

[NOTE: The above article was prepared from various letters received from Maxilla Evans. The original correspondence is on file at the North Carolina State Museum. Because this species has not been previously reported from the state, the Band-tailed Pigeon should be placed on the Provisional I list for North Carolina birds (see Chat 44(3):59-61).—DSL]

[NOTE: The March 1980 Newsletter of the Columbia, S.C., Audubon Society reports the sighting of a Band-tailed Pigeon with a flock of Rock Doves in the Boykin-Rembert area north of Sumter, S.C. Kay Sisson (pers. comm.) says that the bird was found on 30 January 1980 by three hunters, who checked the identity in a field guide. Bennie Marshall of Route 1, Rembert, S.C., telephoned Mrs. Sisson about the bird and noted all the differences from the Rock Dove, leaving no question in her mind that he knew what he was talking about. The other two observers were Baynard Boykin and Alen Wooten.—EFP]

Nectar Robbing by Orchard Orioles

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Nectar is an important component of the diet of several species of orioles (Fisk and Steen, *Condor* 78:269-271, 1976). In the tropics, wintering Orchard Orioles (*Icterus spurius*) and Northern Orioles (*I. galbula*) have been observed visiting flowering trees for nectar and may even be pollinators for some tree species (Leck, *Auk* 91:162-163, 1974; Cruden and Herman-Parker, *Auk* 94:594-596, 1977). Here in North America, Northern Orioles have been found to feed upon the nectar of flowering Trumpet Creepers (*Campsis radicans*) (Bent, U.S. Natl. Mus. Bull. 211, 1958). However, little is known of oriole nectar feeding habits on the breeding ground in the temperate region. The purpose of this note is to describe the nectar feeding behavior of Orchard Orioles in North Carolina.

On the morning of 7 July 1980, while observing a patch of flowering Trumpet Creepers within an Orchard Oriole territory on the Dorothea Dix Farm, Raleigh, N.C., I observed a flock of four orioles (one adult, three juveniles) feeding upon the blossoms. A feeding oriole perched on the vine or the attached end of the flower and used its bill to pierce a hole in the top part of the floral tube (corolla) near the nectaries. Once inside the long corolla, the bird opened its bill (gaped) and proceeded to lap up nectar with the tongue. Periodically, a feeding bird lifted its head to permit the liquid to flow down the throat. After feeding upon one flower, the bird moved on to the next blooming flower. The flock members concentrated all of their feeding effort upon the blooming Trumpet Creeper flowers and ignored the Trumpet Creeper buds as well as the abundant flowers of Japanese Honeysuckle (*Lonicera japonica*). The flock fed within the Trumpet Creeper tangle for approximately 7 minutes before departing.

On the morning of 8 July 1980, I examined the corollas of Trumpet Creeper flowers growing within and outside the Orchard Oriole territory. I inspected 169 blooming Trumpet Creeper flowers in four different patches all within 1 km, but outside the oriole territory. No evidence of damage to the flowers was found outside the oriole territory. However, within the Orchard Oriole territory 78.3% of the blooming Trumpet Creeper flowers (N=23) contained slits in the corollas while only 15.8% of the flower buds (N=19) contained longitudinal slits. Thus Orchard Orioles showed a

statistically significant ($G=14.77$, $p < .005$) preference for mature flowers, which would be expected to have the highest nectar content.

I have used the term "nectar robbing" because the orioles by-passed the anthers and stigma by piercing and splitting the corolla near the nectaries and thus obtained nectar from the Trumpet Creeper flowers without serving as a pollinator. Although Ruby-throated Hummingbirds (*Archilochus colubris*) frequently visited the Trumpet Creeper flowers and probably served as pollinators, they were never observed feeding upon the flowers split open by the Orchard Orioles. By removing nectar from the flowers, orioles may discourage visits by such pollinators. However, the extent of Orchard Oriole nectar robbing of Trumpet Creeper flowers appears to be restricted to those vines within or very near oriole territories. By the end of the oriole breeding season when widespread movement occurs, most of the Trumpet Creeper flowers have finished blooming.

Second Winter Record of Indigo Bunting in South Carolina

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On 15 December 1978 during efforts to capture Dark-eyed Juncos (*Junco hyemalis*) in the vicinity of Clemson, Pickens County, S.C., we netted an immature Indigo Bunting (*Passerina cyanea*). The bird's skull was completely ossified, and the wing and tail measured 69 and 50 mm respectively. The rectrices were very worn, suggesting that the bird was a first-year individual. The relatively large extent of blue shading in the feathers further suggested that it might be a male, but sex was not positively determined. The same individual (USFWS Band 1520-79659) was caught again on 16 December during the Clemson Christmas Bird Count at the same site among married-student housing units in the western part of the Clemson University campus near the old Seneca River bed.

This is the second winter record of the Indigo Bunting in South Carolina; the first was reported from Edisto Beach, Colleton County, in the winter of 1954-1955, when a molting male stayed at a feeder for a week (Chamberlain 1955). The usual winter range of *P. cyanea* extends north from Central America to Florida and the northern Gulf Coast (Taber and Johnston in Bent 1968). Most winter records of the species north of Florida have been coastal (e.g. Tipton 1976, North Carolina; Imhof 1976, Alabama), although many inland reports exist, particularly in the Mississippi Valley (Smith 1958, North Carolina; Mumford and Keller 1975, Indiana; Bohlen 1978, Illinois; Stupka 1963, Muffy and Owen 1977, and Bierly 1980, Tennessee). We surmise that this individual was enabled to stay in the upper piedmont by the extraordinarily mild autumn weather in northwestern South Carolina in 1978. It is interesting that an Indigo Bunting was caught in Indiana also during December (D. Whitehead, pers. comm.).

This manuscript has benefitted from review and discussion with M. L. Bierly.

LITERATURE CITED

- Bent, A.C. 1968. Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies. Compiled and edited by O.L. Austin Jr.