

NOTES

Florida Field Naturalist 28(4):182-185, 2000.

**A RECORD OF TROPICAL KINGBIRD (*Tyrannus melancholicus*)
IN FLORIDA**

LEE F. SNYDER¹ AND LARRY A. HOPKINS²

¹P.O. Box 530185, St. Petersburg, Florida 33747

²7436 Cedar Street, St. Petersburg, Florida 33702

Tropical Kingbird and (*Tyrannus melancholicus*) were the English and scientific names formerly applied to a tyrannid flycatcher complex resident in Middle America, northern South America, and Arizona and Texas (AOU 1957). Traylor (1979) re-evaluated the complex and concluded it was comprised of two species. The population resident northward along most of both coasts of Mexico, southern Arizona and Texas is now known as Tropical Kingbird (*T. melancholicus*) and the population resident along the Gulf of Mexico from the Yucatan Peninsula north into Texas, Couch's Kingbird (*T. couchii*). The two species are widely sympatric in eastern and southern Mexico, where limited hybridization may occur (AOU 1983, 1998).

Representatives of the complex sometimes stray eastward in North America (AOU 1998). First detected in Florida in 1942 (Stimson 1942), about 26 individuals subsequently have been reported from the state (Robertson and Woolfenden 1992). Following separation of the two species, seven *T. couchii* and one *T. melancholicus* were reported (Anderson 1996). However, no confirmed specimens or taped vocalizations of *T. melancholicus* were obtained.

A bird identified as a member of the Tropical/Couch's Kingbird was discovered at 1800 EST on 9 May 1998 at Fort DeSoto County Park, along the east end of Mullet Key, Pinellas County, Florida (27°37'43"N, 82°42'53"W) by Darlene and Melvin Gahr, Cheryl Libera and LFS. It was sally-feeding from roadside posts and nearby, taller shrubs. Because Ron W. Smith (pers. comm.) had extensively searched the area only two hours before the discovery, it is believed the bird had arrived shortly before it was found. As sunset approached, the bird became more active and moved about 500 meters farther east to the edge of a stand of mangroves at the easternmost end of Mullet Key. There the bird took a position on the tallest mangrove tree, a leafless snag, where it continued sally-feeding. The bird was reported on Mullet Key from 9 to 12 May and eventually heard calling and singing before it disappeared.

Traylor (1979) listed morphological characteristics that separate adults of the two species, (form of the wing tip, relative length of the bill, and differences in color and size), but these can be used only with specimens in hand. Vocalizations, however, are reportedly distinctive (Smith 1966, Traylor 1979, Kaufman 1983).

Observations on 9 May, the first day, were made with various binoculars and field scopes in good light for 90 minutes at distances of 5 to 20 meters. A five minute video tape recording (MJH) yielded a possible call note, but no song. Two simultaneous video/audio tape recordings of calls and call notes were made on 12 May (LAH and Marian J. Hopkins: Magnavox cassette recorder and player Model: D6280; Brooks H. Atherton: no information available).

We performed time-spectrogram analyses (Brian S. Nelson; FFT of 4096, 98.44% overlap and 1024 frame length) on the LAH recording (Fig. 1B) and commercial recordings of *T. melancholicus* (Fig 1A; Peterson 1992) and *T. couchii* (Fig 1C; Peterson 1992).

