

GENERAL NOTES

Measurements of White-throated and Other Sparrows to Determine Sex.—Thanks to the suggestion of Mr. William G. Fargo of the Museum of Zoölogy, Ann Arbor, Michigan, that the sex of Song Sparrows could often be determined by measurements of the wing and tail, all birds that I have trapped this fall have been thus measured, with most interesting results. It proved easy to distinguish the sex of sixty-two out of sixty-six White-throated Sparrows (*Zonotrichia albicollis*), of three Lincoln's Sparrows (*Melospiza lincolni lincolni*), of one Tree Sparrow (*Spizella arborea arborea*), and of the majority of the sixty Juncos (*Junco hyemalis hyemalis*) and seventy-nine Song Sparrows (*Melospiza melodia beata*).

The measurements in millimeters of the White-throats were as follows, the average being in parentheses:

30 males, wing, 73-76.5 (75.1); tail, 70.5-77 (73.8)

36 females, wing, 66-73 (70.3); tail, 66-73 (69.7)

With four birds the wings measured 73mm.; one was considered a male because he weighed 25.7g., two were considered females because of weights of 21 and 22.5g., while the fourth, with a weight of 24g., was rather doubtfully assigned to the female ranks. (All of these birds were caught in the early morning.)

In dealing with weights of birds, the individuals must be classified according to sex and also as to the time of day they are captured, as the following table shows:

*Average Weight in Grams of White-throated Sparrows,
Sept. 26 to Nov. 8, 1931.*

Sex	No. of Birds	7-8 A. M.	No. of Birds	9 A. M.-3 P. M.	No. of Birds	4-6 P. M.
♂	22	25.9	13	26.3	9	26.7
♀	34	23.9	15	25.2	2	23.7

The range of weights for early-morning captures varied with males from 23.2g. to 28.5g.; for females from 21g. to 27.3g. Later in the day males varied from 23.5 to 30g.; females from 22.6 to 27.8g.

The data on the Lincoln's and Tree Sparrows were as follows:

Lincoln's Sparrow, ♂	Oct. 3, 7.20 A. M.	Wing 64mm., tail 58mm.; weight 18.8g.
♀	Oct 3, 7.20 A. M.	Wing 61mm., tail 57mm.; weight 17.0g.
Tree Sparrow, ♂	Oct. 17, 8.00 A. M.	Wing 61mm., tail 57mm.; weight 17.5g.
♀	Dec 6, 8.30 A. M.	Wing 70mm., tail 64mm.; weight 16.5g.

With both Juncos and Song Sparrows the majority of birds have been clearly male or female according to wing measurements, but a number in both species cannot be placed without further experience. Juncos need to be carefully studied as to plumage differences, including the amount of white on the tail-feathers. I am finding a number that look like males but measure like females, and one of these, collected by a cat, proved to be a female.

As to the Song Sparrows I call all those with wing measurements of 63mm. females, all those with 66 to 70mm. males (and this has been corroborated in ten cases by the singing of the individuals), but those with wings of 65mm. I hesitate to assign one way or another at present. It may well be that some are males and others females, and that tail measurements and weights (the fall males have averaged 1.8g. heavier than the females) will help in the problem. But I shall know much more about Song Sparrow measurements after I have trapped the nesting adults next spring.