

Lemur Country Magic

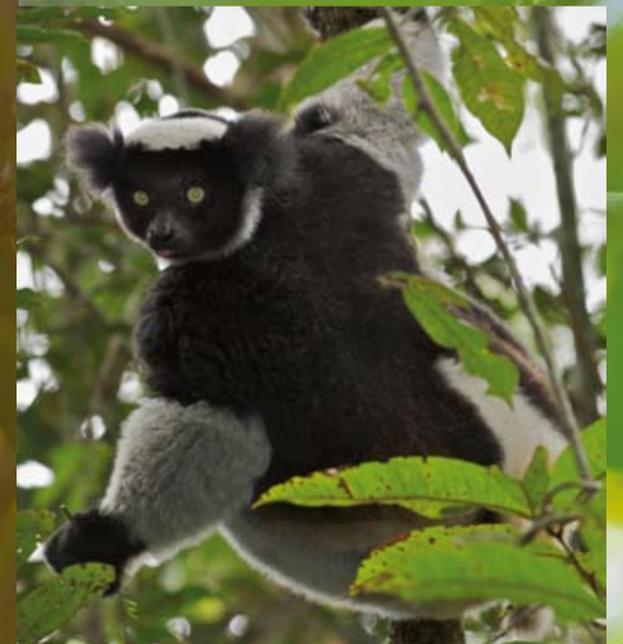
Beyond the “dancing lemurs with an attitude” portrayed in DreamWorks’ 2003 animated movie, Madagascar remains a large island of mystery to most people. Through the years, *Nature Watch* has featured articles focusing on Madagascar flora. Bjorn Olesen goes for some seriously ‘Mad’ lemur-watching this time. The outcome of his work is a real photo-fantasy.

Text and photos by **Bjorn Olesen**

The nocturnal Eastern Avahi (*Avahi laniger*) is native to the eastern rainforest belt rising to at least 1,600m above sea-level. These two owl-like individuals were watching us intensely from high up the canopy in the Analamazaotra Special Reserve.



The endangered Red Ruffed Lemur (*Varecia rubra*) is mainly a fruit-lover, though it also eats shoots and leaves. It appears to be restricted to the Masoala Peninsula on the northern east coast. Unfortunately this member is still widely hunted — its high vocal calls betraying presence to hunters.



The largest surviving prosimian, Indri (*Indri indri*), is also endangered. It is almost exclusively active during the day, and lives in small family groups of two to six individuals, comprising a monogamous pair with offspring of varying ages. Female dominant. Indri's song is its hallmark — carrying over several kilometres, and is often answered by neighbouring groups. This social call maintains spatial distribution and minimizes overlap of home ranges.

To most conservationists Madagascar is a treasure island. The map says Madagascar is part of Africa, but don't believe it! An amazing 90% of its plants and animals cannot be found anywhere else on earth. My wife Fanny and I decided to revisit this most interesting biodiversity hot spot in the month of September. Around that time of year, all the Madagascar lemurs are very active with infants to care for.

Madagascar has suffered heavy environmental degradation mainly caused by slash-and-burn farming, called *tavy* in Malagasy. Forests that once completely covered the eastern parts of the island have turned scrub. When flying over some parts of Madagascar, you even get the impression that it is devoid of forests. Finding a solution is far from easy in a country where 80% of the people are subsistence farmers living on less than one dollar a day. Many farmers continue to practice *tavy* because it is part of their culture. They know of no other means to survive.

Only about 9% of the original forest cover is left. The good news — 3% of the total area of Madagascar is under environmental protection, which includes a total of 53 nature reserves or national parks.

During our 2-3 weeks stay, we visited a total of six national parks in the northern, western, and eastern parts of the country to get a good representative view of what this magnificent island has to offer. The nature reserves we saw were like oases in an otherwise bleak landscape. We were impressed with the commitment and knowledge of the local guides. With their expertise, we managed to get good photos of more than 20 different species of lemurs. We would highly recommend 'The Land of the Lemurs' as a great holiday destination for wildlife adventure.



The Goodman's Mouse Lemur (*Microcebus lehilahytsara*), only discovered in 2005, has been found in just one location on this planet. It lives in the mid-altitude rainforests of the Andasibe-Mantadia National Park. By far the smallest lemur we saw at 48g and 92mm long! We observed this individual for more than 10 minutes, but it never allowed us to get an unrestricted view. It is yet to be studied.

Below: When flying over some parts of Madagascar, you get the impression that it is devoid of forests.



LEMUR FAST FACTS

Lemurs are primates, albeit of the more primitive class. They are known as prosimians or 'pre-monkeys', a group that also includes lorises and perhaps tarsiers, such as found in South-east Asia.

