

Purple Finch (<i>Carpodacus p. purpureus</i>)	114
Song Sparrow (<i>Melospiza m. melodia</i>)	102
Tree Sparrow (<i>Spizella m. monticola</i>)	62
Chipping Sparrow (<i>Spizella p. passerina</i>)	39

During the year eleven new species were banded. To date 58 species have been recorded as returns, and, since our organization in 1922, 39,305 birds have been banded, and a total of 1309 returns have been recorded.

The number of birds banded by individual members ranged from 3 to over 3000. The nine members banding the largest number with their records are as follows: Mr. Charles B. Floyd, 3062; Mr. Laurence B. Fletcher, 995; Dr. Edward Gould Rowland, 550; Mr. Harry E. Woods, 574; Mr. Charles L. Whittle, 425; Mrs. Charles L. Whittle, 361; Mr. Benjamin S. Harrison, 348; Mr. A.W. Higgins, 323; Mr. Willis H. Ropes, 313. Messrs. Floyd's, Fletcher's, and Harrison's numbers were augmented by the birds banded at Heron, Gull, and Tern colonies, but the other records were made up of birds banded at home stations or in the vicinity. The four members securing the largest number of returns were: Mrs. C. L. Whittle, 105; Mr. Charles L. Whittle, 46; Dr. Edward Gould Rowland, 33; and Mr. Willis H. Ropes, 23.

SOME BIRD WEIGHTS

BY CHARLES L. WHITTLE AND HELEN GRANGER WHITTLE

ONE of the results of handling live birds for a term of years is the acquisition of the power to detect small differences in their weights, at first not perceived. In the case of Purple Finches, adult males have seemed prevalingly, heavier, as detected merely by handling, than the average of the olivaceous birds. Our records for olivaceous Purple Finches also not infrequently note "large," "heavy," or "strong." One wonders whether these especially heavy birds are young males. Or, are they perhaps adult females? It appears least likely of all that they are young females.

Birds of some other species, notably American Goldfinches and Pine Siskins, also exhibit a variation in weight which is detectable in the hand.

In the hope of getting more exact information on the subject, it was determined during the past winter actually to weigh a series of birds. A balance of German manufacture

has been used. It has a scale graduated to grams and by estimation to $\frac{1}{4}$ gram. For the celluloid pan supplied with the balance, a skeleton pasteboard box, 5 x 4 x 4 inches was substituted. The cover was discarded, and portions of the sides and of one end were cut away to reduce weight, and the openings covered with white cotton cloth. In the remaining end a round hole 2 inches in diameter was cut as an entrance. This is closed by a loose card which slides inside. Light enough penetrates the cloth to induce ready entrance by the birds, but since the box is not transparent, most birds are perfectly quiet after the slide is closed. They are allowed to enter box from the hand after band is affixed, or the band number read.

The total number of birds weighed to the date of writing (March 15th) has been 133 made up of 11 species. In the table following is shown to what extent the data secured are applicable to ascertaining male, female, and species average weights in grams.

SPECIES	No. Weighed	No. Males	No. Females	No. Sex in doubt	Av. Wt. Males	Av. Wt. Females	Av. Wt. of Species	REMARKS
Downy Woodpecker (<i>Dryobates p. medianus</i>)	4	2	2		26.50	28.75	27.62	
Purple Finch (<i>Carpodacus p. purpureus</i>)	45	16		29 ¹	27.73		25.79	Known 6 oldest av., 28.12 grs. Range 25.00-30.00 grs.
Goldfinch (<i>Astragalinus t. tristis</i>)	29	15	9	5	15.06	14.50	14.86	Range 12.00-17.00 grs.
Pine Siskin (<i>Spinus p. pinus</i>)	6 ²			6			15.80	Range 13.50-19.00 grs.
Tree Sparrow (<i>Spizella m. monticola</i>)	12		1 (adult)	11		21.00 ³	21.04	Range 18.00-24.50 grs.
Junco (<i>Junco h. hyemalis</i>)	11	7	3	1	21.75	21.08	21.68	Range 19.50-23.00 grs.
Song Sparrow (<i>Melospiza m. melodia</i>)	1			1			26.00 ⁴	
House Sparrow (<i>Passer d. domesticus</i>)	1	1					28.75	
Brown Creeper (<i>Certhia familiaris americana</i>)	1			1			10.00	
White-breasted Nuthatch (<i>Sitta c. carolinensis</i>)	1	1 (adult)					21.50	
Chickadee (<i>Penthestes a. atricapillus</i>)	22			22			11.92	Seven adults, Av., 12.36 grs.
Total	133							

¹ The ratio of 16 ad. males to 29 olivaceous birds is probably not the true ratio in nature.

² One bird, No. A26623, weighing 13.50 grams, has no greenish-yellow on wings and only a trace at base of central rectrices. Were not birds of this type born last year.

³ Sexed by Dr. Francis Harper. Skull thoroughly granulated.

⁴ With six additional birds taken in late March the average weight is 24.28 grams.

