Zoo Placental Mammals

Order Primata

Order Primata

- Many primate characteristics represent arboreal adaptations
- Hands and five digits with increased mobility; nails replacing claws and sensitive pads on the digits with friction ridges, which are important for grasping
- Brain size increased with elaboration of cerebral cortex, expanded visual brain areas, including the primary visual cortex
- Muzzle region is shortened associated with decrease in use of smell and shift to binocular, color vision
- Reproduction occurs at a slower rate, sexual maturity is delayed and life spans are longer
- Complex social and mating systems; grooming helps maintain social bonds



Prosimian Lemur



- Lemurs found only on Madagascar; some critically endangered due to human encroachment
- Primitive primates with pointed muzzles and wet noses; stronger sense of smell than most primates
- Semi-opposable thumb; flat nails except for a claw for grooming on 2nd toe
- Mainly arboreal
- Legs usually longer than arms, strong legs for leaping and clinging to trees
- Female social dominance in groups fewer than 15 individuals
- Important as seed dispersers and pollinators

Prosimian Ring-tailed Lemur



Lemur catta

- South and southwestern Madagascar in drier areas such as scrub forest, rocky areas, and deciduous forest
- Spends a lot of time foraging on the ground. Eats fruit, leaves, bark, sap and flowers
- Social animals, groups of 3-24; dominance hierarchy, with females dominant over males
- Males engage in "stink fights" for dominance
- Not as threatened as far as numbers, but their favored habitat is decreasing
- Endangered, SSP species

Prosimian Blue-eyed Black Lemur



Blue-eyed Black Lemur Eulemur flavifrons

- Extremely isolated to Northwestern Madagascar in subtropical moist forests and dry deciduous forests.
- Only primate besides humans with blue eyes
- Mainly frugivores; they are important seed dispersers in their habitat
- Sexually dimorphic; males solid black; females are reddish-brown with underside and outline of their face a lighter tan
- Live in groups of 2 to 15 members, with a dominant female
- Critically Endangered; not found in protected area
- SSP species

Prosimian Red-fronted Brown Lemur

- Found in dry lowland forests in western and moist tropical forests in eastern Madagascar
- Sexually dimorphic with variations between individuals and between east and west populations
- Sociable, permanent groups usually of 4 to 18 individuals
- Mainly frugivorous but also eats leaves, seeds, nectar and flowers
- One of the few lemur species that is not female dominated and without a noticeable hierarchy
- Cathemeral eastern population



Eulemur rufifrons

Prosimian Red-bellied Lemur

- Found in high altitude rainforests of eastern Madagascar
- Primarily frugivorous, some invertebrates (millipedes)
- Distinguished by patches of white skin below its eyes, giving rise to a "teardrop" effect
- Sexually dichromatic
- Cathemeral
- Red-bellied lemurs employ a sentinel to keep watch for predators



Eulemur rubriventer

Prosimian Crowned Lemur

- Found in semi-deciduous dry forest of extreme Northern tip of Madagascar
- Primarily frugivorous; by eating flowers and fruits, they aid in pollination and are seed dispersers
- · Sexually dichromatic
- · Females are dominant
- Cathemeral
- · Endangered species



Eulemur coronatus

Prosimian Red Ruffed Lemur

Varecia rubra

- Found in northeastern Madagascar in tropical forests
- Ruffed lemurs are the largest of the
- Ruffed lemurs are the only primates that produce litters of young. The most common litter size is three
- Complex vocal system, with different warning calls for different kinds of predators
- Mainly frugivorous; some leaves, and shoots
- Important seed dispersers /pollinators
- Critically Endangered due to habitat loss
- SSP species

Prosimian Black and White Ruffed Lemur

- Found on Eastern coastal area in canopies of coastal rain forests
- Very vocal, with a loud, hooting alarm call
- Mainly frugivorous; some leaves and seeds
- · Important seed disperser
- Ruffed lemurs build a nest for litter
- Critically Endangered due to habitat loss and capture for export, particularly to the U.S.
- SSP species



Varecia variegata

Prosimian Coquerel's Sifaka

- Found northwestern
 Madagascar in dry deciduous
 forest (including coastal area)
- Adapted for vertical leaping and clinging with upright posture
- Folivorous diet
- Enlarged caecum and extremely long colon for digestion
- Endangered due to habitat loss and hunting pressures
- SSP species



Propithecus coquereli

Suborder Haplorhini Monkeys





Old World Monkey

- All monkeys have binocular eyes, most (except some adapted for brachiation) have opposable thumbs and 5 digits on each limb, are intelligent, and have large canines
- The monkeys divided into the Old World monkeys and the New World monkeys
- New World monkeys (also known as Platyrrhini) are restricted to Central and South America
- Old World monkeys (also known as Catarrhini) are found in Asia and Africa

