

Conservation in Madagascar

Case study: Masoala National Park

1. Protected areas in Madagascar

There are several degrees and kinds of protection for lands in Madagascar. Some include:

- National park: Open to the public with permits
- Strict nature reserve (“reserve naturelle”): Open only to authorized scientific researchers
- Special reserve: Access for authorized scientific research, and traditional rights of exploitation of selected living resources
- Two types of reserve are broadly analogous to our national forests.

Nosy Mangabe and the Masoala peninsula

2. Management by outsiders: WCS, CARE & Projet Masoala

- Three conservation NGOs have split up Madagascar by region. The Wildlife Conservation Society has the Northeast, so oversees the new national park (*Masoala National Park*), with occasional help from CARE International.
- Their combined, local manifestation in Maroantsetra and Andahala and the peninsula in between is Projet Masoala, which hires only local people: as conservation agents, as naturalist guides, as office workers, as captains and porters.
- Conservation agents are a mixed bag, for understandable reasons.

2b. Impacts of conservation on local communities

- Traditionally, Betsimisaraka fisherpeople fish off the coast of Nosy Mangabe, and come on land to smoke-dry the fish and camp. National Park status has outlawed this behavior.
- “Criminalization is the state’s negative redefinition of a resource management practice, such as fire, in order to assert specific claims to resources. Resistance is the attempt—through actions and words— by resource users to forestall or prevent criminalization, to protect their rights and impede interference, in order to assert alternative claims.” (Kull p180)

3a. Pet Trade: herps from Masoala

- High risk groups: gekkos (especially *Uroplatus*), chameleons, snakes, colorful frogs like poison frogs and the tomato frog. All are endemic to Madagascar.
- Most exporters of Malagasy animals pay local people trivial amounts (usually <\$1 / animal) to harvest from the wild, they keep the animals in cages long enough to display them and pretend they’ve got captive breeding programs, then sell them to European pet traders for \$300+ / animal.

3b. CITES

- The Convention on International Trade in Endangered Species of Wild Fauna and Flora
- A 1975 international agreement between governments to ensure that the international trade of specimens of wild animals and plants does not threaten their survival.
- All import, export, and introduction of the species covered by CITES must be authorized through a licensing system.
- Species are listed in one of three appendices, according to the degree of protection they need.

CITES appendices

- Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.
- Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
- Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

CITES protection of Malagasy organisms

- Appendix 1: all lemurs (true lemurs and others); the Madagascar radiated tortoise; both Malagasy boa species; one micro-chameleon (*Brookesia perarmata*); the tomato frog; some *Pachypodium* and euphorbs
- Appendix 2: most native Carnivora (fossa and other viverrids); all *Phelsuma* ("day gekko") and many *Uroplatus* (leaf-tailed gekko) species; all *Mantella*; all remaining chameleons. All orchids & Didiereaceae; endemic pitcher plants; a flying fox; most raptors; many owls.
- Notably missing (among many others): tenrecs, baobabs, zonosaurus.

3c. International Union for Conservation of Nature (IUCN)

- Members include 77 States, 114 government agencies, and 800-plus NGOs from 140 countries. More than 10,000 internationally-recognized scientists and experts from more than 180 countries volunteer their services to its six global commissions.
- Mission: to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable."
- Assesses the conservation status of species and subspecies on a global scale in order to highlight taxa threatened with extinction, and therefore promote their conservation. The resulting **Red List** is like CITES Appendices, but without international enforcement.

4. Workshop: The Creation of Masoala National Park

- With the other members of your study group, rank the 13 "criteria and information needs for designing Masoala National Park" in order of their importance for any large piece of unprotected rainforest with a high degree of endemism. Use Table 1 from Kremen et al 1999 (see page 3).
- Full reference: Kremen, C., Razafimahatratra, V., Guillery, R. P., Rakotomalala, J., Weiss, A. & Ratsisompatrarivo, J. S. 1999. *Designing the Masoala National Park in Madagascar based on biological and socioeconomic data*. *Conservation Biology*, 13, 1055-1068.