

AMPHIBIANS: NEGLECTED CLASS OF VERTEBRATES IN ZOOS

Rathinasabapathy

There are about 205 species of amphibians in India (Dutta, 1992). Field studies have reiterated that habitat destruction and water pollution are the main causes for the decline of amphibian population (Inger and Dutta 1986). Zoos are the ideal place for breeding amphibians. Biological aspects like breeding, growth rate and maturity can be studied by observing them in captivity. Today amphibians are used in research laboratories, schools and colleges more frequently than other animals. *Hoplobatrachus tigerinus* is one of several species used for this purpose. But strangely very little is known of the details of their life except for a few species. The aim of this paper is to emphasize the need of keeping amphibians in captivity for conservation and education.

As per the Indian zoo directory prepared by the Central Zoo Authority (1994), there are about 334 zoos in India. None of the zoos have amphibian exhibits. This is mainly due to the following reasons.

1. Amphibians are not considered worthy enough for an exhibit as they are less attractive and so unpopular with the public.
2. Lack of realization is another reason. Many Zoos do not realize that amphibians can also be part of the zoo's collection.
3. People are often interested to see larger animals rather than small creatures and
4. Exhibiting in a terrarium and simulating the natural habitat is thought to be a difficult task.

There are several advantages of keeping amphibians in captivity. Acquiring animals is easy. Only species like Himalayan newt or salamander are listed in the schedule -II and the fresh water frog *Rana* sp. listed in the Schedule IV of the Wildlife Protection Act (1972). Exhibiting amphibians is very easy, handling is not a difficult task, cost wise much lower than the other class of animal and maintenance is not a problem.

Lesson from Jersey Zoo

Western zoos give importance to lower vertebrates and invertebrates as much as the higher vertebrates. Jersey and Chester Zoos, which I visited last year, have exhibited some of the endangered amphibians. The Jersey Wildlife Preservation Trust (JWPT) has successfully established captive population of many endangered lower vertebrates as an insurance against possible extinction. Some of the notable amphibians are the Jersey agile frog, Mallorcan midwife toad and the blue poison arrow frog. The programme aims to captive breed them for possible reintroduction to wild and to encourage other zoos to breed and display native animals as part of their conservation and community education programme. In 1994 JWPT has started the "model frog" exhibit for the species *Dendrobates auratus*, *Colostethus triniatus* and *Alytes* sp. During 1995, this helped in setting up terrarium for the Blue poison arrow frog, *D. azureus*, an en-

dangered species from the Surinam. Now the JWPT has successfully bred four species of frogs and has organized exchange programme with other Zoos. Setting up a terrarium may be an easy task, but getting a skilled person is a major problem. This can be rectified by sending curator/ keeper for a training programme. Later, they can be involved in setting up terrarium for amphibians.

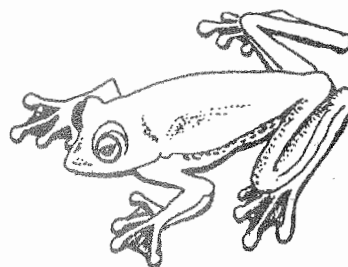
Present situation in Indian zoos

In India zoos have not made any attempt to display amphibians. According to IUCN Red Data Book, world wide there are about 53 species of amphibians listed in the endangered category. Of the 205 species reported from India, 3 species are included in the IUCN Red data book. It is time for us to realize their importance and adopt captive breeding programmes for some of the endangered and common amphibians before they vanish. The main requirement is good husbandry techniques, knowledge and simulating natural vegetation in a terrarium according to the habitat of the species. Species of the genus *Hyla*, *Bufo*, *Rhacophorus* and *Rana* are of interest to keep in Zoos.

REFERENCES:

- Dutta, S.K. 1992. Amphibians of India: Updated species list with distribution record. *Hamadryad*. 17:1-13.
- Inger, R. F. and Dutta, S. K. 1986. An overview of the amphibian fauna of India. *J. Bombay Nat. Hist. Soc.* 83(suppl.): 135-146.

* Biologists, Coimbatore Zoological Park, Tamil Nadu.



FRAWG