

Madagascar's Unique Biodiversity and Conservation Needs

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ABCG Meeting on Madagascar's Environmental Program
21 July 2010



Birds of Madagascar

A Photographic Guide

Pete Morris and Frank Hawkins

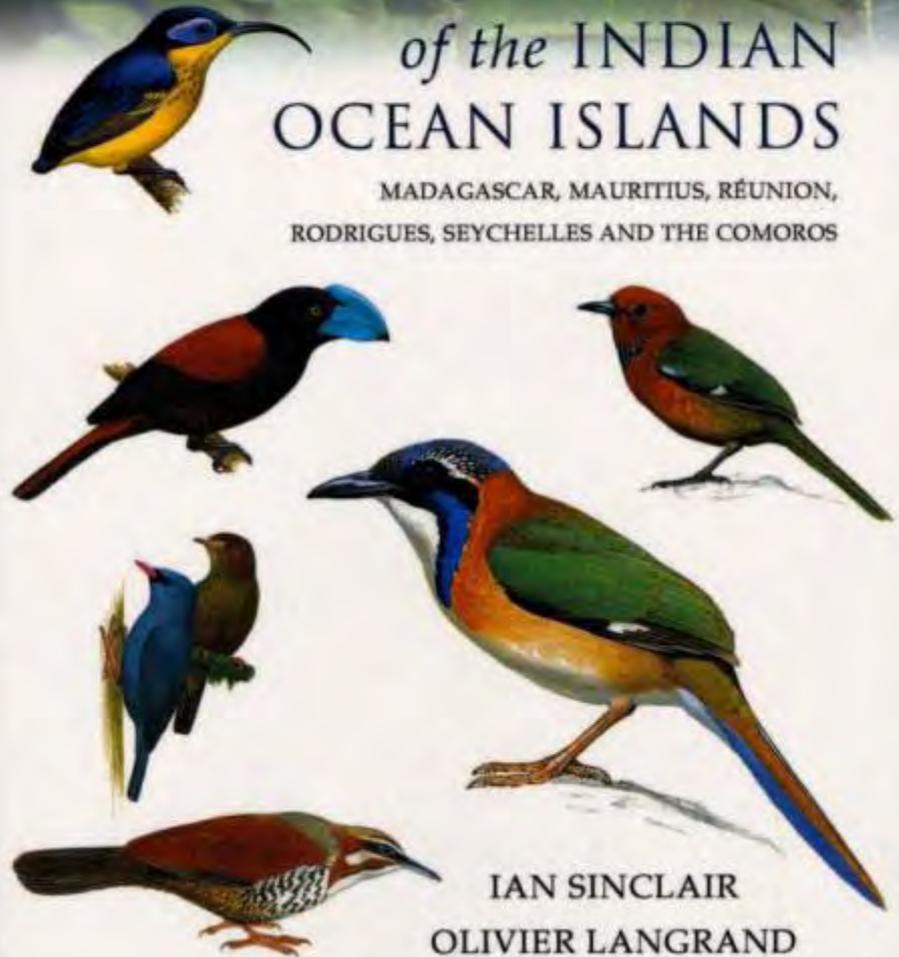
MADAGASCAR
A Photographic Guide



BIRDS

of the INDIAN OCEAN ISLANDS

MADAGASCAR, MAURITIUS, RÉUNION,
RODRIGUES, SEYCHELLES AND THE COMOROS



IAN SINCLAIR
OLIVIER LANGRAND

MADAGASCAR – US AID

July 21, 2010

A Little Early History – US AID's Critical Role

***The Global Importance of
Madagascar's Biodiversity:
A Country of Superlatives***

***Madagascar as a Hotspot & a
Megadiversity Country***

The Critical Importance of Protected Areas

The Durban Vision / SAPM

Green Economies: PES & REDD

Ecotourism and Local Communities

***Time for a Major International Commitment
to Save a Global Public Good***

EARLY HISTORY: 1984-1986

After the Majunga Cyclone

WWF-US, US AID and Beza-Mahafaly

The Key Role of Sam Rae

*The 1985 SSC Workshop &
Conference a Madagascar sur la
Conservation des Ressources au Service
du Developpement”, Nov. 4-12, 1985*

WWF, WB, and US AID

Prince Philip: Ecological Suicide

The First EAP in Africa – WB and US AID

Why ANGAP?



