

4.19	Blue	Male	Tried several times to enter, then ate insect
4.20	Green	Female	Entered, fed insect, removed faecal sac
4.21	Blue	Female	Entered, fed insect
4.23	Green	Female	Entered, fed insect, remained one minute
4.23 $\frac{1}{4}$	Blue	Female	Fed insect from entrance while green female was inside
4.24	Blue	Male	Fed katydid from entrance while green female was inside
4.31	Blue	Male	Entered, fed worm, removed faecal sac
4.32	Green	Male	Fed berry from entrance
4.34	Black	Male	Fed insect from entrance

Thus during the two hours the adult green-banded male fed 5 times, the adult blue-banded male fed 8 times, the adult blue-banded female fed 11 times, the immature green-banded female fed 9 times, and the immature black-banded male fed 4 times.

All cleaned the nest except the young male. The blue-banded male, who was evidently father of the brood, displayed more fear than the others. He had difficulty in entering the box and at least once ate the food after trying several times to give it to the young. When both males arrived at the nest with food at the same time, one greeted the other with characteristic Bluebird fluttering and caroling, similar to that of a mated pair, but the green-banded male always fed first, probably because he was more fearless. The immature female when feeding lingered in the box and cleaned the nest more often than even the adult female. That the adult male Bluebird left unmated should assist in feeding the young seems not so strange as the fact that two young of the first brood should feed and care for their younger brothers and sisters when they themselves were only two months old<sup>1</sup>.—MRS. KENNETH B. WETHERBEE, Wetherbee Pastures, Pomfret, Connecticut.

**Further Notes from Penikese Island Terns.**—During the summer of 1932 many tern colonies along the Massachusetts Coast suffered more severely than during any year so far recorded. The details of these bird tragedies have been exhaustively described by Oliver L. Austin, M.D., and Dr. Oliver L. Austin, Jr. (see *Bird-Banding*, Vol. III, No. 4, pp. 123-139 and pp. 143-156.)

In the case of Penikese Island, the terns returned to their nesting colony in the usual numbers in the spring of 1932, and breeding proceeded normally until the season was well advanced. Eggs and young were produced in abundance, and a successful rearing appeared to be in the making, when suddenly the adults completely deserted the colony, and eggs, young, and adults vanished almost over night. (See *Bird-Banding*, Volume III, No. 4, pages 173 and 174.) The reason for this strange disappearance has not been determined. It was, therefore, with great interest that Penikese Island, lying near the entrance to Buzzard's Bay, was again visited from July 1st to July 5th, 1933, by the same group of banders that were on the island the previous year during the corresponding period. As I have previously stated, the island is completely covered to the water's edge with long thick grass, in which the terns nest under conditions quite in contrast to those in other Massachusetts colonies, where open sandy tracts on islands

<sup>1</sup> This exhibition of one of the series of procreative instincts out of the usual order, which begins with the sexual urge, followed by mating and nest-building, and ends with the discontinuance of feeding the young, is of great interest as none of the antecedent instincts in the series, generally regarded as essential to the appearance of a successor, could well have been manifested.—EPROR.

or mainland are preferred. Warden Turner reported the appearance of the Penikese terns on the average date of arrival, and a survey of the island revealed their presence in thousands. The Common Terns, as usual, greatly outnumbered the Roseates, the old breeding-areas being occupied. These areas can easily be determined by the dead and matted vegetation, and the sparse new growth of the year. All over the island nests with eggs were found in new locations, and the young were hiding in the long grass in great numbers. The adults were obtaining food with a minimum of effort, constantly fishing with success around the island and catching small fish in such abundance that there was no fighting among them. The hatch and growth of the chicks was excellent. There were almost no dead birds, and the living were fat and healthy, despite days of fog, rain, and cold.

In many of the Massachusetts colonies where the nests are all built on sand with little beach grass, the nests and young are crowded together so that when the young wander from their home into territory claimed by others, they are often so severely pecked about the head while being driven away that they die. On Penikese Island there is no crowding of nests, and consequently no mortality from this cause. The first hatching of young birds was well advanced, and all the chicks were about of uniform size, with very few just out of the eggs. This uniformity indicated that the first clutches were laid at approximately the same time and that there was a marked interval between this and the second laying of the hundreds of eggs that the adults incubated.

