

Living National Heritage - species whose survival depends on the action of a single nation ... <http://Intreasures.com/>

Half of all animal and plant species live in a single country and nowhere else.

Often less familiar than a country's cultural wonders, these living national treasures are similarly important as irreplaceable parts of a nation's heritage.

This site highlights those plants and animals whose survival depends solely on the actions of a single nation.

Dear Readers:

A VERY old friend of ZOO Fred Swengel has spent the last two decades researching a very interesting and relevant topic, that is those taxa which are restricted to one country and dependent for survival on the concern and ability of that country to protect them, or at least not destroy them. Fred has now just uploaded his work onto a website :
Url is <http://Intreasures.com/> for all 212 countries. Url for India is <http://Intreasures.com/india.html> in case you want to go right to that.

In addition to the actual theme, which is of crucial importance, there is much of interest to anyone searching the web for global information which would help with a number of searches. For example the CIA World Fact Book, produced for public usage and updated every two weeks. Just check it out — <https://www.cia.gov/library/publications/the-world-factbook/index.html>. Or, Wilson and Reeder's 3rd edition of Mammal Species of the World <http://www.bucknell.edu/msw3/> where you can get a convenient on-line reference for identifying or verifying recognized scientific names and for taxonomic research. That is only two of the great tools Fred has used in creating this unique website.

Knowing what species are both threatened and limited to one country has vast range of possibilities for education, lobbying, prioritising actions and thus for pushing hard for more and better protection for these species and might even promote Peace on Earth ! Anyway we will use this information in a myriad of way in our various education and conservation activities. Enjoy this site. I certainly am! Sally Walker, Ed. Em.

About Fred Swengel and the site development

Fred Swengel is 52 years old; he graduated from the Zookeeper Training Course at Santa Fe Community College (Gainesville, FL) in 1977 and obtained a B.Sc. in Zoology at Northern Arizona University (Flagstaff, AZ) in 1979. He lives in St. Paul, Minnesota with his wife who is a veterinarian and two teenage children. He started as a zookeeper in the Tropics Department of the Minnesota Zoo in 1979 until last year when he transferred to the Northern Trail section of the zoo due to the opening of a new

exhibit on the wildlife of Russia's Far East where he works with Brown Bear, Amur Tiger, and Amur Leopard among other species. Fred's two decades assessing 75,000 taxa (at species, genus, and family level) for endemism without time off from work, or a grant or anything must have put a strain on family relationships but both Fred and the family survived and we are reaping the benefits of this monumental work.

It gives me great satisfaction to report that the origin of the project had an Indian connection. Fred had started a project called Friends of Amphibians of the Western Ghats FRAWG in which ZOO was a major player, which in turn descended from another project which was of the publication of a checklist on the endemic vertebrates of the Western Ghats. Fred had published this in 1991 in the Nilgiri Tahr Regional Studbook of which he was Studbook Keeper for many years. *That* checklist resulted from a visit to Western Ghats (Eravikulam, Anamalai, and Mukurti) in 1990 following a conference in which Zoo Outreach Organisation was a co-organiser and planner of the symposium which invited Fred to give a presentation. You can see how we at ZOO might feel quite proud of our indirect but significant role in this project !!!

Fred also compiled a database of the world's amphibians with their ranges for the International Species Information System which was then based at Minnesota Zoo. He generated a list of single nation amphibian endemics from that database and noted with fascination that the Western Ghats were the sole home of 2% of the planet's amphibian species. This fascination provoked a lot of thinking about compiling similar databases for the other vertebrate groups. By that time, late Dr. U.S. Seal, Chair, Conservation Breeding Specialist Group also camping at the Minnesota zoo, came to know of his work in this area. Ulie tasked Fred with compiling lists of the endemic vertebrate species for Guatemala, Costa Rica, and Panama to use in CAMPs in those countries which further inspired Fred to tackle the whole world.

He created initial databases for mammals, birds, and reptiles early on in the project, but was long hampered by the lack of a comprehensive fish checklist. After finding a FishBase cd in 2004 he

could get on with the project, picking an authoritative source for each group and finish the website before each source became hopelessly outdated.

