

Eudocimus albus (American White Ibis)

Family: Threskiornithidae (Ibises and Spoonbills)

Order: Ciconiiformes (Storks, Herons and Ibises)

Class: Aves (Birds)



Fig. 1. American white ibis, *Eudocimus albus*.

[http://blogs.crikey.com.au/northern/2010/12/02/bird-of-the-week-same-sex-marriage-and-the-american-white-ibises-of-floridas-space-coast/?wpm_switcher=mobile, downloaded 12 November 2012]

TRAITS. The American white ibis is medium-sized and considered a wading bird. According to Roof (1999), its body shape resembles that of the great blue heron. It has all white plumage except for the tips of the wings which are black. This is usually seen during flight. The face is bare and pink and it has a long, curved beak that is bright red with black at the tip. It also possesses long red-orange legs and light blue eyes. Sexual dimorphism is evident in the white ibis (Bildstein, 1987) since the males weigh more and has larger appendages than the females. The average weight is 1,036 g for males and 764 g for females while the length of the adult

female and male ranges from 53-70 cm and a wingspan of 90-105 cm. The American white ibis uses its call when flying or if it is disturbed. This call can be heard as a honking sound similar to “hunk hunk”. They make a squealing sound during courtship and a soft, “huu huu” sound while foraging while nestlings make a high-pitched sound when begging (Hancock & Kushlan, 1992).

ECOLOGY. The habitats of the American white ibis varies although the most common places in which they can be found include; shallow coastal marshes, wetlands and mangrove swamps (Kushlan, 1979). *Eudocimus albus* can be found throughout the Caribbean, Florida, on the coasts of Mexico and Central America (Nellis, 2001), but it is recorded only as an occasional visitor in Trinidad. They thrive in environments where the water level is low as heavy rainfall resulting in flooding and high water levels negatively impact on foraging and breeding. This is because the high water levels make it difficult for the birds to capture prey which leads to a reduction in nest numbers and average clutch size (Herring et al. 2010).

FORAGING BEHAVIOUR. The American white ibis commonly prey on crustaceans, crayfish, aquatic insects, snails, worms, frogs and small fishes while foraging in freshwater or saltwater wetlands. They can be observed foraging by slowly walking while using their beaks to probe around in exposed or submerged mud or by sweep feeding where they sweep their partially open beak from side to side in the water and snapping down when a prey is felt. These birds feed in flocks and depend mainly on tactile probing to capture their prey (Nellis, 2001) however, on exposed soil surfaces; they use sight to capture their prey. They wash off the mud from their prey in the surrounding water then swallow small prey by thrusting their head upwards (Roof, 1999) but they break down larger prey into smaller pieces by biting and stabbing before swallowing. They sometimes steal or have their prey stolen from other wading birds. Feeding nestlings requires access to freshwater since they become salt stressed after being fed saltwater prey (Nellis, 2001).

SEXUAL BEHAVIOUR. Usually, this species of ibis is monogamous with both male and female demonstrating parental care but extra pair copulation is also common. This is observed as the male leaves its initial female partner to engage in extra pair copulation with another female of a different nesting site. Extra pair copulation is capable of fertilization of up to 6 % of all eggs however, this is not always successful as the other female may have a male guarding the nest or the female may reject the male which would not pursue this action further. The males actively defend their nest by displaying “exaggerated preening, head rubbing and bill popping with twig grasping” (Nellis, 2001). In courtship, the males would display similar behaviour to that of defence toward the female. The female would then carefully approach the male and bow in order to show off the brightly coloured side of its face. The male may then react to this by attacking the female and shaking her head. The pair will then display greeting actions such as stick shaking, preening and standing with body contact. Body contact is rare among birds except during courtship and fighting. This behaviour may involve the male making the “hunk” call and the female responding to it by making a squealing sound (Nellis, 2001). Pair formation depends on the amount of rainfall, light and availability of food (Roof, 1999). Successful reproduction of the American white ibis is dependent on rainfall and water levels in the ecosystem as this determines the availability of prey which then relates to the survival and clutch size of the young (Herring et al. 2010). They nest in large colonies and are not limited to a specific breeding site (Nellis, 2001)

but they nest when the environmental conditions are suitable usually in the period of mid-May to early June, laying 2-3 eggs on average (Roof, 1999).

PARENTAL CARE. The incubation of the eggs lasts for 21 days in which the male and female share the task of incubation. The eggs hatch in intervals of 1-2 days. The chicks are born with their eyes closed and are unable to hold up their head for the first day and are fed by the adults which regurgitate food into the hatchlings' mouth. Black down covers the heads and necks of the hatchlings and they have a straight, flesh coloured beak as seen in Fig. 2. Another feature of parental care is observed as the adult shelters the chicks from the sun, creating shade by spreading out their wings. They do this because the young birds are unable to regulate their body temperature. By week 1, the chicks begin to make the begging call and by week 2 they are able to move about and can leave the nest to seek shade on their own (Nellis, 2001). After receiving parental care for about 40-50 days, the ibises leave the nest for the first time but this is not permanent (Roof, 1999). The American white ibis do not become successful foragers even after one year and only reaches adult weight after 2 years. After the breeding season, the adult ibises undergo a postnuptial molt to replace their feathers that have been soiled during the nesting period (Nellis, 2001).

REFERENCES

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Fig. 2. American white ibis hatchlings and egg.

[<http://cdn1.arkive.org/media/16/16FC0D06-D346-4631-8DD4-FD9A7FD7C30B/Presentation.Large/African-sacred-ibis-hatchlings-and-egg-in-nest.jpg>, downloaded 11 November 2012]



Fig. 3. Juvenile American white ibis.

[http://upload.wikimedia.org/wikipedia/commons/thumb/9/98/Juvenile_American_White_Ibis.jpg/800px-Juvenile_American_White_Ibis.jpg, downloaded 11 November 2012]