

# Chestnut-mandibled Toucan

the Second Generation

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The Chestnut-mandibled Toucan *Ramphastos swainsonii*, also popularly referred to as the Swainson's Toucan, is the second largest of the large black toucans, and one of only two *Ramphastos* species found in Central America. It occurs as far north as central Honduras and ranges south into southern Panama and northern Columbia. The other large toucan found in this region is the Keel-billed Toucan *R. sulphuratus*, which is similar in appearance. These two species vary in that their bills are remarkably different in color, the Chestnut-mandibled is thirty percent larger, and their calls are unique.

The Chestnut-mandible has a bi-colored beak giving it its Spanish name, Tucan Bicolor, with the upper mandible yellow, and the lower mandible chestnut brown (hence its proper English common name). The Keel-billed has a multicolored beak beginning with red at the tip, mostly green upper and lower mandibles with some blue in the lower mandible and a well defined orange patch in the center shaped much like the upside down

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4 March/April 1998



Keelbilled Toucan — mother right, baby female on the left.



Swainson's Toucan family of five.

keel of a sailboat.

These two species can readily be distinguished audibly at a distance by their unique calls. The Chestnut-mandibled Toucan has a high pitched, three syllable yelping call, whereas the Keel-billed has a lower pitched "croaking" call, reminiscent of a frog or creaking door.

Both species are largely black in color except for their yellow breasts, white rumps, red vents, and green periorbital skin (skin around the eye).

Both species occupy similar habitat of tropical rainforest, though the Keel-billed also inhabits tropical dry forests in the northern part of its range in Mexico, Guatemala, Belize and Honduras. The Chestnut-mandibled Toucan avoids the tropical dry forests, keeping the more humid areas.

Chestnut-mandibled Toucans were quite rare in North American bird collections until the early 1980s when a couple dozen birds showed up on importer price lists. This phenomenon



was very short-lived, and only one captive breeding occurred from that period, when a single pair of those birds reproduced in the author's collection in 1989 (world first breeding).

Reproductive activity was minimal, and only three young were produced from these original importations. In the meantime, most of the imported stock disappeared, presumably due to old age and disease. The population had declined by early 1994 to unsustainable levels, and the species was doomed to vanish from American Aviculture.

Fortunately, the situation took a dramatic turn for the better with the opening of exports from Nicaragua, which established a wildlife management program for the sustainable export of various species of birds. This program includes an export quota, allocating a small number of birds to each of 10 licensed exporters. As a result, a number of Chestnut-mandibled Toucans have been imported into the U.S. in the past three years.

In the Spring of 1997, two pairs of Chestnut-mandibled Toucans reproduced at Emerald Forest Bird Gardens. Of these, one pair consisted of an original breeding male, imported in 1984, and its current mate, a female imported from Nicaragua in 1995 (the original breeding hen died in 1992, was replaced in 1993 and killed by him that same year). This pair produced two chicks, which were pulled at two weeks of age for handrearing. This breeding marked the first time this male bred since 1990, and was only his third nest since acquisition in 1984.

More significantly, a second pair also bred in 1997. This pair consisted of a handreared male offspring of the previously discussed male, and a female, also imported from Nicaragua in 1995.

On May 9, 1997, three eggs were laid in a hollow palm tree nest log, measuring forty two inches in length and sixteen inches in diameter, with an inside depth of twenty four inches from the top of the log, and sixteen inches from the bottom of the nest entrance. Internal diameter of the cavity was nine and a half inches. The entrance hole measures three and three quarters inches square. The log

was situated in a sheltered corner of the large 12 x 24 x 8 foot flight as high as possible in the flight, such that the entrance is nearly eight feet above ground.

All three eggs hatched on May 25, 1997 and the three chicks fledged the nest on July 14, 1997. They were soon weaned, and still remain with the parents. At first, the fledglings were quite nervous at the approach of people, flying about wildly. This behavior soon subsided when the offspring realized the parents were not frightened.

During the incubation and rearing period, the birds were left completely alone, except for daily feeding. No effort was made to enter the aviary, except once during early incubation to inspect the nest with flashlight and mirror (to count eggs), and once a couple weeks after hatching to count chicks.

The parents were fed a diet of diced papaya, and soaked Wayne's dog kibble. Crickets were offered three times a day. No other foods or supplements were provided. The chicks fledged the nest over a three day period, and were vigorously flying about their enclosure a few days later.

The primary significance of this breeding is that handreared birds do not necessarily imprint on humans, that the imprinting tendency can be reversed, if handreared young are properly managed and socialized, and that handreared birds properly socialized can go on to become successful parents, contrary to the experience many have had not only with toucans, but with other softbill species.

The Chestnut-mandibled Toucan has been designated a target species by the Association of Zoos and Aquariums (AZA) Piciformes Taxon Advisory Group (TAG). It is a species readily available to collection managers, public and private, and is a hardy species capable of reproductive success. Hopefully, enough collections will see fit to include this elegant bird in their future plans.

NOTE: The father of the male responsible for this second generation breeding was imported as an adult (age unknown) in 1984 and is still capable of breeding at an age of at least fourteen years. ➔

## *Toucan Cooperative Breeding Program has First Successful Captive Breedings in 1997*

**T**he Co-operative Breeding Program for Toucans, approved by the U.S. Fish and Wildlife Service in 1995 under the Wild Bird Conservation Act of 1992, for the importation of Keel-billed Toucans listed on Appendix II of CITES, saw its first breeding successes in 1997.

On July 14, 1997 the first two offspring were hatched at the Riverbanks Zoo in Columbia, South Carolina. These young were fledged on August 21 and 23, 1997, and are doing well. The second breeding occurred at Emerald Forest Bird Gardens on August 11, 1997 when two more young were hatched. These young fledged on September 22 and 23, 1997 and are also doing fine.

Keel-billed Toucans seem to fledge at an earlier age than many of the other large toucans, requiring only 38 to 42 days from hatching to fledging. Other species, such as the Toco, take up to 50 days to fledge.

All four of the chicks produced in 1997 will remain in the breeding program to augment the captive population. An additional 20 birds will also be imported in 1998. ➔



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