breeding colonies have also been reported recently in North Carolina (Chat, 35:54; 37:17) and Virginia (American Birds, 26:843).

Five adult Red-cockaded Woodpeckers were noted on the initial trip with one nesting hole found occupied. Several subsequent visits revealed adults carrying food to the nest cavity on 15 May and young birds calling within the tree 18 May. The nest hole was 12 feet 8 inches from the ground on the west side of a 40-foot loblolly pine (*Pinus taeda*). The immediate area was relatively open with a young pine understory 4 to 5 feet high. Old fire scars on many tree trunks indicate that fire was responsible for the present forest condition.

Red-cockaded Woodpeckers continued to be sighted in Sumter National Forest through December, indicating the existence of a permanent colony in Laurens County.

Cerulean Warbler Found in North Carolina in Summer

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According to Pearson, Brimley, and Brimley (Birds of North Carolina, 1959), the Cerulean Warbler (Dendroica cerulea) breeds sparingly in North Carolina. Breeding records from three western piedmont and mountain localities are cited, all of these dated between 1909 and 1930. I am not aware of any additional published breeding records for the state. Observations in Northampton County during the summer of 1972 indicate that the breeding range of the Cerulean Warbler in the state may be considerably more extensive than previously reported.

On 16 June 1972 Chris Marsh and I discovered a small colony of three to four singing males along the Roanoke River in Northampton County about a mile downstream from Halifax. These birds were in a mature river-bottom hardwood forest. The site is on the western edge of the coastal plain at an elevation of about 40 feet. The birds were first seen here in late April and May (Lynch, American Birds, 26:750) and were thought to be spring migrants. On 16 June at least one of the males was paired, and the female was watched repeatedly carrying grubs and insects to the top of a hackberry (Celtis occidentalis) 70 to 80 feet tall. Each time she approached the tree with food we heard high, chippering notes coming from the spot where she entered. These were unmistakably begging calls from the nestlings. Because of the height and the dense foliage we were unable to see either the nest or young. Subsequent trips during the summer yielded no further evidence of nesting although males were still singing continuously at least until 19 July.

On the afternoon of 24 June, Harry LeGrand, Edmund LeGrand, and I discovered a group of at least five singing male Cerulean Warblers while driving along US 21 about 11 miles N-NW of Elkin in extreme NE Wilkes County, N.C. We stopped and saw two males along the roadside. These birds were in steep, rocky deciduous woods on a mountainside at an elevation of about 2,100 feet. They were far from any creek or water source. Lack of time and the steep terrain prevented a thorough search for positive evidence of nesting.

To the best of my knowledge these observations are the first summer records for the Cerulean Warbler in North Carolina in 42 years. This apparent absence of recent records is evidently attributable to the lack of extensive summer field work in the state, especially in the northwestern section. The most interesting aspect of the 1972 sightings is the totally different habitat and geographical location of the two colonies. The Halifax colony was in the low coastal plain in river-bottom forest, while the Wilkes County birds were in mountainous terrain far from a major water source. These apparently isolated breeding populations follow quite closely the same distribution pattern exhibited by two

other warblers, the Black-throated Green Warbler and Swainson's Warbler, both of which have isolated coastal plain and mountain breeding populations. This idea of two separate populations is speculation until more field work can be done, but there is some supporting evidence. F.R. Scott (Raven, 29:118) found a singing male in Chickahominy Swamp in SW New Kent County, Virginia, on 12 June 1948. In the summer of 1958 he again found several males in the same swamp and vicinity, but no positive nesting evidence was secured. This area is only about 80 miles NE of the Halifax colony and seems to relate both geographically and ecologically to the Halifax site. Also, in parts of the Virginia and West Virginia mountains, especially on steep, deciduous hillsides, the Cerulean Warbler is locally common in several breeding bird census plots (American Birds, Vol. 20-26, December issues 1966-1972). The Wilkes County birds seem to relate to this segment of the population. The exact status and distribution of the Cerulean Warbler in North Carolina should be determined by future summer field work.

Addendum: Extensive field work by the author in June 1973 revealed that at least 25 pairs of summering Cerulean Warblers were present and apparently nesting at the Halifax colony.—JML

Brown-headed Cowbird Increases in North Carolina Mountains

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The Brown-headed Cowbird (Molothrus ater) appears to be on the increase in the North Carolina mountains. Eugene P. Odum found no cowbirds during a survey of breeding birds of the Highlands plateau in 1946-1947 (Ecology, 31:587-605). In a similar breeding bird census in Highlands in 1959, 1960, and 1971, I found the cowbird absent. In the spring of 1972, however, the cowbird appeared in the area around the Highlands Biological Station and in an overgrown field 6 miles E of Highlands. Both adults and young have been noted during late May and early June of 1972. They appear to be common. David W. Johnston, in reporting the birds of the Highlands area in 1964, classified the cowbird as uncommon with only one observation during the breeding season (Jour. Elisha Mitchell Sci. Soc., 80:30-38). Their recent increase has been noted in other areas of the North Carolina mountains as well as in the Highlands area. Because the presence of these birds affects the population density of other birds, variations in the Brown-headed Cowbird population should be carefully noted.

CONSERVATION

(Continued from Page 65)

New Book

A long awaited book has just emerged that will prove invaluable to anyone who grows wild flowers. Growing Wildflowers, by Marie Sperka (Harper & Row, Publishers, Inc., 10 East 53rd St., N.Y. 10022, \$8.95), fullfills a need for a practical guide to soil requirements, site preparation, and the specialized needs of each individual species. Marie Sperka, a long time personal friend, has many years experience in growing wild flowers and runs a nursery at Crivitz, Wisconsin. She is a dedicated conservationist and one of the very few nursery operators who raises all of her stock, collecting from the wild only where roads or development threaten natural habitat. Marie has successfully grown bog plants in sphagnum moss on an aluminum foil base, and she has succeeded with many rare beauties extremely difficult to propogate.

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