Plateau of New York, The Auk, 62: 423, July, 1945), commenting on the absence of Red-eyed Vireos from the hemlock environment, says: "There is no obvious reason why the Red-eyed Vireo should not also nest in hemlock, although it is not known to do so."

In view of the foregoing it would seem desirable to record the finding of a nest of the Red-eyed Vireo (Vireo olivaceus) by the writer in a hemlock tree about 40 feet high in the North Chagrin Reservation of the Cleveland Metropolitan Park System (about 16 miles east of the City of Cleveland, Ohio) July 6, 1936. The forest here is predominantly beech and sugar maple, with a few scattered hemlocks. The particular hemlock tree in which this nest was found was surrounded by beeches and maples, so that there were plenty of available nesting sites in deciduous trees close at hand. The nest was located about 15 feet above ground, suspended between twigs that made a horizontal fork near the end of a branch. It contained three eggs. The bird was incubating at the time, but remained near by during the climbing of the tree and examination of the nest. There was no doubt about identification. At the time the unusualness of the site was not appreciated or photographs would have been secured.—Arthur B. Williams, Cleveland Museum of Natural History, Cleveland 15, Ohio.

More concerning the thundering and clapping sounds of the Chimney Swift.—Through his article on the Chimney Swift, Groskin (Auk, 62: 361-372, 1945) stimulated discussions by Moore (Auk, 63: 70-72, 1946) and Allard (ibid.: 84) on the sound effects, especially the "rumbling of thunder" noises, of this bird in confined spaces. Earlier, Worth (Auk, 60: 558-564, 1943) discussed the clapping sound produced by perched Chimney Swifts. During two seasons the writer has studied the roosting and breeding populations of Chimney Swifts on the roofs of buildings on the campus of Kent State University, and he has had some experience with the thundering and clapping sounds of this species. Roosting birds, which congregate in air shafts during the spring and late summer and which are disturbed by the flashing of a light down into the ventilators, set up a thundering noise while flying down to a lower level. For example, on the evening of September 24, 1944, a small flock of swifts was discovered in an air shaft on Merrill Hall. A flashlight beam caused the birds to push off from the walls, and with a thundering sound they dropped several feet lower in the shaft. (Forty-four birds were removed from this ventilator, including ten previously banded individuals, six of which had nested that season on Kent Hall near by and four which probably had been raised there during the preceding months.) The shaft is 22 inches × 26 inches in cross section and 42 feet deep with a damper opening, making it an open pipe with a fundamental resonant frequency of 13, just within the range needed for perceptible overtone production (Moore, loc. cit). On the evening of May 19, 1945, a flock of 88 Chimney Swifts (including five returns, two of which were mates and have nested in the same shaft for at least two seasons, another nesting bird of the previous year, and two others which had probably hatched in the season of 1944) roosted in one of the 73 air shafts of Kent Hall. The disturbance caused by a light brought about a very loud thundering sound. Here the shaft is 21 inches square in cross section and 21.5 feet deep with a damper opening near the bottom. It has a fundamental resonant frequency of 26.

Worth (loc. cit.) believed that the characteristic clapping sound of the Chimney Swift was caused by striking the wings against the wall. All of the observations made by this writer indicate that the wings are slapped against the body in producing this sound which presumably is made to frighten away the intruder. When a light is focused on a swift (flashlight by night, mirror by day) clinging to its nest or to the wall, it pushes its body away from the nest or wall by straightening its legs to a hori-

zontal position, slowly raises its wings to a high angle, holds them still momentarily, and then claps them vigorously against the sides of the body. The bird may then remain in place and repeat the performance in a few seconds or drop down several feet where the process may be repeated if the disturbance continues. The mate usually follows suit or may perform simultaneously. Seldom will one swift clap more than twice in succession without an interval of rest. When incubating eggs or brooding young, the swifts usually require a longer period of irritation before giving the clapping reaction. Sometimes the birds will push off entirely from the nest or wall, clap their wings in rapid succession for several seconds while fluttering in the well, and then return to the same spot. Mates may alternate in doing this or perform at the same time. Worth apparently heard only the single-clap behavior and raised the question as to whether it may be incidental to changing position in the chimney. Having observed these phenomena for many nights in succession over a period of several months each year, the writer is convinced that they are deliberate behavior reactions which come to an end soon after the disturbance ceases.-RALPH W. DEXTER, Kent State University, Kent, Ohio.

Land birds at sea.—On October 11, 1945 I was returning to the United States aboard ship. Early in the afternoon I saw a Red-shafted Flicker land on the ship's rail. As the afternoon passed, two more flickers, a small owl of undetermined species, three White-throated Sparrows, and approximately fifty other small birds of undetermined species landed on various parts of the ship. When the first flicker landed on the ship, we were nearly five hundred miles due west of the southern California coast. With the exception of making short flights into the wind or to the other ship, the majority of the birds remained on the ship until we entered San Diego harbor two days later. During this same period I also observed several small birds floating in the water, and on one occasion saw a small bird picked from the water and swallowed by an albatross. A strong easterly wind, which frequently approached thirty miles an hour on October 9, 10, 11, and 12, may have accounted for the presence of such non-migratory species as the owl nearly five hundred miles from land.—John L. Buckley, New York State College of Forestry, Syracuse, New York.

Tree Swallow mortality from exposure during unseasonable weather .-The Tree Swallow, Iridoprocne bicolor (Vieillot), is said to be one of the hardiest of its family and often arrives early enough in the spring to encounter more or less snow and cold weather. The spring of 1945 was unusually cold and wet at the time the Tree Swallows were arriving and some, possibly many, birds contracted pneumonia and subsequently died. One birdhouse in the heart of Syracuse, N. Y., produced eleven dead Tree Swallows on May 15, all victims of pneumonia. By coincidence, the writer happened to be at the Huntington Forest, Newcomb, N. Y. (in the Adirondacks), on the above-mentioned date and found Herring Gull pellets on the gull nesting rocks in Wolf Lake that contained feathers, feet, bills and other parts of Tree Swallows. The inference in this case was that the swallows were not taken on the wing but rather in the water or its immediate environs, where they had dropped in a weakened condition and perhaps later died. Innumerable Tree Swallows were observed in the act of catching small insects above the surface of Wolf Lake and in so doing often came near the gulls. The gulls never showed any aggressiveness toward the swallows and that in itself undoubtedly accounts for their fearlessness. Herring Gulls are noted for their scavenging propensities and they undoubtedly were acting in that capacity at Wolf Lake rather than as predators.—WILFORD A. DENCE, Roosevelt Wildlife Forest Experiment Station, N. Y. State College of Forestry, Syracuse, N. Y.