Steatornis caripensis (Oilbird or Guacharo)

Family: Steatornithidae (Oilbird)
Order: Caprimulgiformes (Nightbirds)
Class: Aves (Birds)

Fig. 1. Oilbird, *Steatornis caripensis.*

[http://www.pbase.com/rainbirder/image/94030478, downloaded 24 October 2011]

TRAITS. The oilbirds are only species of bird that belong to the family Steatornithidae (Kricher, 2011). These oilbirds are large, slim and nocturnal birds that are usually active during the night and inactive during the day (Wikipedia, 2011). The total length of both males and females are approximately 43-49 cm and wing span is about 95-107 cm (Del Risco et al, 2002). The average body: males are 390 g and females are 360 g (Del Risco et al, 2002). They are reddish-brown in colour with a few diamond shaped spots of white at the back of their necks and wings and their eyes are brown but reflect red (Wikipedia, 2011). Oilbirds are referred to as nocturnal feeders and frugivores since their diet is composed mainly of fruits especially fruits from oil palms trees (Wikipedia, 2011). Their feet and legs are small (Wikipedia, 2011) and the males are slightly larger than the females. The males are grayer than the females (Del Risco et al, 2011).

ECOLOGY. The habitats of the oilbird are mostly within caves, alongside mountains and forest especially with coniferous and evergreen trees (Wikipedia, 2011). *Steatornis caripensis* or Guacharo is mainly found in Trinidad especially in the ASA Wright Nature Caves (Wikipedia, 2011) or the Dunstan cave along the Guacharo River. These forests are mainly required because of the availability of ripe fruits throughout the year (Del Risco et al, 2002). Mostly during the night they are found in the forest foraging for food and the daylight they are found resting or nearby the nest in the cave (Del Risco et al, 2002). The oilbird is also distributed in South America and are abundant in northern areas such as Venezuela, Guyana, Columbia, Ecuador and Peru (Wikipedia, 2011).

ACTIVITY. These birds are strictly nocturnal and frugivores (Del Risco et al, 2002). They are always found in the caves and are active in the night and inactive during the day (Del Risco et al, 2002). During the night they are found foraging for food outside the caves and during the day they are found roosting about the caves (Del Risco et al, 2002). They mainly use the process of echolocation to navigate through the dark cave and to forage for food (Del Risco et al, 2002). They share a monogamous relationship with one partner and both parents use the phenomena of parental care to take care of their offspring and they both sit on the eggs until they are hatched (Del Risco et al, 2002).

FORAGING BEHAVIOUR. The oilbirds are the only type of birds that belong to the family Steatornithidae that are nocturnal and frugivores that feed on only fruits (Burton et al, 1970). They travel long distances approximately 90 miles or 150 km in search of fruits in the forest (Burton et al, 1970). After travelling long distance through the forests they eventually come across a tree of which is their food type (Burton et al, 1970). They hover among fruits and consume as much as they can (Burton et al, 1970). Upon a full stomach, they return to their homes where the digestion process takes place during the day (Burton et al, 1970). Oilbirds tend to regurgitate or bring up food that is not completely digested from their stomach to the mouth and this is used to feed the newly born oilbirds (Burton et al, 1970). These oilbirds could also be referred to as seed collectors since they tend to accumulate seed under their nesting ledges (Burton et al, 1970). By the accumulation of these seeds, an ornithologist David Snow was able to determine by experimental research the type of fruits these oilbirds feed on (Burton et al, 1970). He was able to conclude that the seeds were mainly from the palms, Caribbean “laurels” and incense and these fruits are highly scented and aromatic (Burton et al, 1970).

COMMUNICATION. Vocal communication: Oilbirds’ echolocation can be defined as the time taken for their echo/sound to return and aid in determining the object distance from its source and also revealing the object size and shape (Mackay, 2001). Oilbirds emit calls to the environment that produces echoes (Wikipedia, 2011). The objects surrounding these echoes are returned (Wikipedia, 2011). These echoes are used to navigate through the dark caves and aid in foraging of food (Wikipedia, 2011). Their voices tend to be noisy (Mackay, 2001). They are usually silent within the cave environment but if they are disturbed they produce repeating number of echoes that are typically deafening to the surrounding environment (Mackay, 2001). Oilbirds use echolocation to fly under the canopy of the trees that are dark and their large eyes allow them to do this. (Mackay, 2001). One of the reasons why oilbirds are unique is because of their vocalizations that are odd clicking noise (Kricher, 2011). Their sonar signals are referred to as clicks are sent out to the surrounding and these bounce off the wall of the dark caves and this

gives the trigger the bird flight (Kricher, 2011). These echolocations may function is to serve as barriers allowing the birds not to crash into the walls of the cave (Kricher, 2011).

SEXUAL AND JUVENILE BEHAVIOUR. Oilbirds usually occur in pairs even while nesting and they have a monogamous relationship which is having one male and female together in a permanent pair bond (Del Risco et al, 2002). Their nests are built about 10-20 cm in height from the floor of the cave, built close to each other and are always found within the cave away from predation. (Del Risco et al, 2002). The nests are made of plant fibres that are held together by saliva of the birds that are cylindral and are approximately 16 inches in diameter (Del Risco et al, 2002). When the female oilbirds are fertilized via mating of the male oilbirds, these eggs are developed within the females (Del Risco et al, 2002). The females laid approximately 2-4 white eggs within 2-6 days (Del Risco et al, 2002). Both the parents sit on the eggs that are laid until it is hatched (Del Risco et al, 2002). This process is called incubation and takes approximately thirty two to thirty five days (Del Risco et al, 2002). It is essential that the parents sit on the eggs because it requires adequate conditions in order to hatch since the temperature within the cage is relatively low (Del Risco et al, 2002). When the offspring are produced they are naked with a few scattered feathers, their eyes are closed and they weigh about 0.4 to 0.5 ounces (Del Risco et al, 2002). Parental care is essential here since the chicks are needed to be fed by their parents until they become overweight (Del Risco et al, 2002). Males give the same amount of parental care as the females (Del Risco et al, 2002). At about seventy days old they are twice the weight of an adult oilbird because of the high source of protein in the fruits (Del Risco et al, 2002). At about 110 to 120 days the birds are able to migrate away from the nest into the external environments of the cave (Del Risco et al, 2002). By this stage the weight of the oilbird are reduced and the feathers within the entire body is highly developed (Del Risco et al, 2002).

ANTIPREDATOR BEHAVIOUR. Very little information has been published about the antipredator behaviour of the oilbirds but however since they are mostly enclosed in the caves during the day they are less susceptible to predators (Hilty et al, 2005).

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Fig. 2. Oilbird foraging at night.

[http://www1.nhl.nl/~ribot/english/stca_ng.htm, downloaded 16 November 2011]

Fig. 3. Monogamous relationship.

[http://www.stanford.edu/~siegelr/trinidad/oilbirds.html , downloaded 16 November 2011]