

ALLINACE FOR ZERO EXTINCTION MADAGASCAR: Mainstreaming Strategy

Background

Initiated in 2005 by conservation organizations, AZE is an initiative at the global level now totaling more than 98 members and aimed at identifying and protecting sites that are the only ones where some endangered species can be found. The conservation of these irreplaceable sites requires the adoption of policies whose objectives are to integrate the conservation of AZE sites into national conservation strategies aligned with the objectives of the CBD, as well as the policies of the international financial institutions. In 2010, at the global level, 587 sites had been identified in relation to 920 species considered, including 21 sites for 28 species in Madagascar.

From the end of 2015 until 2018, Birdlife International and its partners have implemented a GEF / UNEP project titled "AZE - Conserving Earth's Most Irreplaceable Sites for Endangered Biodiversity". The objective of the project is to prevent extinction of species at priority sites identified through AZE. This includes two components: the first is aimed at creating and improving the effectiveness of demonstration site management in Brazil, Chile and Madagascar. The second component focuses on two outcomes. First, the conservation of endangered species and the protection of AZE sites are integrated into the safeguarding policies of major international financial institutions. Second, the conservation of AZE sites is integrated into national biodiversity strategies and action plans, protected area work program action plans and other national conservation plans in support of the goals. of the CBD.

Several workshops followed one another. Thus, a project development workshop was held in 2014 and an introductory workshop in 2016. Online consultations on new AZE sites and their limits were held in 2017. Finally, a sharing and validation workshop was held in took place in 2018. In parallel with this, conservation actions were initiated and developed at the demonstration site in Tsitongambarika. The present workshop is a logical follow-up of these events and consists of presenting the results of the project during its three years in Madagascar and identifying avenues for sustainability actions once the project is completed.

This case study aims to:

- Present the current situation by site in Madagascar
- Produce a strategy for the perpetuation of AZE sites in Madagascar to ensure the conservation of nominative species on the site
- Present a strategy to integrate the AZE concept into national strategies in Madagascar

1. Madagascar's AZE sites

a. Site information

Madagascar currently has 55 confirmed AZE sites (Annex 1, map 1) and 13 other potential sites (Candidates) should be included in these sites of international importance (Annex 2).

Sites	Site Name	With Managers	Without Managers
Candidatee	13	6	7
Confirmed	55	48	7
Total	68	55	14

This table shows that among these already confirmed AZE sites, two sites have partial protection (only a part included in protected areas) and seven (7) do not even have a manager. These sites are threatened by logging, mining, oil and national development projects.

Map 1 : AZE sites in Madagascar



b. On-site actions

	Total sites	Sites with conservation action	Sites without conservation action
Candidate	13	6	7
Confirmed	55	48	7
Total	68	54	14

The following table shows the number of sites with on-site conservation actions.

Of the newly identified sites (Candidate), 6 already have protection status and conservation actions are already under way. On the other hand, seven sites among those already confirmed do not have managers, and no conservation action is being carried out.

Sites with conservation action

Most sites with managers are protected areas. The most common actions being implemented are:

- Conservation of the site by the manager
- Patrol and surveillance
- Research on the target species of conservation
- Support for safeguarding the local population

Some managers have had the opportunity to conduct more activities, such as:

- Ecotourism development
- Ecosystem restoration
- Reforestation

Sites without conservation action

These sites have been identified through scientific research and / or an analysis of existing data. Conservation actions are almost non-existent.

c. Actions on species

Actions are often limited to the overall conservation of the site. Few actions are directed at species, even though they are often conservation targets for protected areas. Seven confirmed AZE sites have species-focused actions (see the following table).