MEGADIVERSITY



EARTH'S BIOLOGICALLY WEALTHIEST NATIONS

BY NIELA A. MITTERMEIER • PATRICK BOLDWIN • CHRISTINA SCOTT • JEFF MITTERMEIER

MEGADIVERSITY

18

*Biologically Wealthiest
Nations on Earth*

MEGADIVERSITY

> 2/3

*of all known species:
terrestrial, freshwater
& marine*

MEGADIVERSITY COUNTRIES

BRAZIL

INDONESIA

COLOMBIA

MEXICO

AUSTRALIA

PERU

CHINA

MADAGASCAR

MEXICO

PHILIPPINES

PAPUA NEW GUINEA

INDIA

DEMOCRATIC REPUBLIC OF CONGO

ECUADOR

MALAYSIA

SOUTH AFRICA

VENEZUELA

UNITED STATES OF AMERICA

FRANCE



HOTSPOTS

R E V I S I T E D

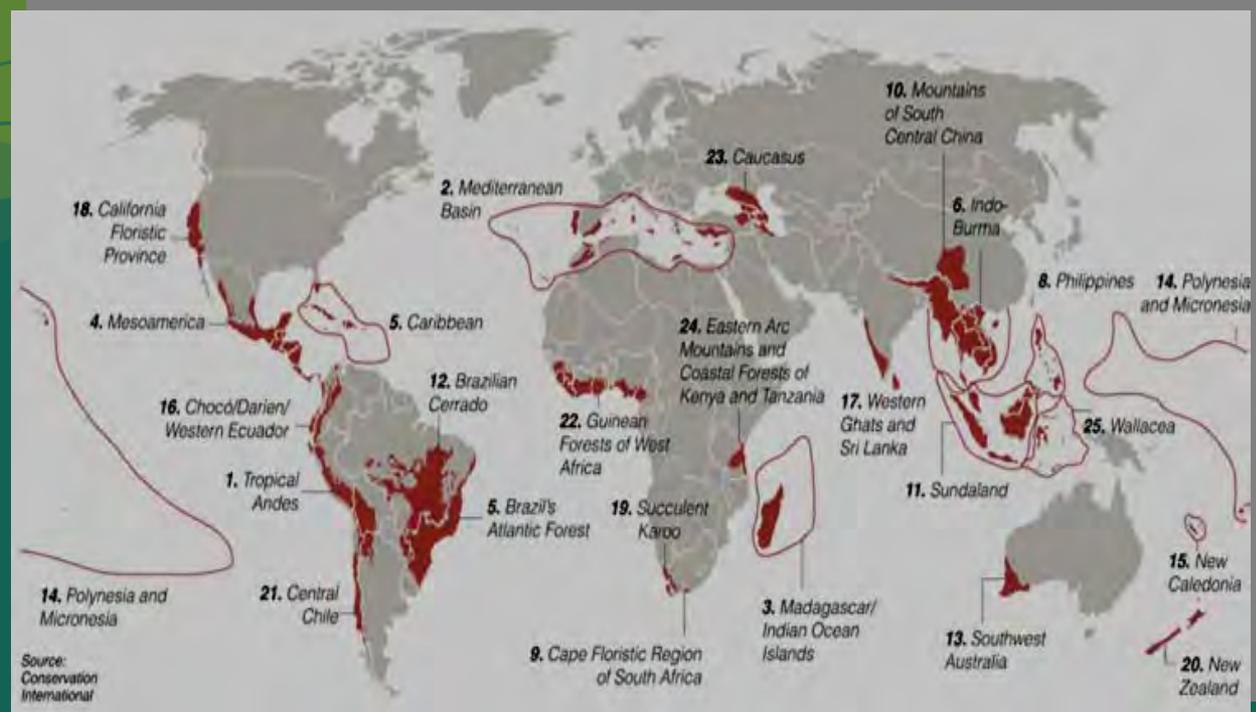
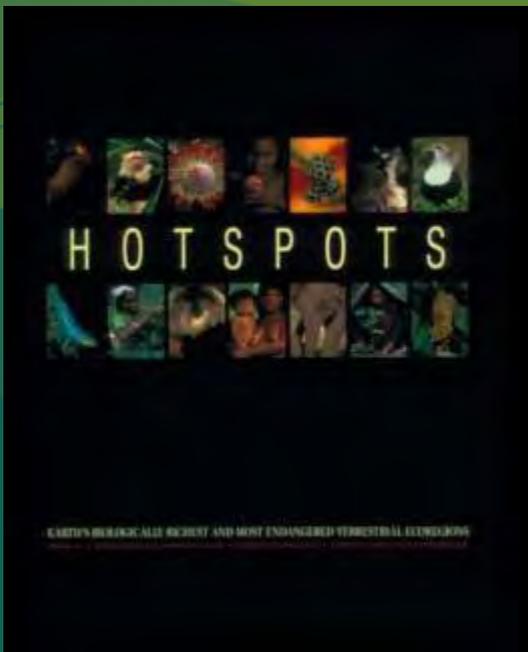


