

Alliance for Zero Extinction (AZE) & its Elegant Strategy

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The Alliance for Zero Extinction is a relatively new organisation, set up in 2000 and by 2005 was launched internationally. The organisation is composed of 75 NGOs whose goal is to avert extinctions of species. Many organisations claim the same goal but AZE has a unique and elegant system or formula for targeting priority cases.

AZE works to ensure the conservation of species with the highest risk of extinction found in a single location. This is achieved by identifying and monitoring of the site that hosts certain IUCN Red List generated EN and CR species. These species have been prioritized by using the IUCN criteria of irreplaceability (options in space for conservation) and vulnerability (options in time). Priority species have both high irreplaceability and high vulnerability along with the aforementioned single site and therefore take precedence for conservation. The IUCN Red List is used to assist in these assessments.

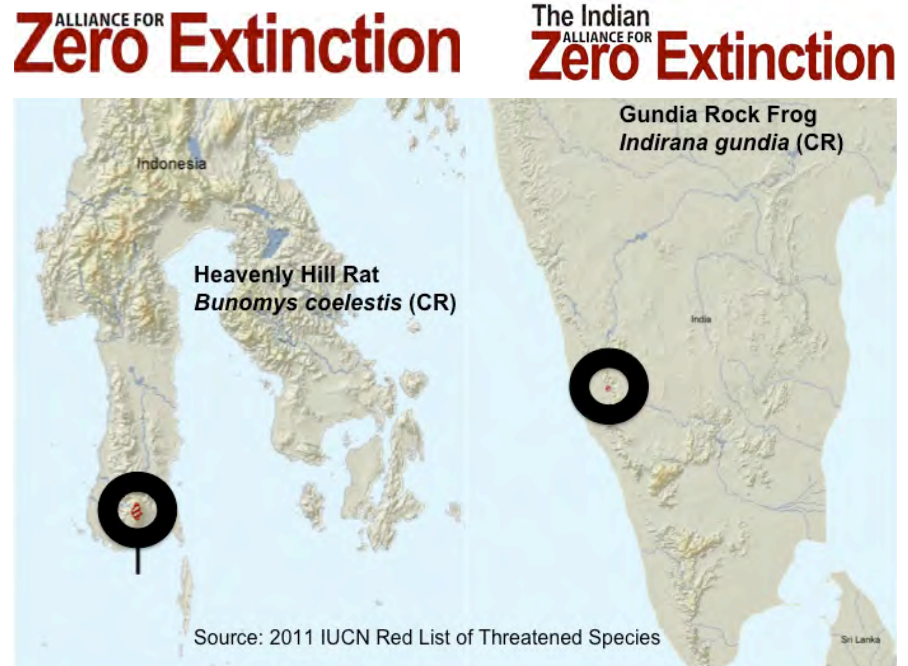
More about these selection criteria for the site. Note, all three criteria have to be met.

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

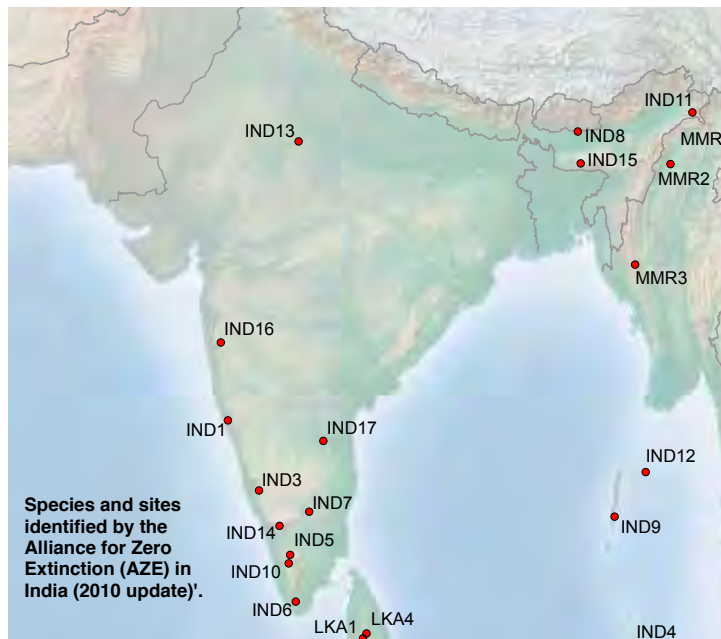
Irreplaceability. An AZE site should only be designated if it is the sole area where an EN or CR species occurs, contains the overwhelmingly significant known resident population (>95%) of the EN or CR species, or contains the overwhelmingly significant known population (>95%) for one life history segment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

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

Five-hundred-and-eighty-seven AZE sites have been identified of which only 250 qualify as protected areas: in these sites 920 species have been identified comprising mammals, birds, amphibians, some reptiles and



A range map of a species that is very geographically restricted and so this site is highly irreplaceable as it is the only place where the species is found.



conifers. The sites must also be homogenous and manageable for conservation. AZE has a "Candidate List" for any areas that are narrowly disqualified or unclear for inclusion. Examples include sites that do not quite meet the irreplaceability criteria, that are not quite threatened enough (VU and DD species) but which are restricted to one or a few sites, unevaluated species, and species with taxonomic uncertainties (including undescribed and newly described species). This list will be periodically

reviewed so that the best judgments can be made in cases of uncertainty.

