

## *Ajaia ajaja* (Roseate Spoonbill)

Family: Threskiornithidae (Ibises and Spoonbills)

Order: Ciconiiformes (Storks, Herons and Ibises)

Class: Aves (Birds)



**Fig. 1.** Roseate spoonbill, *Ajaia ajaja*.

<http://purplepurple.com/life-science/birds/roseate-spoonbill.html>, downloaded 6 November 2012]

**TRAITS.** Both male and female of this species display the same plumage, or collective feather cover, of a bright pink colour (Fig. 1) (Nature works, 2012). Their body mass weighs between 1.2-1.8 kg, they grow to a height of 71-86 cm and possess a wing span of 120-133 cm, with an individual wing measuring 32.3-37.5 cm (Wikipedia, 2012). The head of the adults has no feathers and the bare skin varies from dull-green, orange and black (Pearson, 1936:173-175). They have a long spatulate bill, which is grey in colour (Purpleopurple, 2012) and other distinguishing features include its white upper back, breast and neck, with a black band around the back of the head. Also, its legs and eyes are red, and under parts and wing coverts are crimson pink (Purpleopurple, 2012). Its tail, as well as the side of the breast bears a brownish-yellow colour (Pearson, 1936). The length of its tarsus or ankle bones occur between 9.7-12.4 cm, while the culmen or highest middle lengthwise line of the bill, measures 14.5-18 cm. Sexual size dimorphism, or a difference in body size between males and females, is not seen in this species (Nature works, 2012). *A. ajaja* is sometimes placed in the genus *Platalea* but is commonly distinguished from the other spoonbill species in the genus *Ajaia* (Kalappenbach, 2012). Other common names for *A. ajaja* include flame bird, banjo bill, pink chicken (Smithsonian, 2012) as well as pink curlew and rosy spoonbill (Pearson, 1936:173-175).

**ECOLOGY.** Roseate spoonbills are very social birds thus form flocks that inhabit home ranges, instead of each occupying individual territories (Smithsonian, 2012). They inhabit a variety of inland wetlands including marshes, mangrove swamps, rivers, lakes and ponds, as well as coastal regions such as bays, estuaries and beaches (Smithsonian, 2012). *A. ajaja* is a neotropical bird, thus apart from Trinidad and Tobago, distribution of the species occurs in other Caribbean islands of the West Indies, throughout the entire Gulf of Mexico coastline and South to Central American countries (Texas Parks & Wildlife, 2012). Flamingos are close relatives of the *A. ajaja* and these too have bright pink feathers but are larger in size and possess longer necks (Texas Parks & Wildlife, 2012). Mitochondrial DNA studies conducted by Cheres, et al, in 2010 however, have shown that the closest relative to the *A. ajaja* is the *Platalea flavipers* (yellow-billed spoonbill). There are four other spoonbill species; *Platalea leucorodia* (Eurasian spoonbill), *Platalea minor* (black-faced spoonbill), *Platalea alba* (African spoonbill) and *Platalea regia* (royal spoonbill) (Wikipedia, 2012). Of all these, *A. ajaja* is the only known spoonbill to inhabit the New World (Mayntz, 2012).

**SOCIAL ORGANIZATION.** Social colonial birds which feed and travel in groups (Smithsonian, 2012), though feeding may sometimes be solitary (Nature Works, 2012). They are highly gregarious, thus often join mix flocks with similar birds such as ibises, egrets, cormorants and herons (Pearson, 1936:173-175). Nesting areas are often occupied by mixed colonies of terns, herons and gulls (Smithsonian, 2012) and this could probably be due to the advantage of collective mobbing of predators, to drive them away from the eggs and nestlings.