HOTSPOTS

*Prioritizing Areas of
High Irreplaceability
(Endemic Species)
and
High Threat*

HOTSPOTS

Earth's 35 Richest and Most Endangered Ecoregions



HOTSPOTS

Area Remaining Intact

3,385,341 km²

2.3%

of Earth's land surface

Plant Endemism in the Hotspots

150,000 species

50%

*of all plants
as endemics*

Vertebrate Endemism in the Hotspots

12,065 species

42%

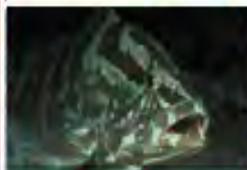
*of all vertebrates
as endemics*

- Introduction
- Acknowledgements
- Red List Programme
- Data Organization
- Summary Statistics
- Sources & Quality
- Categories & Criteria
- Authority Files
- Photo Gallery
- References
- FAQs
- Links



The IUCN Species Survival Commission

2004 IUCN Red List of Threatened Species™



SEARCH

**EXPERT
SEARCH**

The Red List Consortium



Threatened Species in Hotspots (CR, EN, VU)

Birds 83%

Mammals 82%

Amphibians 90%

HOTSPOTS: KEY POINTS

Not Just Tropical Rain Forest

*Not Just **Species** Richness or Endemism*

*Concentration of Endemism at
Higher Taxonomic Levels
(Endemic Genera, Families)*

*Deep Lineages /
Evolutionary History*

ENDEMISM AT THE FAMILY LEVEL (PLANTS + VERTEBRATES)

<i>MADAGASCAR</i>	25
<i>NEW ZEALAND</i>	7
<i>CHILEAN WINTER RAINFALL / VALDIVIAN FORESTS</i>	7
<i>NEW CALEDONIA</i>	7
<i>CAPE FLORISTIC REGION</i>	5
<i>SUNDALAND</i>	3
<i>JAPAN</i>	3
<i>CARIBBEAN</i>	2+
<i>SW AUSTRALIA</i>	2
<i>INDO-BURMA</i>	2
<i>SW CHINA</i>	2

ENDEMISM AT THE GENERIC LEVEL (PLANTS + VERTEBRATES)

<i>MADAGASCAR</i>	478
<i>CARIBBEAN</i>	269
<i>ATLANTIC FOREST</i>	210
<i>SUNDALAND</i>	199
<i>EASTERN AFROMONTANE</i>	178
<i>CAPE FLORISTIC REGION</i>	162
<i>MESOAMERICA</i>	138
<i>WESTERN GHATS / SRI LANKA</i>	125
<i>NEW CALEDONIA</i>	122
<i>HIMALAYA</i>	107





Madagascar Plants

14-15,000 spp.

*80+% endemic /
found nowhere
else on Earth*



363 species

92% endemic



260 species

5 endemic families



Lemurs

5 families

15 genera

101 species

100%

endemic







*New Species
Discoveries in
Madagascar*



Field Guide to the Lemurs of Madagascar

1994: 50

2006 (1/06): 71

2010 : 101 !



244 species known

*119-221 new species
(373-465)*





*Madagascar Pochard –
Rediscovered !!*







Western Indian Ocean Seascape



Madagascar and the Indian Ocean Island
Hotspot











Sokakes in other regions are **killed by punching a large hole** in the shell and taking only the liver -- hundreds to thousands of slaughtered tortoises have been found in Anandriana.







Mesopropithecus

Ind



Pachylemur



Babakotia



Palaeopropithecus



Megaladapis

0 50 cm



Hadropithecus



Archaeoindris

Archaeolemur





Madagascar:

The World's Highest Priority Hotspot?