There are great advantages in investing in AZE species. We are most likely to lose these species next. We can prevent the extinction crises most effectively. It is the most cost effective way to proceed.

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Himalayan Grey Langur
Semnopithecus ajax

Membership in the Alliance is open to any non-governmental environmental organization that has as a primary purpose the conservation of biological diversity. Zoos should consider taking membership in AZE – it is a “win-win” for zoos. The AZE method is a natural for selection of conservation projects undertaken by zoos, which are changing the image and meaning of zoos. Moreover the data collected through supporting project will add to the global database.

Indian case study

Zoo Outreach Organization (ZOO) has set up an Indian AZE and is encouraging NGOs in India to take up some of the AZE identified species of fish and aquatic plants which were recently assessed under IUCN criteria.

Zoo Outreach Organization hosts the IUCN SSC Primate Specialist Group in South Asia, e.g., South Asian Primate Network. There are 43 taxa of Primates in the region of South Asia. Of these, the Himalayan Grey Langur, *Semnopithecus ajax* Pocock, 1928 has a narrow distribution and restricted to a single location, e.g. Chamba Valley of Himachal Pradesh and Jammu & Kashmir in the northwestern Himalaya in India. *Semnopithecus ajax* occurs in pine and alpine cedar forest from 2,200 to 4,000 m. It is folivorous, diurnal, and mainly arboreal (Molur *et al.* 2003).

Himalayan Grey Langur has been assessed as Endangered by the IUCN Red List of Threatened Species based on its highly restricted distribution (single location), its population size is less than 250 mature individuals due to threats from human activities in the area (Groves & Molur 2008). The Grey langur is reported to be hunted by local communities and hunting parties from neighbouring areas. The species is very shy unlike other langurs, due to its avoidance behaviour in human presence, perpetuated by hunting with guns. The species is listed on CITES Appendix I, and Schedule II Part I, of the Indian Wildlife (Protection) Act, 1972 amended up to 2002. The IUCN Red List of Threatened Species recommends that urgent action be taken for conserving this species and paying particular attention to the following areas: survey and establish distribution range, population monitoring and public education. Other priorities include community participation in protecting the species and working with the state forest department to implement holistic conservation management plans for the species and the site.

The Himalayan Grey Langur is one of the 19 species identified by the Alliance for Zero Extinction (AZE) in India. AZE’s primary objective is to ensure conservation of species with the highest risk of extinction found in a single location. The IUCN Red List categories of Critically Endangered and Endangered provide important information on the risk of extinction a species faces in the wild. AZE species are those prioritized from within the CR and EN species that are restricted to a single location. These species exhibit the classical combination of characteristics, e.g., irreplaceability and vulnerability, which determine high priority among threatened species that require urgent conservation actions. *Semnopithecus ajax* fits this requirement and due to its dwindling numbers and highly restricted distribution, is a species that requires immediate attention for conservation action.

Of ZOO’s several taxon based South Asia Networks the Amphibian Network and the Bat/Rodent Network have selected one amphibian species and one small mammal species that need urgent conservation action, e.g., *Indirana gundia* and *Millardia kondana*. *Indirana gundia* is a small rock frog that occurs only in the Gundia/Kempholey forest of Karnataka State. *Millardia kondana* is a rat with soft fur restricted to Sinhagad Plateau/Fort in Maharashtra state. Both of these species have a very restricted distribution and are not recorded from any other location. Both are CR according to IUCN Red List criteria. These two lesser-loved species are excellent AZE examples that require urgent conservation efforts that include stakeholders such as locals, forest staff, temple authorities, and many others. Lesser-known small fauna face higher threats due to neglect, which occurs due to their non-charismatic qualities and human ignorance. There are hundreds of such neglected species and projects out there. As zoos have so dramatically improved their image with the enormously successful *in situ* conservation projects, perhaps species such as these have a much better chance of survival.

The Conservation Reserach Group of Kochi, an Indian AZE member has initiated action on three AZE freshwater fishes (*Crossocheilus periyarensis*, *Lepidopygopsis typus* and *Hypselobarbus periyarensis*) occurring in an AZE site, the Periyar Lake -Stream System, and two AZE fishes (*Horlabiosa arunachalami* and *Homaloptera santhamparaiensis*) in Santhampara, in Kerala. The endemic fishes are threatened from various factors including the most deadly of them all, the alien exotic fishes. CRG along with the support of the Indian AZE and ZOO, and funding from the Critical Ecosystem Partnership Fund, is working with all stakeholders to ensure zero extinction in the AZE site.

Organisations in India who are interested in becoming members may visit the Indian AZE website for more details. Organisations and individuals wishing to join in the conservation efforts of any of the above species, or wishing to start action on other AZE species may write to <herpinvert@gmail.com> or <zooreach@zooreach.org>

AZE also runs national alliances in Colombia, Mexico, Brazil as well as India.

The Alliance for Zero Extinction <www.zeroextinction.org>
The Indian Alliance for Zero Extinction <www.zooreach.org/indianaze/indianaze.html>