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argument applies for another recent Antillean vagrant to Florida, the Key West Quail Dove (*Geotrygon chrysia*), which occurs widely in the Bahamas and Greater Antilles without geographical variation. Audubon (in Howell 1932:282), in addition, reported seeing Key West Quail Doves in the Straits of Florida supposedly migrating from Cuba to the Florida Keys. From their present ranges and lack of variation it seems possible that both of the widely distributed species of quail doves in the West Indies disperse fairly readily between islands. If so, it is not surprising that they occasionally reach southern Florida.

LITERATURE CITED

FFRENCH, R. 1973. A guide to the birds of Trinidad and Tobago. Wynnewood, Pa., Livingston Publ. Co.

GRISCOM, L. 1932. The distribution of bird-life in Guatemala. Bull. Amer. Mus. Nat. Hist. 64: 1-439.

HOLLISTER, N. 1925. Another record of the Ruddy Quail-Dove at Key West. Auk 42: 130.

HOWELL, A. H. 1932. Florida bird life. Tallahassee, Florida Dept. Game Fresh Water Fish.

PAULSON, D. R., AND H. M. STEVENSON. 1962. Florida region. Aud. Field Notes 16: 398-404.

- ROBERTSON, W. B., JR., AND J. A. KUSHLAN. 1974. The south Florida avifauna. Miami Geol. Soc. Mem. 2: 414-452.
- ROBERTSON, W. B., JR., AND C. R. MASON. 1965. Additional bird records from the Dry Tortugas. Fla. Nat. 38: 131-138.

 SCOTT, W. E. D. 1889. Records of rare birds at Key West, Florida, and vicinity, with a note on the capture of a dove (*Geotrygon montana*) new to North America. Auk 6: 160-161.
SPRUNT, A., JR. 1954. Florida bird life. New York, Coward-McCann, Inc.

WILLIAM B. ROBERTSON, JR., National Park Service, South Florida Research Center, Everglades National Park, Homestead, Florida, 33030, and BERYL GIVEN, National Park Service, Fort Jefferson National Monument, c/o U. S. Coast Guard Base, Key West, Florida, 33040.

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Notes on the food habits of the Burrowing Owl in Duval County, Florida.—The Florida Burrowing Owl (Athene cunicularia floridana) has recently been expanding its range in northern Florida, apparently invading and occupying newly cleared land (Ligon 1963, Auk 80: 367-368; Courser 1979, Amer. Birds 13: 143-144). The recently established and apparently successful owl colony at Imeson Industrial Park (formerly Imeson Airport) in North Jacksonville, Duval County, Florida, roughly 33 km south of the Georgia border, may represent the current northernmost breeding limit of the subspecies. Burrowing Owls have been established at Imeson since at least 1976 when two burrows (and at least two owls) were present. This small owl population has continued to increase with at least three pairs of adults fledging a total of 12 young in 1979 (S. Grimes, pers. comm.).

The burrows at Imeson are located in an open prairie-like habitat consisting of a sparse cover of short grasses with widely scattered pine trees (1-2 m in height) in sandy soil. Pellets and scattered prey remains collected at the burrows during May 1977 were examined and analyzed to determine food habits, as little such data is available on Florida Burrowing Owls.

All intact pellets contained sand, ranging from 3% to 60% of the total contents by volume. Eighty percent of the pellets at burrow B contained plant material. All of these contained grass stems and one contained a 10 cm by 3 cm piece of *Nostoc*, a fresh water bluegreen alga. None of the pellets at burrow A contained any noticeable plant material. The presence of sand and plant matter in burrowing owl pellets has been related to nest excavation and accidental ingestion with prey (Thomsen 1971, Condor 73: 177-192). Although insect remains occurred in all pellets, only one contained any vertebrate material. That pellet (20% of the sample for burrow A) contained four fragments of anuran skeleton. Other vertebrate remains collected at an entrance to burrow A included a partially decapitated southern toad (*Bufo terrestris*) and five pairs of *B. terrestris* ilia, one skull of the eastern spadefoot (*Scaphiopus holbrooki*), two vertebrae from a perciform fish (probably a centrachid), two lower mandibles from immature cotton rats (*Sigmodon hispidus*) and one tarsometatarsus from an icterid (probably Bobolink, *Dolichonyx oryzivorus*). No vertebrate remains were found at burrow B. These data agree with those of Lewis (1973, Fla. Field Nat. 1: 12-14) who found that Burrowing Owls in central Florida take a general assortment of vertebrate prey, with amphibians being the most frequent. Although no tern remains were found, these Duval County owls did prey on Least Tern (*Sterna albifrons*) chicks later in 1977 (S. Grimes pers. comm.).