In *Mammals of Madagascar*, Nick Garbutt updates on some recent molecular analysis of all lemurs, a study which includes the bizarre Aye-aye, suggesting "a single ancestor that may have arrived from Africa on floating mats of vegetation between 47 and 54 million years ago".

Many lemur species are active during the day, unlike other prosimians, and live in family groups where the females dominate. Such a gender rule is interesting as males are usually dominant amongst primates.

Lemur diversity is impressive with close to 100 different species, but at least 17 larger species have become extinct since man's arrival on the island some 2,000 years ago. Lemur sizes range from the tiny Mouse Lemurs of 30g to the Indri weighing around 9kg. The extinct Giant Sloth Lemur was possibly as big as a gorilla, about 200 kg. The latest species discovered, announced in January 2012, is the Gerp's Mouse Lemur from the Sahafina Forest of eastern Madagascar.



The Coquerel's Sifaka (*Propithecus coquereli*) is endangered according to IUCN. A matriarchal system is particularly pronounced. All adult and even some sub-adult females are dominant over males. Many local Malagasy traditions prohibit hunting of the species. However, such protective taboos are breaking down with cultural erosion and domestic immigration. Widespread hunting has been reported in and around the national parks.



The Ankarana Sportive Lemur (*Lepilemur ankaranensis*) is a vertical-clinging lemur and one of the smallest of its kind with a body length of 280mm. Leaves form the main diet.



The Greater Dwarf Lemur (*Cheirogaleus major*) has quite a wide distribution in the eastern parts of Madagascar. This individual was calmly watching us during our visit to Amber Mountain National Park in the extreme north. Interestingly most of their fat reserves are stored in the tail. Before 'hibernation' the normal weight is around 600g, which falls to 250g in September when they start to get active again.

LEMURS THE FIVE GROUPS

■ Mouse and Dwarf Lemurs

This is a group represented throughout the various forest types on the island. Two or more species can be found in most areas.

The Mouse Lemurs (*Microcebus*) are the smallest of all primates weighing from only 30 to 70 grams, with body lengths about the same as an iPhone (115 mm)! Initially just two species were thought to exist in Madagascar, but the past 15 years of research has identified many more. All 16 mouse-like species are generally nocturnal and prefer the lower forest layers when foraging.

Further study has also produced a rise in the number of Dwarf Lemur (*Cheirogaleus*) species from 2 to 7. The Dwarf Lemurs are all nocturnal, squirrel-sized, and the only primates that enter a dormant, inactive state during the winter season. The findings for this group are still incomplete and tentative.

■ Sportive Lemurs

The nocturnal Sportive Lemurs occur widely in almost all natural evergreen or deciduous forest formations on the island, according to *The Natural History of Madagascar*.

They are medium-sized and long-tailed lemurs belonging to a single genus, *Lepilemur*, which has 23 species, each apparently occupying a distinct range. Considerable debate, however, is still on-going. Nick Garbutt mentions in *Mammals of Madagascar* that “future research will prompt further revisions, including the probable description of new species”.

There is heavy human hunting pressure on these animals, as they can be quite easily located and captured at their daytime resting sites.

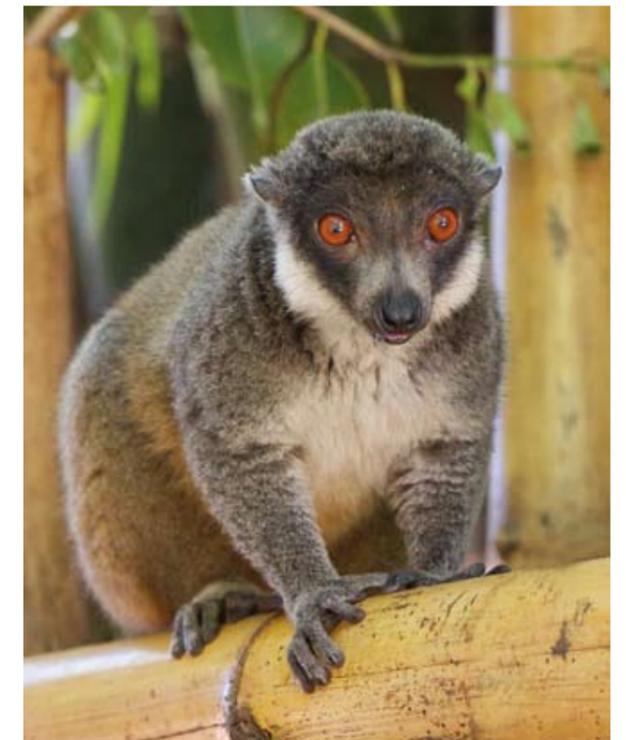
Right: We saw this Eastern Grey Bamboo Lemur (*Hapalemur griseus*) in the Analamazaotra Special Reserve. Its preferred habitat is primary-secondary lowland and montane humid forests with lots of bamboo. On the menu: Bamboo, bamboo, and more bamboo! The Bamboo Lemurs are some of the very few creatures on earth that consume a heavy diet of bamboo.



