

Coereba flaveola (Bananaquit or Sugar Bird)

Family: Coerebidae (Bananaquits)

Order: Passeriformes (Perching Birds)

Class: Aves



Fig. 1. Bananaquit, *Coereba flaveola*.

[http://www.birdsoft.com/birds_info/bananaquit.htm, downloaded 30 November 2012]

TRAITS. The head, back and wings are sooty black; the flight feathers have patches of white at its base and a yellow spot on its edge. There is a conspicuous streak of white above the eye extending from the nostril to the nape. Its chin, throat and feet are slate gray while the rump and belly is saffron yellow. The undertail coverts are white and inner parts of the outer tail feathers are tipped with white. The black bill is curved downwards (Gross 1958). The feet have three forward-pointed toes and one backward, all with sharp claws which facilitate perching (Likoff 1986). The sexes resemble each other in overall plumage coloration but in females, the crown is darker, the throat is lighter and she has an olive-yellow rump. Usually, the male is somewhat larger and its rump is considerably brighter (Gross 1958). It has a special uropygial (preen) gland on its tail base that produces a combination of oils and waxes with which the bird bathes its feathers to keep them pliable, resistant to water and protected from harmful microorganisms. The adult is 10-12 cm in size and weighs 9-10 grams. Juvenile bananaquits resemble their parents but are duller in colour; its body is completely olive-yellow in appearance (Gross 1958).

ECOLOGY. *Coereba flaveola* occurs across all of Central and South America; from mainland Mexico south to Peru, Paraguay, north-east Argentina and south Brazil; throughout the Caribbean islands except Cuba and is a rare visitor to Florida. It generally inhabits areas of tropical vegetation which include scrub, tropical forests and plantation estates; rarely dense forests, deserts and altitudes above 2000 m. It frequently occurs in gardens, parks, and other suburban regions where flowers are abundant. It is energetic and conducts all of its foraging and nest building activities during the day (Contreras-González et al. 2010). It visits flowers for nectar, insects and other small arthropods, occasionally pierces fruits for their juice. It is incapable of hovering while feeding, and hence it must perch (Stiles and Skutch 1989). It assists in the pollination of a few plants species and there is considerable overlap in habitat, diet and activity with other nectarivorous birds e.g. hummingbirds (Contreras-González et al. 2010).

SOCIAL ORGANIZATION. Typically a very sociable bird, bananaquits are often solitary or in pairs; larger groups occur where flowers or sugar is abundant in supply. Also occasionally found in mixed flocks with birds such as tanagers and warblers in forest canopies (Contreras-González et al. 2010). They are polygynous, diurnal and do not exhibit any territorialism (Gross 1958). Males court females without challenging or acting aggressively towards other males. Males and females build individual nests and roost singly (Wunderle 1984). They are frequent visitors to sugar-water feeders in and around human settlements and as a result, they eventually become tame (Likoff 1986).

ACTIVITY. *Coereba flaveola* is a fast-paced, seemingly nervous, flitting bird. It is non-migratory, remaining in its tropical habitat all year-round and also non-colonial (Wunderle 1984). They are often spotted singly, in pairs or small family groups. The presence of these birds in a particular area is determined primarily by the availability of food. They are bold, acrobatic and noisy nectar feeders. They are persistent singers and they build two types of nests throughout the year, which are either specialized for roosting or breeding. At times, they roost in abandoned nests or former brooding nests. The birds settle into their individual roosting nests at sunset and stay there until sunrise (Gross 1958). They bathe in rainwater accumulated on thickened bromeliad leaves, to rinse their feathers that are sticky after flower foraging and also spend a significant amount of time preening (Likoff 1986).

FORAGING BEHAVIOUR. The bananaquit is a brisk forager and whisks from flower to flower in its search for nectar, which makes up more than two-thirds of its diet. The rest consists of insects and insect larvae (Likoff 1986). It reaches the nectar of flowers by thrusting its sharp bill between the flower petals and using its feathered tongue to extract the nectar from its store (Likoff 1986; Gross 1958). This method aids pollination, since pollen brushes onto the bird's feathers and bill and is carried to other flowers. Like the hummingbird, the bananaquit uses its sharp beak to pierce the base of large flowers, to steal their nectar which the bird cannot reach from above (Fig. 2). This does not assist in pollination, but allows hummingbirds and insects to reach the leftover nectar as the flower wilts (Likoff 1986).

Unlike the hummingbird, the bananaquit cannot feed while hovering and must always perch on a branch or stem while feeding, often hanging upside down. Apart from nectar, this bird enjoys the pulp of several fruits as well as small insects found underneath leaves, such as ants, flies and spiders (Stiles and Skutch 1989). The bananaquit uses a technique called gaping to eat the inside of pupae, whereby it pierces the case, opens its bill slightly and licks the inside with its

specialized tongue. Furthermore, it has been seen sipping from droplets of rainwater or dew on plants (Gross 1958). It is also a frequent visitor to bowls or man-made feeders that contain sugar-water mixtures and also flower-boxes near human settlements, such as in verandas, hotels, gardens and parks (Likoff 1986).