Quite a few of the 133 birds listed were weighed several times on different days and at different hours in the day, and in figuring species or sex average weights, the average of the several individual weighings was taken. In a number of instances a very considerable variation in weight occurred in single birds. It was obvious that bird weights secured during rainy periods should be thrown out. Some of the differences noted were doubtless due to the amount of food in the alimentary tract, as was shown by comparing several weighings secured thirty minutes before sunrise with weighings late in the afternoon.

The possibility that the plentitude of food furnished at the station caused the birds to be abnormally fat was investigated to a degree. Only one bird, a Siskin, appeared excessively plump and heavy. This bird weighed 19.00 grams, while the average weight of the other five weighed was 15.81 grams. Tree Sparrows, Juncos, and Chickadees, as species, showed no appreciative increase in weight during the season under consideration.

The species of which the largest number of individuals were weighed is the Purple Finch. Sixteen of these were adult males, known to have been such for periods varying from six months up to three years and nine months. Thus

BAND NUMBER	BANDING DATE	WEIGHT	KNOWN AGE	REMARKS
30935 (67071)	Jan. 13, 1923	30.00	4 yrs. 9 mos.	Return ² . Banded as ad. ♂ Jan. 13, 1923, No. 30935. Recovered by the Hardings in Cohasset Dec. 3, 1923, and band replaced by No. 67071.
67263	Feb. 10, 1923	26.00	4 yrs. 9 mos.	Return ² .
41350	Mar. 9, 1923	28.25 ¹ 27.50 27.25 Av. 27.66	4 yrs. 9 mos.	Recovery ² . Banded in Brockton, Mass. by George H. Priest, 13 miles S. W. of Cohasset.
67072	Dec., 1923	26.75	3 yrs. 9 mos.	Recovery. Banded by Mr. and Mrs. R. B. Harding, Cohasset.
40160	Jan. 26, 1924	29.00	3 yrs. 9 mos.	Recovery ² . Banded by Mrs. Alice B. Pratt, of Middleboro, Mass., 23 miles nearly due south of Cohasset.
S4104	Jan. 27, 1924	29.50	3 yrs. 9 mos.	Recovery. Banded by Conover Fitch, Cohasset, Mass.
A26715	Jan. 27, 1926	25.00	1 yr. 9 mos. ²	
A26717	Jan. 30, 1926	27.50	"	
A26692	Feb. 9, 1926	30.00	"	
A26744	Feb. 13, 1926	27.75	"	
A26670	Feb. 20, 1926	26.75	"	
A26701	Feb. 20, 1925	28.25	"	
A26702	Feb. 20, 1926	29.00	"	
A26704	Feb. 21, 1926	26.00 27.00 Av. 26.50	"	
A26780	Feb. 24, 1926	26.00	"	
A26762	Mar. 14, 1926	28.00	"	
		Average weight 27.73 grams		

¹ Trapped three times during the winter season of 1925-26.

² "Rosy" plumage assumed to be taken on at the time of the first post-nuptial molt

A26762, first taken on March 14, 1926, is at least 1 year and 9 months old on this date, if he assumed his mature plumage last August, when he was 1 year and 2 months old. How much older he is than this, of course, we do not know. As will be noted from the table, this method of reckoning minimum ages is applied to all adult males whose banding date as such is known. The table on page 35 gives the weights of 16 adult male Purple Finches in detail, and also their ages as far as we possess any information.

It is too early to attempt to draw other than tentative conclusions from these figures. It has been ascertained that certain olivaceous Purple Finches which seemed heavier and larger in the hand than the majority of this species similarly colored are so in fact. Six of such olivaceous birds have an average weight of 27.00 grams, 0.65 grams less than the average weight of the adult males. This greater weight may have sex significance, or it may be simply individual variation. Further work by banders in weighing birds, over longer periods of time, and particularly dealing with birds of known age and sex, will be necessary before true averages shall be had.

Cohasset, Mass., March, 1926

GENERAL NOTES

Banding a Mockingbird.—On the 23d of last October (1925) a Mockingbird was discovered feeding on asparagus berries in a garden in South Windsor, Connecticut. A few days later it was found in another garden near the home of Mr. W. S. Farnham. It soon developed a fondness for the suet which had been put out for the birds, and, evidently thinking this was a good place in which to spend the winter, remained there.

As the days went by, it became more and more tame and friendly and went to the feeding-shelf on the kitchen window-sill for water. Seeing it pecking at some orange peel that had been thrown out one day, Mr. Farnham put half of an orange on the tray, and the bird ate it eagerly. Since then water, apples, oranges, suet, meat drippings, and corn-cake have become its regular diet.

In order to learn something of the habits of Mockingbirds in New England it seemed wise to attempt to band this bird, so on January 20th (1926) I set my trap for it, baiting it with half of an orange. The Mockingbird was not in sight when the trap was set, but five minutes later it came and alighted on a branch of the tree over the trap, which it eyed curiously. Presently it dropped down on top of the trap. Seeing that it could not get at the orange from this position, it hopped down back of the trap and deliberately walked round and entered. The string was pulled, and the bird was a captive. The bird did not appear disturbed by the banding and was back feeding in less than half an hour.

Aside from one slight accident this Mockingbird has survived the cold and severe storms of the winter well. On one cold morning he dipped his