

the past 2 or 3 years, presumably to increase visibility from the firetower. The tallest tree in the vicinity was a 20-m Hemlock, 40 cm d.b.h., 21 m from the nest. Basal area was 16 m<sup>2</sup>/ha. Canopy cover by trees was 30%. Cover provided by the *Rhododendron*, *Kalmia latifolia*, and Red Maple midstory was 70%. Shrub stems <3 cm numbered 36,300/ha; those 3 to 8 cm numbered 5640/ha. Groundcover was approximately 40%, *Vaccinium* sp. and *Rubus* sp. predominating.

Birds heard or seen within 120 m of the nest site are as follows: Ruffed Grouse, Pileated Woodpecker Great Crested Flycatcher, Solitary Vireo, Black-and-white Warbler, Ovenbird, Hooded Warbler, American Redstart, Rose-breasted Grosbeak, and Rufous-sided Towhee.

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#### LITERATURE CITED

- American Ornithologists' Union. 1957. Check-list of North American Birds. Amer. Ornithol. Union, Baltimore, Md.
- Byrd, H.S. 1972. Soil Survey of Pickens County, South Carolina. USDA Soil Conservation Serv., Washington, D.C.
- Simpson, M.B., Jr. 1976. Birds of the Plott Balsam Mountains of North Carolina. Chat 40:53-62.
- Sprunt, A., Jr. 1968. *Junco hyemalis carolinensis* Brewster. Carolina Slate-colored Junco. Pages 1043-1049 in Life Histories of North American Cardinals, Grosbeaks, Buntings, Finches, Sparrows, and Allies. Part 2. (A.C. Bent; O.L. Austin Jr., Ed.) U.S. Natl. Mus. Bull. 237.
- Sprunt, A., Jr., and E.B. Chamberlain. 1970. South Carolina Bird Life. Reprint of 1949 ed. with supplement by E.M. Burton. Univ. S.C. Press, Columbia.
- Stupka, A. 1963. Notes on the Birds of Great Smoky Mountains National Park. Univ. Tenn. Press, Knoxville.
- Tate, J., Jr. and C.R. Smith. 1974. Late spring along the southern Blue Ridge Parkway—1973. Chat 38:83-87.

## Distraction Display of Chipping Sparrow

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While picking blackberries on the afternoon of 29 June 1980, I heard repeated loud "protest" notes of an adult Chipping Sparrow (*Spizella passerina*). The bird was 10 to 15 feet behind me, vocalizing from an extensive *Rubus* thicket in my yard at Bayleaf, Wake County, N.C. When I turned toward it, the bird flew to the ground, and while continuing its loud notes hopped and fluttered away from me with frequent pauses. One wing was lowered but not dragging. As I continued my activities, the bird returned to its original position and continued to chirp. When I again turned toward the bird, the entire process was repeated. After I progressed another 15 feet a single, recently fledged Chipping Sparrow flew out of the blackberry thicket I was working and went across a gravel drive in a downward glide. It landed near what I assume was its alarmed parent and disappeared into another *Rubus* thicket.

Eloise Potter kindly checked the manuscript text of the forthcoming *Birds of the Carolinas* and found that the only reference to warblers and sparrows performing

broken-wing acts were for Black-and-white and Swainson's Warblers. Specific reference to sparrows exhibiting distraction displays are few, although Pettingill (1970) stated, "Injury-feining shows up in a great number of species representing many families. . . . The performance differs in detail from species to species depending to some extent on the habitat. In general, species nesting on the ground most fully perform injury-feigning, but species nesting in other situations, such as trees and marshes, at least use some of the movements and adapt them accordingly." Stull (1968) provided the only reference to Chipping Sparrows performing distraction displays. He reported two occasions in which he observed incubating birds tumble from nests 6 feet above the ground and flutter along the ground away from his approach. Most accounts, for altricial species at least, are for distractions away from nest and eggs. Pierson (1978) provided a unique example of a displaying male Canada Warbler, a bird that was later observed carrying food. Pierson assumed that this bird was going to nest to feed its young. The significance of the Chipping Sparrow behavior reported here is twofold: It is but the second time a distraction display has been reported for the species, normally one that nests in trees, and it is also an example of an adult decoying a potential predator away from a *fledged* bird.

#### LITERATURE CITED

- Pierson, J.A. 1978. Distraction display of the male Canada Warbler. *Raven* 49:62-63.
- Pettingill, O.S., Jr. 1970. *Ornithology in Laboratory and Field*. Burgess Publishing Co., Minneapolis, Minn.
- Stull, W.D. 1968. Pages 1166-1184 in *Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies*. Part 2. (A.C. Bent; O.L. Austin Jr., Ed.) U.S. Natl. Mus. Bull. 237.

## Red-tailed Hawk Snatches Bird in Flight

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On the morning of 30 October 1978, I heard the scream of a Red-tailed Hawk (*Buteo jamaicensis*) and looked up to see a pair of them circling overhead. One hawk was considerably larger than the other and had a bit of green plant material attached to one foot. It had apparently become tangled in weeds while trying to catch a rabbit or rodent. The two hawks stayed fairly close together, circling the area just above tree-top height. They had their heads down, scouring the area for prey. After a few minutes, the larger hawk flew off and the smaller one remained. The wind had picked up considerably by this time, and the hawk hung almost motionless in the air. As I continued to watch, it suddenly banked to its right, dropped a few feet and plucked a small bird out of the air. (The prey probably was a Starling as there were no other birds bucking the winds but a small flock of them.) The hawk snatched the bird with one foot, adjusted to hold it with both feet, transferred the bird to its beak, bit it on the neck (as best I could tell), and moved it back into its talons. He then dropped lower and flew off over the nearby woods and out of sight. All of this activity occurred in less than 2 minutes while I was watching with binoculars.

Red-tailed Hawks do occasionally eat small birds, as discovered by numerous studies of stomach contents, and G. Ronald Austing (World of the Red-tailed Hawk, Lippincott, 1965, p. 15) states, "On rare occasions a red-tail may attempt a falcon-like swoop upon aerial prey, which sometimes ends in success." Nevertheless, there are few documented records of *Buteos* catching aerial prey although this is certainly well known in falcons and some kites, and I was unable to find any detailed description of this feeding behavior for Red-tailed Hawks.