Tulane National Primate Research Center

Nonhuman Primates



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TABLE OF CONTENTS

Babo□

Cynomolgus Macaque	3
Green Monkey	4
Ma□	
Pigtailed Macaque	10
Rhesus Macaque	12
Squirrel Monkey	14



Nonhuman primates are a widely diverse group of animals. For a variety of scientific and historical reasons, the Tulane National Primate Research Center houses the following nine species of nonhuman primates for research use: baboon, cynomolgus macaque, green monkey, mangabey monkey (sooty and whitecrowned), patas monkey, pigtailed macaque, rhesus macaque and squirrel monkey. The rhesus macaque of Indian origin is the most widely used of these species. This brochure provides brief descriptions of each of the species of nonhuman primates at the Tulane National Primate Research Center.

BABOON

There are five species of baboons (Guinea or Western baboon, *Papio papio;* Olive baboon, *Papio anubis;* Yellow baboon, *Papio cynocephalus;* Hamadryas or Sacred baboon, *Papio hamadryas;* Chacma baboon, *Papio ursinus*). Baboons are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Widely distributed throughout equatorial Africa
- Woodland savanna, grassland, acacia scrub, sub-desert, gallery and rainforest

Behavior

- Multi-male/multi-female social groups (30 to 60, up to 198 or more individuals)
- Dominance hierarchy
- Adult males determine group movement
- Males emigrate from their natal group around 4 years of age
- Females remain in their natal group
- No distinct breeding season, so give birth all year round
- Terrestrial, but climb trees or rocks and cliffs to sleep at night



Equatorial Africa

Diet

- Omnivorous grasses, fruits, leaves, insects, small mammals, birds' eggs, roots, tubers, and crustceans
- Dig holes in dried-up river beds to reach water

- Adults weigh from 32 to 82 lbs
- Males are about twice as large as females
- May live over 30 years in captivity
- Females reach full size and bear their first offspring at 5 years
- Males are sexually mature at 5 years but not fully developed or able to mate successfully until 7 to 10 years,
- Average gestation length is 180 days



BABOONS

CYNOMOLGUS MACAQUE

Cynomolgus macaques (*Macaca fascicularis*) are also called long-tailed or crab-eating macaques. They live in much wetter habitats than rhesus or pigtailed macaques. Cynomolgus macaques are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Southern Indochina, Burma (Myanmar), Indonesia, Philippines, Nicobar Islands (part of India)
- Coastal, mangrove, swamp, and riverine forest

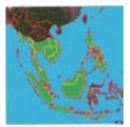
Behavior

- Multi-male/multi-female social groups (10 to 48 or more individuals)
- Groups may split into subgroups and come back together (fission-fusion)
- Males emigrate from their natal group around 4 years of age
- No distinct breeding season, so give birth all year round
- Swim well

Diet

• Fruit, seeds, leaves, buds, insects, frogs, crabs

- Adults weigh from 6 to 18 lbs
- Males are larger than females
- May live over 30 years in captivity
- Gestation length is 160 to 170 days



Southern Indochina, Burma, Indonesia, Philippines, Nicobar Islands (India)



Cynomolgus Macaque

GREEN MONKEY

Green monkeys (*Chlorocebus genus*) are the most widespread of all African monkey species. They are also called savanna guenons, grivets, vervets, or Tantalus monkeys. Green monkeys are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Senegal to the Sudan and Ethiopia and southwards to South Africa
- Savanna, open woodland, gallery, rainforest edge, riverine woodland

Behavior

- Multi-male/multi-female groups of 5 to 76 individuals
- Strong dominance hierarchy
- Males emigrate and join groups with relatives or known individuals from their natal group
- Females remain in their natal group
- Sleep in trees at night
- Have elaborate vocal communication system including different warning calls for different types of predators

Diet

- Omnivorous fruit, seeds, savanna grass, gums, Acacia thorns and bark, insects, birds' eggs, small vertebrates
- Raid crops

Dimensions and Natural History

• Adults weigh from 7 to 15 lbs





- May live over 30 years in captivity
- Females are sexually mature at 4.5 years but do not have their first offspring until they are 5 years of age,
- Males reach sexual maturity at 5 years
- Average gestation length is 165 days



GREEN MONKEY

MANGABEY

There are five species of mangabeys (Cercocebus agilis, Cercocebus galeritus, Cercocebus torquatus, Cercocebus atys, Cercocebus lunulatus). The Tulane National Primate Research Center has sooty mangabeys (Cercocebus atys) and white-crowned mangabeys (Cercocebus lunulatus). Mangabeys are placed within the Cercopithecidae family (Old World Monkey).

