

## *Progne dominicensis* (Caribbean Martin)

Family: Hirundinidae (Swallows)

Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



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**Fig. 1.** Caribbean martin, *Progne dominicensis*.

[[https://www.flickr.com/photos/dax\\_roman/10413087254](https://www.flickr.com/photos/dax_roman/10413087254) downloaded 10 October 2015]

**TRAITS.** The Caribbean martin is also known as the white-bellied martin. The male and female share a characteristic dark blue colour on the greater part of the body, and a distinctly snowy belly (Fig. 1). In the Caribbean martin, the only trait that distinguishes the male from the female is the sudden change in colour; males have a sharp line that separates the white and blue colours, but females' feathers are brown and progressively intermingle with the white. The juvenile martins also have brown feathers (Raffaele et al., 1998). These birds have black beaks which are small and have wings that are long and pointed, the tail is also forked (Downer, 1990). The Caribbean martin at maturity would be 17-20 cm long (Downer, 1990; Raffaele, et al., 1998). The adult male has wings and tail black with a gloss that looks bluish, wings 141-148mm in length, tail 74-76mm, depth of tail fork 17-21mm, bill length 11-12mm. The Adult female and the young in the first year have almost the same features, they both resemble the adult male but the features and colours are more muted and dulled (Fig. 2). In females wing length is 135-148mm, tail 69-74 mm, fork tail depth 14-20mm.

**ECOLOGY.** Breeds in the Greater Antilles, some of the Lesser Antilles and Tobago (Raffaele et al., 1998). The Caribbean martin is also seen travelling to the Bahamas, Cayman and Mexico. These birds usually migrate from the Caribbean in the nonbreeding season which is from October to January. There is little information on the migration or nonbreeding distribution of these martins. There have been records of sightings in Curaçao for both spring and fall, but it is unknown if it is a migrant or a vagrant. The Caribbean martin favours an open, low elevated habitat that is situated near sea coasts, cliffs, fresh water, and/or towns. Their primary source of food is insects.

**SOCIAL ORGANIZATION.** Caribbean martins are very social birds; they are usually seen flying in groups or perched on bare branches or wires (Fig. 3) (Raffaele et al., 1998; Downer, 1990). They are like most martins, monogamous (Sibley, 2001) and males that are breeding are extremely territorial. They may sometimes nest with other pairs sometimes a colony if there are limited nesting sites.

**ACTIVITY.** Little is known about the Caribbean martins' activity, they generally migrate longitudinally, and the migration usually occurs during the nonbreeding season which is also the winter season. They usually migrate to South America during those winter months and return to the Caribbean in the spring. The behaviour has been seen to be directly connected to mating season (Downer, 1990).

**FORAGING BEHAVIOUR.** Usually fly very high above the ground but could be seen flying lower to trail cattle to catch the insects from the cows. Their flight pattern alternates between gliding and gentle flapping. They catch insects midair/in flight their diet mainly consists of flies, dragonflies, butterflies, flying ants and plant bugs (Flieg and Sander, 2000).

**COMMUNICATION.** The Caribbean martin calls are like the purple and grey-breasted martins. Their voice is a gurgling sound that includes a high-pitched sharp 'twick-twick', liquid 'chileet, chur-chur, chi-chi-chiwee'. They also make a melodic chirrup or gritty 'churr', and other contact calls like a 'zwoot' and 'kweet,' which is used in aggressive exchanges. They make a unique 'wheet,' call when approaching another bird's territory. There is a courtship call which sounds like a 'croo' and a high-pitched call 'peak,' which is an alarm for predators being near. Also use 'wrack' sound when mobbing. The members of this species usually use these calling methods to communicate with one another (Downer, 1990; Raffaele, et al., 1998)

**SEXUAL BEHAVIOUR.** There is insufficient evidence on the mating systems for this species, but like other martins, these are said to also be monogamous (Sibley, 2001). They use twigs and leaves to build their nests. They build their nests on cliff crevices, palms, telephone poles and old woodpecker holes. The breeding season is usually from February to August in the Caribbean. The females usually produce 2-6 white eggs (Raffaele et al., 1998), which are incubated for about 14 days (Hickman, et al., 2000; Raffaele, et al., 1998). Males are territorial and attack intruders using the head forward thrust display, this is done by a continuous flicking of their wings and tail, lunging, snapping their bill and physically fighting.

**JUVENILE BEHAVIOUR.** Not much is known about juvenile behaviour. The young require nourishment; they hatch bare and are very helpless when they are born. They are seen to be nested for about a week and are fed constantly (Fig. 4) (Hickman, et al., 2000).

**ANTI-PREDATOR BEHAVIOUR.** Very little information is known about the anti-predator behaviour of the Caribbean martin. There are reports of small numbers of these birds in the diets of owls (Williams, 2010). Caribbean martins often use a high-pitched 'peak,' call to signal an alarm for predators, the males which are somewhat aggressive, sometimes attack predators who are encroaching the nesting sites by mobbing (Hickman, et al., 2000; Raffaele, et al., 1998).

#### REFERENCES

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Author: Annika Mohammed

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**Fig. 2.** Female and juvenile Caribbean martins.

[<http://alfredo.colon.oiseaux.net/hirondelle.a.ventre.blanc.2.html>] downloaded 10 October 2015]



**Fig. 3.** Male and female Caribbean martins perched on wire.

[<http://ebird.org/content/caribbean/noticias/unase-a-nuestro-censo-de-las-golondrinas-de-iglesias-del-caribe/?lang=es> downloaded 10 October 2015]



**Fig. 4.** Female feeding juvenile Caribbean martin.

[<http://www.mangoverde.com/birdsound/picpages/pic123-5-3.html> downloaded 10 October 2015]