The Northern Rufous Mouse Lemur (*Microcebus tavaratra*) is also recently described, and found in one location: Ankarana Special Reserve in the extreme north, where we saw this individual hiding in a tree-hole. Like the Goodman's Mouse Lemur, it is yet to be studied.



The Ring-tailed Lemur (*Lemur catta*) is the flagship species of Madagascar, and is probably the best researched of all Malagasy lemurs. They are highly sociable, often living in groups of up to 30 individuals, and they have the broadest habitat range of any lemur. It is also female dominant, a trait common among lemurs. They often depend on Tamarind trees (*Thamarindus indicus*) as a key food source, with the fruits and leaves providing up to 50% of their food.



Above: The Mongoose Lemur (*Eulemur mongoz*) lives in small groups of strong bonding family units, a behaviour which can be seen when feeding, travelling and sleeping. With the May onset of the dry season, a predominant shift occurs towards nocturnal habits.

Left: This is a Common Brown Lemur (*Eulemur fulvus*) with a 2 weeks' old infant in Anjajavy Private Reserve.



The endangered Diademed Sifaka (*Propithecus diadema*) seen in Mantadia National Park. It is one of the largest and most beautiful of all Malagasy lemurs.

■ Bamboo/Gentle and 'True' Lemurs

Two subfamilies are known in the *Lemuridae* family — Bamboo or Gentle Lemurs, and the 'True' Lemurs.

Bamboo Lemurs (*Hapalemur*) are the smallest diurnal lemurs. All 6 species specialise in a bamboo diet, and are capable of quick bounding leaps between close, upright stems of bamboo and other vegetation. The 13 'True' Lemur (*Lemurinae*) species are medium to medium-large lemurs. Though skilled climbers, some species also spend time on the ground like the Ring-tailed Lemur (*Lemur catta*), and a few can be active both day and night.

■ Avahis, Sifakas and Indris

The *Indriidae* family is made up of 14 species in three genera. Two of these genera, *Indri* and *Propithecus*, are diurnal and the largest living prosimians. *Avahi* is considerably smaller and nocturnal. Avahis are unique amongst nocturnal prosimians in moving and feeding as a cohesive family group. Other nocturnal prosimians tend to be solitary. Sifakas (*Propithecus*) are diurnal and spend most of their time in the canopy moving from tree to tree with bounding leaps between vertical trunks



The Aye-aye is the most remarkable mammal that we have ever seen: It has the body of a cat, bat's ears, beaver's teeth, a very long bushy squirrel tail, a middle finger like a long dead twig, and big brown eyes like those of ET! The Aye-aye is probably best known for its extraordinary thin middle finger, and the hands are highly distinctive with all digits elongated ending in curved claw-like nails (left).

and branches, but are also capable of descending to the ground and bouncing sideward across open spaces. The Indri (*Indri*) is one of the most familiar and charismatic lemurs. It is the largest surviving prosimian, and its eerie wailing song is unforgettable producing an abiding memory for visitors to their rainforest home.

■ Aye-aye

In 1863, Richard Owen, one of the most eminent British anatomists of his time, concluded on the unique characteristics of the Aye-aye that "Darwin's theory of natural selection must be wrong ... only God could have created an animal so well adapted to its environment."

Daubentoniidae family contains only a single surviving species — the near threatened Aye-aye (*Daubentonia madagascariensis*). The Aye-aye had generated a century of controversy on whether to place it within the primates, the rodents, or even the marsupials. Owen's definitive study of the Aye-aye's anatomy finally quelled the debate in 1866. This most remarkable creature was believed to be extinct by the 1930s, but then 'rediscovered' in 1957. Recent studies indicate that the Aye-aye may

be one of the most widely distributed species in Madagascar, but ironically it is one of the most difficult lemurs to see in the wild. According to Malagasy legend, Aye-ayes are an omen of evil, sickness or death. When spotted, they are often killed on sight and hung up, in the belief that passing travellers will carry away the evil spirit. 🌿

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Bjorn Olesen is a full-time wildlife photographer and a passionate conservationist. He is a long-term resident of South-east Asia and a member of NSS. His photos and articles have appeared in many local and overseas publications and websites. All his 40,000 visual images are available free-of-charge to non-profit conservation NGOs. He can be contacted through his website www.bjornolesen.com