with no migrants from the north to be considered, the peak indicates the flocking just prior to migrating.

The average of 17 miles per day for the ten fastest birds probably affords the closest approximation to the true rate of travel, particularly as in all ten cases the dates are very likely those of actual departure and arrival. This rate, however, may still be very low, for one Dove actually averaged at least 43.8 miles per day.

North Eastham, Cape Cod, Massachusetts.

GENERAL NOTES

Sex Ratios and Weights in Wintering Crows.—Frequently Crows are shot at their winter roosts in large numbers, but ornithologists seem rarely to avail themselves of the excellent opportunities afforded for study of the specimens.

A large Crow roost in the region of Zanesville, Ohio, (Muskingum County) has now been under observation for six months. This roost began in August, 1934, with 600 to 800 birds, but grew rapidly to 5000 to 6000 in November, 10,000 to 11,000 in January, and 16,000 in February. The roost has changed position many times owing to continued persecution by man, but the birds at intervals select a new roost-site for no apparent reason. A line drawn on a map enclosing all points at which these birds are known to feed, includes more than four hundred square miles of territory. This would mean an average feeding population of about forty birds per square mile.

On February 19, 1935, 75 birds were taken as specimens from this roost. Other smaller collections have indicated the same general results, so these 75 birds are considered as being fairly representative of the whole flock of 16,000 birds.

Of the 75 birds, 45, or exactly 60 per cent, were females. In Ohio wintering Starlings[1], the *males* commonly make up 60 per cent to 70 per cent of the total population. It seems likely that the two sexes are about equally represented in the total Crow population of eastern United States. This observed lop-sided sex-ratio (if actual) is probably due to the sexes having somewhat different winter territories. There is some reason to believe that most of the birds wintering near the northern winter limits for the species are males, and that the majority of the females winter several degrees farther south than the majority of the males. This would account for the preponderance of females among the wintering Crows of southeastern Ohio.

The number of specimens is small, though larger than the number usually found necessary to establish the existing sex-ratio. However, future collections may considerably alter the sex-ratio now believed to prevail. It would seem of considerable value for ornithologists, where possible, to sex Crows, Starlings, or Grackles taken during frequent pest-drives and report on their findings. In no other way can a clear picture be compiled of the winter status of many common species throughout their range. It would be especially valuable to study Crows taken at their northern winter limits in northern Ohio, Pennsylvania, and New York, and compare with those found at the same time in the big roosts of Kentucky and Tennessee.

In regions with few or no wintering Crows, the sex-ratio of the first spring arrivals should be determined. Large roosts should be sampled at intervals in late winter, as the roosts grow and then dwindle as spring breaks, to determine which sex leads in the northward shift.

[1]Hicks, Lawrence E. Individual and Sexual Variations in the European Starling. *Bird-Banding*, 1934, v, 103-118.

In this study all Crows handled were weighed to within an accuracy of one tenth of a gram. Thirty males ranged from 436 to 637 grams (average, 541.1 grams), and the 45 females ranged from 416 to 610 grams (average, 491.1 grams). Thus the males exceeded the females by 50.0 grams. The 500-gram mark was exceeded by 83 per cent of the males but by only 38 per cent of the females. The birds showed a rather remarkable weight-range—201 grams in the males and 194 grams in the females, the smallest bird having only about 65 per cent of the weight of the largest.

It appeared to be relatively easy to detect both the immature males and the immature females by the development of the gonads. Practically all of the fourth of the population in the lowest-weight brackets appeared to be immatures. The birds were in uniform medium condition, the weight differences being almost entirely due to actual size-differences. Quite unexpected fluctuations occurred in bill-size. Full stomachs averaged 36.6 grams each, of which 11.0 grams, or 32.7 per cent, comprised the food contents.

The following table indicates the actual weights, the weight-range, and the weight-frequency for each sex:

Weight-range in grams	*Per cent of each sex in weight group*		*Actual weights in grams of 75 Crows (corvus b. brachyrhynchos)*	
	Males	*Females*	*Males*	*Females*
625–650	6.7	.0	631–637	
600–625	3.3	2.2	613	610
575–600	3.3	.0	577	
550–575	16.7	6.7	550–561–565–567–571	571–566–561
525–550	26.7	6.7	532–533–539–540–547 528–529–531	545–537–532
500–525	26.7	22.2	518–519–524–524 500–505–509–511	521–520–519–516–512 506–503–503–501–500
475–500	10.0	28.9	479–495–496	497–496–496–495–494 490–485–484–484–481 478–476–475
450–475	3.3	20.0	466	475–472–468–467–465 456–464–457–457
425–450	3.3	8.9	436	439–436–426–426
400–425	.0	4.4		421–416

—Lawrence E. Hicks and Charles A. Dambach, Ohio State University, Columbus, Ohio.

Two Migrating Returns of Olive-backed Thrushes.—On May 15, 1932' at my station in Nashville, Tennessee, I placed bands 176642 and 176643 on two Olive-backed Thrushes (*Hylocichla ustulata swainsoni*). They were captured in a Government sparrow trap.

On September 18, 1932, both birds returned and were taken in the same trap, at the same location, a few hours apart, migrating returns-1.

On May 20, 1933, 176642 returned to the same location, a migrating return-2, and on September 24, 1933, 176642 was again captured in the same trap, at the same location, a migrating return-3.—Mrs. Arch Cochran, 3030 Sheridan Road, Chicago, Illinois.

The above data show that during four migrations—two going northerly and two going southerly—176642 followed at least a portion of the same migration route, the returns constituting the most remarkable and important migration records reported to date, at least of any North American thrush. As there are occasional records of this species nesting in the mountains of North Carolina, it is possible these birds did so, though it seems unlikely that their migration route would be in part east and west, as nesting in North Carolina would require.

—Editor.