Fred's reasons for creating the website and even for being a zookeeper are indebted to his life long fascination with wildlife. He says "Working as a zookeeper gives me a unique opportunity to know some of the world's most spectacular animals as individuals with all their own personality quirks. It also has made me care on a much more personal level that their wild relatives have a future in a world where the threats to their survival seem to be constantly increasing."

The popularity and availability of the World Wide Web made it possible to make the information on what animals and plants were dependant on a single nation for their survival available to a large audience, which served as a further stimulus and incentive for Fred.

Much of this data had either never been assembled or was not in a format accessible to the general public.

Fred has written each country overview page with an audience of that nation's citizens in mind. He has, he

says, also tried to provide abundant links to some of the spectacular resources on the Web – this is the understatement of the year !

Fred says he has always felt that a nation's living things are at least as important as its cultural treasures such as the Platypus as opposed to the Sydney Opera House ! The Living National Treasures website is Fred's way of trying to share that vision. He has done all of us, both human beings and non-human species a great service and to say that is also a tremendous understatement.

This project is just the tip of an iceberg of intellectual pursuits and tasks devolved upon Fred Swengel. I don't claim to know even a fraction but I do remember one particularly horrible one which was Fred's mandate (another task for Dr. Seal and CBSG) to compile a Directory of the world's zoos. Fred did a wonderful job on this and continued to add to it for some time.

You can write to Fred at fbswengel@yahoo.com if you have questions or thanks.

Note : Opportunistic Scavenging by Lesser Bandicoot *Bandicota bengalensis* (Gray & Hardwicke) in Gulab Bagh Zoo, Udaipur, Rajasthan Satish Kumar Sharma*

On May 12, 2008, while inspecting cages of the zoo, amidst Gulab Bagh, Udaipur, Rajasthan, I found that some nocturnal, Lesser Bandicoots (*Bandicota bengalensis*) were freely sharing food in broad day light with caged animals. They were pilfering grains of maize and *bajra* from the "walk in aviary" and *pakshi-ghar* (bird house). While observing birds of *the pakshi-ghar* through wire mesh, I noticed a fullgrown *Bandicota bengalensis* lifting and carrying a big piece of flesh of a fish towards its hole. After lapse of few minutes, I noticed one more rat pilfering a big piece of flesh in the same manner. A third rat was seen feeding on a big piece of flesh in open space. Since the piece was heavy, hence it was not possible for the rat to pull it to its hole like others.

Greylag Goose (*Anser anser*), Comb Duck (*Sarkidiornis melanotos*), Common Coot (*Fulica atra*), Great White Pelican (*Pelecanus onocrotalus*), Spot-billed pelican (*P. philippensis*) and Greater Flamingo (*Phoenicopterus ruber*) are the species kept in the *pakshi-ghar*. Besides grains and leafy material, fishes and fish pieces are also offered to the birds everyday. Lesser Bandicoot share both vegetarian and non-vegetarian food with resident birds. The caretaker of the exhibit told me that Lesser Bandicoots regularly feed on flesh of fishes in *pakshi-ghar* and also the flesh of buffalo in cages of carnivorous animals.

The Lesser Bandicoot is normally a nocturnal rodent which feeds on grains, succulent shoots, roots, leaves, tubers and fruits (Roberts 1997).

Though, primarily the Lesser Bandicoot is a vegetarian rodent, it also feeds on Fiddler Crabs *Uca* spp. and Fresh Water Crab *Paratelphusa spinigera* (Roberts 1997). Feeding on flesh of fish and buffalo is an addition to its known diet. In Zoos, this rodent behaves like a diurnal creature (Sharma 2006) and becomes an opportunistic flesh eater.

References :

- Roberts, T.J. (1997). *The mammals of Pakistan*. Oxford University Press.
Sharma, S.K. (2006). Diurnal feeding behaviour of Lesser Bandicoot Rat *Bandicota bengalensis*. *Rat- a - tattle, RILSCINSA Newsletter*, 6(1):6.

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