# **Golden Lion Tamarin**

#### Leontopithecus rosalia

Class: Mammalia Superorder: Haplorrhini monkeys, apes, and tarsiers Infraorder: Simiiformes (monkeys and apes- Platyrrhini-New World monkeys) Order: Primates Family: Cebidae (marmosets, tamarins, capuchins and squirrel monkeys) Subfamily: Callitrichinae (callitrichids -marmosets and tamarins)

Other names: golden lion marmoset

#### Other subspecies:

Other Relatives: There are four species in Leontopithecus;

- Black-faced lion tamarin (Leontopithecus caissara)
- Golden-headed lion tamarin (Leontopithecus chrysomelas)
- Golden-rumped lion tamarin (*Leontopithecus chrysopygus*)
- Golden lion tamarin (Leontopithecus rosalia)

#### Zoo Golden Lion Tamarins 4.2.0

'Isabel' 0.1 – female Birth: 03/23/2003 AQ: 05/19/2005 *About Isabel* Isabel was born at the Palm Beach Zoo

Isabel was born at the Palm Beach Zoo. Isabel and Armond are the breeding pair for this family, and are the parents to Inigo, Huey, AJ and Gabanna. She weighs about 700g.

'Armond' 1.0 – male Birth: 06/16/2003 AQ: 06/07/2005 *About Armond* 

Armond was born at the Bergen County Zoo, Isabel and Armond are the breeding pair for this family, and are the parents to Inigo, Huey, AJ and Gabanna. He weighs about 680g.

'Inigo' 0.1 – female Birth: 05/29/2008 AQ: 05/29/2008 *About Inigo* Inigo was born at Brandywine Zoo, Isabel and Armond are her parents. She weighs about 655g.

'Huey' 1.0 – male Birth: 11/19/2007 AQ: 11/19/2007 *About Huey* Huey was born at the was born at Brandywine Zoo, Isabel and Armond are his parents. He weighs about 650g.

'Armond Junior' 1.0 – male Birth: 04/15/2007 AQ: 04/15/2007 *About Armond Junior AKA 'AJ'* AJ was born at the was born at Brandywine Zoo, Isabel and Armond are his parents. He weighs about 630g.

'Gabanna' 1.0 – male Birth: 12/1/2006 AQ: 12/1/2006 *About Gabanna* Gabanna was born at the was born at Brandywine Zoo, Isabel and Armond are his parents. He weighs about 700g.

#### Status

Endangered [1] The current estimate of L. rosalia in the wild is now over 1,000 [1].



#### Geographic Region

Golden lion tamarins live in the lowland, coastal rain forest region in southeast Brazil. The extent of occurrence is less than 5,000 km<sup>2</sup>, the existing range is severely fragmented, and there is a continuing decline in quality of habitat and area of occupancy [1].

#### Habitat

Lowland seasonal rain forest of the Atlantic coast of Brazil [1]

#### Characteristics

Size: *length:* 200-366mm long (8-13in); tail length of between 315-400mm (12-15in) [2] *weight:* 654.5 g/23.07 oz Longevity: Wild 15 years [2] Captivity up to  $\sim$ 25 in captivity has been reported [2]







#### **Physical Description**

- They have fiery orange or red fur over their entire bodies including long hairs that form a striking mane on their cheeks, throat, and ears surrounding their dark, hairless faces [2].
- Lion tamarins are the largest of the **callitrichids**.
- They have small, rounded heads adorned with a thick golden mane on the crown, cheeks, throat, ears and shoulders [3].
- They have claws, not flattened fingernails [3]. Their claws allow them to cling vertically to tree trunks and perhaps aiding in walking, running, leaping and bounding **quadrupedally** along smaller branches in the forests in which they live
- Marmosets and tamarins are distinguished from the other monkeys of the New World by their small size, modified claws rather than nails on all digits except the big toe, the presence of two as opposed to three molar teeth in either side of each jaw, and by the occurrence of twin births [1].

#### Dimorphism

There is no physical sexual dimorphism, but there is some sexual dimorphism in their calls [3].

# Males:

Females:

#### Diet: Omnivore

**Diet in the Wild:** It eats spiders, snails, small lizards, eggs, plant exudates (gums), flowers, nectar, small birds, fruits and vegetables. They eat insects using their long, slender fingers to probe into crevices in the tree bark. This technique is called "*micromanipulation*." [1] [3]

Diet in the Zoo: commercial marmoset diet, banana, pear, eggs, primate salad, leaf-eater biscuits, grapes

#### Behavior

- Diurnal, day-active
- Their sleep patterns are regular: they sleep from dusk until sunrise, oftentimes with a midday nap (Frantom).
- Lion tamarins are active for about nine to 12 hours each day, leaving their nesting sites between shortly after sunrise and entering a new nighttime den shortly before dusk [2]
- They have a quad-gait, meaning they use all fours to get around. They run and walk through the trees and spring and leap between branches and vines.