WHAT TO DO? SOME SUGGESTIONS

Protected Areas

*Green Economies: PES,
REDD+*

*Ecotourism and
Local Communities*

***The Critical
Importance
of
Protected Areas***



Ecosystem Services





The Durban Vision / SAPM



MADAGASCAR

Commitment to

triple

*Protected Area coverage
over the next 5 years !*





MADAGASCAR

\$50 million

*Trust Fund requested
in September, 2003*

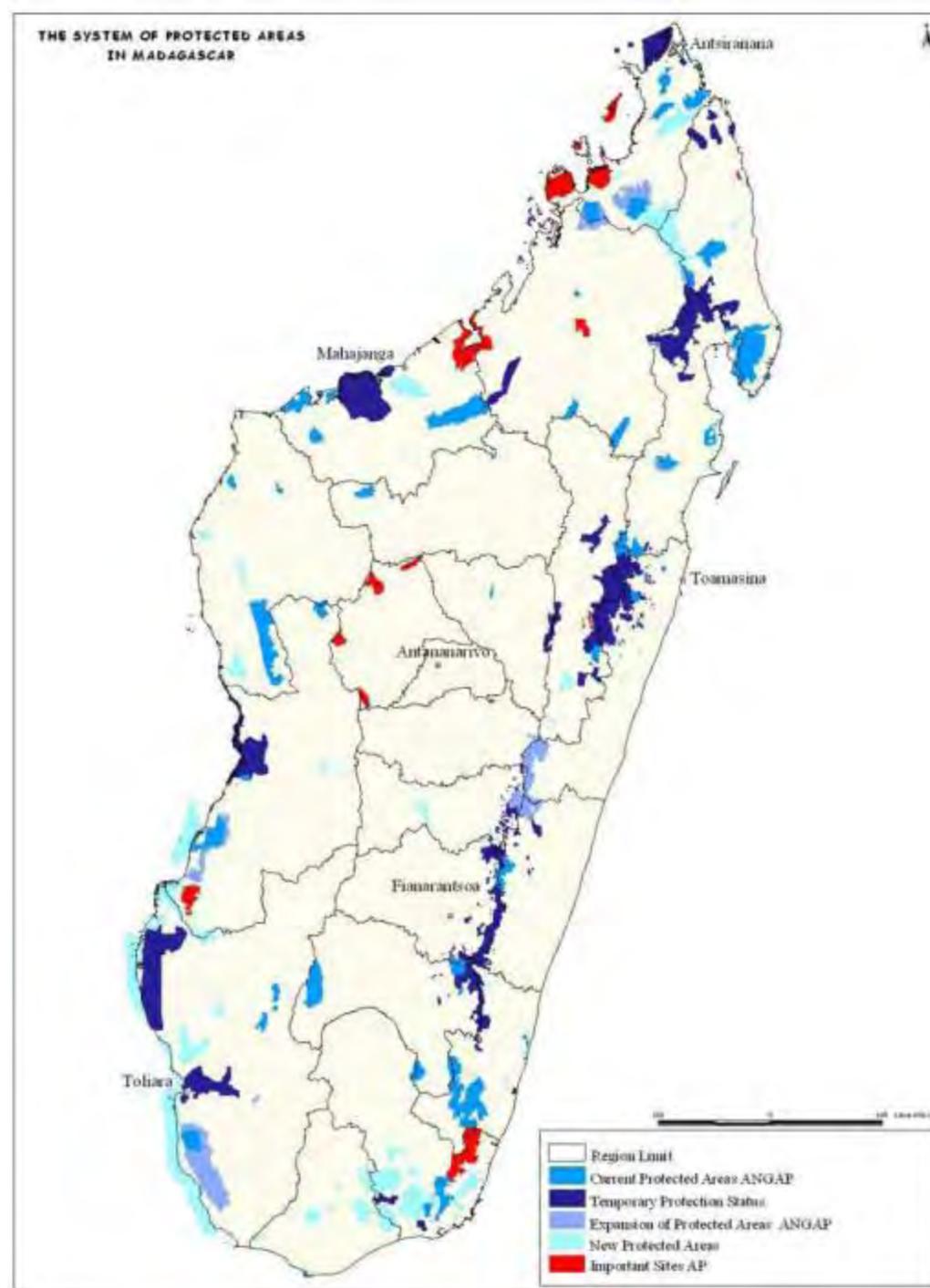
*CI invests first \$1 million from
Global Conservation Fund*

*\$34 million committed to date, of which \$22 million
already in; \$19 more in the world*

