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**Species of Special Concern**  
**WHITE IBIS**

*Eudocimus albus* (Linnaeus)  
Family Threskiornithidae  
Order Ciconiiformes

**OTHER NAMES:** White Curlew, Brown Curlew (immature).

**DESCRIPTION:** The White Ibis is a medium-sized wading bird about 22 inches (56 cm) long having a wing span of about 38 inches (96 cm) and characterized by a long, narrow down-curved bill. Size varies considerably, with females averaging smaller than males in all measurements. Ibis fly with neck outstretched, often in V-shaped or linear flocks. Plumage of adults is entirely white with exception of tips of 4 longest primaries which are dark iridescent green (appearing black from a distance). Soft parts of adults are pink to flesh colored except in breeding season when legs, face and throat are red, and the distal portion of the bill is black. Irides of adult are pale blue. Juveniles have brown wings, neck, head, tail, and irides, and gray legs. They gradually assume adult plumage during the first 3 years and probably first breed near 3 years of age.

**RANGE:** Generally coastal and coastal plain from North Carolina through Texas, West Indies, Central America and northern South America. Range includes all peninsular Florida but the birds are localized in areas of suitable marsh habitat. The largest nesting colonies are at Seahorse Key (Cedar Keys), in some years at Rookery Branch of the Shark River in Everglades National Park, and since 1972 in Water Conservation Area 3. Birds from southeastern United States winter in Florida, but few details are known.

**HABITAT:** The White Ibis is typically a bird of freshwater and estuarine wetlands. Largest colonies traditionally utilize the broad expanses of the Everglades. The species nests on islands in lakes, in marshes, or in mangroves. Feeding requires shallow water (10 cm), and nesting success depends on use of sequentially available feeding locations.

**LIFE HISTORY AND ECOLOGY:** White Ibis feed primarily on aquatic invertebrates and on fish, where such are densely concentrated. Crayfish (*Procambarus alleni*) is the predominant food in most freshwater habitats. Aquatic beetles, bugs, snails, and insect larvae are also consumed. In estuarine habitats fish, Crayfish and crabs are eaten. Diet is varied and generally opportunistic but feeding depends on suitable water conditions. Ibis feed singly or in tight flocks by probing in the water, in the ground, and among the roots of plants. Use of relatively sedentary invertebrate prey requires suitable water-depth conditions, while use of mobile prey depends, in addition, on high concentration.

The species breeds in colonies with nests placed in trees, marsh vegetation, or on the ground. Eggs are variable, with ground color ranging from white to blue and green and variously splotched with brown.

**SPECIALIZED OR UNIQUE CHARACTERISTICS:**

The historically abundant White Ibis, feeding and flying in tight flocks, has an esthetic appeal which has made it one of the most characteristic species of Florida wetlands. In addition, being relatively common and feeding in dense flocks, this species has an important ecological impact on the marshlands it inhabits.

**BASIS OF STATUS CLASSIFICATION:** The White Ibis was the most abundant wading bird in Florida. Although it remains so today, its numbers have declined considerably over the past 40 years. For example, the population south of Lake Istokpoga has declined by about 90% in this period. The species is opportunistic and can maintain small population units in relatively altered sites if afforded adequate protection and access to suitable feeding areas, e.g., Greynolds Park, Dade County. The most important population units are the large coastal and inland colonies which require considerable areas of suitable feeding habitat. Many of these habitats, including freshwater marshes, sandy flatwoods, and coastal salt marshes, are threatened with destruction from human encroachment, which therefore poses a significant threat to maintaining the present population levels of the species.

In addition, the breeding distribution of the Florida population is seemingly undergoing change with unpredictable outcome. For example, the largest colonies in the 1930's were in the southern Everglades, now in Everglades National Park. However, these colonies, which were estimated by R.P. Allen to contain 90% of the Florida population, have declined in numbers and have experienced increasing irregularity of successful nesting despite complete protection. The important colony on the Rookery Branch of the Shark River has succeeded only twice in the period 1967 through 1975. From 1972 through 1975, large colonies formed and successfully produced young in Water Conservation Area 3, north of Everglades National Park.

**RECOMMENDATIONS:** The most serious threat to this species are environmental contamination, loss of nesting sites, and loss of feeding habitat. Information on its distribution, movement and habitat requirements on a statewide basis is lacking.

The White Ibis is undoubtedly susceptible to persistent pesticides which have affected the White-faced Glossy Ibis (*Plegadis chihi*) in the western United States. Samples from southern Florida have contained high levels of mercury. Although there is presently no indication of an immediate threat to the Florida population of the White Ibis from environmental contamination, a program of statewide monitoring of tissue levels of critical contaminants is desirable.

The preservation of nesting sites is critical to the species' survival, even if such sites are used only intermittently. Presently, most sites have some degree of protection. An important exception is Bumblebee Island in Lake Istokpoga, that should be preserved.

Of broader concern is the protection of feeding sites. Most population groups are semi-nomadic in the non-breeding season and move from one feeding and roosting area to the next in a consistent pattern from year to year. Such feeding areas as well as feeding areas utilized during the breeding season need to be protected. The latter may be as much as 80 km from the nesting sites. In southern Florida most remaining habitat is protected in Everglades National Park, the Conservation Areas, or in the proposed Big Cypress Reserve. An important exception is the Everglades drainage south of Conservation

Area 3 and east of Everglades National Park which is used by the White Ibis and other wading birds for several months during the winter and early spring. As many as 14,600 White Ibis fed in this area in 1974-75. Birds in coastal rookeries require protected mangrove and salt-marsh habitats that are threatened in most areas.

Successful maintenance of the White Ibis in Florida requires initiation of systematic and exhaustive surveys of nesting and feeding areas utilized throughout the year. This long-term monitoring must be conducted on a statewide basis and be of sufficient intensity to distinguish all major population movements.

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