or other gas headlamp, producing a brighter, whiter beam, might permit even more effective operation. Selectivity is also offered; the bander can pick off grackle, redwing, or cowbird, male or female, at will.

After these experiences early in 1952 we feel that when these birds are found roosting in low brush or small trees we can band whatever number of birds appears adequate for our purposes. Banding in this manner, also, seems to offer a means of studying the spring breakup of the roost. By banding an arbitrary quota of birds once a week from height of occupancy through the breakup recoveries and repeats may occur in sufficient numbers to permit formulating some definite conclusions; at present our knowledge of roost breakup is based on visual observations only.

There has been no opportunity to test this method with other species of passerine birds that occasionally roost in similar manner in the deep south in immense roosts, but it appears that successful banding might be done in those instances as well. The two major conditions controlling its success appear to be, first, the availability of densely roosting birds in low brush where the birds are within arm's reach, and second, the frequency of occurrence of very dark cloudy nights during the winter roost period. Beyond these, the ambition of the bander seems to be the only other governing factor.

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ON THE WEIGHT OF THE CHIMNEY SWIFT

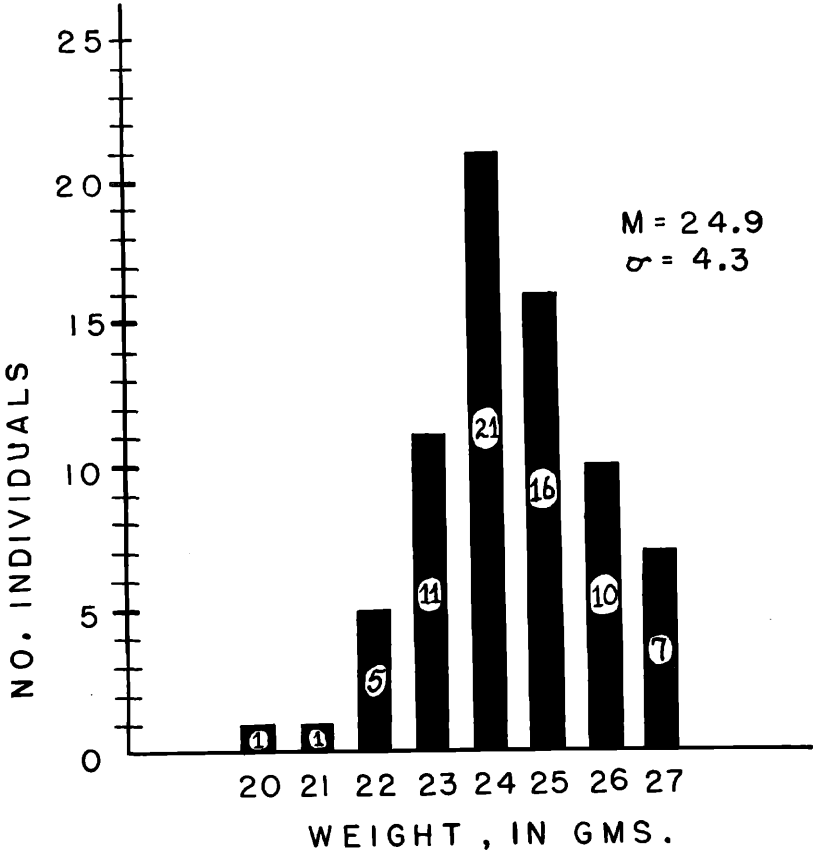
BY L. M. BARTLETT

In 1947 Mr. William Randolph presented a term paper in my ornithology course in which he reviewed a considerable body of information on the Chimney Swift, *Chaetura pelagica*. His extensive paper interested me in this species, and brief perusal of the literature described in his paper soon revealed a point of interest for further consideration. Poole (1938) used a figure of 17.3 gms. for the weight of the Chimney Swift in calculating the wing area per gram. On reading Poole's original paper I noted that his datum was derived from a single specimen. Since he had made several broad interpretations on the basis of his data, and since he used the Chimney Swift as an example in those generalizations, I was led to search for other references to the weight of this species. I soon found that Stewart had previously (1937) given minimum, maximum, and mean weights of 21, 27, and 23.3 grams respectively for 47 specimens examined by him. Roberts (1932) had given a weight range for the species as 0.88-1 oz. (24.9-28.3 grams). It would seem, then, that Poole had not compared the weights obtained in his study with weights obtained by previous investigators. Since almost all of the data which Poole has published is based at the most on 2-5 specimens per species, this would seem to invalidate his conclusions on grounds of inadequate data.

72 Chimney Swifts were weighed and banded in Amherst, Mass., on May 28-29, 1950, by the author. They were trapped from a chimney 4′10″ square rising 16′ above a flat roof area on one of the Experiment

Station buildings on the University of Massachusetts campus. The two days just prior to this period had been warm and sunny (Stapleton, 1950). During the trapping period the weather was mild, but more cloudy. Because of the size and height of the chimney a trap and board covering were held in place by guy wires at all times, and ¼ of the chimney area left open during the day. This procedure was not very satisfactory, since the swifts gave every evidence of being frightened by this monstrous contraption atop their sleeping quarters. 72 swifts were trapped in the first two days, but on the third day none entered in the evening, so the trap and cover were removed the following day.

The weights were recorded to the nearest ½ gram on a dietetic balance as the bird lay wrapped in a small piece of cheesecloth. The weight data from these 72 swifts agree well with Stewart's figures. The bar graph given below gives the frequency distribution, mean, and standard deviation of the weights recorded. It may be noted here that the data for either day taken separately give almost exactly the same mean and standard deviation as the total for the two days.



The weight of a bird has been shown by numerous authors to be influenced by such factors as age, sex, and time of day of the capture. Since the distribution of weights presented here is obviously not bimodal, there is no evidence for sexual or age differences in this small population. The fact that there was fair and warm weather prior to the dates of capture indicates that the mean weight recorded here is probably close to that of normal healthy birds in the spring near the end of their migration period. This belief is further strengthened by the close correspondence of these and Stewart's data.

The fact that Poole's bird weighed nearly 4 grams less than the minimum recorded by either Stewart or myself would indicate that Poole must have unfortunately selected either a bird which was emaciated or one which had been dead for some time prior to weighing. Assuming that the wing area is the same for all swifts (obviously not necessarily a valid assumption), the following comparison shows how far off one may go in basing calculations on a single specimen:

Author	No. of birds	Wt. of bird	Wing area	Wing area per gram
Poole (1938)	1	17.3 gm.	104 cm.^{2}	6.00 cm.^{2}
Stewart (1937)	47	23.3	104*	4.46†
Present data	72	24.9	104*	4.18†

*assumed value, based on Poole's single specimen.
†calculated using assumed value for wing area.

This, then, is just one more example showing that extreme caution must be exercised in the interpretation of data based on few specimens or observations, especially when such observations run counter to previously published data.

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THE CLOACAL PROTUBERANCE—A MEANS FOR DETERMINING BREEDING CONDITION IN LIVE MALE PASSERINES

BY ALBERT WOLFSON

Ornithologists have always been interested in the breeding seasons of birds and have recorded their occurrence in numerous species. With Rowan's discovery (1929) that day length influences the reproductive cycle in birds, these observations took on new significance, and further intensive studies were stimulated. These studies have been of two types: experimental, laboratory studies designed to elucidate the role of day length and other environmental factors, and careful studies of breeding seasons in nature in relation to latitude and climate. In experimental