

## *Phaethon lepturus* (White-tailed Tropicbird)

Family: Phaethontidae (Tropicbirds)

Order: Pelecaniformes (Pelicans and Allied Waterbirds)

Class: Aves (Birds)



**Fig. 1.** White-tailed tropicbird, *Phaethon lepturus*.

[<http://depts.washington.edu/rabep/birds.html>, downloaded 11 November 2012]

**TRAITS.** The white-tailed tropicbird is the smallest of the tropicbirds; it is however considered big in comparison to other birds as their wingspan is 3 ft. The overall length of the adults is 30-32 inches, this includes the tail. Sexes are usually similar in appearance except that on average the males have longer streamers than the female. Adults have feathers that are almost entirely white with black diagonal stripes across it. These stripes form a 'V' when seen from above as they are in flight (Fig. 3). They have a yellow to orange coloured bill. Their feet are yellow in colour with black webbing (Raffaele & Wiley 2003). They have long white tail streamers however the juveniles lack the tail streamers and have yellow-green bills. Juveniles have long grayish feathers that turn white with black edges over time before they become adults (Fig. 2).

**ECOLOGY.** The white-tailed tropicbird is found over pelagic waters, this is water in an open area which is not close to the coast or the sea floor (del Hoyo et al. 1992). It is seen in the

Atlantic, Pacific and Indian Oceans. It can be seen nesting in Little Tobago. It does however come ashore to breed, where it breeds on small, remote, tropical islands where it nests on cliffs, sometimes trees. The white-tailed tropicbird forages out of sight of the breeding colony at a great distance from land. The prey is caught by plunge-diving, where it dives into water in a fast movement from flight. Flying-fish is caught by use of the wing.

**SOCIAL ORGANIZATION.** It is solitary at sea however during the breeding season the tropicbird collects into loose colonies. For breeding the bird engages in courtship with almost twenty birds flying up 100 m high. Before the birds leave the colony they perform a descending glide in tandem; this is the arrangement where the birds line up one behind another facing the same direction. The birds fly in unison, making wide circles and drop the tail and streamers in an arc. The males create the nest on a cliff that is rocky and can offer shelter from the sun. The offspring is left alone while the parents forage away from the nesting site; this makes the offspring a target for predators.

**ACTIVITY.** Activity is mainly seen throughout the day, foraging far out over the sea. Its activity is high in the daylight when it is able to fly away from the nesting area. It is mainly seen in flight as they are not strong on land.

**FORAGING BEHAVIOUR.** Uses plunge-diving method, once the prey is targeted it flies over the prey for a while before making rapid spiral plunges into the water from 15-20 m high. The tropicbird is able to make quick movements with turns and twists while using its wings in a bent position to control the body and capture the prey in the beak. On land the bird is not able to move as it does in water. The movement is no longer controlled or flexible but limited. It lies on its stomach and uses the bill to pull it forward by penetrating the ground in order to control its movement (Schaffner 1990). This shows how they are more adapted to water than land. They feed on mainly flying-fish, squid and crustaceans.

**COMMUNICATION.** The white-tailed tropic bird uses its voice as a form of communication. It does this to claim territory, when mating as well as a warning for predators and of the presence of predators to the rest of the colony. The tropicbird has a loud piercing scream; “keee-keee-krrrt-krrt-krrt”. When mating occurs loud cries are heard. The sounds made by the bird can be heard for miles. This tropicbird is not noisy when in their colony. The mating display is usually done by the male to attract the females. They are territorial during the nesting period where they fight over the best nesting site, where there is deadly competition and birds can be badly injured by the stabbing and slashing of the bills.

**SEXUAL BEHAVIOUR.** *Phaethon lepturus* breeds when it is 2-5 years old. During courtship the pair engage in a graceful glide and loud cries are heard. The courting birds fly parallel to each other with the streamers of the bird above turned downward towards its mate. Nest sites and mates can vary year after year. These nesting sites can be on the ground or in trees. Copulation is seen at the nest site or by the site of display. Breeding is annual or biennial or sometimes year-round. Nests are built from scrapes or twigs and other materials. The clutch size, which is the number of eggs that is laid, can vary from one to six. Eggs are then incubated by both by the male and the female, switching at intervals of 13 days, for 40-43 days (Fig. 4).

**JUVENILE BEHAVIOUR.** Juveniles are left alone in the nest while the adults forage. The offspring fledges after 70-85 days. Fledging is the stage where the juvenile feathers and muscles are fully developed. After this period the offspring leaves the nest on its own and joins the adults in searching for good foraging sites. They leave the nesting colony as soon as they can fly, and once they have reached sexual maturity they return to breed there.

**ANTIPREDATOR BEHAVIOUR.** They are strong fliers and avoid predators by varying their flying pattern.

#### **REFERENCES**

- del Hoyo, J.; Elliot, A.; Sargatal, J. (1992). *Handbook of the Birds of the World, vol. 1: Ostrich to Ducks*. Lynx Edicions, Barcelona, Spain
- Raffaele, H, Wiley, J. (2003). *Birds of the West Indies*. Princeton , New Jersey.
- Schaffner, F, (1990). *Food Provisioning by White\_tailed Tropicbirds effects on the Developmental Pattern of Chicks*. Department of Biology, University of Miami. Coral Gables, Florida.

Author: Frances Roberts

Posted online: 2012



**Fig. 2.** Juvenile white-tailed tropicbird.

[<http://xavier.libert.oiseaux.net/images/phaeton.a.bec.jaune.lixa.1g.jpg>, download 11 November 2012]



**Fig. 3.** *Phaethon lepturus* in flight, V-shape seen on wings.

[<http://www.oiseaux.net/photos/patrick.derennes/images/phaeton.a.bec.jaune.pade.19g.jpg>,  
downloaded 11 November 2012]



**Fig. 4.** White-tailed tropicbird nesting.

[<http://www.oiseaux.net/photos/yann.libessart/images/phaeton.a.bec.jaune.yali.1g.jpg>,  
downloaded 11 November 2012]

For educational use only - copyright of images remains with original source