

The Indian ALLIANCE FOR Zero Extinction

Pinpointing and conserving epicenters of imminent extinctions in India

Indian AZE Activities 2012-2013

Alliance for Zero Extinction is the coming together of different Non Government Organizations across the globe to prevent the immediate threat to species extinction!

The Alliance is an initiative to develop conservation strategies for species assessed as Critically Endangered or Endangered as per IUCN categories and criteria found in a single location. The ideology of setting up the Alliance is in tandem with the Convention on Biological Diversity (CBD) Aichi 2020 Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

The Alliance for Zero Extinction (AZE) sites are declared based on three criteria:

Endangerment. An AZE site contains at least one Endangered (EN) or Critically Endangered (CR) species, as listed on the IUCN Red List.

Irreplaceability. An AZE site is only designated if it is the sole area where an EN or CR species occurs, contains the overwhelmingly significant known resident population (>95%) of the EN or CR species, or contains the overwhelmingly significant known population (>95%) for one life history segment (e.g. breeding or wintering) of the EN or CR species.

Discreteness. The area is a definable boundary within which the characters of habitats, biological communities, and/or management issues have more in common with each other than they do with those in adjacent areas.

Globally 587 AZE sites are identified based on these three criteria and these sites are inhabited by 920 species of mammals, birds, amphibians, some reptiles and conifers.

The Alliance has national representations in Brazil, Mexico, Colombia and India among others. The Indian Alliance for Zero Extinction (Indian AZE) was established in January 2011 to bring together NGOs in India to prevent extinction of the Critically Endangered and Endangered species found in a single location in India. Currently, the NGOs that have joined hands in this endeavor are Aaranyak; Conservation Research Group; Agumbe Rainforest Research Station; Biodiversity Research and Conservation Society; Biome Conservation foundation; Keystone Foundation; Madras Crocodile Bank Trust; Society for Wildlife Conservation, Education and Research; Titli Trust; Wildlife Information Liaison Development Society; Wildlife Research Conservation Society; and Zoo Outreach Organization.

The 2010 global AZE update includes 17 AZE species (including birds, amphibians, mammals and reptiles) in 17 sites in India (Table 1). Post the 2010 listing the Indian AZE has identified 21 AZE fish species and 14 AZE plant species based on the freshwater assessments conducted in Eastern Himalaya and Western Ghats by the IUCN Freshwater Biodiversity Unit and Zoo Outreach Organization (Table 2). One tarantula is also recognized in this

Indian AZE list. This list provides an idea of species in India that are highly restricted in distribution and at a very high risk of extinction with the highest priority for undertaking status survey, and developing and implementing conservation plans.

Table 1. Seventeen Indian Alliance for Zero Extinction species listed in 2010

SN	Species Name	IUCN status
1	<i>Aceros narcondami</i>	EN
2	<i>Batagur kachuga</i>	CR
3	<i>Biswamoyopterus biswasi</i>	CR
4	<i>Cremnomys elvira</i>	CR
5	<i>Crocidura andamanensis</i>	CR
6	<i>Crocidura jenkinsi</i>	CR
7	<i>Crocidura nicobarica</i>	CR
8	<i>Fejervarya murthii</i>	CR
9	<i>Indirana gundia</i>	CR
10	<i>Indirana phrynoderma</i>	CR
11	<i>Millardia kondana</i>	CR
12	<i>Nyctibatrachus vasanthi</i>	EN
13	<i>Porcula salvania</i>	CR
14	<i>Pseudophilautus amboli</i>	CR
15	<i>Raorchestes shillongensis</i>	CR
16	<i>Rhinoptilus bitorquatus</i>	CR
17	<i>Semnopithecus ajax</i>	EN



Table 2. Fish, aquatic plant and invertebrates recognized by the Indian AZE for priority action.

Fish

1	<i>Crossocheilus periyarensis</i>	EN
2	<i>Devario horai</i>	EN
3	<i>Garra kalakadensis</i>	EN
4	<i>Glyptothorax davissinghi</i>	EN
5	<i>Glyptothorax kudremukhensis</i>	CR
6	<i>Homaloptera santhamparaiensis</i>	EN
7	<i>Horalabiosa arunachalami</i>	CR
8	<i>Hypselobarbus periyarensis</i>	EN
9	<i>Lepidocephalichthys arunachalensis</i>	EN
10	<i>Lepidopygopsis typus</i>	EN
11	<i>Mesonoemacheilus herrei</i>	CR
12	<i>Parapsilorhynchus prateri</i>	CR
13	<i>Psilorhynchus microphthalmus</i>	EN
14	<i>Pterocryptis barakensis</i>	EN
15	<i>Puntius deccanensis</i>	CR
16	<i>Puntius manipurensis</i>	EN
17	<i>Schistura minutus</i>	EN
18	<i>Schistura nagodiensis</i>	EN
19	<i>Schistura papulifera</i>	CR
20	<i>Schistura sijuensis</i>	EN
21	<i>Schistura tigrinum</i>	EN



