Ardea alba (Great Egret)

Family: Ardeidae (Herons and Egrets)
Order: Ciconiiformes (Storks, Herons and Ibises)
Class: Aves (Birds)

Fig. 1. Great egret, *Ardea alba.*

[http://images.nationalgeographic.com/wpf/media-live/photos/000/005/cache/great-egret_558_600x450.jpg, downloaded 7 November 2011]

TRAITS. The great egret is characterised by long, black legs and feet, a straight, long yellow bill and white plumage. These carnivorous birds have a very distinctive S-shaped neck when pulled back during flight. Typical size ranges 94 cm to 104 cm with a wing span between 1.3-1.5 m. The average weight of an adult is approximately 1 kg (McCrimmon et al., 2001). Juveniles are similar in appearance to non-breeding adults.

ECOLOGY. Great egrets are characteristically found in tropical or warm temperate climates near bodies of water including lakes, mangroves, rivers and seas. There are four sub species of great egrets. *Ardea alba alba* is commonly found in Europe. *Ardea alba egretta* is the American counterpart. *Ardea alba melanorhynchos* is typically found in Africa. Lastly *Ardea alba*

modesta is found in South East Asia, India and Oceania. All great egrets are oppornunistic feeders that consume a wide range of organisms including insects, reptiles, amphibians, fish and small mammals.

SOCIAL ORGANISATION. Great egrets can be classed as Ciconiiformes, an order that includes a variety of long legged, wading birds with large bills. Great egrets exhibit territorial behavior during feeding, courtship and nesting (Jones, 2002). These birds however often nest with other egret and heron species with which they form colonies. Great egrets show a great deal of aggression to smaller heron species and other members of their colony. This occurs with or without a shortage in food sources.

ACTIVITY. Great egrets, as all other Ciconiiformes are diurnal and so all activity generally occurs during daylight hours. These animals rise at just before dawn and usually roost at dusk.

FORAGING BEHAVIOUR. Great egrets typically nest near to rivers, seas, mangroves and other sources of water. This provides them with easy access to food sources. The diet of the great egret typically consists of insects, reptiles, amphibians, fish and small mammals. These birds typically hunt in reeds, bushes, and along the shore line at low tide. They would even proceed to wade in shallow water to feed on aquatic organisms. These organisms show a high success rate for their fishing method which involves striking and snatching the fish (Jones, 2002). They are also known to use their feet to stir up the water and scare intended prey. Great egrets are notorious thieves, often stealing food from smaller bird and other egrets (Connecticut Department of Environmental Protection, 2000; Illinois Department of Natural Resources, 1998).

COMMUNICATION. Though generally very quiet, great egrets communicate through a series of distinct calls during courtship and in the defence of their territory. These vocalisations produced during courtship are harsh and deep “corrs” (Jones, 2002). An intruder is attacked with harsh jabs of the beak and loud squawking (Chisholm, 2001; Oregon Zoo, 2002).

SEXUAL BEHAVIOUR. Great egrets are seasonally monogamous and breed once per year (Jones, 2002). These birds typically reach sexual maturity at two years. Male egrets select a territory and perform elaborate dances and mating calls to attract a female. The dance consists of long aigrettes held up and over the back while walking around the nest (McCrimmon et al., 2001). If male is successful a female will approach and copulation will occur (Illinois Department of Natural Resources, 1998). A clutch of two to four eggs is usually laid about 23 days after successful copulation. Fledging typically occurs within two to three weeks.

JUVENILE BEHAVIOUR. Sibling rivalry is often fatal between young egrets. The first-hatched chicks achieve a larger portion of the food brought to the nest by the parents, than the last-hatched chicks. This increase in food gives the older chicks the advantage of being larger than there juniors. Young chicks frequently starve to death, often as a result of sibling aggression or are thrown out of the nest by their older siblings (Mock and Parker, 1997, Drummond, 2001). Chicks contend by begging relentlessly with open mouths and heads held up and necks extended. The siblings jostle each other for most advantageous feeding positions, eat hastily, latch onto the parent’s beak, and fight each other during feeding (Mock and Parker, 1997). A study conducted on the unequal food distribution among great egret chicks concluded that when chicks were

separated the female parents showed preferential treatment to the younger, smaller chick whereas male parents showed preferential treatment to the older, stronger chicks. This proved that death of the younger chicks were in fact due largely to sibling rivalry (Ploger and Medeiros, 2004).

ANTIPREDATOR BEHAVIOUR. Though adults to not possess any non-human predators, eggs and chicks often fall prey to a wide array of predators including hawks, snakes and vultures. Adults protect their young by squawking, leaping at and jabbing their beaks at predators (Jones, 2002).

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