

Mimus gilvus (Tropical Mockingbird)

Family: Mimidae (Mockingbirds)

Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



Fig. 1. Tropical mockingbird, *Mimus gilvus*.

[<http://asawright.org/wp-content/uploads/2012/07/Tropical-Mockingbird.jpg>, downloaded 16 November 2014]

TRAITS. The tropical mockingbird is a songbird that can be identified by its ashy colour; grey body upperparts and white underparts. It has long legs, blackish wings with white bars and a long blackish tail with white edges. The juvenile is duller and browner than adults with a chest slightly spotted brown. The average length and weight of the bird is 23-25cm and 54g respectively (Hoyo Calduch et al., 2005). It has yellow eyes and a short, slender, slightly curved black bill. There is no apparent sexual dimorphism (Soberanes-González et al., 2010). It is the neotropical counterpart to the northern mockingbird (*Mimus polyglottos*), with its main difference being that the tropical mockingbird has less white in its wings and primaries (flight feathers).

ECOLOGY. *Mimus gilvus* is found in open habitats ranging from savanna or farmland to human habitation. These birds are geographically distributed from southern Mexico to northern South America to coastal Eastern Brazil and the Southern Lesser Antilles, including Trinidad and Tobago (Coelho et al., 2011). The tropical mockingbird may have been introduced into Trinidad

and Panama, but these are now resident populations. It builds its cup-like nest in thick bushes or shrubbery with sticks and roots about 2-3m off the ground (Hoyo Calduch et al., 2005). It is a very territorial bird as it will aggressively and boldly fight off any larger birds or lizards (Ryan, 2012). These birds are generally seen perched in the open.

FORAGING BEHAVIOUR. These birds are omnivorous as they feed on a wide variety of insects and fruits. They consume lizards and small invertebrates such as spiders, grasshoppers and beetles. They eat fruits and seeds like berries and mangoes from their trees, or from what has fallen on the ground. It therefore forages on the ground among vegetation or, in suburban areas, it will simply steal food off of plates. It may also fly down from perching, spreading its wings, displaying the white bars, to catch an insect. It runs swiftly on the ground in grassy areas. While they are foraging on the ground, they pause between foraging runs in order to lift their wings in an “archangel-fashion”. This is similar to that of the northern mockingbird’s behaviour, but the tropical mockingbird lacks the striking white pattern under its wings, therefore making its “wing-flashing” a quite peculiar behaviour (Haverschmidt, 1953). They prefer to run through the grass with their long legs, to disrupt the insects (Hoyo Calduch et al., 2005).

COMMUNICATION. Mockingbirds communicate through song, unique to its species and locality. These birds are said to have quite an extensive repertoire. Its song consists of continuous buzzy and clear whistled syllables. Their calls include a hard “chek” or “shahk” (Hoyo Calduch et al., 2005). The bird can also cluck and wheeze (Ryan, 2012). The young song birds begin with “subsong” which is the production of soft, rambling sounds. These young learn to make sounds via mimicry of adults of the same species and practice. Later on, they make “plastic songs” which are more stereotypical vocalizations (Hultsch and Todt, 2004). The male birds learn over one hundred syllables and combine them in a variety of ways to contribute to their extensive repertoire which is usually presented prior to breeding. The top ranking males use these songs to compete for females and the higher ranking male would usually sing whilst perched higher in the tree for increased song output (Botero et al., 2009). Although the males can produce high song versatility they sometimes sing quite repetitively, which has been shown to be a stronger, more aggressive threat response. This is specifically seen while two male, rival birds are counter-singing. The repetition may be “within-song” due to songs composed of one syllable type, “between-song” by duplication of the same song, or by both methods. Studies show that in agonistic (conflict) situations, males with high song versatility usually become repetitive and vice versa (Botero and Vehrencamp, 2007). The birds mainly sing in the morning and usually during the hottest time of the day; they sometimes sing in the night. Unlike their close relative, the northern mockingbird, they do not mimic the sounds of other species (Bouglovan, 2014).

SOCIAL ORGANIZATION. In this species, male dominance relates to the how repetitive their syllables and songs are (i.e to perform each of these with high consistency). As they get older, the males usually get more consistent and therefore more dominant which leads to higher reproductive success. This leads to a positive correlation between age and dominance. In groups with members of all the same sex, linear dominance is observed. However, these birds live in cooperative breeding groups with many members, both males and female, working together to defend the territory. The group usually consists of one monogamous pair. In some groups, there exists an alpha (dominant) and a beta male (subordinate) who will compete with each other for the highest ranking female. They sing and build nests but the alpha male habitually wins as he perches higher

in the tree to maximise song output. Studies also show that alpha males have a repertoire of higher consistency than the beta males (Botero et al., 2009).

SEXUAL BEHAVIOUR. Tropical mockingbirds are monogamous and territorial yearlong. Courtship begins with the male's attempt to attract a female with prolonged song and building the outer cup of the nest. Females are usually attracted to males with a larger repertoire with high consistency either "within-song" or "between-song". If the female likes the song, she will help to build the inner lining of the nest and breed with the male. Not much work has been done on the sexual behaviour of this bird, but it is assumed that such behaviours would be similar to that of the northern mockingbird. The following describes some general characteristics of sexual behaviour of the northern mockingbird. The males and females chase each other around while making harsh or soft sounds. Flight display is also used as the male would fly down from singing perched on a tree first flapping its wings, then just keeping them open while gliding onto a lower branch. The male usually sings before and during copulation which takes place as the male mounts the female on the ground (Derrickson et al., 1992).

REPRODUCTION. Tropical mocking birds are multibrooded. This means that the females lay more than one batch of eggs per season. They breed during all seasons but reproduction tends to peak in time for the rainy season because of an increased food source. The reproductive cycle is dependent on geographic location but lies within a range of 60-67 days. The female lays a clutch of 2-3 greyish greenish eggs with brown spots (Fig. 2). Only the female incubates them for about 11-15 days while the male aggressively defends the nest from larger mammals such as iguanas or mongooses. After the chicks hatch, both parents take responsibility in caring for and feeding them (Soberanes-González et al., 2010). The group of older offspring usually stay and help take care of the new young.

DEFENSIVE BEHAVIOUR. These birds are highly territorial and therefore aggressive. They are quite brave and bold as they physically take on larger animals which threaten them or their young. Both the male and the female defend the nest, but it is primarily the male. They defend against intruders and predators. They are prolific mobbers as they attack in groups in order to overcome the predator as well as distract it from the nest and possibly attract a predator of the predator (Backyardnature.net 2011). They chase or threaten while flicking their wings up (Fig. 3) and down to display their aggression. They also stand with their tail upright (Fig. 4).

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Fig. 2. *Mimus gilvus* egg.

[http://www.curacao-nature.com/images/birds/eggs/thumbnails/mimus%20gilvus%20egg%2001%20AN%20curacao%20juldorp_600x0.jpg, downloaded 17 November 2014]



Fig. 3. *Mimus gilvus* spread-wing display.

[<http://cache2.asset-cache.net/gc/154358562-mimus-gilvus-gettyimages.jpg>, downloaded 17 November 2014]



Fig. 4. Tropical mockingbird showing attitude.

[http://avise-birds.bio.uci.edu/passeriformes/mimidae/mimus_gilvus/images/4trmo_copy.jpg, downloaded 17 November 2014]

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