COMMUNICATION. The bananaquit's song is a rapid series of high-pitched, shrill, unmelodious squeaks which is heard most noisily while foraging in groups (Gross 1958). Its song consists of a intensifying "sisisis" and also "wiz wiz wiz sisisisi" while the call is a brief, high-pitched "tsip" or "seet" (Contreras-González et al. 2010). The song can be heard throughout the year at any time of day, but varies greatly with individuals, conditions and geographical location (Gross 1958). Most song variation is observed among male bananaquits, whose songs differ in note usage and song types, with 120-340 song types per male. The different types of songs are produced by adding or omitting notes at the end of the song, but maintaining minimal note variation at the start of the song (Wunderle et al. 1992). These variations in song characteristics render males relatively more active singers than females. Usually, before breeding the male tries to win a female mate by singing around her roost. The female emits a single high-pitched note when locating her young, and they respond with a similar but quieter note (Gross 1958).

SEXUAL BEHAVIOUR. *Coereba flaveola* generally nests throughout the year, with the female laying several clutches per year. Nests are built from five feet to thirty feet above ground in shrubs, trees or vine tangles; sometimes higher in open locations (Gross 1958; Contreras-González et al. 2010). In many regions, breeding runs from around the close of the dry season into the first rains of the wet season. This is typically the most productive flowering period and coincides with the months March through early August (Allen 1961; Wunderle 1984).

During this period, the male spends his time singing near the nest of his prospective mate. The breeding pair then participates in a courtship ritual which includes several reverent gestures and inclinations towards each other (Wunderle 1984; Contreras-González et al. 2010). They abandon their individual roosting nests and unite to laboriously build a larger, more sophisticated nest suitable for a family (Likoff 1986). The nest is a compact spherical structure with thick walls, constructed using various plant materials, and lined with a blanket of fine fibers or feathers. From the inside, the opening is high up on the wall of the nest with an upward projection from the bottom, likely to prevent the eggs or hatchlings from falling out (Fig. 3) (Contreras-González et al. 2010). This breeding nest is three times larger than the roosting nest, and takes the pair between five to seven days to construct as opposed to a few hours needed to complete a roosting nest (Likoff 1986). The male is very protective, and stays close to his mate, helping to gather materials for the brooding nest (Wunderle 1984).

The clutch size is two or three white eggs with brown spots and the female incubates them for about 12-14 days. The male does not help to incubate the eggs, but helps to protect the brood and feed the hatchlings regurgitated food. The female keeps the nest clean and either swallows or carries away the hatchlings' fecal sacs (Likoff 1986). Once the hatchlings leave the nest, the male returns to his nest and continues to court other females (Allen 1961; Wunderle 1984).

JUVENILE BEHAVIOUR. The hatchling is entirely naked; its entire body is a bright pink, flesh colour and bears no evidence of down. Their eyes are closed and their gapes are pale yellow. During this time, the mother broods her young who are entirely dependent on her (Fig. 3). They are fed regurgitated food by both parents, and this causes a temporary pouch to form at the right side of the neck (Skutch 1983). Their diet consists of nectar and more importantly, insects which provide the necessary protein for growth (Likoff 1986). After 4-5 days, their eyes open and feathers begin to develop. They are able to stretch their necks through the nest entrance to receive food from their parents. At 14 days, enough feathers are unsheathed to cover its body; however, the distinctive feather colorations are not yet fully developed. The mother no longer broods her young, but continues to accompany them until they are able to fly. They leave the nest after about 15-18 days but continue to flit between branches, repeatedly emitting sharp notes that enable their parents to locate them and bring them food. Their parents do not lead them to sleep in brood nests, but rather leave them outside until they can find or learn to build their own nests (Skutch 1983).

ANTIPREDATOR BEHAVIOUR. Bananaquits often build their nests near wasp nests for protection against predators (Gross 1958). After the female lays her eggs, the male spends much of his time near the nest, protecting her as she incubates. The female also protects her hatchlings from other bananaquits and nest predators, until they are ready to leave the nest. Common predators include larger bird species, rats, snakes and ants (Gross 1958; Allen 1961). If approached, the bananaquit wards off enemies with rapid wing vibrations. Alternatively, it pecks at its opponent and flies down to the ground to resume a fight (Likoff 1986). At times however, they do not resist or protest nest intruders but rather fly away quietly (Gross 1958).

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Fig. 2. Bananaquit piercing base of flower to steal nectar.

[<http://www.flickrriver.com/photos/pazzani/4451414324/>, downloaded 10 November 2012]



Fig. 3. Female bananaquit brooding hatchlings in a nest.

[<http://ibc.lynxeds.com/photo/bananaquit-coerebidae/adult-female-sitting-nest-young-taken-blanchiceusse>.
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