Plants

1	<i>Eriocaulon bolei</i>	CR
2	<i>Eriocaulon ratnagiricum</i>	CR
3	<i>Eriocaulon rouxianum</i>	CR
4	<i>Eriocaulon santapau</i>	CR
5	<i>Eriocaulon sharmae</i>	CR
6	<i>Eriocaulon sivarajanii</i>	CR
7	<i>Isachne veldkampii</i>	CR
8	<i>Ischaemum jayachandranii</i>	CR
9	<i>Ischaemum vembanadense</i>	EN
10	<i>Lindernia manilaliana</i>	EN
11	<i>Nymphoides macrospermum</i>	CR
12	<i>Nymphoides sivarajanii</i>	CR
13	<i>Podostemum munnarensense</i>	EN
14	<i>Rotala malabarica</i>	CR

Invertebrate

1	<i>Poecilotheria metallica</i>	CR
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Cop 11 Indian Alliance for Zero Extinction Side event, 17 October 2012 at Hyderabad, India

Understanding this pressing need and the similarity in the vision with the CBD Aichi 2020 Target 12, the Alliance for Zero Extinction organized a side event titled "Seven Wonders of Conservation" at the Convention of Parties 11 at Hyderabad on 17 October 2012, to present this concept and invite other NGOs to be a part of this network.

Olivier Langrand of Island Conservation and AZE Steering Committee member introduced the programme, the AZE concept and about the Seven Wonders of Conservation, an initiative to identify, through social networking, the worlds top seven AZE species/sites. Along with him two other AZE Steering Committee members, Russ Mittermeier of Conservation International and Sanjay Molur of Zoo Outreach Organization were part of this side event along with other speakers and supporters, Jane Smart and Aban Marker Kabraji of IUCN, and Nick Holmes of Island Conservation. Dr. Russ Mittermeier spoke about the Alliance and its impacts thus far including the effects the objectives had influenced the Target 12 and the new initiative of Friends of Target 12. Jane Smart indicated her and IUCN's support to





AZE and indicated that the AZE was a natural progression to the assessments conducted by the IUCN's famous Red List of Threatened Species. Aban Marker Kabraji spoke about the IUCN's Asia Regional Office being in full support of the activities of AZE and the need to identify more national AZEs within the region.

Nick Holmes presented insights into links between Island Conservation and AZE and mutual support. He began with explaining island ecosystems and the major threats plaguing them – invasive species! He also highlighted how it was imperative to remove alien invasive species from the system to prevent extinction on islands and some success stories in island conservation, many of which are also AZE sites.

Sanjay Molur made a presentation about

Indian AZE with special emphasis on the Periyar Lake - Stream System (PLSS) case study initiated by the Conservation Research Group of Kochi, one of the members of the Indian AZE. The baseline data to support this information originated from the assessments of status and distribution of freshwater taxa (fish, molluscs, odonates and aquatic plants) across the Western Ghats conducted by Zoo Outreach Organization and IUCN Freshwater Biodiversity Unit supported by the Critical Ecosystem Partnership Fund. The Periyar LSS hosts three AZE species of freshwater fish species—Periyar Hill Trout *Lepidopygopsis typus*, Periyar Barb *Hypselobarbus periyarensis* and Periyar Latia *Crossocheilus periyarensis*—and another site, also located in Kerala, is Santhampara, a non-protected area which hosts two AZE species—*Horallabiosa arunachalami* and *Homaloptera santhamparensis*. Although occurring within the protected area, the freshwater species are not protected as they are under the negative influences of pollution from oil spills and introduction of exotic fish. The project is to address these concerns and to direct attention to the urgency of the situation. Local stakeholders such as the Kerala Forest Department and the local communities are very supportive of the initiative and are joining hands to battle the alien invasive species in this system.



The event was concluded with an interesting interactive session with participation from people belonging to different parts of the world. There were questions pertaining to protection awarded to freshwater groups in India and also sharing of case studies speaking of the success stories and complications involved in conservation.