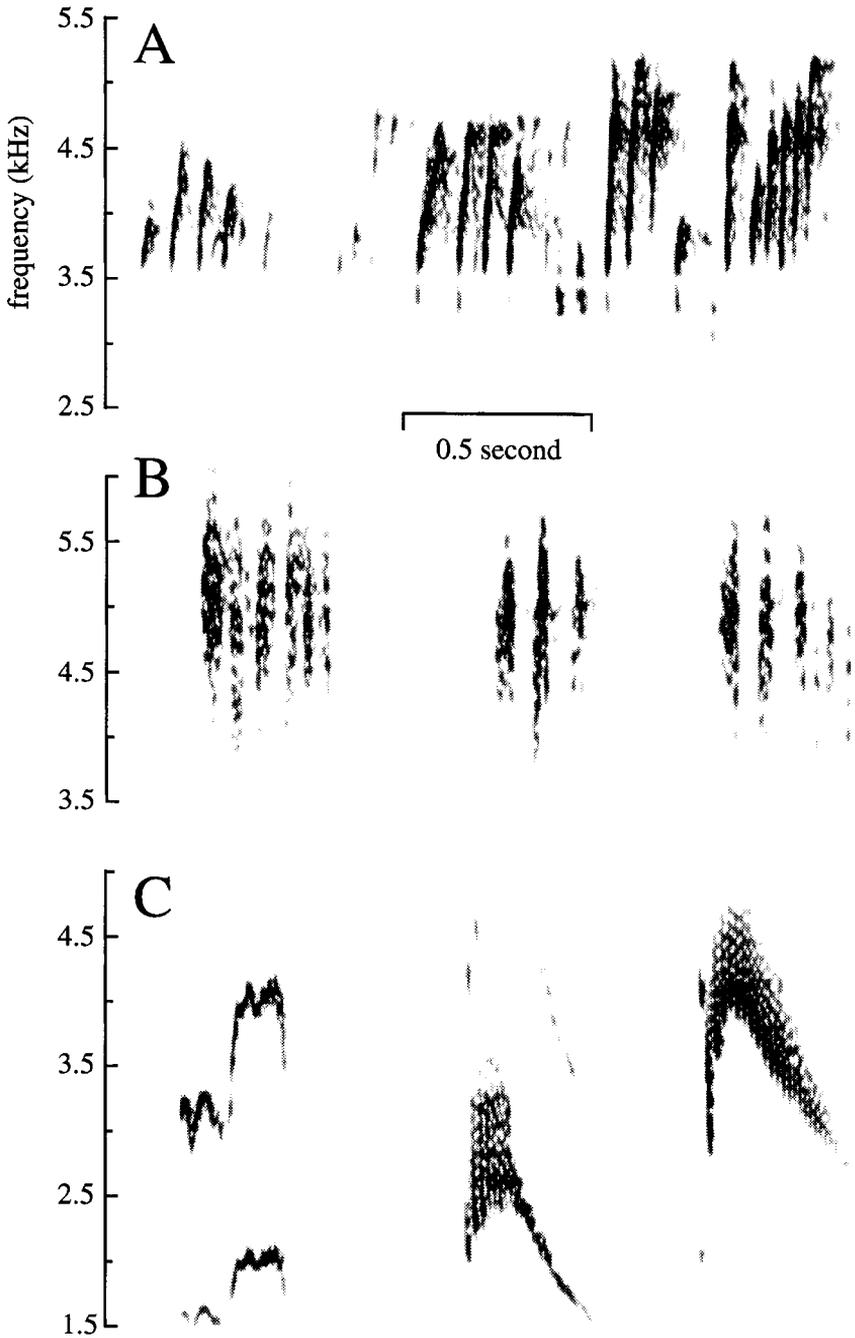


Figure 1. Vocalizations of (A) *T. melancholicus* (Peterson 1992); (B) *T. melancholicus* (LAH—see text); (C) *T. couchii* (Peterson 1992).

The LAH recordings were filtered below 3.0 kHz using the program "CANARY" (Charif et al. 1995) to remove background noise. Recordings were normalized to a constant peak amplitude before time-spectrogram production. W. John Smith (Department of Biology, University of Pennsylvania, Philadelphia) and M. Ross Lein (Department of Biology, University of Calgary, Calgary, Alberta, Canada) stated that the Florida taped song (Fig. 1B) represented *T. melancholicus*.

Photographs (LFS: Nikon F4, Nikon 600mm, f/5.6 lens, Nikon 2× Teleconverter, Kodak EPR rated 64 ISO) were taken on 12 May (Figure 2). Photographs and videotape containing the identifying song (LAH) are archived at Archbold Biological Station, Lake Placid, Florida.

Weather conditions for 1 to 8 May (St. Petersburg Times) showed no unusual weather patterns west of Florida over the Gulf of Mexico that may have aided in the bird's dispersal. Unusually hot weather persisted from most of Texas south to the Yucatan Peninsula for more than a week prior to the bird's discovery. However, a cold front that stretched from southern Texas eastward to the Georgia coast on 3 May and moved rapidly eastward and out over the Atlantic Ocean by 5 May (St. Petersburg Times May 1-8) could have altered the course of the Florida bird.

ACKNOWLEDGMENTS.—The authors wish to express their sincere appreciation to Dr. Glen Woolfenden for his untiring guidance and remarks in preparing this note. We thank W. John Smith and M. Ross Lein for reviewing the time-spectrogram and Brian S. Nelson for preparing the time-spectrograms. Thanks also to Susan Rallo, Ron W. Smith and Bill Pranty for their helpful comments. Special thanks to Judy Hopkins for contributions of identifying sound materials. Finally, the authors wish to express their gratitude to all of those who graciously shared their field notes and observations to help establish the first verifiable sighting and vocalization of the Tropical Kingbird in Florida.



Figure 2. Tropical Kingbird in profile taken on 12 May 1998 at Fort DeSoto County Park, Pinellas County, Florida (LFS).

LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1957. Check-list of North American birds. 5th ed. American Ornithologists' Union, Baltimore.
- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds. 6th ed. American Ornithologists' Union, Lawrence.
- AMERICAN ORNITHOLOGISTS' UNION. 1998. Check-list of North American birds. 7th ed. American Ornithologists' Union, Washington, D.C.
- ANDERSON, B. 1996. Records Committee report. Florida Field Naturalist 24:127.
- CHARIF, R. A., S. MITCHELL, AND C. W. CLARK. 1995. Canary 1.2 User's Manual. Cornell Laboratory of Ornithology. Ithaca.
- KAUFMAN, K. 1983. The Audubon Society master guide to birding. Vol. 2. John Farrand, Jr., Ed. Knopf, New York.
- PETERSON FIELD GUIDES. 1992. Western Bird Songs. Cornell Laboratory of Ornithology/Interactive audio, Ithaca.
- ROBERTSON, W. B., JR., AND G. E. WOOLFENDEN. 1992. Florida bird species: an annotated list. Florida Ornithological Society, Special Publication No. 6.
- SMITH, W. J. 1966. Communications and relationships in the genus *Tyrannus*. Publications of the Nuttall Ornithological Club 6.
- STIMSON, L. A. 1942. Sight record of *Tyrannus melancholicus*. Florida Naturalist 15:56.
- STOUFFER, P. C., AND R. T. CHESSER. 1998. Tropical Kingbird (*Tyrannus melancholicus*). In The birds of North America, no. 358. (A. Poole and F. Gill, Eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.
- TRAYLOR, M. A., Jr. 1979. Two sibling species of *Tyrannus* (Tyrannidae). Auk 96:221-233.