General Field Notes

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Recent Evidence of Sharp-Shinned Hawks Breeding in North Carolina

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Although there have been at least a half-dozen breeding, or probable breeding, records of Sharp-shinned Hawks (*Accipter striatus*) in North Carolina (Pearson, Brimley, and Brimley, Birds of North Carolina, revised by Wray and Davis, 1959), additional records are obviously noteworthy.

On 24 July 1970, near the summit of Mount Mitchell, Mueller saw an adult male pass food to a juvenile female in flight. We have seen this behavior only when parents feed fully-fledged young.

On 17 June 1974, Mueller saw a male Sharp-shin in the Mason Farm area about 5 km SE of Chapel Hill. The bird was carrying food and was flying at a height of more than 50 m, and proceeded in a straight line for more than 500 m until it disappeared from view behind trees. We have seen such behavior only when the male is carrying food to the nesting female or young.

On 2 May 1981, Meyer saw an adult male and adult female Sharp-shin apparently defending a nest near the Eno River, 7 km NE of Hillsborough. The nest, with the female in incubating position, was found on 3 May. The nest was located against the trunk (18 cm dbh), of a 15- to 16-m Virginia Pine (*Pinus virginiana*) at a point 12 to 13 m above the ground. The nest tree was on a 30- to 40-degree slope about 200 m from the river and 9 m from a disused logging road. The site was near the edge of a stand of Virginia Pines, adjacent to an extensive oak/hickory forest. The diameter of the nest and the sticks used in its construction were typical of the nests we have seen in Maine and eastern Canada. The depth of the nest was greater than any we have seen and it was built in a tree and grove offering much less concealment than any other nest, which were all in spruces (*Picea* sp.). One food delivery by the male was seen on 3 May. The female received the prey 30 to 40 m from the nest after a brief vocal exchange. On 13 May, the female remained in incubating position during the entire 3-hour observation period. The male was not seen during this time, though, in our experience,

TABLE 1. Observations of Sharp-shinned Hawks during the breeding season, 1960-1981.

County	Date	Observer(s)	Reference[1]
	Western North Carolina		
Ashe-Allegheny	30 June 1980	Lynch & Moore	45:20 (1981)
Avery	22 May 1976	Wentworth	40:91 (1976)
Buncombe	23 June 1972[2]	Lee	Unpublished
Caldwell	30 May 1981	Sneeden	46:18 (1982)
	Central North Carolina		
Chatham	23 July 1977	Pullman & Teulings	42:17 (1978)
Cumberland	14 June 1978	Crutchfield	43:22 (1979)
Durham	29 July 1975	Teulings	40:18 (1976)
Durham	3 July 1976	Pullman	41:14 (1977)
Guilford	22 June 1975	Carter	40:18 (1976)
Vance	6 July 1980	Tove	45:20 (1981)
Wake	23 July 1974[2]	Wright	38:96 (1974)
Warren	4 June 1974	LeGrand	38:96 (1974)
	Eastern North Carolina		
Carteret	22 June 1970	Wade & Fussell	34:108 (1970)
Carteret	27 May 1972	Fussell	36:94 (1972)

[1]All references are to *The Chat*.
[2]Two individual birds were seen.

such absences are not unusual early in the nesting cycle. Neither adult was present on 18 May; we found no signs of young, egg remains, or nest predation. Occasional searches in late May, June, and early July provided no evidence of the hawks or any possible explanation for the pair's apparent failure.

There have been no other definite, or even strongly suggestive, records of Sharp-shins breeding in North Carolina since 1959. Stupka (Notes on the Birds of Great Smoky Mountains National Park, 1963) mentions four records for both June and July for the years 1928 through 1961, but does not indicate how many of these were seen in the North Carolina portion of the park. Stupka lists only one record that we interpret as clear evidence for breeding; on 2 June 1954, Tanner saw a bird carrying food near Mount LeConte (Tennessee). Two other works have indicated Sharp-shins as being present in summer, at least rarely, but neither presents details: Johnston, J. Elisha Mitchell Sci. Soc. 80: 29-38 (Highlands, Cashiers, and vicinity); and Simpson, J. Elisha Mitchell Sci. Soc. 88: 244-251 (Mount Mitchell State Park). A summary of all other know observations of Sharp-shins in North Carolina in summer is presented in Table 1.

The presence of a single individual is dubious evidence of breeding. We know very little about the age when most Sharp-shins breed and what portion of first-year birds complete the migration to northern breeding areas. Sharp-shinned Hawks have been observed in migration at the Cedar Grove Ornithological

Station in southeastern Wisconsin as late as 30 May; in the 9 years the station was operated in the spring, we conducted observations for a total of only 9 days in June with the latest date on 8 June (Mueller, unpubl.). It is possible that a few birds may move northward in June.

The simultaneous sighting of two birds without any evidence of behaviors associated with breeding is also only tenuous evidence for breeding. The female remains in the immediate vicinity of the nest from just before egg-laying until the nestlings are about 3 weeks old, a total period of about 8 weeks. During this time the male provides all the food for his family and is seen in the vicinity of the nest only during the few minutes (maximum) elapsed during the delivery of prey to the female. This exchange involves considerable vocalizations. Incubating females may sit tight and go unnoticed when a nest is approached, but most will exhibit some form of defensive behavior, particularly after the young have hatched. Defensive behaviors range from flying about, vocalizing, to attacks on the human intruder. The young remain together for about 3 weeks after fledging and this is the most likely time to see more than one Sharp-shin in a small area. Young birds frequently perch in the same or adjacent trees, and interact frequently, stooping at each other and vocalizing. The approach of an adult results in a frenzy of vocalizing and young able to fly will meet the approaching adult and chase it until the food is dropped. The bird obtaining the food item is usually chased by one or more siblings who have failed to receive food, vocalizing as they fly about.

Anyone seeing two Sharp-shins together in summer should pause for an hour or two and attempt to observe interactions or other behaviors suggesting breeding. Every attempt should be made to determine the age and sex of the birds (see Mueller, Berger, and Allez, American Birds 33:236-240 and Bird-Banding 50:34-44).

Sighting of a Swainson's Hawk in North Carolina

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On 21 March 1982, approximately 30 minutes before sunset, we saw an adult, light-phase Swainson's Hawk (*Buteo swainsoni*), at Lake Benson. Lake Benson is near Garner, Wake County, N.C., and is approximately 8 miles S of Raleigh. The large Buteo was soaring along the line of trees that separates Lake Benson from the fields to the east. After remaining in sight for approximately 10 seconds and approaching us to within about 7.5 m, the bird turned eastward and disappeared behind the trees. We were unable to find the bird again that day or on subsequent days. At the time of the sightings the sun was low but unobscured and was over our right shoulders. We were facing southeast from the Lake Benson