SAPM: Current situation

- Existing: 47 protected areas managed by Madagascar National Parks (category I, II et IV of IUCN): 1.7 M Ha
- Provisional status: 29 new protected areas (Most of them in category V et VI): 2,997,145 Ha
- Creation in progress: 40 new protected areas: 1,168,419 Ha
- Extension of Madagascar National Parks network: 505,488 Ha

TOTAL: >6.3 Million Hectares
i.e. 10% of the land area



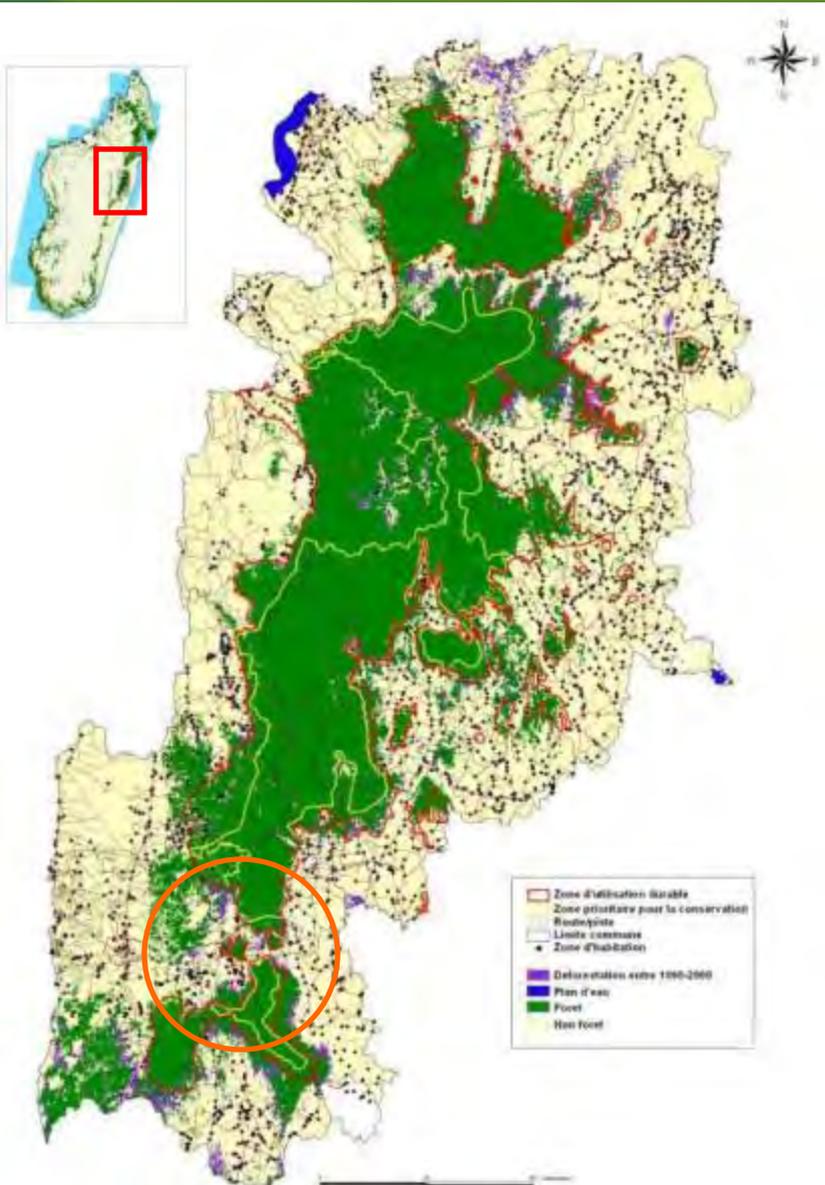
Green Economies

*Protected Areas as the
Anchors in larger Corridors*

PES & REDD+

“Greening” the Mining Sector

Mantadia corridor: a multi-benefit approach



Objectives:

Reduce carbon emissions,
conserve native **biodiversity**,
enhance **human welfare** and
restore degraded land

Conservation (REDD) and
Ecological restoration
(reforestation):