	Sites	
Candidate Site Actions		
Satisfactory	1	
Very weak	12	
Confirmed Site Actions		
Weak	2	
Satisfactory	5	
Very weak	48	
Total	68	

* Possible values: Very weak; Weak ; Satisfactory ; Good

2. Conservation Strategies

Given the current situation of AZE sites in Madagascar, minimum conservation actions should be conducted to prevent the loss of AZE trigger species. Actions have been divided into two major groups: 1) for sites with managers, and 2) for sites without managers.

a. Sites with managers

- For Protected Areas with managers, the following actions could be implemented:
 - \circ Ensure patrols by the local communities and / or local park committees
 - $\circ\,$ Research the target species of conservation. AZE species should be included as conservation target species.
 - \circ Support the population surrounding the protected area
 - \circ Ensure the conservation of the protected area in general
 - \odot Fire monitoring
 - $\,\circ\,$ Develop and implement a fire plan
- Some sites could do more:
 - \circ Set up fire patrol boats (Tilin'afo)
- The following actions are requested:
 - Empower the local population in species conservation
 - \circ Collaborate with universities to ensure research is conducted
 - o Develop conservation strategies for AZE species
 - Communicate to various entities the presence of AZE sites without managers, as some organizations may be interested in their management

b. Sites without managers

- The following actions are proposed for orphan sites.
 - Raise awareness of AZE site status
 - Communicate to various entities the presence of AZE sites without managers, as some organizations may be interested in their management
 - Collaborate with private sector extractors (mining, oil, ...) to determine if exploitation occurs around the site
 - Raise awareness of AZE site status with universities to encouarge studies on the AZE species
 - A "Madagascar AZE Alliance" could be created to lobby on the conservation of AZE species
 - Create Community Protected Areas (CPAs) to ensure the conservation of AZE species

3. Mainstreaming Strategy

The AZE concept has already been integrated into Madagascar's CBD reports and NBSAP. Next steps are to integrate the concept in all national documents, including Regional Development Plans (PRD) and Communal Development Plans (PCD). Institutions working at the regional level will participate in the development of the PRD and the PCD.

4. Mainstreaming Action Plan

Actions	Products	Sche	dule				Responsible
		2019	2020	2021	2022	2023	
Vision : Conservation of AZE species ensured t	hrough actions at AZE	sites	in Mad	agasca	ar		
Overall goal of AZE mainstreaming (2019-2023): A process to integrate AZE sites into national and regional plans							
Expected Result 1: By 2023, decision-making e national plans	ntities are aware of th	e integ	gration	of the	AZE c	oncep	t into regional and
Objective 1: Decision-making entities are sensed	sitized through differer	nt mea	ans of i	nforma	ation		
Strategy 1: Revive the AZE Working Group							
Action 1: Hold regular group meetings	Meeting notes						MEDD, Group Leader
Action 2: Participate in forums, and national / international sharing and exchange	Publications						Group members
Strategy 2: Hold awarenness and mainstreamin	ng workshops						
Action 1: Raise awareness of the importance of AZE species	Names of people attending workshops						Group members
Action 2: Contribute to regional, national and international workshops	Posters, Publications						Group members
Action 3: Inculcate AZE values at local population level							Group members
Action 4: Publish research reports as tools for persuasion of decision-making entities	Publications						Group members, MEDD
Expected Result 2: By 2023, AZE action plans a	re integrated into natio	onal pl	ans				
Objective 2: A legal process ensures the integra	ation of the AZE conce	pt into	nation	al stra	tegies		
Strategy 1: Awareness / Information about the	AZE concept						
Action 1: Hold regional workshops to promote the AZE concept in municipal and regional plans	PCD and PRD include AZE concept						MEDD and members groups
Action 2: Use results from pilot sites as conservation baseline models	Duplicate template at other sites						MEDD and members groups
Action 1: Integrate the AZE concept into communal and regional plans	PCD and PRD include AZE concept						Région, Commune
Strategy 2: Create AZE decrees on sites of inter	rnational importance						
Action 1: Lobby at the level of state institutions (Senate, National Assembly)	Lobby						MEDD and members groups
Action 2: Prepare a draft AZE decree on sites of international importance	Decree						MEDD and members groups
Action 3: Prepare a draft decree	Decree						MEDD and members groups
Strategy 3: Promote research and scientific stu	dies on species to dire	ect the	plan				
Action 1: Research on ecology, biology, ethology and distribution of species, in particular target species	Research Protocols and Reports						Group members