**ACTIVITY.** *A. ajaja* are diurnal in nature thus are active during the day. They feed mainly in the early morning hours and evenings (Smithsonian, 2012). Short distances are covered via walking but they locomote mainly by flight in flocks of long diagonal lines where consecutive birds are just to one side of the preceding (Pearson, 1936:173-175). During flight, their legs and necks are outstretched (Fig. 2) (Nature Works, 2012) and they alternate between stiff, shallow wing-beats and glides (Wikipedia, 2012). During stationary periods on land or in trees, it is customary for them to stand on one leg for 1 hour or more (Pearson, 1936:173-175).

**FORAGING BEHAVIOUR.** Feeds collectively in shallow areas of both fresh and coastal water (Fig. 3) (Pearson, 1936: 173-175). As it wades, it keeps its head low and its bill partially submerged and open. It swings its head from side to side in a semicircular sweep, then snaps its bill shut when prey is detected inside (Pearson, 1936:173-175). Detection is facilitated by sensitive nerve endings which line the bill (Nature Works, 2012) and it is then removed from the water and the food swallowed. The spoon shape of the bill allows for efficient shifting through the mud to find prey (Pearson, 1936:173-175). While feeding they walk about continuously, not waiting for the prey to approach as done by herons, but rather hardly ever make any long pauses (Pearson, 1936:173-175) and unlike other birds, they are silent when feeding. *A. ajaja* consume primarily carotenoid-rich foods such as a particular marine shrimp *Macrobrachium intermedium*. Carotenoids are a group of orange and red organic pigments of plants and photosynthetic (organisms with the ability to capture light energy from the sun and convert it to chemical energy in the production of glucose) algae and bacteria. Shrimp feed on algae which produce carotenoids and it is believed that two particular carotenoid molecules, namely canthaxanthin and astaxanthin, are responsible for the pink colour observed in *A. ajaja* (Wikipedia, 2012). Other prey of *A. ajaja* include small crustaceans, aquatic insects, molluscs, frogs, newts, small

fishes and plant material at times (Pearson, 1936:173-175). In some locations during certain seasons, fishes are particularly important to their diet (Nature Works, 2012).

**COMMUNICATION.** As is common in the class Aves, vocal utterances take precedence in the means of communication for *A. ajaja*. Though their windpipe is very long with a coiled lower end resembling a figure '8', similar to that of cranes, they have no true vocal cords (Pearson, 1936:173-175). They produce a harsh 'quack' as well as a clattering sound from the clapping of their mandibles or upper and lower part of the bill, together (Pearson, 1936:173-175). Begging calls which are the sounds produced by nestlings when beckoning their parents for food, have been observed in the young offspring and are softer and of a higher frequency than that of the 'quack' (Mayntz, 2012). On breeding grounds, they make a low croaking note of "huh-huh-huh" (Pearson, 1936) or a coarse "rrek-ek-ek-ek-ek-ek" sound (Arlott, 2010:22). They are usually silent when feeding however and occasional calls have also been heard during flight (Mayntz, 2012). During courtship, visual communication displays of dancing have been observed (Smithsonian, 2012).

**SEXUAL BEHAVIOUR.** A monogamous species where males and females pair off, mate, build a nest and raise the offspring together (Nature Works, 2012). Sexual maturity is reached at about 16 weeks (Texas Parks & Wildlife, 2012), though most adult development is not completed until about 3 years old (Pearson, 1936:173-175). Head appears 'golden buff' when breeding (Wikipedia, 2012), as well as a tuft or fine crest of pink coloured feathers occurs on their usually white breast, deepening from the nape of the neck (Pearson, 1936:173-175). During the breeding season, which extends from August to December (Pearson, 1936:173-175), the male attracts the female by providing her with nesting materials (Texas Parks & Wildlife, 2012). Other courtship displays include dancing and clapping of the bill by the male (Smithsonian, 2012). The female builds a nest like a platform of sticks in thick vegetation of shrubs, trees and mangroves, about 8-20 feet above the ground (Pearson, 1936:173-175). Nests are deeply cupped and lined with soft materials such as grasses (Smithsonian, 2012). Copulation occurs at the nest and after maturation of the fertilized eggs, the female lays a brood of approximately 3-5 eggs, which are whitish in colour with brown speckles (Pearson, 1936:173-175).

