

Assessment of the Density and Composition of the Nocturnal Lemur Population of Andasibe, Eastern Madagascar.

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Abstract

Although extensive surveys have been conducted on the fauna and flora of the Andasibe region, very few studies have focussed on the lemurs. The aim of this study was to



A hairy-eared dwarf lemur (*Allocebus trichotis*) in Andasibe

make a new assessment of the nocturnal lemur population of Analamazaotra Special Reserve and Forest Station in Eastern Madagascar. I walked a total of 16.7 km of reconnaissance walks in the Special Reserve and the Forest Station between October and November 2007. I recorded the genus rather than the species as it is difficult, in the field, to differentiate species within the genera *Microcebus* and *Cheirogaleus* in particular. I estimated population density in two ways. First, I calculated the number of animals per kilometre walked. Then, I assessed the density per square kilometre and per hectare for all animals encountered and for the genera with ten or more animals sighted (i.e. *Avahi* and *Cheirogaleus*). During the nocturnal reconnaissance walks, I encountered 48 animals of five different genera: *Allocebus*, *Avahi*,

Cheirogaleus, *Lepilemur* and *Microcebus*. In addition, I observed *Daubentonia madagascariensis* opportunistically on two occasions, once in the Special Reserve and once in the Forest Station. The results of the density calculations are as follows: all genera: 2.88 animals/km, 116.17 animals/km², 1.16 animals/ha; *Cheirogaleus*: 1.26 animals/km, 74.95 animals/km², 0.75 animals/ha; *Avahi*: 1.02 animals/km; *Microcebus*: 0.42 animals/km; *Allocebus*: 0.12 animals/km and *Lepilemur*: 0.02 animals/km. It was not possible to truncate the data and calculate the strip width for the density assessment of *Avahi*. as most sightings occurred between 9-9.5 m from the trail. Based on observations at this particular site, I propose that *Microcebus* sp., *Avahi laniger* and *Cheirogaleus* sp. be considered Least Concern for this site. At a species level, however, it is still extremely urgent to assess the exact species composition and attempt to determine the density per species, especially for mouse and dwarf lemurs. *Allocebus trichotis*, *Lepilemur* sp. and *Daubentonia madagascariensis* need urgent additional research to determine their level of threat. It is crucial for the conservation of these species to continue research efforts to determine species' distribution and abundance all along the east coast of Malagasy.



A mouse lemur (*Microcebus* sp) in Andasibe