Insect remains present in the pellets or scattered about the entrance of burrow A included lepidopterans, dipterans and coleopterans. Coleopterans identified to family included one staphylinid, one curculionid and one hydrophilid or dytiscid. An unidentified gastropod shell also was found at burrow A.

Insect remains in the pellets at burrow B included coleopterans (especially scarabs), one collembolan, one hemipteran, one dipteran and one lepidopteran (family Sphingidae). One scarab was further identified as a nocturnal june bug of the genus *Phyllophaga*. The staphylinid and many of the scarabs found in these samples are ground dwellers. Again, these data correspond well with the findings of Lewis (1973) who described a wide range of invertebrate prey items with coleopterans being the most common (suggesting a high degree of opportunism).

The presence of items such as *Scaphiopus holbrooki*, *Bufo terrestris*, *Phyllophaga* and the sphingid moth as prey indicates nocturnal or crepuscular feeding in these owls. As Dice (1949 Amer. Nat. 79: 385-416) found that individuals of the western subspecies (*Athene cunicularia hypugaea*) were poorly adapted to finding dead prey under simulated nocturnal conditions, perhaps movement and/or sound is required for prey detection in these situations. Other prey items such as some of the beetles and the hemipteran, however, are likely to have been taken during the day. Thus, the Florida Burrowing Owl seems highly flexible in both prey selection and activity period.

I thank Dr. Pierce Brodkorb, Peter Meylan and especially Jackie Belwood for assisting me in identifying prey remains and Mark Wygoda for reviewing this manuscript.—WILLARD W. HENNEMANN, III, Department of Zoology, University of Florida, Gainesville, Florida 32611.

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Two more records of the Tropical Kingbird for Florida.—On 12 May 1979 at 0800, we observed a Tropical Kingbird (Tyrannus melancholicus) at 15-20 m in good light perched in a mastic tree (Mastichodendron foetidissimum) at the south loop of West Atlantic Drive on Hypoluxo Island, Palm Beach County, Florida. A short time later it was seen perched on utility wires. A Gray Kingbird (T. dominicensis) and a Great Crested Flycatcher (Myiarchus crinitus) were nearby affording comparison of size and color intensity. The bird had a brown tail (both Western (T. verticalis) and Cassin's kingbirds (T. vociferans) have square-tipped black tails) with a distinct deep notch. There was no white in any of the rectrices. The tail feathers, upon careful study with a scope, showed no signs of wear indicating fresh plumage. The breast, belly and undertail coverts were bright yellow. The throat was white and the head was light gray with a small black mask. There was a faint line of gray between the throat and upper breast and the back was olive. The bird was later seen by many observers and was last reported on 15 May (Cloria Hunter pers. comm.). Brooks Atheron photographed this bird in late afternoon of 12 May (Fig. 1). This black and white photograph was made from a 35 mm color slide which is now on file at Tall Timbers Research Station, Tallahassee. This appears to be the first photograph of the Tropical Kingbird for Florida.

Another Tropical Kingbird was carefully studied twice during the morning of 20 May 1979, on Garden Key, Dry Tortugas, Monroe County, Florida, by Brian Hope, Al and Barbara Liberman and Paul Sykes. All field marks were carefully checked. It was studied at 10 m in company of a Gray Kingbird.