great and will be discussed below. The mean brood-size at fledging in Connecticut was 4.52 ± 1.18 days and does not differ significantly from the mean at Kent Island, although it does differ from that at Cape Cod.

It is difficult to arrive at a satisfactory conclusion from these data, but before an attempt is made to draw a tentative hypothesis it is well to bear in mind that the nestling period at Kent Island may have been shortened somewhat by disturbances owing to the daily weighings of the young since there was a tendency for the young to leave the nest before they were capable of sustained flight. To what extent human disturbance may have introduced an artifact is unknown, but there must be a minimum age at which the young are capable of leaving the nest and if all broods are subjected to the same amount of disturbance the time of departure must be shortened equally throughout the sample. Any differences in the nestling periods would be retained, presumably, although sharp demarcations might be erased. Therefore, it seems probable that the results indicating a relationship between the duration of the nestling period and brood-size are in the right order of magnitude although somewhat shortened. The birds in Connecticut and on Cape Cod were not subjected to so much disturbance and probably the nestling period data from these areas more nearly represent the normal condition, when account is taken of the different methods used for computing the duration of the nestling periods.

In retrospect, the material indicates that the duration of the nestling period is shortest in Connecticut, slightly longer on Kent Island, and longest at Cape Cod. Even though the Kent Island figure may have been artificially shortened, the fact remains that a difference exists between the periods at Cape Cod and in Connecticut. The clutch-size is largest at Kent Island, slightly smaller in Connecticut, and smallest at Cape Cod. The brood-sizes, at the time of fledging, differ in the same manner, but may be of little significance in discussing the duration of the nestling period because any relationship between brood-size and the nestling period would be expected to have been brought about earlier in the life of the birds. The significance of these observations will be considered presently.

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[*To be continued*]

GENERAL NOTES

More Leg Sizes.—The accompanying table shows some leg size measurements made at our station in West Hartford, using a gauge which Mr. Parker Reed kindly supplied, of the sort described by Dr. Blake in *Bird-Banding*, **25**: 11-16, January, 1954. They include a measurement of one Downy Woodpecker, a species not represented in his table. Among the species which occur in both tables, our sample of Starlings showed a larger average greater diameter by .2mm, not by virtue of a higher maximum but rather by having fewer birds toward the small end of the range of measurements. Our Goldfinches averaged .2mm larger on the greater diameter (with an individual maximum of 1.8mm) and .1mm larger on the lesser diameter. It may be significant that our only Goldfinches with a greater diameter as small as 1.5mm were taken on October 31, and from November 1 on, all those taken were larger. The single Towhee which we measured was .2mm below the

smallest Towhee in Dr. Blake's table, in both dimensions; possibly this has some relation to the fact it was banded in late fall after our other Towhees had departed. Our sizeable sample of Tree Sparrows reinforces Dr. Blake's inclination to use size 0 bands on this species, as well as our own habit of doing so. We measured 16 Fox Sparrows compared to his three; the larger sample showed a greater individual range but the same average greater diameter and an average lesser diameter only .1 larger than his. Our Song Sparrow sample averaged larger, with one individual markedly larger than any of his in the lesser diameter.

TABLE OF LEG SIZES

Species	Sample Size	Aver. Greater Diam.	Obs. Range	Aver. Lesser Diam.	Obs. Range
Downy Woodpecker	1	—	2.2mm.	—	1.6mm.
Blue Jay	16	3.7	3.5-4.1	2.3	1.9-2.6
Starling	9	3.8	3.6-4.0	2.2	2.1-2.2
Goldfinch	18	1.7	1.5-1.8	1.2	1.0-1.3
Towhee	1	—	2.8	—	1.5
Tree Sparrow	47	1.9	1.7-2.1	1.2	1.0-1.3
Fox Sparrow	16	2.7	2.5-2.9	1.6	1.5-1.8
Song Sparrow	6	2.3	2.1-2.4	1.4	1.3-1.7

—E. Alexander Bergstrom, 37 Old Brook Road, West Hartford 7, Conn.

Death of a Bluebird.—A female Eastern Bluebird *(Sialia s. sialis)* 20-155630 nested in a box on my back lawn at Lincoln, Mass. She was the second mate for that season of male 48-166507 and was present from 23 June to 4 August 1951. She hatched her five eggs on 13 July. The nestlings died at various ages. The last was alive on 4 August but dead the next morning. Although it had been hatched 22 days before it was still only partially fledged. The usual fledging period is 16 to 18 days.

In 1952 this female reappeared on 5 April and was taken again 3 May. The next morning I caught a new female, 20-196356. It was soon seen that she was probably occupying the rear lawn box with male 48-164834. On the morning of 12 May 20-155630 came around the box and was engaged in 'hand-to-hand' battle by the resident female. 48-164834 looked on but took no actual part in the fighting. It was fairly certain that 20-155630 was an unmated trespasser. When I returned in the late afternoon I found her lying on the ground in a house trap about 20 yards away. How she happened to enter the trap I do not know. No other bluebird ever has. The exit door at ground level was open. The resident female was working around and over the trap. 20-155630 was in very bad shape and died in about half an hour.

At autopsy it was found that the ovary was only about 7 mm. long with follicles under a millimeter in diameter and uniform in size. The bird had not come into breeding condition by the middle of May.

These observations lead to a conjecture: in 1951, 20-155630 was in or very near a sexual condition analogous to human menopause; in 1952, she had outlived the ability to ovulate. If this conjecture be even approximately true, it may shed a little light on the almost unknown phenomena of senescence in passerine birds.

The skein of relations of these bluebirds and some others are set out in the tabulation below.

♂ 48-164834	15 May-4 June 1949; 16 July 1950
	27 Mar.-3 Aug. 1952, mate probably 20-196356
	16 Oct. 1952; 1 Apr.-31 May 1953
♀ 20-196356	4-13 May 1952 and probably to 30 July 1952
♂ 48-166507	13 Oct. 1949
	28 June-5 Aug. 1950, mate 48-190546
	4 Apr.-4 Aug. 1951, mates (1) 20-155564, (2) 20-155630
♀ 48-190546	21 July-5 Aug. 1950
♀ 20-155564	6 Apr.-25 May 1951, young reared successfully
♀ 20-155630	23 June-4 Aug. 1951, see above
	5 Apr.-12 May 1952, died as above

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