

material on 11 May. It was made of green moss and well lined with white dog hair and tiny feathers. On 22 May I saw chickadees carrying material into the same box. On 3 July the adults were feeding several well-developed young birds. This brood apparently left the box while I was away from home on 5 July. After the box was no longer in use, I removed the nesting material. The pad of green moss was only 1½ inches thick, and it appeared to be unlined. A few bits of fur and feathers mixed in the moss probably were the remains of a thin lining trampled into the pad by the nestlings.

Although there is no absolute proof that the events described above represent two successive nestings by the same pair of birds, the permanent resident status of the Carolina Chickadee and the late date the nestlings were in the box strongly suggest the rearing of a second brood. Allowing 11 days for incubation and 17 days for young to remain in the nest places the time of laying about the first week in June, which would be extremely late for a replacement clutch by a species that normally lays its eggs in April. Certainly this unusually late nesting by the Carolina Chickadee demonstrates once again that we cannot assume everything is known about a species just because it nests in our own yard year after year.

#### ADDENDUM

During the 1976 breeding season two broods of Carolina Chickadees were reared in the same nest box described above. Building began at mid-March, and the nest was well lined when the male mounted the female on 28 March. This brood left the nest on or before 4 May. Construction of the second nest was first noted on 17 May. Young were out of the nest on 23 June but returned to the box for the night and left for good on 24 June. Both 1976 pads of nesting material were about 2 inches thick and contained a fairly good amount of lining material in addition to the moss.

### **Worm-eating Warblers in the South Carolina Coastal Plain in June**

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Although breeding season records of Worm-eating Warblers (*Helmitheros vermivorus*) exist from the southern coastal plain in several states (A.O.U. 1957, Griscom and Sprunt 1957, Oberholser 1974, Lowery 1974, Imhof 1962, Pearson et al. 1959, Scott and Cutler 1963), a very few are from the lower coastal plain, within approximately 100 miles of the coast. Typical breeding habitat is described as forested hillsides and ravines with moderately dense understory (Griscom and Sprunt 1957, Bent 1953). One lower coastal plain locality where the bird breeds regularly, St. Francisville, Louisiana, (Kennedy 1974) is typical hilly habitat (S.A. Gauthreaux Jr., pers. comm.). An increasing number of recent records in atypical habitat indicates that the status of the species in the southern coastal plain, especially in the Carolinas, needs reevaluation (Gauthreaux 1971). LeGrand (1975) gives the breeding status in the North Carolina coastal plain as very rare in the north to absent in the south, based on data complete through 1973. Two 1975 reports have since been added to the list of coastal plain records for that state (Lynch 1976, Fussell 1976).

Burton (in Supplement, Sprunt and Chamberlain, 1970, p. 621) lists the bird as a rare transient along the coast of South Carolina, 7 April-5 May. Sprunt and Chamberlain (1970, p. 437) mention two of A.T. Wayne's records as possible indications of

breeding in the coastal plain, but concur with Burton that the species is a transient in spring, April-May, and fall, July-October. We here present evidence that this species is a probable breeder in the South Carolina coastal plain.

On 8 June 1976, in Berkeley County, S.C., Hamel observed a singing male *H. vermivorus* at 0845 for more than 60 seconds with 8x30 binoculars at a distance of 30 feet. All field marks were clearly visible. The location is 2.5 miles S of Shuler and 1800 feet NW of the point where Halfway Creek crosses county road 98, Halfway Creek Road, in the Francis Marion National Forest. On 22 June 1976 Lennartz observed a non-singing individual for 20 seconds with 10x50 glasses at 25 to 30 feet approximately 1200 feet WNW of the first sighting.

The habitat is a relatively dry forest intersected by a small drain (Halfway Creek) about 5 feet wide. The forest has a mature overstory of scattered loblolly pine (*Pinus taeda*); a maturing midstory of sweetgum (*Liquidambar styraciflua*), black gum (*Nyssa sylvatica*), and water oak (*Quercus nigra*), which reaches the height of the loblolly crowns; and an understory of red maple (*Acer rubrum*), sweetgum, cane (*Arundinaria gigantea*), *Lyonia lucida*, pepperbush (*Clethra alnifolia*), wax myrtle (*Myrica cerifera*), and grape vines (*Vitis* sp.). On 8 June the bird sang and foraged from perches between 2 to 8 feet in a moderately dense thicket of water oak saplings, wax myrtle shrubs and grape vines. It could be heard singing from National Forest Road 161 before 0800. The bird continued singing until at least 0900 when the observer had to leave the area to engage in other work. On 22 June Lennartz noted a bird after having found a singing male Swainson's Warbler (*Limnothlypis swainsonii*). This *H. vermivorus* was leaf-gleaning about 5 feet up in an understory shrub. It moved out to the end of a branch where it hung upside down foraging, its striped head plainly visible, before it moved out of sight. These are the first June records of this warbler in the South Carolina coastal plain of which we are aware.

While these and the other recent records of the Worm-eating Warbler from the Gulf coastal plain and the Atlantic coastal plain south of the Dismal Swamp may indicate an increase in the intensity of fieldwork in these areas, they also suggest the possibility that this species may be expanding its breeding range to include southern coastal plain habitats as well as more northern ones.

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## Probable Breeding of the Red Crossbill in the North Carolina Sandhills

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The Red Crossbill (*Loxia curvirostra*) is an erratic wanderer, and evidence of its breeding in North Carolina is mostly restricted to higher elevations in the mountains (Johnston 1963, Stupka 1963, Simpson 1974). Sykes (1974) reported probable breeding in Wake County in the spring of 1967.

On 1 September 1974, I saw an adult female and a juvenile Red Crossbill near Southern Pines, Moore County, N.C. The birds were watched for several minutes in a large loblolly pine (*Pinus taeda*) bordering a small lake in a residential area. The female was observed feeding the juvenile on several occasions. The juvenile was heavily streaked with dark brown and had brown wings. Its bill was not noticeably crossed. It was capable of sustained flight. The young bird spent most of its time loudly begging for food from the female; however, it was seen trying to obtain seeds from cones by itself on at least one occasion.

Red Crossbills were first recorded in the North Carolina Sandhills on 15 November 1969, and lingered until 2 June 1970 (Carter 1971). They were also present from 18 December 1972 to 7 June 1973 and from 13 November 1973 to 19 May 1974. None were recorded from June through August 1974. Following the 1 September 1974 sighting, a single Red Crossbill in green plumage was seen in the same area on 9 September 1974 and 6 and 7 January 1975. At least one Red Crossbill was heard on 8 July 1975 in the nearby Fort Bragg Military Reservation (2 miles NE of the juvenile's location).

The Red Crossbill is now a visitor throughout the year in the North Carolina Sandhills, and most are seen from November through May. During the summer of 1974, it is highly probable that Red Crossbills bred in the Sandhills region.

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[For additional evidence of breeding by Red Crossbills in North Carolina outside the mountains, see Briefs for the Files, page 105 in this issue of *The Chat*.—ED.]