

## *Chiroxiphia pareola* (Blue-backed Manakin)

Family: Pipridae (Manakins)

Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



**Fig. 1.** Blue-backed manakin, *Chiroxiphia pareola*.

[[http://neotropical.birds.cornell.edu/portal/species/overview?p\\_p\\_spp=503276](http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=503276), downloaded 17 November 2014]

**TRAITS.** Blue-backed manakins are compact, polygamous neotropical birds about the size of a sparrow. *Chiroxiphia pareola* is one of the most colourful manakins. The adult male is a brightly coloured, typically 12–14 cm long and weighs 17–21g (Gilliard, 1959). The male is mainly a soft black with a light blue back, pale orange-red legs and a red coloured crown (Fig. 1). The feathers are narrow and rigid. The adult males are unmistakable due to the bright red crown and blue back (Schulenberg, 2012). The adult female upper body has yellowish olive colour which become greyish towards the abdomen. Its feathers are also narrow but less rigid than that of the male (Fig. 2). The immature male is coloured the same as a female, however, it possesses a bright red crown (Fig. 3).

**ECOLOGY.** Found in tropical Southern America countries such as southern Colombia, eastern Venezuela, Guyana, north-east Brazil, Bolivia and Ecuador, and in Tobago (but not Trinidad). They inhabit dry and moist deciduous, humid forest and perform mating dances on low perches in the heavy undergrowth of secondary forest. Male manakins display their dance at a few reserved perches located not too far from each other within an area of about 100 x 50m called the lek (Snow, 1971). These perches are normally located 60–80cm above the ground in patches of dense undergrowth (Gilliard, 1959). There is a main dance area where the males display their moves and auxiliary perches nearby.

**SOCIAL ORGANIZATION.** The blue-backed manakin males have a cooperative relationship rather than a competitive one. The adult male takes on a juvenile male apprentice, whom is taught the art of the courtship dance. Males keep together in pairs and these pairs occupy fixed territories in the forest and they spend much of their time together and nearly all of their displays are performed jointly (Snow, 1971). Snow also noted that the pairs always uttered certain calls when sitting together and after these calls, the pair often moved down to the display perch. On low perches in the undergrowth they perform a courtship dance where the males jump in an alternating manner. At the main display site, the dominant male calls other males before the dance begins. A hierarchy system was noticed, which is dependent on age, between the adult and juvenile male apprentice. There is no territorial conflict between two male adult blue-backed manakins, as a group of these birds have shared ownership of the varying perches that they prepared within the lek (Snow, 1971). In their highly polygamous system the social dancing between males is a replacement to fighting in selection of dominant breeding (Gilliard, 1959). These birds tend to remain in a particular area, with limited mobility.

Despite the fact that the manakins spend most of their time in the lek they have been spotted in the middle layer of the forest at the crowns of these trees. The male blue-backed manakins do not participate in any nest building responsibilities but are responsible for cleaning the lek, removing fallen debris and plucking leaves around the perches (Gilliard, 1959). "The activity of clearing leaves may also facilitate a skylight effect for the manakins which would accentuate the crown of their heads and the blue colour on their backs making them appear more appealing to the female audience" (Gilliard, 1959). The activity at the different perches changes sporadically with time. At certain times of the year one perch was more frequently used than another. An old male may have many mates, but the apprentice does not mate until the older male has died or stops being of reproductive age.

**COMMUNICATION.** The most widely heard sound through the forest above the dance areas is a wren-like "wwwrrrrr". It is a drawn out ascending sound ending in an explosive chow sound which was repeated sometimes. This call was uttered by lone males perched higher up in the trees in the afternoon period when the activity of the forest has subsided. Generally the calls were answered with a "whee-whew" call. The sounds heard first thing in the morning was a short descending "chew" preceded by a quick ascending whistle "chewwheat". This served as an invitational call to females sounded by lone males (Gilliard, 1959). Before the dance begins the dominant male and the juvenile sit side by side uttering a long series of calls in unison. When each male manakin jumps they make a nasal twanging sound, producing a rhythmic twanging. The purpose of the dance is to attract females to the site. When a female lands at the site they face her and continue (Snow, 1971). If she chose him to be her mate the adult manakin would leave with her, leaving behind his young apprentice. When the males all gathered in the display area they made a loud penetrating "chu" sound that was uttered quickly three or four clicks to the second after a rising whistling "kii" (Gilliard, 1959).

**BREEDING BEHAVIOUR.** The breeding season vary according to regions but in Tobago a possible time can be around March according to (Gilliard, 1959). The females normally build their nest on the higher branches of a tree but not too high up. The nest is small and often cup-shape. It is made from plant materials e.g. leaves, rootlets, fibres, and twigs. They surprisingly use spider webs as well as fine plant roots to secure the nest (Oiseaux-birds.com, 2014). They use the vegetation to camouflage their nest perfectly, so it is almost invisible. Two white and brown marked eggs are laid by the female and incubated for 17-20 days. The male does not help in this. The chicks are given

small fruits and insects and usually leave the nest two weeks after they have hatched. Females still fed their young several weeks later (Oiseaux-birds.com, 2014).

**JUVENILE BEHAVIOUR.** Male juveniles often land on auxiliary perches and copy/practice the courtship dance with each other or with an adult male. The younger male uses this to gain experience and does not mate until the oldest male loses status or dies and the juvenile takes on a new apprentice (Oiseaux-birds.com, 2014). The juveniles would respond to calls made by adult males and have never been seen to be solitary (Snow, 1971)

**ANTIPREDATOR BEHAVIOUR.** When the male blue-backed manakins are disturbed by any movement at a perch, they relocate to another perch for the purpose of deceiving predators. There were no signs of territorial defence among the species as more than one pair of blue-backed manakins were observed occupying the same lek and dancing on the same perch (Gilliard, 1959). They clear the leaves from the floor and the perches on and above the lek and by doing this reduce the risk of successful attacks from lizards, snakes and other birds.

#### REFERENCES

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**Fig. 2.** Female *Chiroxiphia pareola*.

[<http://www.oiseaux-birds.com/card-blue-backed-manakin.html>, downloaded 17 November 2014]



**Fig. 3.** Juvenile male *Chiroxiphia pareola*.

[<http://www.oiseaux-birds.com/card-blue-backed-manakin.html>, downloaded 17 November 2014]

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