

GENERAL NOTES

**Sex Ratios in Eastern Crow Populations During Winter and Spring.**—Roost raids by sportsmen's clubs and other organizations have been responsible for the slaughter of many thousands of Crows in various parts of the country in recent years. The bodies of the birds at the scenes of these raids are usually piled up or left scattered about on the ground, where they may easily be gathered by any bird-student interested in such material. Often enough specimens may be obtained from a roost in this manner to give a fairly reliable cross-sectional picture of a local population for statistical analysis.

Specimens of *Corvus b. brachyrhynchos* collected in this manner by the writer at three winter roosting sites in the Finger Lakes Region of New York State near the northern border of the winter range of the species have furnished some interesting statistics on sex ratios. Of 348 wintering birds examined, 193 were males and 155 were females, a ratio of 124.5 males to a hundred females.

This preponderance of males is in striking contrast to the situation found by Dr. Lawrence E. Hicks at a roost near Zanesville, Ohio, one hundred fifty miles farther south than the New York locality (*Bird-Banding*, vol. 6, 1935, p. 35), where out of 75 specimens examined only 30 were males, a sex ratio of 66.6 males to 100 females. In other words there were 8 males with every 12 females in the Zanesville region and 15 males with every 12 females in the Finger Lakes region. This would seem to indicate, as Dr. Hicks has already suggested (*loc. cit.*), that the Eastern Crow displays a partial segregation of the sexes during the winter season, the females centering their winter distribution farther south than the males.

The accompanying table (1) gives the statistics for the New York State birds:

WINTER ROOSTS		(Winter Residents)	
Month	Males	Females	♂♂ per 100 ♀♀
December .....	33	27	122.2
January .....	18	21	85.8
February .....	22	16	137.5
March .....	120	91	132.0
Totals .....	193	155	Average 124.5

Table 1: Sex ratios in crows taken at roosts in Ontario, Seneca, and Cayuga Counties, New York, winter of 1932-33.

Additional evidence of a partial segregation of the sexes of Crows in winter was procured through an examination of specimens in the United States National Museum, the American Museum of Natural History, the Museum of Comparative Zoölogy, and the Philadelphia Academy of Natural Sciences. While the specimen material in collections is not extensive enough to give a complete representative picture of the situation in individual localities, a comparison of the material from a few northern and southern localities (table 2) is at least suggestive.

General Locality	Males	Females	♂♂ per 100 ♀♀
Boston, Mass. ....	5	4	125.0
New York, N. Y. ....	9	7	128.7
Philadelphia, Pa. ....	11	19	57.9
Washington, D. C. ....	13	20	65.1
Currituck, N. C. ....	7	11	63.6

Table 2: Sex ratios of Crows in various localities along the Atlantic coast in winter (November-February) as demonstrated by museum specimens. Notice that the female heavy ratio of the southern localities is carried over into the range of *C. b. paulus*.

A study of the birds in the small roosts which spring up amongst the large winter roosts of the Finger Lakes region in late February produced some further data of interest. A small sample taken from two of these "spring roosts" contained 21 males and 32 females (sex ratio 68.7 males to 100 females), a preponderance of females similar to that found by Dr. Hicks in the winter roosts farther south (table 3).

SPRING ROOSTS ( <i>Transients</i> )			
Month	Males	Females	♂ to 100 ♀
March .....	16	22	72.7
April .....	5	10	50.0
Totals .....	21	32	68.7

  

FALL ROOSTS ( <i>Transients</i> )			
Month	Males	Females	♂ to 100 ♀
October .....	8	9	88.9

Table 3: Sex ratios from samples of transient Crow populations taken at spring and fall roosts in Ontario, Seneca, and Cayuga Counties, New York, fall, 1932, and spring, 1933.

Although the amount of material in this case is admittedly too small to permit the formulation of definite inferences, speculation on the significance of the ratios obtained is, perhaps, permissible. The question which arises is: if these new spring arrivals resemble in their sex ratio a more southern wintering population, can we conclude that they are representatives of such a southern population, migrating northward as a unit and remaining aloof from the populations encountered in transit? This would seem to be a logical interpretation, especially since a coincident sample of the birds remaining in the rapidly dwindling local winter roosts still shows in March the surplus of males of the wintering population (table 1, March). Of course it is possible that this preponderance of females in the spring roosts may be accounted for by a differential migration period, or by an early desertion of the common roosts by male birds in favor of their newly established nesting territories. Proper interpretation of such statistics awaits further observation and study.—J. T. EMLEN, JR., Division of Zoology, University of California, Davis, California.

**The Bird-Banding Stations in 1934-1935.**—The correction in the total number of birds banded during the year ending July 1, 1934, (*Bird Banding Notes*, 2:194) makes a rather important change in the figures presented in my article (*Bird-Banding* 6:26). Since the decrease in the total must be subtracted from those stations which banded less than one hundred birds during the year, that figure should have been 43,029, instead of 131,917, or 16 per cent of the total instead of 36 per cent. (The further corrections in the numbers for several individuals would reduce this to 29,376, or 10.7 per cent, but perhaps this should not be applied.) A similar tabulation for the year ending July 1, 1935, seems to show that the decrease in the total from the year before also has come from this remainder. My calculation shows just 104 fewer birds banded by 295 stations than by the 297 of the year before. This leaves only 17,945 to be accounted for by the smaller stations, or 7 per cent of the total. The standing of the various States has varied somewhat. Massachusetts, California and Pennsylvania show large gains, most of the other leading ones considerable losses. Alabama, Nebraska, Vermont, Washington, and Wyoming appear in the list; Colorado, Mississippi, Montana, and Rhode Island drop out. Among the States with the smaller numbers Indiana shows the most notable increase, with a little over twice as many stations and also total birds.—O. A. STEVENS, Fargo, North Dakota.

**Notes on the Intelligence of the House Sparrow (*Passer d. domesticus*).**—Supplementing the note by Mr. Venables in *Bird-Banding* of January, 1936, on the "Apparent Intelligence of the Sparrow and Starling at the Trap," I wish to record the following:

Of all the species of birds entering my traps this Sparrow most quickly learns to find its way out of our common funnel traps. I have watched some adults come to a baited trap for weeks. At first they carefully take all food from under the funnel entrance, frequently backing out and then gradually entering a little deeper until they slip in and out of the neck of the funnel. After a few days they are so well acquainted with the plan of the trap that they quickly run to the funnel exit opening from any part and will escape, even moving towards a person approaching. When young Sparrows follow adults to feed, or if a strange Sparrow comes with them, they are more easily confused and caught.