Vireos, or whether the male of the original mismatched pair was attracted to a female of his own kind. At 8:05 a.m. the female Solitary Vireo visited the nest alone and worked in it briefly. A Yellow-throated Vireo was perched near the nest, and singing, when the Solitary Vireo returned at 9:10 a.m. and remained to work in the nest for two minutes. The female Solitary Vireo then flew to a neighboring oak to preen in the sun. She stayed within 50 feet of the nest for the following 50 minutes, something I had not seen her do before; she was not joined by her mate. The female Solitary Vireo made a final brief visit to the nest at 10:06 a.m., remaining only a few seconds before flying off for the last time. A Yellow-throated Vireo, perched near the nest, sang as she approached as well as during and after her last visit. The Yellow-throated Vireo did not fly toward, nor threaten, the Solitary Vireo, unless its song, during her visit to her nest, constituted a threat.

Later that morning, I saw a Yellow-throated Vireo at the nest on three separate occasions. Each time the bird got into the nest to turn and shape it; each time it seemed to peck and eat something from the rim; and on each visit the bird sang. Although I did not see two Yellow-throated Vireos in the area at the same time again until several days later, a Yellow-throated Vireo was present and singing through much of the afternoon. A single Yellow-throated Vireo was seen at the nest early the following morning. No other vireos were heard or seen in the area until May 30, when a pair of Yellow-throated Vireos hopped through the branches of a pine tree and then flew toward, but over, the nest tree and out of sight.

A week later I secured the empty nest and sent it to Dr. Herbert G. Deignan at the U.S. National Museum. After comparing the nest with those of a series of Yellow-throated, Solitary, and Mountain Vireos, in company with Dr. Alexander Wetmore, Dr. Deignan wrote:

". . . Your nest distinctly fits with the nests of the two blue-headed races in its greater dimensions, and does not disagree with them in materials. This would seem to show that, while both members of a mated pair of vireos take part in nest-building, it is the female that is responsible for the architecture of the nest. . . ."—DORIS C. HAUSER, *309 Sylvan Road, Fayetteville, N. C., January 1, 1959.*

Sparrow Hawks attempting to breed in the laboratory.—Sibling Sparrow Hawks (*Falco sparverius*) taken before they could fly, were kept in a cage (6 × 2 × 5 feet high) in the laboratory (temperature 19° to 21°C.—winter; 23° to 28°C.—summer). They were fed white rats and mice, horse meat and wild birds.

In March, nearly a year after hatching, a pasteboard box with a hole 5 × 6 inches in the side was fastened in the upper corner of the cage. The birds soon enlarged the hole. On April 30 an egg was laid but disappeared the next morning. Five days later a second egg was found but was broken a few hours later. A third egg, laid seven days after the first, remained for 19 days when it was broken. No more eggs were laid.

In late February of the following year the female became very active trying to push the male along the perch and pecking him without response. A few days later (March 8) copulation started. During the height of their sexual activity copulation was frequent. For example, on March 15 they copulated 14 times from 7 a.m. to 7:36 a.m.; six times more before noon and once more at 4:50 p.m. The female was the aggressor. As the season advanced sexual activity diminished, so that by early May copulation occurred only once or twice a day and then ceased. Four eggs were laid but all were broken soon afterwards.

The female died at 30 months of age, having eaten a bird that may have been infected. She was replaced by another female a few months old. At first the newcomer became so aggressive that a few days' separation was necessary. Shortly after the female was returned

to the large cage the male attempted copulation but the female was not receptive until the latter part of March when copulation became frequent. On May 6 the first egg was laid but soon was broken. By the time a sixth egg (May 25) had been laid the female was setting much of the time, the male replacing her occasionally. None of the eggs hatched.

Each year the birds began to show an interest in the nest box during the last days of February and did a little courting. Laying began about the middle of April and continued into May until five or six eggs had been laid. In one season, of three eggs which remained unbroken, one was not fertile but the other two contained embryos. None ever hatched.

At 86 months of age the male died of encephalitis. The remaining female survived five years more, dying at the age of 115 months. A year before this she began to refuse all food but white mice, although she appeared in good condition. A week before death, her appetite began to fail and she would sit on her perch with eyes closed. An autopsy was performed but no pathology was found.—FRANK A. HARTMAN, *Department of Physiology, The Ohio State University, Columbus, Ohio, December 15, 1958.*

Chipping Sparrow copulates with House Sparrow.—On the afternoon of July 17, 1959, an adult male House Sparrow (*Passer domesticus*) was feeding approximately 15 feet from a small Scotch pine in Kalamazoo, Michigan. This tree contained a nest of a pair of Chipping Sparrows (*Spizella passerina*), in which was one young bird. One of the Chipping Sparrows, a male judging from its bright rufous crown, flew from the tree and alighted, facing the House Sparrow and some two feet from it. The House Sparrow, with partially extended wings and upturned bill, immediately hopped toward the Chipping Sparrow in the attitude usually associated with food-begging by young House Sparrows. The Chipping Sparrow retreated approximately one foot from the advancing House Sparrow, then turned and advanced toward it. While the House Sparrow was still crouched with partially extended wings, the Chipping Sparrow hopped to its side, mounted the now passive bird and attempted copulation. I could not ascertain if actual cloacal contact was achieved. No longer than four seconds passed from the time the Chipping Sparrow mounted until it fluttered off and returned to the nest tree. The House Sparrow, after approximately 30 seconds, flew to a nearby building.—THANE S. ROBINSON, *Department of Biology, Western Michigan University, Kalamazoo, Michigan, August 7, 1959.*

Caspian Tern and Black Skimmer in Newfoundland.—On July 10, 1958, Tordoff and an ornithology class from the University of Michigan Biological Station found a single pair of Caspian Terns (*Hydroprogne caspia*) nesting in a large colony of Ring-billed Gulls (*Larus delawarensis*) at Rogers City, Presque Isle County, Michigan. These terns very likely were the same individuals found nesting there in 1957 (Pettingill, 1958. *Jack-Pine Warbler*, 183–184). With the adult terns we found two large young capable of short flights. We captured and banded (FWS 566-32953) one of the young.

On September 30, 1958, this tern was shot by Mr. Edwin Keeping at Boxey, Fortune Bay, Newfoundland. Southern wrote to Keeping to confirm the information received from the U. S. Fish and Wildlife Service Bird Banding Office. The recovery date sent to us by this office was October 9, which seems to be the date the report was received rather than the date the bird was taken. In addition to supplying details on the tern, Mr. Keeping also sent to us for identification part of another bird—the bill and anterior part of the crown and face of a Black Skimmer (*Rynchops nigra*), probably a male judging by bill size. Keeping had taken the skimmer at Boxey on September 30, 1958. The specimen has been sent to the National Museum of Canada for permanent preservation.

The Caspian Tern is an "uncommon summer resident" in Newfoundland and probably