New World Monkeys



OFF EXHIBIT

- New World monkeys (also known as Platyrrhini) are restricted to Central and South America
- · Some have a prehensile tail
- Species are strictly arboreal
- Nostrils face sideways, pointing out
- Color vision is variable; some are dichromatic, while others are trichromatic

New World Monkey Black Howler Monkey



OFF EXHIBIT

- Largest of the New World monkeys. found in northeastern South America, in streamside forests Eat leaves and fruit
- Sexually dimorphic; females are olive brown to yellow, while males are totally black. Offspring are brown for about three months, then change color to the adult form
- Very loud, booming call made by a specialized larynx; males vocalize to advertise territory to other groups
- Form mixed sex groups with a
- Hairless pad on prehensile tail for grip
- Have reduced thumbs and nails on all digits for arboreal lifestyle

Old World Monkeys



- Mandrillus sphina
- Old World monkeys (also known as Catarrhini) are found in Asia and Africa
- Non-prehensile tails
- · Arboreal and terrestrial species
- · Nostrils are closer together and point forward and down
- · Ischial callosities
- True color vision
- · Some have a cheek pouches

Old World Monkey François 'Langur or Leaf Monkey

- Native to Southeast Asia, from China to Vietnam; found in moist forests or well-sheltered rocky areas
- Mainly leaf eaters, but will also eat fruit and crops
- Infants are born with reddish orange hair, which takes a year to change to black
- Live in groups of one male, females, and offspring Endangered; suffered
- population declines due to Vietnam war; are used in Asian traditional medicines



Trachypithecus françoisi

Old World Monkey OFF EXHIBIT **Black and White Colobus**



Colobus guereza

- Found in tropical forests of central and eastern Africa
 - Thumb greatly reduced; allows quick movements through the trees
 - Good leaper, jumping from tree to tree; mantle and tails act as a parachute on
 - long lealps
 Herbivorous diet of leaves, fruit, flowers and twigs; enlarged salivary gland aids in softening food
 - Uses gut microbes in multi-chambered stomach to break down the cellulose of diet, enabling them to draw more energy from plant resources than other monkey
 - Infants are born all white
 - Important for seed dispersal through their sloppy eating habits
 - SSP species

Old World Monkey Mandrill



Mandrillus sphinx

- Western Central African baboon species; found in dense subtropical forests
- They are the largest monkey in the world and are mostly ground dwelling
- and are mostly ground dweiling Extreme sexual dimorphism; males can be 30-40 pounds heavier than the female and have blue and red coloration on the rump and facial ridges, with very large canines which he displays as a warning
- They eat fruits and seeds, as well as eggs and small animals
- and small animals
 Live in mixed sex groups with a dominant
 male; bright coloration and penetrating
 stare are used to intimidate male rivals
 and establish dominance
 Vulnerable due to logging
- SSP species

Superfamily Hominoidea Apes

- Large, tailless primates in two families, lesser apes, and the great apes
- Arms are longer than legs
- Extremely intelligent, large brained mammals, can recognize themselves in mirrors, and can learn sign language
- Found in Africa and Asia, except for humans, which are worldwide Form complex social groups
- Most are Critically Endangered due to hunting, habitat loss and wars in their native countries



Great Ape Chimpanzee

- Found in equatorial rainforests of west and central Africa
 Eat mainly fruits and vegetation, but will hunt, particularly the males, for monkeys, birds, and small antelope
 Humans share 98.4% of genes with chimps
- Live in large group of up to 80 members
- Young chimps may stay with their mothers up to 7 years; she can have multi-age offspring she is raising at one time
- Brilliant tool users; will forge items such as a stick or rock to apply to a task and will teach the process to young
 Very vocal, they have calls to express many levels of emotion and social communication; also communicate through facial expressions
- Endangered due to high levels of poaching, infectious diseases, and loss of habitat



Great Ape Western Lowland Gorilla



Gorilla gorilla gorilla

- Found in lowland tropical forests of western central Africa Largest of the great apes and also the most herbivorous; will occasionally eat insects Live in groups of females and young, a dominant silverback male, and sub-adult males
- Males get the "silver" coloration on their backs after about 12 years; they can be from 300-600 pounds
- Female gorillas have about 3 babies in their lifetime becoming pregnant for the first time at about 8 years of
- Critically Endangered due to hunting for bushmeat, clear-cutting of forests, casualties of civil war, and human disease

Great Ape Borneo Orangutan



- Endemic to the island of Borneo; found in tropical and subtropical forests in lowlands and up to 4,900'
- Extreme sexual dimorphism; males 2x weight of female
- Males have large cheek pads or "flanges" Capable of brachiation; highly
- mobile hips and shoulders
 Opposable thumb and big toe
- Birth intervals are every 3 6 years
- Share 97% DNA with humans
- Observed using tools
- Critically Endangered due to deforestation (palm oil plantations), pet trade & bushmeat trade.