Action 2: Ecological monitoring of target species while assessing the status of target species relative to the level of natural variation.	Scientific ecological monitoring plan and report			Group members
Action 3: Develop an action plan related to research results	Action plan			Group members
Action 4: Foster partnerships with universities and other stakeholders working on research and studies	Partnership Agreement			Group members

Annex 1 : AZE sites in Madagascar

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_22426	Ambohitantely Special Reserve	Yes	Confirmed	Anodonthyla vallani, Guibemantis punctatus, Rhombophryne helenae	Satisfactory	Very weak
AZE_22433	Ambositra-Vondrozo Corridor NPA (COFAV)	Yes	Confirmed	Eliurus penicillatus	Satisfactory	Very weak
AZE_22436	Sahafina Forest (Anivorano-Brickaville) NPA	Yes	Confirmed	Microcebus gerpi	Satisfactory	Satisfactory
AZE_22447	Bongolava Classified Forest (Marosely) NPA	Yes	Confirmed	Microcebus bongolavensis	Satisfactory	Very weak
AZE_22453	Fierenana NPA	Yes	Confirmed	Mantella milotympanum, Scaphiophryne boribory	Satisfactory	Very weak
AZE_22459	Itremo	Yes	Confirmed	Podocarpus capuronii	Satisfactory	Very weak
AZE_22470	Anjanaharibe-Sud - Marojejy - Makira	Yes	Confirmed	Microcebus mittermeieri, Microcebus macarthurii, Calumma vencesi	Satisfactory	Very weak
AZE_22476	Efatsy (Farafangana) and northern Manombo Special Reserve	Yes	Confirmed	Lepilemur jamesorum, Anodonthyla theoi, Guibemantis diphonus	Satisfactory	Very weak
AZE_22478	Beampingaratsy (Anosy Mountains)	Yes	Confirmed	Anodonthyla rouxae	Satisfactory	Very weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_22480	Montagne des Francais NPA	Yes	Confirmed	Brookesia tristis	Satisfactory	Very weak
AZE_22488	PK32-Ranobe NPA	Yes	Confirmed	Furcifer belalandaensis	Satisfactory	Very weak
AZE_22494	Sorata	Yes	Confirmed	Rhombophryne longicrus	Satisfactory	Very weak
AZE_22499	Tsaratanana-Marojejy Corridor NPA (COMATSA)	Yes	Confirmed	Cophyla olgae	Satisfactory	Very weak
AZE_22508	Ankeniheny Zahamena Corridor NPA (CAZ)	Yes	Confirmed	Calumma furcifer	Satisfactory	Very weak
AZE_22512	Manjakatompo-Ankaratra Massif NPA	Yes	Confirmed	Boophis williamsi, Lygodactylus mirabilis, Mantidactylus pauliani	Weak	Weak
AZE_23322	Lokobe National Park	Yes	Confirmed	Microcebus mamiratra, Lepilemur tymerlachsoni	Satisfactory	Very weak
AZE_24673	Bemanevika / Tsaratanana massif	Yes	Confirmed	Microcebus margotmarshae, Aythya innotata, Calumma hafahafa	Satisfactory	Very weak
AZE_27111	Ankeniheny - Lakato NPA	Yes	Confirmed	Boophis liami	Satisfactory	Very weak
AZE_27268	Menabe	Yes	Confirmed	Hypogeomys antimena, Microcebus berthae	Satisfactory	Weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_45384	Fandriana-Marolambo Forest Corridor NPA (COFAM)	Yes	Confirmed	Lepilemur betsileo, Avahi betsileo	Satisfactory	Very weak
AZE_45392	Tsimanampetsotse National Park	Yes	Confirmed	Galidictis grandidieri	Satisfactory	Very weak
AZE_45501	Daraina - Loky - Manambato NPA	Yes	Confirmed	Propithecus tattersalli, Lepilemur milanoi	Satisfactory	Satisfactory
AZE_6522	Cape Anorontany Archipelago NPA	Yes	Confirmed	Rhombophryne hara	Satisfactory	Very weak
