## **General Notes**

White Pelican numbers in Everglades National Park. — The winter range of the White Pelican (*Pelecanus erythrorhychos*) includes the coasts of Florida through Mexico (Palmer 1962). The substantial numbers found in some areas of south Florida have long been known (May 1935). White Pelicans are locally common in and near Everglades National Park where airplane surveys, conducted as part of the Coot Bay Christmas Bird Count, have found from 1000 to 4600 birds over the past decade. Although this survey provides a nearly complete census of pelicans in the count area, year to year differences do not necessarily reflect trends in pelican numbers because of the small area covered and because weather and the extent of the seasonal dry period determine whether pelicans happen to be feeding or loafing in the count area on the day of the count.

To evaluate the importance of estuaries in and near Everglades National Park to White Pelicans, I undertook three aerial censuses during the spring (9 April), summer (22 July), and winter (13 December) of 1976. The censuses covered all marine and brackish water habitats from Everglades City on the Gulf of Mexico to Cutler on Biscayne Bay, including south Biscayne Bay, Card Sound, Barnes Sound and Florida Bay south to the Lower Arsnicker Keys. Most of the habitat covered is in Everglades National Park and Biscayne National Monument.

Although White Pelicans are most numerous in winter, some remain in south Florida during spring and summer. I found 46 pelicans in April and 43 in July 1976. Apparently the number of summering birds varies from year to year with several hundred being reported in some summers (Robertson 1962).

The arrival of wintering pelicans in October coincides with the beginning of the dry season. They first frequent the Gulf Coast and when this region becomes too dry for feeding, they move to Cape Sable and Florida Bay. In spring many feed inland in streams and ponds of the Everglades where fish become concentrated as the marshes dry.

In December 1976, I found 5240 White Pelicans in and near Everglades National Park. Most (70%) were on Cape Sable and 27% were in Florida Bay. The rest were scattered along the Gulf Coast and Biscayne Bay. This population can be compared to that of 20 years before, when William B. Robertson, Jr. estimated that 5000 or more pelicans wintered in Everglades National Park (Stevenson 1957). This comparison suggests that there may have been no marked change in the wintering population over the past 20 years.

Analysis of pelican band recoveries, provided by the U. S. Fish and Wildlife Service Bird Banding Laboratory, indicates that pelicans wintering in Florida include those from Saskatchewan, Montana, Ontario, North Dakota and South Dakota. It has been suggested that pelicans wintering in south Florida may represent a significant proportion of those breeding east of the continental divide (Robertson and Kushlan 1974). Current estimates put the White Pelican nesting population of Montana, and South and North Dakota at about 17,000 (Sloan 1973). Thus it is possible that the bays, estuaries and marshes of extreme southern Florida in and near Everglades National Park may be important to the survival of some segments of the American White Pelican population.

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Green Heron Nest site tenacity. — On 22 May 1977, in Gulf Breeze, Santa Rosa County, Florida, we found three newly hatched Green Heron chicks (*Butorides striatus*) in a nest about 3 m high in a 6 m laurel oak (*Quercus laurifolia*). The immediate area had been overgrown with live oaks (*Quercus virginiana*) and laurel oaks 1.75-8 m tall and so dense that it was impossible to walk through, but clearing began during incubation and eventually the nest tree was completely exposed, with only scattered small trees left in the immediate area. When we discovered the nest, workmen were continually cutting trees using chain saws and passing by the nest dragging brush. Human activity was confined to a few hours in the late afternoon during 23-27 May, but increased on 28 and 29 May when the parents were seen in the vicinity but not at the nest. Despite a large brush fire started about 9 m from the nest on 28 and 30 May, nestlings remained in the nest. Human activity diminished after that time and three young Green Herons were observed away from the nest on 17 June, having fledged successfully.

Feeding habits of the Green Heron and their young as described in Bent (1963, Life histories of North American marsh birds, New York, Dover, p. 188), indicate that they are fed only in early morning and late afternoon. Kushlan (1976, Wilson Bull. 88: 656-658), has found that in another ciconiiform, the White Ibis (*Eudocimus albus*), nestlings exhibit an internal hunger rhythm coinciding with the peak of parental feeding activities at 0900 and 2100. At our Green Heron nest disturbance occurred between 0800 and 2000, and weekdays between 1700 and 2000. These periods of human disturbance apparently did not coincide with peak feeding periods of the nestlings, thus allowing the parents to approach the nest undisturbed. — ROBERT A. DUNCAN AND LUCY R. DUNCAN, 614 Fairpoint Drive, Gulf Breeze, Florida 32561.

Sandhill Cranes in Florida flying with their legs drawn up. — During cold weather, Sandhill Cranes (*Grus canadensis*) have been observed in Saskatchewan and Indiana flying with their legs folded up under their bellies (Walkinshaw 1953, Auk 70: 204-205; Bard and Lohrman 1965, Blue Jay 23: 121; Skinner 1966, Blue Jay 24: 47). The same posture has been reported for Whooping Cranes (*G. americana*) (Epp 1970, Canad. Field Nat. 84: 307-308), Common Cranes (*G. grus*) and Japanese Cranes (*G. japanensis*) (Walkinshaw 1973, Cranes of the World, New York, Winchester Press, p. 6).



Fig. 1. Sandhill Cranes flying with their legs drawn up.