Natural Habitat

- West to Central Africa (Sierra Leone to Angola) •
- High canopy primary forest, mangrove, gallery, inland forests, young secondary forests, and cultivated areas

Behavior

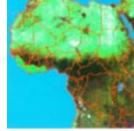
- Multi-male/multi-female social groups (14 to 60 or more individuals) •
- Arboreal and terrestrial •
- No matrilineal hierarchy observed •
- Females interact with similar aged females more often than kin •

Diet

- Fruits, seeds, animal prey, flowers •
- Raid crops and cacao plantations •

- Adults weigh from 18 to 23 lbs •
- Males are larger than females
- May live over 20 years in captivity •

Sierra Leone to Ghana



- Females are sexually mature at 3 years and have their first offspring at an average age of 4.7 years
- Males reach puberty at 6 to 7 years when their canines are fully erupted and their voice change allows them to make the "loud call"
- Average gestation length is 180 days



MANGABEYS

PATAS MONKEY

Patas monkeys (*Erythrocebus patas*) are the cheetahs of the primate world, reaching speeds of 35 mph. Other names for this primate are Nisnas monkey, red monkey, Hussar monkey, or military monkey. Patas monkeys are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Senegal to Ethiopia and south to Tanzania
- Woodland savanna, scrub and sub-desert

Behavior

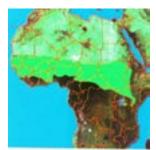
- Harem groups (one male/multi-female) of 5 to 34 individuals
- Dominance hierarchy for females
- · Females usually initiate group movement
- Males emigrate at around 3 years of age
- Females remain in their natal group
- Each adult sleeps in a separate tree at night
- Distinct birth season which varies with location

Diet

- · Fruits, beans, seeds, grasses, insects, lizards, birds' eggs
- Eat the prickly pear cactus (Kenya)

Dimensions and Natural History

• Adults weigh from 8 to 28 lbs



West Africa to Ethiopia, Kenya, and Tanzania

- Males are twice as large as females
- May live over 20 years in captivity
- Females are sexually mature at 2.5 years and have their first offspring at 3 to 4 years of age
- Males reach sexual maturity at 4 to 5 years of age
- Average gestation length is 167 days



PATAS MONKEY

PIGTAILED MACAQUE

Pigtailed macaques (*Macaca nemestrina*) are a diurnal species which is more arboreal than rhesus macaques. They spend an estimated 90% of their time in the forest canopy. Pigtailed macaques are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Burma to Malay Peninsula and Sumatra
- Lowland forests and coastal, swamp, dry land, and montane forest

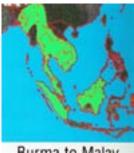
Behavior

- Multi-male/multi-female social groups (15-40 animals)
- Matrilineal dominance hierarchy
- Males emigrate from their natal group
- No distinct breeding season, so give birth all year round
- The "pucker" is a unique facial expression with variable meanings depending upon the social context

Diet

- Fruit, seeds, leaves, flowers, insects, nestling birds, termites, river crabs
- Estimated more than 160 plant species used by wild populations

- Adults weigh from 10 to 32 lbs
- Males are larger than females



Burma to Malay Peninsula and Sumatra

- May live over 20 years in captivity
- Average gestation length is 174 days



PIGTAILED MACAQUES

RHESUS MACAQUE

Rhesus macaques (*Macaca mulatta*) are the most widespread nonhuman primate species. This is a diurnal, mostly terrestrial, and partly arboreal species. Rhesus macaques are placed within the Cercopithecidae family (Old World Monkeys).

Natural Habitat

- Afghanistan through much of India and Nepal, to northeastern China, Indochina, and Hainan
- Adapted to almost any ecological niche from sea level to ~8200 feet, from snow to intense heat, and from near desert situations to dense forests

Behavior

- Large multi-male/multi-female social groups (range from 10 to 180 or more individuals)
- Strong dominance hierarchy for both males and females
- Kinship is important in dominance with social status of the young dependent upon rank of their mother
- Females remain in the group in which they were born
- Males emigrate from their natal group at approximately 4 years of age
- Well known for their aggressive behavior
- Estimated to spend 10-13% of their daily activity on grooming
- Distinct breeding season

Diet

- Fruits, leaves, seeds, tubers, bark, insects
- Estimated that up to 92 plant species used by wild populations

Afghanistan and India to Thailand and Southern China



- Adults weigh from 9 to 22 lbs
- Males are larger than females
- May live up to 30 years in captivity
- Females sexually mature at 3.5 years, but growth not complete until 6th year
- Males sexually mature at 4.5 years, but growth not complete until 10th year
- Average gestation length is 165 days



Rhesus Macaque

SQUIRREL MONKEY

Squirrel monkeys (*Saimiri sciureus*) are small South American primates. Squirrel monkeys are placed within the Cebidae family (New World Monkeys).

Natural Habitat

- East of the Andes from Colombia and northern Peru to northeastern Brazil
- · Primary and secondary forests, gallery forest, forest edge

Behavior

- Large multi-male/multi-female groups (22 to 42 or more individuals)
- Complex social system with groups subdivided into adult male bands, mother-infant bands, and juvenile bands
- Matrilineal dominance hierarchy for females
- Separate dominance hierarchy for males which is maintained by penile displays

Diet

• Fruits, berries, nuts, flowers, buds, seeds, leaves, gums, insects, arachnids, small vertebrates

Dimensions and Natural History

- Adults weigh from 1 to 3 lbs
- May live over 20 years in captivity
- Females are sexually mature at 3 years of age

Brazil, Guyana, French Guiana, Suriname,

Venezuela,

Colombia

- Males reach sexual maturity at 4 to 5 years
- Gestation length 160 to 170 days



SQUIRREL MONKEYS



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