AZE_6524	Extension of Montagne d'Ambre National Park	Yes	Confirmed	Microcebus arnholdi, Brookesia desperata, Boophis baetkei, Cophyla noromalalae, Cophyla puellarum, Plethodontohyla matavy, Rhombophryne madagascariensis, Cophyla maharipeo, Monticola erythronotus	Satisfactory	Very weak
AZE_6524	Montagne d'Ambre National Park and Special Reserve	Yes	Confirmed	Microcebus arnholdi, Brookesia desperata, Boophis baetkei, Cophyla noromalalae, Cophyla puellarum, Plethodontohyla matavy, Rhombophryne madagascariensis, Cophyla maharipeo, Monticola erythronotus	Satisfactory	Very weak
AZE_6527	Ankarana Special Reserve	Yes	Confirmed	Rhombophryne be, Tsingymantis antitra	Satisfactory	Very weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_6533	Ampasindava Bay wetlands	Yes	Confirmed	Phaner parienti, Lepilemur mittermeieri	Satisfactory	Very weak
AZE_6534	Manongarivo Special Reserve	Yes	Confirmed	Microcebus sambiranensis, Brookesia bekolosy	Satisfactory	Very weak
AZE_6534	Réserve Spéciale de Manongarivo	Yes	Confirmed	Microcebus sambiranensis, Brookesia bekolosy	Satisfactory	Very weak
AZE_6535	Tsaratanana Strict Nature Reserve and extension	Yes	Confirmed	Cophyla alticola, Rhombophryne guentherpetersi, Rhombophryne ornata, Rhombophryne tany	Satisfactory	Very weak
AZE_6537	Marojejy National Park	Yes	Confirmed	Brookesia karchei, Cophyla rava, Gephyromantis ranjomavo, Rhombophryne minuta, Rhombophryne roseifemoralis, Rhombophryne serratopalpebrosa, Rhombophryne vaventy	Satisfactory	Very weak
AZE_6538	Masoala National Park	Yes	Confirmed	Avahi mooreorum, Lepilemur scottorum, Phelsuma masohoala	Satisfactory	Very weak
AZE_6539	Sahamalaza National Park	Yes	Confirmed	Lepilemur sahamalazensis, Boophis ankarafensis, Boophis tsilomaro	Satisfactory	Very weak
AZE_6546	Mahavavy - Kinkony wetlands NPA	Yes	Confirmed	Lepilemur ahmansonorum, Paretroplus dambabe	Satisfactory	Very weak
AZE_6547	Baly Bay National Park	Yes	Confirmed	Astrochelys yniphora	Satisfactory	Very weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_6548	Ankarafantsika National Park and Ampijoroa	Yes	Confirmed	Macrotarsomys ingens,Brookesia decaryi, Brookesia dentata	Satisfactory	Very weak
AZE_6551	Tsingy de Namoroka National Park	Yes	Confirmed	Brookesia bonsi	Satisfactory	Very weak
AZE_6558	Tsingy de Bemaraha National Park	Yes	Confirmed	Nesomys lambertoni, Avahi cleesei, Lepilemur randrianasoloi, Brookesia exarmata, Brookesia perarmata, Furcifer nicosiai	Satisfactory	Very weak
AZE_6563	Mananara-North National Park	Yes	Confirmed	Lepilemur hollandorum	Satisfactory	Very weak
AZE_6567	Lake Alaotra NPA	Yes	Confirmed	Hapalemur alaotrensis	Satisfactory	Satisfactory
AZE_6569	Betampona Strict Nature Reserve	Yes	Confirmed	Cophyla karenae	Satisfactory	Very weak
AZE_6578	Anjozorobe Forest	Yes	Confirmed	Voalavo antsahabensis, Cheirogaleus sibrei	Satisfactory	Satisfactory
AZE_6585	Mikea National Park	Yes	Confirmed	Microgale jenkinsae	Satisfactory	Very weak
AZE_6592	Andohahela National Park - Section I	Yes	Confirmed	Lepilemur fleuretae	Satisfactory	Very weak
AZE_6600	Ranomafana National Park	Yes	Confirmed	Anodonthyla emilei, Anodonthyla moramora, Boophis narinsi, Boophis piperatus, Mantidactylus paidroa	Satisfactory	Satisfactory

