

BLUE GROSBEAK BREEDS IN THE FLORIDA EVERGLADES

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The Blue Grosbeak (*Guiraca caerulea*) is known to breed across northern Florida (Sprunt 1954, Bent 1965, Weston 1965). Farther south, breeding was reported once near Tarpon Springs (Sprunt 1954). More recently the species was found in full song at Campbell City, northern Osceola County, by Stevenson (1966) on 29 May and 17 June. No account of its nesting in southern Florida has been found. Ogden (1969) listed the species as only an uncommon transient in the Everglades National Park, and Greene (1946) recorded a single transient for the lower Florida Keys. The present report documents the nesting of a pair of Blue Grosbeaks at Belle Glade Agricultural Research and Education Center (formerly the Everglades Experiment Station) in western Palm Beach County, 170 miles SE and 120 miles SSE of the Tarpon Springs and Osceola County sites, respectively.

On 28 June 1973 I found a nest somewhat smaller than that of a Red-winged Blackbird (*Agelaius phoeniceus*) or Cardinal (*Cardinalis cardinalis*) in the crotch of an elderberry (*Sambucus simpsonii*) bush growing on a ditch bank. The open nest attracted attention because of a rather large cast snake skin woven into and dangling from it. It contained a single pale bluish egg.

The egg color, without lines or marks, limited the species to only a few possibilities, and the inclusion of a snake skin in the nest suggested the Blue Grosbeak. An egg per day was added on 29 and 30 June and 1 July without a glimpse of either of the adults. (Observation time was mainly limited to the noon hour or after 1700 hours.) The female was not observed until 2 July, which date probably was after incubation had begun. She was glimpsed as she dove from the nest while I was still about 40 m away. The equally shy male was identified on 3 July with 7x, 50 binoculars. Familiarity with my presence did not embolden either bird, although I had become a twice-a-day visitor to their nest.

As Bent (1965) supplied few facts on incubation in the Blue Grosbeak, our observations are of interest. Two eggs had hatched by 1200 on 12 July, the third egg by 0900 hours on 13 July, and the fourth by 1300 hours the same day. Assuming incubation commenced with deposition of the fourth egg, hatching required 12 to 13 days. The male was never observed on or leaving the nest and is not believed to have aided in incubation duties.

The adults were less shy after incubation, probably because of concern for their nestlings. By 18 July the young grosbeaks nearly

filled the nest, which was tipped about 30 degrees. All young had their eyes open by 19 July.

On 22 July a storm with high winds and torrential rains dumped 7 inches of water on the area. On 23 July, in my absence, C. E. Seiler checked the nest. He found the nest empty with one dead young on the grass beneath. Several species of predators occur in the vicinity, and any of them may have destroyed the other young. The most likely predators, because of their abundance, are the Cotton Rat (*Sigmodon hispidus*) and the Boat-tailed Grackle (*Cassidix major*). The disturbed adults remained in the vicinity of the nest for a few days, but they were not observed carrying food to the young, and I concluded that all had perished. The male was still in the vicinity of the nest on the 26th, after which neither bird was seen again.

My observations on the food taken to the young indicated that the bulk of the material consisted of noctuid larvae, including particularly the Striped Grass Looper (*Mocis latipes*), and of nymphs of various acridid grasshoppers. The American Grasshopper (*Schistocerca americana*), the Larger Obscure Grasshopper (*S. obscura*), the Southern Olive-green Swamp Grasshopper (*Paroxya clavuliger*), and the Short-winged Green Grasshopper (*Dichromorpha viridis*) were plentiful nearby. The only identifiable material in the gizzard in the one dead nestling recovered was 3 acridid mandibles, 4 complete acridid cerci, what appeared to be a tettigoniid ovipositor, and apparently the complete hind femur and tibia of a flea beetle (*Chrysomelidae*). The remaining material was mostly severely fragmented insect parts.

The nest was constructed mainly of coarse and fine grass blades and small roots. The inner lining contained many hairs apparently from the tail brush of cattle. In addition to the characteristic cast snake skin, 2 pieces of clear plastic and a piece of tissue-like paper were woven into the nest's outer layer.

The nest site was bordered by beef cattle pastures, of mainly St. Augustine Grass (*Stenotaphrum secundatum*), fallow fields containing a wide variety of grasses and broad-leaved plants, and by a dense stand of elderberry of approximately 20 acres.

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LITERATURE CITED

- Bent, Arthur Cleveland. 1965. Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies. Part 1. Dover Publications, Inc., New York. 602 pp.
- Greene, Earle R. 1946. Birds of the Lower Florida Keys. Proc. Fla. Acad. Sci., 8(3) : 199-265. Published jointly by the Academy and the Fla. Audubon Society.
- Ogden, John C. 1969. Checklist of Birds of Everglades National Park. Everglades Natural History Assn.
- Sprunt, Alexander, Jr. 1954. Florida Bird Life. Coward-McCann, Inc., New York. Nat. Audubon Soc. and Fla. Game and Fresh Water Fish Comm. 527 pp.
- Stevenson, Henry M. 1966. Florida Region. *Audubon Field Notes*, 20: 564.
- Weston, Francis M. 1965. A survey of the birdlife of northwestern Florida. Bull. Tall Timbers Res. Sta. , 5: 1-147.

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