Incubation occurs for a period of 22-24 days, where both the male and female take turns in sitting on the eggs (Nature Works, 2012). The nestlings are nurtured and fed by both parents, where regurgitated food is dribbled down the upturned beaks of the young (Smithsonian, 2012). This occurs for 36-42 days, after which they leave the nest (Mayntz, 2012). A mated pair raises one brood each year (Fig. 4).

**JUVENILE BEHAVIOUR.** Newly hatched chicks have skin that is pink in colour and a few white feathers. Their eyes are dark and beaks are upturned. This, together with their legs and feet are orange in colour (Smithsonian, 2012). Their heads are feathered and a tinge of pink occurs on the wings, tail and abdomen which is much paler in relation to the adult's colour (Pearson, 1936:173-175). At one month old, the chicks exercise by clambering about in any surrounding vegetation and by week 8, they are ready to fly (Smithsonian, 2012).

**ANTIPREDATOR BEHAVIOUR.** Though they are generally silent birds, they make a "huh-huh-huh" sound if disturbed and may even grunt (Purplepurple, 2012). Common nestling predators include vultures, coyotes, turkeys, bald eagles, fire ants and racoons (Wikipedia, 2012).

**REFERENCES**

- Arlott, N. (2010). "Birds of the West Indies": Egrets, Roseate Spoonbill and Flamingo-Pg 22. Princeton University Press, 41 William Street, Princeton, New Jersey 08540.
- Kalappenbach, L. (2012). Roseate Spoonbill. About.com: <http://animals.about.com/od/birds/p/roseatespoonbil.htm>, downloaded 6 November 2012
- Mayntz, M. (2012). Roseate Spoonbill. About.com: <http://birding.about.com/od/birdprofiles/p/Roseate-Spoonbill.htm>, downloaded 6 November 2012
- Nature Works (2012). Roseate Spoonbill - *Platalea ajaja*. <http://www.nhptv.org/natureworks/roseatespoonbill.htm>, downloaded 6 November 2012
- Pearson, T.G. (1936). "Birds of America": Order of Herons, Storks, Ibises, etc-Pg 173-175. Doubleday & Company, Inc.
- Purplepurple (2012). Roseate Spoonbill. <http://purplepurple.com/life-science/birds/roseate-spoonbill.html>, downloaded 6 November 2012
- Smithsonian National Zoological Park (2012). Roseate Spoonbill. <http://nationalzoo.si.edu/ANIMALS/BIRDS/FACTS/FACTSHEETS/FACT-ROSESPOONBILL.CFM>, downloaded 6 November 2012
- Texas Parks & Wildlife (2012). Roseate Spoonbill (*Platalea ajaja*). <http://www.tpwd.state.tx.us/huntwild/wild/species/spoonbill/>, downloaded 6 November 2012
- Wikipedia (2012). Roseate Spoonbill. [http://en.wikipedia.org/wiki/Roseate\\_Spoonbill](http://en.wikipedia.org/wiki/Roseate_Spoonbill), downloaded 6 November 2012

Author: Roxanne Lewis

Posted online: 2012



**Fig. 2.** *Ajaja ajaja* with outstretched head and legs during flight.

[<http://stokesbirdingblog.blogspot.com/2007/12/108th-christmas-bird-count-dec14th-to.html>  
downloaded 12 November 2012]



**Fig. 3.** Collective feeding and grooming of *A. ajaja*.

[[http://birdperch.blogspot.com/2007\\_02\\_01\\_archive.html](http://birdperch.blogspot.com/2007_02_01_archive.html), downloaded 12 November 2012]



**Fig.4.** Parent *A. ajaja* with two nestlings.

[<http://www.sciencephoto.com/media/380978/view>, downloaded 12 November 2012]