Zoo Outreach Organisation is hosting/helping 3 projects currently funded by the Conservation Leadership Programme, the Rufford Small Grant, Md. Bin Zayed Conservation Fund. The Chester Zoo grant is used for the Indian AZE administration, travel support and also to help promoting more projects.

1. Conserving the Himalayan Grey Langur, *Semnopithecus ajax*, an Endangered, endemic species of primate.

2. Developing and implementing conservation actions in two most critical fish AZE sites in the Western Ghats through an integrated approach of awareness, capacity building, monitoring and policy interventions. The project sites are Periyar National Park and Tiger Reserve and Santhampara Hills in Kerala in Collaboration with Conservation Research Group, Kerala.
3. Conservation of Kerala Indian Frog (*Indirana phrynoderma*) through intensive field surveys and community participation (Project Location Tamil Nadu and Kerala) in Collaboration with Conservation Research Group, Kerala.

Travel

March 2012 – Conservation of Critical Freshwater Fish Habitats in Southern Western Ghats – Alliance for Zero Extinction (AZE) sites, held in Trivandram.

September 2012 – Workshop on Challenges for Freshwater Fish Conservation

October 2012 - Cop 11 Indian Alliance for Zero Extinction Side event, 17 October 2012 at Hyderabad, India

October 25, 2012 – AZE Steering Committee meeting held in Washington DC

April 29-30, 2013 - Towards an "Exotic Fish" Free Periyar Tiger Reserve, April 29-30, 2013

Posters and bookmarks were printed and distributed at the Cop 11 Indian Alliance for Zero Extinction Side event, 17 October 2012 at Hyderabad, India.

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The Indian Alliance for Zero Extinction (Indian AZE) is actively seeking to promote communication, collaboration and cooperation between conservation NGOs, GOs and communities in India to work towards holistic conservation action of species that occur only in a single location and have a very high risk of extinction being assessed as either Critically Endangered or Endangered as per the IUCN Red List of Threatened Species. There are currently 17 recognized AZE species in India (in 2010) and several more that are in the process of being formally recognized. Information on the Alliance and the process is available at www.zooreach.org/indianaze.

	Recognized AZE species (2010)	
Batagur kachuga Red-crowned Roofed Turtle	EN	
	EN	
Kakan Vanna	EN	
	EN	
Narcondam Hornbill	EN	
	EN	
Kerala Rock Frog	EN	
	CR	
Metallic Parachute Spider	CR	

AZE species yet to be recognized	
Fish	
<i>Crossocheilus periyarensis</i>	EN
<i>Deviana horai</i>	EN
<i>Gama kalakadensis</i>	EN
<i>Glyptothorax divisangali</i>	EN
<i>Glyptothorax kudremukhensis</i>	CR
<i>Homaloptera santhamparensis</i>	EN
<i>Horallabius anurachalensis</i>	CR
<i>Hydrobiobasus periyarensis</i>	EN
<i>Lepidogobius anurachalensis</i>	EN
<i>Leptogobius lyoni</i>	CR
<i>Misozonemacheilus herai</i>	CR
<i>Pseudoglyptothorax prateri</i>	CR
<i>Pseudoglyptothorax microcephalus</i>	EN
<i>Phenacogaster barakensis</i>	EN
<i>Puntius deccanensis</i>	CR
<i>Puntius mansurensis</i>	EN
<i>Schistura mindot</i>	EN
<i>Schistura magnidens</i>	EN
<i>Schistura papulifera</i>	CR
<i>Schistura signum</i>	EN
Plants	
<i>Enicocaulon bollei</i>	CR
<i>Enicocaulon tetragynum</i>	CR
<i>Enicocaulon osianum</i>	CR
<i>Enicocaulon santapau</i>	CR
<i>Enicocaulon shamae</i>	CR
<i>Enicocaulon sivapagai</i>	CR
<i>Isachne vellichampii</i>	CR
<i>Ischaemum jayashandhani</i>	CR
<i>Ischaemum venkateshwarani</i>	EN
<i>Lindenbergia</i>	EN
<i>Nymphaeodes macrosporum</i>	CR
<i>Nymphaeodes sivapagai</i>	CR
<i>Palaudium anurachalensis</i>	EN
<i>Alata malabarica</i>	CR
Invertebrates	
<i>Psephenochelone metallica</i>	CR

Indian AZE Partners

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Biome Conservation Foundation



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