

## Prevalence of Bill Abnormalities in Florida Brown Thrashers

The Brown Thrasher (*Toxostoma rufum*) in Florida exhibits a high rate of occurrence of an elongated sickle-bill type of abnormality. This observation became evident after having reviewed the literature on the subject and after I captured an apparently healthy thrasher with an elongated, decurved bill in north Tampa, Florida, near the University of South Florida, on 26 April 1975. Scattered notes and references in the literature document approximately 12 other sightings of Brown Thrashers with bill abnormalities, confined largely to central Florida and distributed over the last decade (Steffee 1968, Stitt 1968, Taylor and Anderson 1972, Taylor 1973). Also, the report by Cobb (1946) of a Long-billed Thrasher (*T. longirostre*) in St. Petersburg almost certainly represents another sickle-billed Brown Thrasher sighting. Recently, Taylor (pers. comm.) has mentioned 2 unpublished records of specimens taken in January 1974 and March 1975 and deposited in the Florida Technological University collections. Unfortunately, only 4 of these birds were carefully examined, measured, or preserved for scientific analysis. All, however, appear to involve an elongated, decurved maxilla, and in most there was a partial sickling and extension of the mandible as well.

The Tampa record represents the most extreme example of sickle-bill abnormality yet measured (Fig. 1). This individual is an adult male with normal plumage and weighing 62.0 g. The exposed culmen measures 70 mm in length, and the maxilla projects 35 mm beyond the tip of the mandible. The mandible has a square tip and may have broken off recently. Taylor and Anderson (1972) recorded the previous maximum culmen length to be 40 mm, the culmen length averaging about 25 mm and extending no more than 2-3 mm beyond the mandible. Therefore, the thrasher taken in Tampa has an upper bill length almost three times that of a normal individual.

The feeding behavior of the abnormal thrasher was observed for about 15 minutes prior to capture. It was rather tame compared to other thrashers in the area and foraged successfully for insects on the ground and among shrubs. Food was captured by turning the head and bill sideways and grasping the item midway up the maxilla near the tip of the mandible. Several leafhoppers and grasshoppers were consumed in this manner, and the bird appeared to have efficiently adapted its foraging technique to the extreme bill abnormality by using lateral headturning movements.

One can only speculate as to the cause of recurring cases of the sickle-bill elongation in Florida Brown Thrashers. The most probable explanation would be a high incidence of certain genes in the popula-

tion that control the growth of an elongate bill. However, there is no evidence yet as to whether the condition is inherited. Since several western species of thrashers normally have rather elongate, decurved bills, mutation of certain genes to produce the condition in a short-billed species is certainly within reason. However, because the incidence of the abnormality is high in central Florida, we might also be on the alert for possible environmental causes such as chemical pollutants unique to this area, or contamination of the food eaten by thrashers. Many more data are needed on the flight movements and local situations within which abnormal thrashers live and forage. It is imperative to determine where the abnormal birds were fledged, in what areas they nest, and whether their offspring are normal or sickle-billed. The ornithologist or bird watcher who makes careful observations of breeding performance involving sickle-billed Brown Thrashers could certainly shed much light on these interesting questions of genetic inheritance or potential environmental causes and effects.

I wish to acknowledge the able assistance of Curtis K. Brown and L. Kristopher Brown in locating and capturing the abnormal Tampa Brown Thrasher. This specimen is now deposited in the University of South Florida Zoological Collections.



Figure 1. Adult male Brown Thrasher with extreme sickle-bill abnormality; Tampa, Florida, 26 April 1975.

## LITERATURE CITED

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- and B.H. Anderson. 1972. Brown Thrasher (*Toxostoma rufum*) with a bill abnormality in Seminole County. *Fla. Nat.*, 45: 129.
- Larry N. Brown, Dept. of Biology, Univ. of South Florida, Tampa, Fla. 33620.

### Report of Fall Meeting

The 1975 fall meeting of the FOS was hosted by the Indian River Audubon Society on 17-19 Oct. at Titusville, with 168 in attendance.

On Friday evening Pam Stewart of Manatee Junior College gave a slide-lecture, "Birds in Art: History and Symbolism," and on Saturday Helen Cruickshank transported the banqueters to Alaska on her magic camera. During field trips to Merritt Island Refuge, Port Canaveral, and offshore, 166 species were recorded, including Lapland Longspur, Bay-breasted Warbler, and numerous accipiters and falcons. The contest in identifying bird skins was won by Noel Wamer and Bob Barber who tied; each was awarded a copy of Robert Porter Allen's *Birds of the Caribbean*.

Papers were presented by David W. Johnston, J. W. Hardy, Herbert W. Kale II, James A. Kushlan, and John C. Ogden.

At the meeting of the Executive Board, W. B. Robertson, Jr., G. E. Woolfenden, H. M. Stevenson, and O. T. Owre were appointed to prepare an annotated checklist of Florida Birds. To broaden the base of the Board (seven professionals and two non-professionals when the Society was trying its wings), D. W. Johnston and G. E. Woolfenden resigned as Directors. To fill the vacancies C. W. Biggs and J. B. Edscorn were appointed. Johnson and Woolfenden will continue to serve on the Editorial Board. Staggered terms for Directors will be studied. The Board looked with favor upon the recent initiation of a Florida Rare Bird Alert by Bob Wallace, John Hintermister, and Jim Horner.

The 1976 spring meeting will be hosted by the Tropical Audubon Society and the University of Miami. The fall 1976 meeting will be in Jacksonville. —Margaret C. Bowman, Secretary.