

by a mammal, evidently the skunk whose den was within 50 feet of the cage. When the young Crows were about two months old, or after they had been confined for four or five weeks, they became too large and active for their cages and were released. Even at five weeks the adults were still feeding the young regularly.

Pellets and food items were collected from a sheet of heavy wrapping paper spread on the ground beneath the cage. When it rained, the paper, as well as the pellets and food, became wet. This made collecting a little more messy, but did not seem to affect the material, which was thoroughly dried within a few days by exposure to two 500-watt bulbs in a wooden-frame oven. From the four cages 52 collections, totaling 3,225 grams of dried material, were gathered for examination.—PHILIP BAUMGRAS, *Game Division, Michigan Department of Conservation, Lansing, Michigan.*

**Swainson's Warbler in Webster County, West Virginia.**—From June 13 to 20, 1942, the Brooks Bird Club held its annual field trip at Holly River State Park, Webster County, West Virginia. On the afternoon of the first day I identified there several singing Swainson's Warblers (*Limnothlypis swainsoni*), a species with which I had fortunately had several months' experience in Nicholas County. Subsequently Swainson's Warblers were observed by Mr. and Mrs. John Handlan, Russell West, Mr. and Mrs. Charles Conrad, Pete Chandler, Maxine Thacker, and other members of the club and were found at all suitable habitats visited in the park. This extends about 60 miles northward the known breeding range of the species in West Virginia.—WILLIAM C. LEGG, *Mount Lookout, West Virginia.*

**Variable Nesting Habits of the Parula Warbler.**—There seems to be a widespread belief among bird students that the breeding distribution of the Parula Warbler (*Compothlypis americana*) depends strictly on the presence of *Usnea* or *Tillandsia* beard "mosses." R. T. Peterson, for example, in a recent paper (*Audubon Magazine*, 44, 1942: 25) states that "the Parula Warbler is an especially good illustration of association with a particular life form. The northern race is a bird of the cool coniferous forest biome or Canadian life zone. Its ecological niche is where the *Usnea* lichen, or bearded moss, hangs from the trees. The southern race of this bird is found in a totally different biome, the more humid parts of the warm Lower Austral zone. There it is dependent on the Spanish moss" (*Tillandsia*). Clumps of these "mosses" furnish pendant nest sites for the parula warbler.

At Washington, D. C., where neither *Usnea* nor *Tillandsia* is present, Robert S. Bray and I, during May, 1936, found two nests in bunches of dead leaves and debris caught, during a flood earlier that spring, in low branches of deciduous trees bordering the Potomac River. Arthur A. Allen, in June, 1942 (personal letter), examined a similar nest found by Mrs. York along the Chemung River near Elmira, New York; and Florence Merriam Bailey mentioned this type of nest site in her "Handbook of Birds of the Western United States."

A nest collected by Ned Hollister at the National Zoological Park in Washington, D. C., on July 28, 1921 (U.S.N.M. 36282), is composed almost entirely of heavy brown wrapping cord and a small quantity of wool. It is scantily lined with horsehairs and rootlets and, apparently, hung pensive with the opening at the top, vireo-fashion. According to the label, it was found 6 feet, 8 inches from the ground in a Norway spruce (*Picea abies*) on a lawn near buildings. W. Howard Ball in May, 1934, at Washington, D.C., observed a similarly suspended parula nest about 60 feet up, in one of the topmost branches of a sycamore (*Platanus occidentalis*). Its materials could not be determined.

According to E. H. Forbush (*Birds of Massachusetts . . . etc.*, 3, 1929: 227), "Dr. Anne E. Perkins records that about three pairs come yearly to Collins, New

York, and nest in upland woods where no *Usnea* grows. In 1921, one pair was observed building a nest somewhat in the form of that of an oriole on the down hanging branch of a pine tree. The material used was largely skeletonized leaves and pine needles, but the nest was blown down before it was quite finished." Arthur A. Allen at Ithaca, New York, found and photographed (*Bird Lore*, 21, 1919) "a nest composed entirely of leaf skeletons." It was located "at the edge of a small lake, hung in the tip of a drooping hemlock branch about 25 feet above the water. There was no *Usnea* moss in the vicinity, but the substitute had been quite as skillfully used."

J. Warren Jacobs (*Gleanings*, No. 4, 1905: 9) describes two nests that he found at Blacksville, West Virginia, where *Usnea* was scarce. One was "well concealed among the twigs at the end of a drooping spruce branch, nine feet up. The composition was chiefly of fine grasses, with a slight mixture of *Usnea* moss, vegetable fiber and small bits of wool." A second, similarly placed, resembled the first, but "contained a goodly supply of hickory catkins and hair, as well as some fine rootlets in the lining."

Around Washington, Parula Warblers are found in summer in widely varying woodland habitats. Apparently, mature or partly-mature forests are preferred, but open woods composed of trees between 30 and 50 feet tall are often inhabited. Mature pine stands are rare here, but mixed woods and pure deciduous forests seem to be equally occupied. No preference is apparently given either flood plains, hillsides or ridges.

On three large mature and partly-mature woodland areas near the city, the parula population during late June, 1942, averaged about one singing male per 20 acres. My attempts to locate nests in these areas then were fruitless. All individuals observed appeared to be nesting in the crowns of rather isolated 80- to 130-foot forest trees. Two juvenile birds with tails about half grown were observed near the ground on June 28 as they were being fed by their parents, and Robert Bartl of Washington witnessed the feeding of an offspring by an adult male on June 27.—GEORGE A. PETRIDES, *National Park Service, Washington, D. C.*

**Myrtle Warbler Feeding Young Cowbird.**—On June 30, 1942, Ruth Gilreath and I watched a Myrtle Warbler (*Dendroica coronata*) feeding a young Cowbird (*Molothrus ater*) near Bryant's Bog, Douglas Lake, Cheboygan County, Michigan. The Cowbird was a full grown juvenile, well able to fly. No young Myrtle Warblers were observed in the vicinity.

Friedmann ("The Cowbirds—A Study in Social Parasitism," 1929: 242, 244) describes the Myrtle Warbler as a species very rarely imposed upon, probably because its breeding range overlaps that of the Cowbird in but few places. He gives two records: a nest in Ontario, July 17, 1914 (Harrington, *Oologist*, 32, 1915: 99), containing two eggs far advanced in incubation and one fresh egg of the Cowbird; a nest near Hessel, Mackinac County, Michigan, June 20, 1919 (Van Tyne, *Auk*, 41, 1924: 169), containing a Cowbird egg and a warbler egg.

Friedmann (*Wilson Bulletin*, 46, 1934: 36) later adds another record of a set of one egg of the warbler and 3 eggs of the Cowbird collected at Pittsfield, Maine, May 26, 1891, by C. H. Morrell.—OSCAR M. ROOT, *Brooks School, North Andover, Massachusetts and University of Michigan Biological Station, Cheboygan, Michigan.*

**Ornithological Writings of the Late Prof. Frank Smith.**—Compiled with the aid of Dr. Harley J. Van Cleave and Miss Alice S. Johnson of the University of Illinois.

1904 An unusual flight of sparrow hawks in Michigan in 1904. *Bull. Mich. Ornith. Club.*, 5(4), December: 77-78.