In the report of last year's observations (*ibid* page 173) comment was made upon the large number of garter snakes that were introduced in to the island years ago in the days of the Agassiz School and that swarmed all over the island, undoubtedly devouring an undetermined number of eggs and young. Much to our surprise, this year we found that the snake population had been practically exterminated by Herring Gulls that nest in a small colony on the east side of the island. During the spring months of this year the gulls were hard pressed for food and frequented the place where Warden Turner empties his garbage into the ocean, fighting over the scraps, a proceeding not before seen except during a severe winter. When the snakes came out of their seclusion during the warm spring days to bask in the sun, they were attacked and devoured by the gulls, which coursed over the island like Marsh Hawks. On several occasions the Warden observed them catch a snake and carry it to the salt water, into which they doused it several times, shaking it savagely before eating it. In former years, when the Warden has killed and thrown the snakes into the water, the gulls have not been seen to eat them. The Herring Gulls have practically eradicated an introduced form of wild life that in years to come would undoubtedly have threatened the very existence of the tern colony.

Despite a growing sentiment the country over, against the taking of birds' eggs for food or commercial purposes, and the laws passed to prohibit such action, Warden Turner reports that on several occasions this year the island was visited by fishermen of foreign extraction, who but for his vigilance would have destroyed and carried away many eggs and probably have broken up the colony. Their method is to stake off certain areas and destroy all the eggs therein. The robbers then return in a few days to collect and carry away all the new-laid eggs in the marked area, thereby ensuring a new laying. The eggs are removed as long as the birds continue laying, or until the pillagers have satisfied their wants.

The birds banded are as follows:

Adult Common Terns .....	34
Immature Common Terns .....	1966
Immature Roseate Terns .....	300
Total .....	2300

—CHARLES B. FLOYD,  
Auburndale, Massachusetts.

**Banding Some Birds of Prey.**—In the two years since I got my banding-license and commenced banding whenever opportunity offered, without trapping, I have banded fourteen birds of prey and had two returns. On June 9, 1932, I climbed to a Red-shouldered Hawk's nest that I had long known and found two young still downy but for pin-feathers on their wings. One merely opened his mouth wide and stuck out his queer-shaped tongue at me; the other backed to the verge of the nest, stood upright with little wings wide-spread, and shrieked. His call had the typical downward inflection of his kind. The parent answered, swooping down within a yard of me, but then vanished. Neither of these birds (B661484-5) has yet been heard from. Others were raised in 1933 but had already flown when I went to band them.

On June 24, 1932, I was guided by H. C. Holton of Mt. Hermon, Massachusetts, to a Marsh Hawks' nest which he had discovered on May 29th while searching for a Bitterns' nest. It had then contained five eggs, but we found only three young, of different ages. The oldest scrambled off into the bushes, and had to be brought back by the wings and held (very belligerent) until banded, when it again dashed away. The second resisted with quick strokes of claws and bill, but remained on the nest. The third was diminutive and very meek. Three weeks later, July 15th, one of these Harriers was shot in the neighboring town of Bernardston by a twelve-year-old farm-boy. Alarmed at finding a band on the bird, he buried it, and only much later told his father about it. Hearing the story from the father, Mr. L. R. Nelson, taxidermist, of Winchester, New Hampshire, dug up the remains and forwarded the band to Washington. Presently I was notified that B661476 was "reported shot by L. R. Nelson"—an ambiguous sentence that I misinterpreted. I wrote Mr. Nelson (whom I had met) reproaching him with killing, so young, a bird protected in Massachusetts. He indignantly replied with the above account.

On June 28, 1932, I climbed into the church-steeple in Springfield, Massachusetts, where two broods of Barn Owls had been raised the previous year. Two addled eggs and two downy featherless youngsters were found on the dung-crusted masons'-platform. They hissed furiously and backed away. Neither parent appeared. A few days later, an adult Barn Owl entered an eighth-floor window in an office-building and was held captive for several days. Fearful of starvation for the young, I wrote the Springfield papers about them, and the son of the church janitor took them under his protection. On October 21st one of these two was shot "by mistake for a Barred Owl" at Whitman, Massachusetts, eighty-two miles due east of Springfield. "This kind of owl is unknown to me; please send me information," wrote the killer in returning the band to Washington. Long, purposeless flights of this kind probably first brought to Massachusetts the Barn Owls that now seem so firmly established. The nest-mate, B661481, has yet to be heard from. In 1933 Barn Owls bred in the tower of the Court House, unsuccessfully (because so early) in February, but successfully later in the spring, and their unsophisticated children got into many difficulties