and 27 October 1963, and 12 and 25 October 1964. All were captured in Muskegon County except the first and fifth which were captured at Battle Creek.

All of these birds were weighed and measured. Following is a summary of their weights and wing measurements:

SPECIES	WEIGHT (GRAM)	WING (mm)	NUMBER
Saw-whet Owl	95.17 (85.1-113.6)	134.6 (123-146)	10
Whip-poor-will (a. m.)	55.7 (46.3-63.3)		11
(p. m.)	57.8 (53.2-68.6)		6
all	56.5	159.2 (152-169)	17
Nighthawk	80.1 (72.2-86.1)	204 (188-222)	3

Thus, I feel that a person is justified in placing nets the night prior to a mist-netting day and that if he is cautious, examining them after dark and prior to daylight, he will catch some of the night species at dusk and dawn.—Lawrence H. Walkimshaw, 1703 Wolverine Tower, Battle Creek, Michigan.

RECENT LITERATURE

BANDING

(See also 13)

1. **Forty Years of Bird-banding in the USSR.** M. Lebedeva and T. Shevareva. 1964. *Okhota i Okhotnische Khozyaistvo* (Hunting and Game Management), No. 4: 21-23. (In Russian). Bird-banding in the Soviet Union was initiated by a group of young amateur naturalists at the Timiryazev Memorial Biostation in 1924, when they released birds carrying bands stamped "Moskva, BION" and the serial number. That was the start of the present national "Banding Bureau." In 1927 a little over 3,000 birds were banded; in 1938, 10,000, and by 1959 the annual total was about 200,000. Over the period of 40 years about two million birds were banded. Reports of subsequent recoveries of these birds are constantly being received at the Banding Center, where about 50,000 records of recoveries have accumulated, which have been utilized in over 200 published papers. From 1956 onward this activity was expanded from tagging young on nests to trapping adults during migration, and from the precincts of a few national reserves to numerous additional stations. Ornithological research parties were sent to distant areas of the Union and influenced workers there to engage in banding of widely distributed species. In a 1959 project 57,196 Starlings were tagged.

In 1956 an extensive waterfowl banding project was undertaken on the lakes of northern Kazakhstan. Many species have been banded in Kirghiz; and in Turkmenistan, at the Hasan-Kul Reserve, a large-scale project for banding wintering ducks and shore birds has been maintained. Systematic bird-banding has been extended to the Far-East where at Khanka Lake (north of Vladivostok) the Far-Eastern Ornithological Station has banded many species and significant reports of recoveries have been received. The Purple Heron and Little Egret (*Ardea purpurea* and *A. egretta*), tagged there in the nesting season, were taken in winter in south China, Viet Nam, Thailand, and Malaya.

At present bird-banding is being utilized in almost all projects involving research on birds as disease vectors, in acclimatization experiments, and in orientation studies. This includes the projects of the Zoological Institute of the National Academy of Sciences USSR and the academies of the allied republics, in reserves and game management stations, the game warden services, and others. Such