#### Social Structure and Communication

- Golden lion tamarins are a social species. In the wild, they are found in groups of two to eight, often made up of family members. The groups are usually nuclear families, but can be extended families [3].
- These tamarins are territorial and defend their area with scent markings and vocalized threats. Some signs of aggression are an open mouth, an arched back and staring [3].
- Golden lion tamarins groom themselves much like other primates. Mainly the males groom the females. Adults spend a lot of time grooming and huddling [3].
- Juveniles play a lot; they chase each other around and wrestle [3].

## Reproduction

- Golden lion tamarins normally breed twice per year, between September and March. Females give birth to twins after a gestation of 130 to 135 days [3].
- At birth, the golden lion tamarin is fully furred with eyes open. It clings to its mother for the first few weeks and nurses for a period of 90 days. At about week five, it begins to expand its curiosity and experience things on its own [3].
- There is one breeding pair per group. The rearing of young is a cooperative effort by all in the group, although the majority is done by the father [3].
- Triplets and quadruplets have also been reported for golden lion tamarins, but when a female gives birth to more than two infants, there are usually one or two weaker individuals that will not survive. About 1% of all wild births are triplets, but in captivity, about 28% of the births are triplet [2]

## Conservation

In 2003, the species was downlisted from Critically Endangered to Endangered, as a result of nearly thirty years of conservation efforts, involving numerous institutions, through the Golden Lion Tamarin Conservation Program (GLTCP) of the National Zoological park, Smithsonian Institution, Washington, DC, and the Associação Mico-Leao-Dourado, Rio de Janeiro. Conservation efforts have included the establishment of a new population through translocation of 47 individuals in six groups, each isolated and evidently otherwise doomed in tiny isolated forests elsewhere, to a new protected area, the União Biological Reserve. Currently, about one-third of the wild population are descendants of a reintroduction programme. The re-introduction of captive-born Golden Lion Tamarins has contributed significantly not only to the numbers of living in the wild, but also to the protection 3,100 ha of forests within their rang [1].

- Use & Trade: At one time, people captured and sold golden lion tamarins as pets. Their rapid decline in numbers has thwarted many people's desires for these exotic pets. They were also exploited in zoos and used in laboratories [3].
- Threats: The golden lion tamarin is one of the rarest of all mammals in the wild, if not the rarest. It is certainly one of the most severely endangered of all primates in the world [3]).

- Although the situation seems to be improving as wild populations are augmented by captive-bred individuals (1/3 of wild species originated from captive stock), there remain a number of threats to the species in the wild, and the continuation of conservation activities is essential to ensure that the enormous successes seen to date are not undone [1].
- The destruction of their habitat and habitat fragmentation has accounted for their loss in numbers. The trees they live in are cut down for lumber, agriculture and housing. Large treeless areas prevent their spread [3].
- There is hope because they have been bred successfully in captivity and this is continually raising their numbers. Reintroduction into the wild has been successful [3].
- **Predators:** hawks and other raptors, cats and snakes. Golden lion tamarins have very distinct vocalizations, including about 17 specific calls used for things such as alarms, defense, etc. Their sounds include trilling for solo activity, clucking during foraging, whining for contact and long, song-like calls for vigilance. There is some sexual dimorphism in the calls [3].

#### Did You Know?/Fun Facts

- The rich color of their coat is thought to be a product of sunlight exposure and the presence of **carotenoids** in their diet [2]
- A special characteristic of this group of primates (callitrichids) is their tendency to give birth to twins, an unusual characteristic among primates because of the immense amount of time and energy it takes to care for just one infant. About 78% of all births in wild golden lion tamarins are twins and the energetic demand of caring for two infants has shaped the social structure and cooperative breeding patterns prevalent in golden lion tamarins [2]

Glossary: List of definitions of the most important recurrent technical terms used in the text.

**Callitrichids -** a family of New World monkeys, including marmosets and tamarins. At times, this group of animals has been regarded as a subfamily, called Callitrichinae, of the family Cebidae.

Carotenoids - organic pigments that are found in plants and some other photosynthetic organisms

Quadruped- a form of terrestrial locomotion in animals using four limbs or legs

#### References

[1] M. R. A. &. d. O. Kierulff, "Leontopithecus rosalia," 2008. [Online]. Available:

http://www.iucnredlist.org/details/11506/0. [Accessed March 2015].

[2] K. A. Cawthon Lang, "Primate Factsheets: Golden lion tamarin (Leontopithecus rosalia) Taxonomy, Morphology, &

Ecology," 1 December 2010. [Online]. Available: http://pin.primate.wisc.edu/factsheets/entry/golden\_lion\_tamarin.

[3] S. Frantom, "Leontopithecus rosalia," 1999. [Online]. Available:

http://animaldiversity.org/accounts/Leontopithecus\_rosalia/. [Accessed March 2015].