

# **Response Paper to the Video:**

## **Life in the Trees**

Gabor Por

May 15, 2003  
<http://pgabor.com>

ANTHRO1

Section #: 27305

Wednesday 6-9

The prosimians shown on the video including the lemurs, sifakas and indris belong, like all primates to the Kingdom of Animalia, Phylum of Chordata, Class of Mammalia. Within the Primates Order some of the lemurs, like the mouse lemur belong to the Cheirogaleidae family, but most of them to the Lemuridae Family. The sifaka and the indri would fall in the Indriidae Family. They, the prosimians, share with other primates the two important features of having a grasping hand and forward facing eyes that enable their stereoscopic vision. Regarding the former it has to be mentioned that the opposability of their thumbs is limited. They may not have color vision, because some of them are nocturnal. This longstanding assumption has been questioned by recent research. What they lack in vision may compensate with their olfactory sense with the help of a protruding snout.

When the island of Madagascar separated from what is now Africa it provided a unique opportunity for their development because there were no major predators remaining there. Thus they could “rule” the island their numbers were not decimated by being a prey.

The video mentioned three species specifically that use vocalization. The marmosets, New World monkeys belonging to the Callithricidae Family, use sharp shrieking voice to fight against intruders to their territory. The indris are using sound to mark their territory, because scent, used by other primates, would disperse too easily up in the trees in their habitat. But the most characteristic vocalization is that of the howler monkey, another New World monkey from the Cebidae Family. They also use their unique and presumably the loudest mammalian sound to mark their territory, but also for other social exchange.

The primary habitat of the South American monkeys shown on the video is the treetop area of the forest. The unique locomotor capability is their prehensile tail. In the case of the Black Howler monkey it is so powerful that when a monkey falls, if its tail can catch a limb, it saves the

animal from hitting the ground. It is not shared by all New World monkey but is not found at any other set of primates.

One of the major ecological adaptations between the old world monkeys and the new world ones is that many of the former is living on the ground. They abandoned the trees. The video even showed a species that explicitly sought refuge on the ground in danger. It was quite an amazing shot as dozens of monkeys evacuated one single tree. Because they no longer live on the trees that do not need or have strong prehensile tails. Their subsistence habits also changed, some of them for example dig up food from the ground.

Social organizations can vary a great deal among primates. Chimpanzees for example live in large groups of 40-80 animals, with at least two levels of social units. The other extreme is the orangutan, in whose case the strongest bond is between the mother and her infant, they constitute a unit. For much of their lives, male and female orangutans avoid each other, meeting only to mate. Some other primates like the mandrill, patas monkey or the François' Languor live in harem formation. The group consists of one male, several females and their offspring's. The bonobos are well-known even among lay people, because sex is used solving conflicts and it is often involved in other communication as well. Gorillas live in groups of 5 to 30 with several females and males, but with one alpha male, the silverback.

Regarding locomotor patterns I already mentioned the new world monkeys and their prehensile tails. Another interesting pattern is the lesser apes, including the gibbons and siamangs is that with their long arms can swing through trees so rapidly and acrobatically. They are efficient and graceful in the trees, but awkward on the ground, and will sometimes walk with their hands held overhead for balance – like tightrope walkers. The gorillas' hands and feet are broad and strong, they “knuckle-walk,” move on all fours. Gorillas and chimpanzees are the only animals to use the backs of their fingers like feet.