

Tyrannus dominicensis (Grey Kingbird or Pitirre)

Family: Tyrannidae (Tyrant Flycatchers)

Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



Fig. 1. Grey kingbird, *Tyrannus dominicensis*.

[http://www.discoverlife.org/IM/I_LHT/0056/320/Tyrannus_dominicensis,_Gray_Kingbird,I_LHT5630.jpg, downloaded 28 October 2015]

TRAITS. The grey kingbird, also known as pitirre or white-breasted kingbird, is distinguishable by its dark grey upperparts, cheeks and tail and a white underside (Fig. 1) (Sauer et al., 2000). The belly of the kingbird may also be light grey in colour (Hoyo et al., 2004). Its flight feathers are narrowly edged with white. On the upper dark grey half of its head, there is a patch of a reddish crown. Both the male and female grey kingbirds are similar in appearance, except that the crown in the females is slightly smaller (Hoyo et al., 2004). The different shades of grey over the head of the kingbird give it the appearance of having on a dark mask. It has a large heavy and long black bill, black legs and feet and dark brown eyes (Hoyo et al., 2004). This species of kingbird is differentiated from the others by its grey forked tail shape (Sauer et al., 2000). A full

grown adult grey kingbird is approximately 21-25 cm in length. The wing length may range from 37-40cm, and the weight of an adult grey kingbird is 44-47g (Hoyo et al., 2004).

ECOLOGY. Grey kingbirds are inhabitants of open areas with scattered trees and bushes. It can be found in grasslands, cultivated pastures, near coastal areas or even in parks and urban areas (Hoyo et al., 2004) and mangroves such as in southern Florida (Maehr, 2005). This species of kingbird is recognized as the national bird in Puerto Rico, and a large population of grey kingbirds is found in south-eastern USA, especially in south Florida (Hoyo et al., 2004). Other places this species can be found residing are in the West Indies, Bahamas, Venezuela, Trinidad and Tobago and the Greater Antilles (Hoyo et al., 2004). Grey kingbirds migrate down the coast of South Carolina and west to Mississippi (Sauer et al., 2000).

SOCIAL ORGANIZATION. They can either be found flying alone or in small loose flocks of 5-12 birds (Hoyo et al., 2004). They are highly territorial to their area, especially nesting area. They usually are seen in pairs where the male and female fly together with their wing and legs outstretched (Hoyo et al., 2004). The male grey kingbird is usually the one with the defense responsibilities and is quite territorial and defensive of the nest while the female incubates the eggs during the incubation period (Doyle, 2013).

ACTIVITY. The grey kingbird is usually spotted atop high trees. (Hoyo et al., 2004). They spend most of their time foraging for food or perching on tall branches and overhead lines (Maehr, 2005).

FORAGING BEHAVIOUR. They spend most of their day foraging through the branches of trees and pecking at small insects. The main diet of grey kingbirds consists of insects (Fig. 2) such as bees, dragonflies, wasps and beetles (Hoyo et al., 2004). They also eat small fruits and berries depending on its availability. Fruits and berries make up one fifth of their daily diet (Hoyo et al., 2004). Spiders and small lizards are occasionally eaten. The birds beat the prey against the resting area or perch before swallowing it (Hoyo et al., 2004). Grey kingbirds usually feed in pairs (Doyle, 2013). Most of the flying insects that were eaten were caught by sallying from power lines or from tall branches on which they were perched. They rarely forage on the ground. Most hunts start from being perched in high branches (Doyle, 2013). It is noted that male kingbirds only forage a few meters; up to 75m from the nest in order to maintain defence of the nest. The females fly further distances or out of sight to obtain food (Doyle, 2013). One characteristic of this species of birds is that it exhibits kleptoparasitism which is the theft of prey or food from another animal that has already caught, collected or stored it (Overington et al., 2008).

COMMUNICATION. The grey kingbird communicates vocally. They vocalize during courting, foraging and even copulating. The common call made by the grey kingbird is an emphatic “pit-piteeri-ri-ree” (Hoyo et al., 2004). The male version of the call has six more musical notes “pi-ti-reee-pi-ti-rrro”. The grey kingbirds also give a throaty “pe-cheer_ry” call that has a higher pitch than the other calls (Hoyo et al., 2004).

SEXUAL BEHAVIOUR. The breeding season varies but is typically between the periods of April to July (Hoyo et al., 2004). Grey kingbirds show aspects of aerial courtship display and copulation (Doyle, 2013). Copulation is observed to continue during egg production and development of nestlings. They exchange “p’t’irre” calls during copulation. The male grey

kingbird courts the female by flying with her in the air and tumbling downward approximately 25m in the air with their feet stretched out, wings fluttering and vocalizing with one another (Doyle, 2013). A large population of grey kingbirds breed along the South Carolina coast (Sauer et al. 2000). It is also noted that the grey kingbird breeds from Northern Columbia and Venezuela northward to far Southeastern North Carolina (Haberman et al., 1991). Grey kingbirds nest in small numbers and is usually spotted nesting on the coast of Georgia (Haberman et al., 1991). The nest is typically made of grass, twigs, vines and stems to form a cup shaped structure (Hoyo et al., 2004). The female usually places the softer grass inside the nest and the harder twigs and stems on the outside (Hoyo et al., 2004). The nest is built mostly in mangroves and approximately 1-6m above ground in the horizontal branches of trees. Between 3-5 light pink-coloured eggs are laid. The incubation period lasts for up to 15 days (Hoyo et al., 2004).

JUVENILE BEHAVIOUR. Chicks leave the nest about 18 days after hatching. However, they still depend on the adults up to five weeks after leaving the nest (Hoyo et al., 2004). The young are fed by both parents, however the male brings the larger quantity of food including insects in its beak (Doyle, 2013). In approximately a week, the chicks can communicate vocally with “p’t’tirre” calls, and the juveniles are able to fly approximately two weeks after hatching (Doyle, 2013).

ANTIPREDATOR BEHAVIOUR. During the incubation period, the male grey kingbird is defensive over the territory. In instances where the male felt like his territory was being attacked or being disturbed, the first defence signals was to flare his wings (Fig. 3), swoop at the predator with flared wings and tail. It may also chase the predator or disturber and strike with its bill and feet (Doyle, 2013).

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Author: Karen Mohammed

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Fig. 2. Grey kingbird, *Tyrannus dominicensis*, feeding on an insect it has captured.

[http://www.lesfruitsdemer.org/wp-content/gallery/kingbirds-01-20-2012/DSC_6549.jpg, downloaded 7 November 2015]



Fig. 3. Grey kingbird showing aggressive territorial display.

[<http://d35vx518gq09qn.cloudfront.net/sites/default/files/birds/kingbirds/greykingbird.jpg>, downloaded 7 November 2015]

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