

## **Numb3rs & AAEPsA -- Amphibian Ark Education Programme South Asia (pron. ape-sah!)**

Have you seen the American crime drama Numb3rs ? It is a wonderful weekly fiction based on facts about how crime specialists now use math ... numb3rs ... to solve crimes. This, is, of course, higher mathematics, computer simulations, projections, etc. which they employ to predict what a particular criminal will do or where a victim will be, etc.

Conservation science also depends on math ... numb3rs ! We use arithmetic -- simple counting -- the numb3rs of individuals in a population, the numb3rs of populations in a locality, state, country, or region and then the whole earth. We use these numbers and math to compute the rate of decline of populations, and computer simulation models to predict the probability of extinction of a species.

Conservation always has been a serious proposition, but now -- with the amphibian crisis -- it has become mega-serious. We are in danger of losing one of our largest taxon groups. Amphibians numb3r 5800 in the world (that is, the known species) and 350 in South Asia, again ... the known species. In the last 5 years 60 new species have been discovered in South Asia. In theory -- strictly in theory because we don't know this -- that means there are 5800 potential cures for cancer, MS, AIDS; relief for various other conditions; instructions or guideposts for quality of life innovations in science. Species are important. Without species' direction and species' products we on Earth would be far less comfortable and safe than we are today. Species -- which ones we don't know -- may provide so many life and quality of life -saving and improving instructions and products. The amphibian crisis is probably the first of many crises we will see in the next few decades.

There are those individuals who take this seriously and worry and act according to their various belief systems regarding extinctions, global warming, holocaust theory, etc. There are others who do not take it seriously, quoting extinctions past and global extinction history back to the early days, when the Earth survived another era of temperature change. Both groups have one thing in common which is that they rely on some scientific facts and also some beliefs, the latter of which (beliefs) are compelling, but not facts. There are two facts that seem to me to be indisputable, e.g., i) climate IS going through a change (anyone can FEEL that and get confirmation from following weather on the news and from **numb3rs** . . . temperature readings), and ii) species ARE declining (this is also possible to know by following the **numb3rs** reported by different agencies and institutions studying species all over the world).

Given that one accepts these "indisputable" facts (well, they are indisputable to ME, anyway), one then has to query whether one can do anything about it. This also brings about choices of actions. Either you believe that you CAN make a difference and that difference, combined with actions of others, will permit the Earth, or the human race, or a modicum of species, etc. to continue in such a way that life is worth living, or you don't believe your actions will have such a result. Or you believe that your efforts and those of others will NOT make a difference and that we are doomed to failure because things have gone too far.

I want to share my own belief system which I acquired here in India which is that it doesn't matter whether I believe the alarmists and pessimists or or the pie-in-the-sky optimists. What matters is doing my duty. **It is our duty to make the world a better place to live, no matter our or the Earth's life span.** Duty is important for all of us who want to be good "citizens of the world" (thanks to Zafar Futehally for that term).

Having established that, here is what ZOO and our partner WILD is going to do. We are going to do our duty, which is -- in the present context -- make an effort to convey the seriousness of the amphibian crisis to as many people as possible, and suggest (when we can think of them at least) ways that the common man or woman -- young and old, rich or poor, city or country -- can at least spread the word of amphibians' plight and its meaning to the greater issue of survival for all.

For that we are going to take the Amphibian Ark AArk a bit further with a special education programme called -- **AAEPsA -- Amphibian Ark Education Programme South Asia (pron. ape-sah!).**

In this programme we will focus on the CBSG and WAZA programme Amphibian Ark with respect to public education - not just in zoos but in field and forest as well. We will develop a series of educational materials which can be used by anyone who wants to educate in South Asia. We will use facts and figures from AArk supplemented with regional South Asian information from the Amphibian CAMP and GAA, as yet unpublished. Although the report of this complicated workshop has not been published as such, information is there for us to use about all species in South Asia. This information was generated by a group of 52 South Asian field biologists working together in a combined effort of IUCN SSC's Global Amphibian Assessment conducted simultaneously with CBSG's Conservation and Assessment and Management Plan CAMP workshop for South Asian amphibians. This workshop was held in 2002 and the output will be going up on the ZOO / WILD website TTMS Threatened Taxa Monitoring System <[www.southasiantaxa.org](http://www.southasiantaxa.org)>. In this interactive website, amphibian biologists who have conducted field surveys since the workshop can continue to contribute new information and the species will be re-assessed one by one as and when new information comes in, if it seems to be of a measure to affect the IUCN status, or to give wildlife agencies, forest managers and others a better insight into the plight of individual species. That is a few weeks in the future. For now, we are publishing next page the information from the AArk website so you will know what is there and be inspired to access and click on all the wonderful Powerpoint presentations and scientific articles which AArk has made available. **By Animal Welfare Fortnightly our education wing SAN-IZE will have some more published material for you.** If you want to publish your own we will share our current packets' art work with you via email attachment. Just write and inquire. The only payment required is to credit the artist and organisation (Sanjay Molur and ZOO) and send us a few copies of your work.