

Spizaetus tyrannus (Black Hawk-eagle)

Family: Accipitridae (Hawks, Kites and Eagles)

Order: Falconiformes (Diurnal Birds of Prey)

Class: Aves (birds)



Fig. 1. Black hawk-eagle, *Spizaetus tyrannus*.

[<http://www.hbw.com/ibc/photo/black-hawk-eagle-spizaetus-tyrannus/adult-perched-tree>, downloaded 4 March 2017]

TRAITS. The black hawk-eagle, *Spizaetus tyrannus*, as the name suggests is shiny black in colour, with thick grey bars on the tail and short crest with specks of white (Fig. 1). Thin black and white bars are evenly spaced on the legs, thighs and under-tail coverts. The bill is blue-black bill, the eyes are amber-yellow, and the feet are yellow with black claws. It has short but broad wings, distinctly narrower at the base (Eagle Directory, 2010). Adult length is 58-71cm, and the sexes are alike (Ffrench, 2012).

DISTRIBUTION. Widespread throughout the neotropics (Fig. 2), from Mexico to Paraguay and northern Argentina (Ferguson-Lees and Christie, 2001). It is resident in Trinidad but an infrequent visitor to other Caribbean islands, and not found in Tobago (Restall, 2006).

HABITAT AND ACTIVITY. Often referred to as a diurnal forest eagle (Ferguson-Lees and Christie, 2001), its habitat ranges from very damp lowlands, mountains, woodlands and secondary forest (Whitacre, 2012), especially open areas along river banks. In Trinidad it occurs Arima and Moruga woodlands, Biche, Wallerfield and in the Northern Range (Ffrench, 2012).

FOOD AND FEEDING. The black hawk-eagle preys on mammals, especially howler monkeys (Joao et al., 2006), more than birds (Sick, 1993), rodents, bats, lizards and snakes. It requires a wide area to meet its food requirements (Schoener, 1968). It hunts by flying from branch to branch or at the edge of woodland, then flying down quickly to attack its prey on the ground or in trees (Fig. 3).

POPULATION ECOLOGY. The black hawk-eagle is solitary or found in pairs, territorial and seldom seen except when in flight while seeking prey or displaying on its territory. The population number is reasonably small with less than 50,000 individuals (IUCN, 2017). Huge forested areas are necessary for the survival of the population although *Spizaetus tyrannus* has displayed an adaptation to deforested woodland areas (Salvador, 2011).

REPRODUCTION. The mating season is from December to August (Eagle Directory, 2010). In comparison to other species, the reproductive rate is slow, in that it breeds every other year unless the nest is unsuccessful or the hatchling dies. The female gathers material to construct the nest, in a branch at a height of about 20m, and consists of twigs, sticks and vines. The adult male does not assist in constructing the nest, however it is often seen flying over the territory (Whitacre, 2012). *Spizaetus tyrannus* normally lay one egg in the clutch, which hatches after 40-45 days and takes 9-10 weeks for fledging.

BEHAVIOUR. The black hawk-eagle often calls while flying at extreme heights, and usually exhibits a “butterfly like” wing motion as it returns to the canopy (Ffrench, 2012). During the nesting period, adult males display two calls; one while flying above the forest, and the other in response to the female’s whistle near the nest or prior to mating (Whitacre, 2012).

APPLIED ECOLOGY. Although the species is declining slowly due to deforestation, it is listed as Least Concern as the population is large enough not to fall in the category Vulnerable (IUCN, 2017).

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Fig. 2. Black hawk-eagle, *Spizaetus tyrannus*, geographic distribution.

[<http://maps.iucnredlist.org/map.html?id=22696193>, downloaded 8 March 2017]



Fig. 2. Black hawk-eagle, *Spizaetus tyrannus*, feeding.

[<http://www.nafex.net/archive/index.php?t-455.html>, downloaded 8 March 2017]