Order: **Piciformes** Family: Ramphastidae Ramphastos ambiguus Scientific Name: Chestnut-mandibled Toucan **Common Name:** swainsonii Green Yellow χ Red None **AZA Management:** П Photo (Male): Photo (Female): **NATURAL HISTORY:** Χ Europe Asia North America Neotropical Geographic Range: Africa Australia Other Click here to enter text. χ **Forest** Desert Grassland Coastal **Habitat:** П Riverine Montane Other Click here to enter text. χ **Circadian Cycle:** Diurnal Crepuscular **Nocturnal** Other Click here to enter text. To 70° F To 60° F To 50° F To 40° F Shelter from wind and any

### **Captive Dietary Needs:**

To 30° F

To 30° F

To 110° F

**Frugivore** 

Nectivore

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To 20° F

To 50° F

Other

Carnivore

Omnivore

**Cold Tolerance:** 

**Heat Tolerance:** 

Diet:

A commercial softbill pelleted diet, such as Mazuri softbill or Marion red Apple Jungle, is recommended along with a variety of fruits. The pelleted portion of the diet may be soaked in water for digestive purposes. Piciformes, in general, are subject to iron storage disease and care should be taken to avoid high iron food items, such as grapes and meat products, especially in mixed species enclosures.

Other

system, should be provided.

To 70° F

**Piscivore** 

Folivore

Shade and access to water, preferably via a mister

precipitation and a modest heat source should be provided.

To 90° F

Insectivore

Other (Add Below)

 Life Expectancy in the Wild:
 Males:
 Unknown
 Females:
 Unknown

 Life Expectancy in Captivity:
 Males:
 Up to 20 years
 Females:
 Up to 20 years

**BREEDING INFORMATION:** 

Age at Sexual Maturity: Males: 2-3 years old Females: 2-3 years old

**Courtship Displays:** Breeding season starts in April and lasts through early June. The male solicits

the female with a combination of special vocalizations and food

presentations. If the female takes the food from the male, copulation may

follow. Sometimes the pair will engage in aggressive bill-fencing.

**Nest Site Description:** Like other piciformes, nests are often built in decaying tree trunks. An

established breeding pair may excavate their own nest cavity when given a properly decaying log, however, a new breeding pair may need help.

Providing the pair with an already-excavated log filled with substrate(s), such

as mulch or wood chips, will allow the pair to "excavate" the nest site

themselves thereby strengthening the bond between them.

Clutch Size, Egg Description: 2-4 white eggs

**Incubation Period:** 17-19 days **Fledgling Period:** 5-7 weeks

**Parental Care:** Both sexes incubate and raise the offspring.

**Chick Development:** Chicks have been known to ingest insects at as young as four days old. In captivity,

insects, pinkies, fruit, monkey chow, and dog food have all been given to developing chicks. This is the only time in a toucan's life that meat products are an acceptable part of their diet. Toucans do not have crops so, if hand-rearing, take special care to

not overfeed. Chicks fledge at 5 – 7 weeks of age.

**CAPTIVE HABITAT INFORMATION:** 

**Social Structure in the Wild:** Primarily found in pairs, especially during the breeding season, or in small

family groups or flocks of 3 to 12 individuals.

**Social Structure in Captivity:** Housed individually or in pairs. Chicks may remain with parents in a small

family flock for up to 2 years.

Minimum Group Size: 1 Maximum Group Size: 5 adults

Compatible in Mixed Species Exhibits:

Varies Comments:

There are two major concerns with this species in mixed species aviaries. The first is diet. As mentioned previously, toucans are prone to iron storage disease and food items high in iron content should be avoided. This may prove difficult in mixed species aviaries where other species require high-iron foods such as meat products. Care should be taken to prevent the toucans from eating these high iron diets perhaps by utilizing exclusion feeders. The second concern is aggression primarily from the toucans toward other species. Toucans have been known to capture, kill and ingest smaller species, especially passerines. The size of the enclosure, the foliage or other visual barriers, and the agility and size of smaller species should all be taken into account when introducing a toucan into a mixed species exhibit.

**Optimal Habitat Size:** 

For a single individual, the minimum enclosure dimensions should be is 2' x 6' x 6' and this should only be for a short period of time, for instance during quarantine or a hospital stay. For a breeding pair of toucans, the floor space should be approximately 200 sq. ft. The longest dimension should be at least 20' and the height should be at least 8'. Anything larger than these minimums should be provided whenever possible.

### **Management Challenges:**

Chestnut-mandibled toucans provide two large management challenges. The first is their sensitivity to dietary iron especially in mixed species exhibits. Besides avoiding foods high in iron, tea may be sprinkled on the diet or infused into their water to bind iron; rendering it unavailable to the body. Toucans in the wild have been observed drinking out of rotten logs and it is thought that the tannins leached into the water by the wood, the same tannins as in tea, help the toucans prevent iron storage disease. Although it is unstudied in birds, it does not appear to cause any ill effects and may even be beneficial.

The second is their reproductive success. Facilities attempting to breed chestnut-mandibled toucans have not been particularly successful, however, the reason is unclear.

# ADDITIONAL COMMENTS: Click here to enter text. REFERENCES: Riverbanks' Zoo Toucan Husbandry Manual. Bob Seibels, Curator of Birds, and Martin Vince, Asst. Curator of Birds. April, 2001. Bies, L. 2004. "Ramphastos swainsonii" (On-line), Animal Diversity Web. Accessed August 30, 2014 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Ramphastos\_swainsonii.html Click here to enter text. Click here to enter text.

### **COMPLETED BY:**

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