



# KEEL-BILLED TOUCAN

PICIFORMES

Family: Ramphastidae

Genus: *Ramphastos*

Species: *sulfuratus*



**Range:** Southern Mexico to Venezuela and Colombia

**Habitat:** canopies of tropical, subtropical, and lowland rainforests, up to altitudes of 6,200 ft

**Niche:** omnivorous, arboreal, crepuscular

**Diet:** Wild: mainly frugivorous; some insects, eggs, nestlings and small reptiles

Zoo:

**Life Span:** Wild: 15 – 20 years

Zoo:

**Sexual Dimorphism:** Male is slightly larger and heavier than female

**Location in SF Zoo:** South American Tropical Rainforest and Aviary

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## APPEARANCE & PHYSICAL ADAPTATIONS:

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The Keel-billed Toucan has the large, colorful bill characteristic of the toucans; the bill that can grow to be up to one third the size of its body. The bill is mainly green with a red tip and orange sides. The coloration is probably more of a camouflage in the brightly colored tropical regions where they reside. The bill is a spongy, mostly hollow bone covered in keratin and is extremely light and very strong. It has strong, cellular fibers are in the form of a honeycomb giving it lightness and strength. The bill is edged with tooth-like ridges. The toucan's bill is surprisingly dextrous and allows the bird to feed on a variety of tropical forest fruits some off branches too small to bear the birds weight. It feeds by snipping off the fruit and flipping its head back to swallow the fruit whole. They regurgitate the larger seeds while the smaller ones pass through their digestive systems. The toucans play an important role in the reproduction of the fruit trees they depend on.

Plumage is mainly black with a yellow neck and chest. It has blue feet and red feathers at the tip of its tail. The long, square tail is red at the base on the underside, and white at the base on top. The area around the eyes is light blue. Wings are wide and short to enable flight through trees. Molting occurs once per year.

<b>Weight:</b> 4.7lbs - 8.8lbs
<b>Length:</b> 17 to 22 in with bill
<b>Wingspan:</b> 43in - 60in
<b>Tail Length:</b>
<b>Beak Length:</b> 5 – 6 in
<b>Beak Weight:</b> 13 – 18 oz

Keel-billed toucans have blue feet arranged in a zygodactyl pattern. Because toucans spend a large portion of time in the trees, this helps the birds to stay on the branches of the trees and jump from one branch to another.

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## STATUS AND CONSERVATION:

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Not globally threatened. Listed as Least Concern on IUCN Red List and on CITES Appendix II because of the large population size and large range. Availability of mature trees with natural nesting sites is of paramount importance. These birds are able to utilize human-altered habitat to some extent. They are occasionally hunted for their meat and ornamental feathers but are considered to have poor dispositions making them bad pets.

## KEEL-BILLED TOUCAN

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### COMMUNICATION AND OTHER BEHAVIOR:

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Keel-billed toucans are one of the largest and most vocal of all toucan species; they are extremely sociable birds. They usually seen in pairs or family groups of six to twelve birds and rarely fly long distances because of their heavy wings. They display a rapid, heavy flapping of the wings and then a glide when flying and calls with a “creek, creek” sound, similar to a frog. The voice is quite loud and can be heard more than half a mile across the open. When feeding in large groups the birds chatter constantly to one another and spar with their beaks clacking together. The bill is also thought to play a role in courtship rituals in addition to assisting with species recognition. Toucans are graceful flyers but rarely fly long distances.

The flocks roost in holes of tree trunks, sometimes with several birds crowding into one hole. Since the tree cavities aren't always very roomy, the species must conserve space by folding its tail up over its back and tucking its beak beneath its wing when it roosts. They forage from canopy to middle levels and rarely come to the ground. They will tear open birds nests and at times follow army ant swarms seeking food.

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### COURTSHIP AND YOUNG:

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Male courtship can involve a variety of different vocal and visual displays, some of which are head and tail jerking along with singing. Males will also court females by offering food. The monogamous pairs are cavity nesters make their nests in natural or woodpecker created tree holes. Both parents take turns incubating the eggs, feeding and caring for their chicks.

Chicks are altricial with no feathers, and have their eyes closed for approximately 3 weeks. They are fully feathered at 37 days. They have adequately formed heel pads, which assist on the pit-covered bottom of the nest. The chicks stay in their nest for approximately eight to nine weeks until their beaks are fully formed and they are ready to fly.

Incubation: 16 – 20 days	Sexual Maturity: 2 yrs
# of Eggs: 1 – 4 laid consecutive days	Fledging: 42 – 47 days

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### MISCELLANEOUS:

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The keel-billed toucan is also known as the Sulfur-breasted Toucan or Rainbow-billed Toucan and is the national bird of Belize and is responsible for bringing in much of the tourism there. There are 43 species of toucans each differentiated by its beak size and coloring!

'Toucan Sam', the cartoon used to advertise Fruit Loops cereal is sometimes identified (incorrectly) as a Keel-billed (Emerald Forest).

#### Sources:

created 3/2014

[The Handbook of the Birds of the World Vol VII © 1996, Lynx Edicions, p.220-249, 269](http://www.rainforest-alliance.org/kids/species-profiles/keel-billed-toucan)

<http://www.rainforest-alliance.org/kids/species-profiles/keel-billed-toucan>

[http://animaldiversity.ummz.umich.edu/accounts/Ramphastos\\_sulfuratus/](http://animaldiversity.ummz.umich.edu/accounts/Ramphastos_sulfuratus/)

[http://neotropical.birds.cornell.edu/portal/species/overview?p\\_p\\_spp=303256](http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=303256)

<http://a-z-animals.com/animals/keel-billed-toucan/>