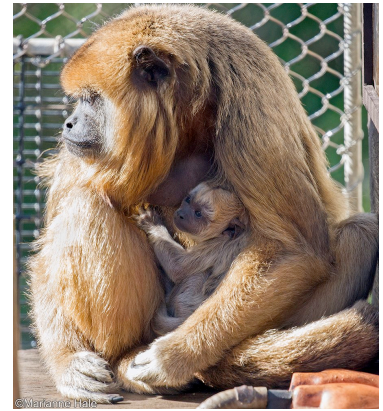




BLACK HOWLER MONKEY

PRIMATA
Family: Cebidae
Genus: *Alouatta*
Species: *caraya*



Female with baby

Range: eastern Bolivia, northeastern Argentina, Paraguay and southern Brazil
Habitat: Various tropical habitats including seasonal (dry) to typical rainforest and wooded savannas
Niche: arboreal, diurnal, herbivorous
Wild diet: leaves, fruits, other vegetable matter
Zoo diet: fruits, vegetables, monkey chow and browse
Life Span: Wild 16 – 20, Captivity 23 – 28 years
Sexual dimorphism: F 68-75% smaller; M are black while F and young are yellow-brown
Location in SF Zoo: Primate Discovery Center

APPEARANCE & PHYSICAL ADAPTATIONS:

Males are completely black while females and juveniles are yellow-brown or olive-buff. Juvenile males will darken in about 3 months reaching completely black at sexual maturity. The bare underside of the prehensile tail is sensitive to touch and enables the monkey to feel what it is gripping thus assisting when leaping from tree to tree. The hands have a cleft between index finger and middle finger that affords a secure grip since Howlers lack the opposable thumb but have opposable large toes. They usually hold objects between their second and third digits on their hand.

Howlers have enlarged throats, due to an extra-large voice box. The angle of the lower jaw and the hyoid bone are both greatly enlarged. The special bony pouch (carniculum) is an offshoot of the larynx, just beneath the throat, acts as a resonance box, amplifying the howls. These chambers are larger in the males allowing for the howl to be heard more than a kilometer away in a natural environment.

Their molars are specially adapted for processing leaves, which they spend most of their day doing. These leaves are fermented in enlarged caecums.

Weight:	M - 11-18 lbs F - 8 - 12 lbs
HBL:	22-36 inches
TL:	23-36 inches

STATUS & CONSERVATION

Black Howlers have been extensively hunted due to their large size. Deforestation also has localized impact but on the whole they appear not to be threatened. This species adapts well to the proximity of humans, often living near villages where they accept handout from the people or they can adapt to small isolated areas. It is currently listed as Least Concern considering its large range, presence in several national parks, and ability to adapt to modified habitats.

COMMUNICATION AND OTHER BEHAVIOR

Their howls have been described by some, as deep and carrying growls comparable to the roars of lions. They have been heard from a distance of up to 3 miles. Though being smaller, the female's softer howls do not carry as far. Their dawn and dusk choruses announce group location so as to prevent direct contact between troops. However territories are not static (as in locations of seasonal fruit trees) and ranges may overlap. Howler monkeys mark their territory with dung piles and scent markings on branches.

Troop size ranges from 3-19 members consisting of 1-3 males and 2-7 females plus young. Males who grow up in the troop are either expelled on reaching maturity, or else they leave of their own accord. Without combat individual males will attach themselves to a selected troop and may even become the dominant male. A striking feature of howler troops is that one of the adult males, usually the biggest, is always clearly dominant. It is likely that the same could be said for the female hierarchy.

About 75% of their time is spent resting, 20% feeding, and 5% with social activities.

COURTSHIP AND YOUNG

Though the genus appears to breed throughout the year, a female pairs with a male from her own troop. Females initiate mating by looking at him, then move her tongue rhythmically. The male responds with similar behavior. Once young are born several females help in looking it (allomothering), carrying, grooming and protecting it, and even males will help out too, although young males are not allowed to do so, as they have been observed causing infanticide. Maturing males leave their birth group to join another. Birthing may occur every year once sexually mature.

Estrous: 13 - 24 days

Gestation: 180 - 194 days

of Mammae: 1 pr

of Young: 1

Sexual Maturity: F 4-5 yrs / M 6-8 yrs

Weaning Age: 10 mo

Weight at birth: 3.5 lbs

MISCELLANEOUS

Howlers lack a specialized stomach to handle their leafy diet though the bacteria needed for fermentation are found in small sacks below the small intestine (the caecum).

Sources:

Grzimek 1990; Kavanagh 1983; Mittermeier 1988; Novak, ed. 1991; Redshaw 1993; Wolfheim 1983

<http://www.honolulu zoo.org/>

<http://www.bristolzoo.org.uk/>

Past Revisions: 2/95 & 9/95

Present Revision: 2/08