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_6601	Andringitra National Park	Yes	Confirmed	Boophis laurenti, Mantidactylus madecassus	Satisfactory	Very weak
AZE_6602	Isalo National Park	Yes	Confirmed	Gephyromantis azzurrae	Satisfactory	Very weak
AZE_6604	Kalambatritra Special Reserve	Yes	Confirmed	Lepilemur wrightae	Satisfactory	Very weak
AZE_NEW_006	Ivoloina to Vohibola	Yes	Confirmed	Calumma vohibola	Satisfactory	Very weak
AZE_NEW_155	Antsohihy - Mandritsara	Non	Confirmed	Rhombophryne analamaina	Very weak	Very weak
AZE_NEW_157	Mahasoa forest	Non	Confirmed	Gephyromantis mafy	Very weak	Very weak
AZE_NEW_186	Ambodimahabibo dry forest	Non	Confirmed	Lepilemur otto	Very weak	Very weak
AZE_NEW_190	Forêt de Marohita	Non	Confirmed	Microcebus marohita	Very weak	Very weak
AZE_NEW_191	Irodo	Non	Confirmed	Lepilemur septentrionalis	Very weak	Very weak
AZE_NEW_192	Mananara - Mananjary	Non	Confirmed	Microcebus jollyae	Very weak	Very weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_NEW_FRESHWATER	Amboamboa Catchment	Non	Candidate	Paretroplus gymnopreoperculans	Very weak	Very weak
AZE_NEW_FRESHWATER	Andasibe	Yes	Candidate	Madagasikara vazimba	Weak	Very weak
AZE_New_forest	Ankafobe	Yes	Candidate	Schizolaena tampoketsana	Satisfactory	Very weak
AZE_NEW_FRESHWATER	Antsiranana	No	Candidate	Foza maNoae	Very weak	Very weak
AZE_NEW_FRESHWATER	Faraony Headwaters	No	Candidate	Bedotia tricolor, Hydrostachys perrieri	Very weak	Very weak
AZE_NEW_FRESHWATER	Isalo National Parks	Yes	Candidate	Thelethylax isalensis	Satisfactory	Very weak
AZE_NEW_FRESHWATER	Lake Tseny Catchment	Yes	Candidate	Arius festinus, Paretroplus menarambo	Satisfactory	Very weak
AZE_NEW_FRESHWATER	Lower Ankofia	No	Candidate	Arius uncinatus	Very weak	Very weak
AZE_NEW_FRESHWATER	Majunga coastal zone	No	Candidate	Schoenoplectiella perrieri	Very weak	Very weak
AZE_NEW_FRESHWATER	Nosivolo River and tributaries (Ramsar site)	Yes	Candidate	Rheocles lateralis, Diospyros anosivolensis	Very weak	Very weak

Site ID	International Site Name	Administrator ?	Confirmed or Candidate ?	Trigger Species	Site conservation	Action on species
AZE_New_forest	Oronjia	Yes	Candidate	Delonix velutina	Satisfactory	Very weak
AZE_NEW_FRESHWATER	South Manambato	No	Candidate	Dypsis aquatilis	Weak	Very weak
AZE_New_forest	Tsitongambarika	Yes	Candidate	Microcebus tanosi, Boucardicus fidimananai, Boucardicus simplex, Aphistogoniulus corallipes, Bemangidia lowryi, Foetidia delphinensis, Micronychia bemangidiensis, Ivodea macrocarpa, Ivodea razakamalalae, Schizolaena charlottae,	Satisfactory	Satisfactory