REDD: 425,000 hectares

World Bank BioCarbon
Fund to buy up to
430,000 tons for
~\$1.5 million

Ecotourism & Local Communities

*2nd highest foreign exchange earner in 2008
(\$400,000)*

Nowhere near its potential

*Clear benefits to communities
and linkages with biodiversity*



\$500,000 for Ecotourism

Local Communities

Guide Associations

*Village Entrepreneurs /
Community Protected Areas*

*Hundreds of new sites could be
developed at very low cost*



Conserve Madagascar's
Biodiversity

Association
d'Andasibe

Association des Guides
d'Andasibe

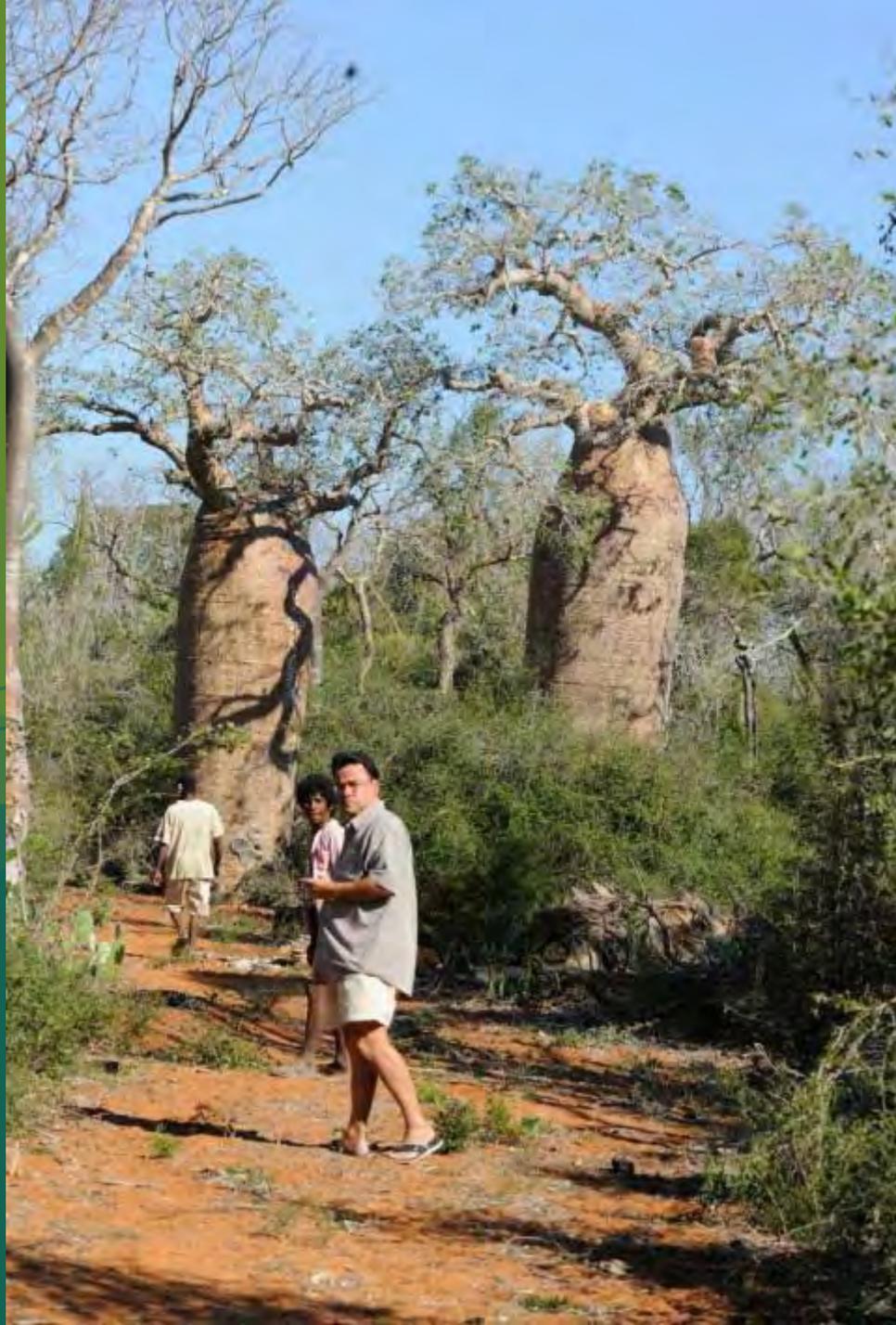
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du Genre

Mantella

Guide d'Identification de Poche



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MADAGASCAR
WHAT NOW
???

Marc Ravalomanana

>>>

Andry Rajoelina
??????????



Time for a Truly Global Commitment

Regardless of the Political Situation

Scenario 3



Haiti



*US AID had
major leadership
role in the past.*

*It needs to have
an even greater
role in the future.*



*And it's not
too late.....*

