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Possible nocturnal migration of the Eastern Kingbird in the Florida panhandle.—Based on detailed notes on bird migration I have kept for over ten years, I consider the Eastern Kingbird (*Tyrannus tyrannus*) to be a common fall migrant in the Florida panhandle, often migrating westward in loose flocks of 30 to 80 birds along the coastal beaches and barrier islands. At Gulf Breeze, Santa Rosa County, they reach their peak numbers between the third week of August and the third week of September. The largest flock I have observed included 110 birds on 26 August 1982. The site of my observations in Gulf Breeze is 0.4 km from the end of a 32-km long peninsula extending westward into Pensacola Bay. A barrier island lies about 5 km south and the mainland 5 km north and west.

The Eastern Kingbird is usually considered to be a diurnal migrant. I have seen them move west in loose flocks along the treeless portion of Dauphin Island, Alabama in mid-day. Lowery (1974, Louisiana birds, Baton Rouge Louisiana, Louisiana State Univ. Press) has observed large southbound diurnal movements in August and September in inland Louisiana. Skutch (Bent 1963, Life histories of North American flycatchers, larks, swallows and their allies, New York, Dover Publications, Inc.), noted that it migrated by day in Central America, and he watched large flocks of southward bound migrants roost at night in Honduras. Diurnal migration is also strongly supported by a lack of nighttime casualties at the WCTV TV tower located 58 km inland near Tallahassee, Florida. Crawford's (1981, Bird casualties at a Leon County, Fla. TV tower: a 25-Year migration study, Bull. Tall Timbers Res. Sta. 22, Tallahassee, Florida) data show that in 25 years (1955-1980) only 13 fall casualties of Eastern Kingbirds were reported, many fewer than nocturnally migrating species, for instance 1066 Gray Catbirds (*Dumetella carolinensis*), 1018 Veeries (*Catharus fuscescens*), and 4600 Red-eyed Vireos (*Vireo olivaceus*).

At Gulf Breeze, I have often seen Eastern Kingbirds moving west in late afternoon toward the end of the point, where they aggregate, flying back and forth just above treetops. On 16 Sept. 1982, near sunset, I watched a flock of

60-65 milling about the point and finally disappearing into the trees near the end of the peninsula. The following morning at 10 minutes after sunrise, I could find only one bird. It is highly unlikely that their presence was obscured by trees. That afternoon, again near sunset, I watched a flock of 70-75 exhibit similar behavior. In order to be certain of ascertaining their location, I watched from the unobscured end of the thinly vegetated point from one half hour before sunrise the following morning until 08 00. I saw not a single Eastern Kingbird. Either they had resumed movement after dusk or begun their flight in the pre-dawn hours. In any case, a total or partial nocturnal movement must have occurred.

My observations suggest that once reaching the coast, the Eastern Kingbird behaves as do other migrants when faced with a long over-water crossing and begins a nocturnal migration.—Robert A. Duncan, 614 Fairpoint Dr., Gulf Breeze, Florida 32561.

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REVIEW

Cape Sable Sparrow management plan.—James A. Kushlan, Oron L. Bass, Jr., Lloyd L. Loope, William B. Robertson, Jr., Peter C. Rosendahl, and Dale L. Taylor. 1982. South Florida Research Center Report M-660, 37 pp. Available from the authors, SFRC, Everglades National Park, P.O. Box 279, Homestead, FL 33030.—The last decade has seen a resurgence of interest in the Seaside Sparrow (*Ammodramus maritimus*). This seems paradoxical, as the species is a small, dingy songbird with nothing exceptional about its life style other than its habitat. Perhaps the sparrow has gained the attention of researchers because we now realize that estuaries are important to human welfare. But politics has also had something to do with it; several Seaside Sparrow populations are on federal or state endangered species lists. In Florida alone, six subspecies are classified as endangered, threatened, of special concern, or status unknown (Kale 1978). One of them, the Dusky Seaside Sparrow (*A. m. nigrescens*), became functionally extinct by 1980, the first federally-listed endangered form to disappear since the passage of the Endangered Species Act in 1973. The Dusky Seaside and the Cape Sable Seaside Sparrow (*A. m. mirabilis*) occur only in Florida and are geographically separate from the main Seaside Sparrow populations on the Gulf and Atlantic coasts. The Cape Sable Seaside Sparrow is the most isolated population, located about 300 km south of other Seaside Sparrows, which are on the central Florida Gulf coast.

The management plan for the Cape Sable Seaside Sparrow, prepared by biologists of the South Florida Research Center of the Everglades National Park, is scholarly. It should serve as a model for all such government documents. The authors have integrated a lot of information about Seaside Sparrow biology to provide a good background for the management of this population.

Like all Seaside Sparrows, the Cape Sable's life is intimately tied to water. But its waters are fresher than those of other populations. Also unlike other Seaside Sparrows, its habitat is a fire disclimax. The interactions of fire and water make the management of the sparrow interesting but complicated. The preferred habitat (as defined by highest densities of singing males) is grassland that burns periodically. The object of management is to burn the nesting areas about every five years on dense *Muhlenbergia* prairie and about every