and not become stained. This is only an hypothesis. Further and other ideas on feather staining are given by Walkinshaw (1964) and Nesbitt (1975).

We thank James H. Hendrie for permitting us to study cranes on his ranch, Lawrence A. Walkinshaw and Stephen A. Nesbitt for comments on the manuscript, David de Jong for identifying the ants and James N. Layne for showing us places where cranes could be found in the vicinity of the Archbold Biological Station.

Literature Cited

Foster, M. S. 1969. Synchronized life cycles in the Orange-crowned Warbler and its mallophagan parasites. Ecology 50: 315-323.

Healey, W. M., and J. W. Thomas. 1973. Effect of dusting on plumage of Japanese Quail. Wilson Bull. 85: 442-448.

Kennard, F. H. 1918. Ferruginous stains on waterfowl. Auk 35: 123-132.

Kilham, L. 1975. Dirt bathing by a Pileated Woodpecker. Bird-Banding 46: 251-252.

Krogman, B. 1978. The Tule goose mystery—a problem in taxonomy. Amer. Birds 32: 164-166.

Nesbitt, S. A. 1975. Feather staining in Florida Sandhill Cranes. Fla. Field Nat. 3: 28-30.

Simmons, K. E. L. 1964. Feather maintenance. *In* A New Dictionary of birds, A. L. Thomson, ed. New York, McGraw-Hill.

Stoddard, H. L. 1931. The Bobwhite quail. New York, Charles Scribners Sons.

Truslow, F. K. 1960. Return of the Trumpeter Swan. Nat'l Geographic 118: 134-150.

Wetzel, R. G. 1975. Limnology. Philadelphia, W. B. Saunders.

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Fla. Field Nat. 8(1): 20-21, 1980

A rare gathering of Red Knots on Casey Key, Florida.—Casey Key is a barrier island about 7 miles long, located in Sarasota County, Florida, 27°10'N-82°30'W, with the Gulf of Mexico on the west and the Intracoastal Waterway on the east. On 23 January 1979, after several days of extremely high winds from the northwest, we observed large flocks of Red Knots (*Calidris canutus*) along the Gulf beach as far as we could see in both directions. The birds were in tight flocks numbering from 200-500, moving in unison, as is their habit, making it fairly easy to estimate their numbers. These were feeding flocks and with the aid of a spotting-scope we were able to census most of the beach. We estimated the total number of knots for 6 miles of beach was in excess of 6500. The knots foraged in the wash of the waves and not among the great quantities of marine invertebrates and debris cast up by the storm. Here they rested instead.

The next day, the strong northwest winds and seas continued. We stood in one spot and watched a huge flock, numbering in the thousands and much larger than any single flock seen on the previous day, pass by and settle on the beach. We could see other flocks at the same time, though smaller, on the beach to the north. From this, we judged there were as many, if not more, than we estimated on the 23rd. On the 26th we again made a survey from our beach area where we could scan some 2 miles of shoreline and in 20 minutes estimated we had seen more than 2000 knots.

We find it difficult to assign a reason for the large concentration of Red Knots but our conjecture is that it is storm related. If food related, probably other species of shorebirds would have been present in increased numbers, but there was no indication of any significant increase in any other shorebird species during this same period.

In the course of participating in the International Shorebird Survey (ISS) (Manomet Bird Observatory, Manomet, Mass.) for the past 2 years, we have monitored the Gulf beach on

Casey Key and 2 miles of the Venice beach and never encountered such a gathering of knots before. The largest number of knots ever seen by us previously was a flock of 300 on 4 November 1977 at the north end of Casey Key.

We checked 28 Christmas Bird Counts (CBCs) around the Gulf coast of the United States for 1973-1977 including 14 in Florida. About half of these Counts do not usually record Red Knots, and only in Florida from St. Petersburg south are knots recorded consistently. The greatest concentrations occur from St. Petersburg to Sanibel-Captiva with a maximum of 1221 in 1976 for the six CBCs of this area. Previous high counts of Red Knots for Florida Gulf Coast CBCs include 3000 at Sarasota on 1 January 1964 and 4245 at St. Petersburg on 20 December 1969. Thus, our estimate of 6500 + Red Knots for 6 miles of beach on Casey Key is far greater than any previous CBC record in Florida or the rest of the United States, and is similar to the maximum counts gathered by the ISS in 1976. Aerial surveys in July 1976 of James and Hudson bays, a major gathering place for Red Knots, tallied over 7300, and the sum of maximum counts of Red Knots along the Atlantic coast during the 1976 fall migration from the Gulf of St. Lawrence to south Florida was 7641 (Morrison, R. I. G., and B. A. Harrington 1979, Trans. N. Amer. Wild. Nat. Resc. Conf. 44: 498-507)

Most Red Knots appear to winter in the southern part of South America (Argentina, Tierra del Fuego) (Morrison and Harrington 1979) and in winter they are casual on the Atlantic coast of the United States and uncommon on the Pacific coast (Forbush 1925, Birds of Massachusetts and other New England states).—STANLEY STEDMAN AND ANNETTE F. STEDMAN, *Seagrape Point, 1156 Casey Key Road, Nokomis, Florida 33555.*

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An early record of the Band-tailed Gull in Florida.—In early September 1968 two teenaged boys found a bird that proved to be a Pacific South American Band-tailed Gull (*Larus belcheri*) in extremely weakened condition in Escambia County, Florida, near the intersection of U.S. 29 and alternate U.S. 90, about 8 miles north of Pensacola. Thinking the bird might have escaped from a nearby zoo, the Swamparium, they took it to the owner, Edward Nowak, Jr., of Cantonment. The bird, which had not escaped from there, responded well to treatment and soon recovered. It is still on display at the Swamparium at this writing (August 1979).

Early attempts to identify the bird were made difficult by the similarity between its breeding (alternate) plumage and the subadult plumage of the Lesser Black-backed Gull (*Larus fuscus*), and it remained in that plumage until September 1970, at which time Goodnight noted patches of dark feathers on the head. Since that year it has developed the dark hood of the non-breeding (basic) plumage each fall (Nowak pers. comm.), losing the red spot on the bill. Kingsbery has seen the bird with the pure white head of the breeding plumage as early as 5 February 1977. In 1979, at least 50% of the head was dark by 18 August, but the red bill-spot was still present. Thus the seasonal occurrence of each plumage seems to have been essentially adjusted to the conditions of the Northern Hemisphere.

Until recently, available photographs of this gull showed only its breeding plumage—superficially similar, except for the tail band and bill pattern, to that of *L. fuscus*—but in October 1977 Stephen Stedman obtained monochromes (Fig. 1) that were identified by Eugene Eisenmann, American Museum of Natural History, as those of a Band-tailed Gull, *Larus b. belcheri*. The Atlantic form, *L. b. atlanticus* (Olrog 1967), probably a distinct species (Olrog's Gull, *L. atlanticus*; Devillers 1977), has a streaked rather than hooded head in basic plumage. Eisenmann suggested that appropriate measurements also be made in case some population intermediate between these two is found later. These measurements were made by Robert and Lucy Duncan, with the help of Nowak. The Duncans made the following notations: wing arc, 375 mm; exposed culmen, 49.5 mm. These measurements are within the known dimensions for *L. b. belcheri*, but too low for the larger *atlanticus*; the respective minima for females of *atlanticus* are 416 and 49.3 mm (Devillers 1977). The brownish black mantle, light gray underwing coverts, and more extensive black tail band, as well as the hood in non-breeding dress, also indicate nominate *belcheri*.