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Table of Contents

| • | Video of the ARCO-Nepal project now on YouTube | 1 |
|---|---|----|
| • | Turtle survival is becoming just a question of extinction? | 2 |
| • | Your donations helped to finalize anti-escape fencing for our turtle sanctuary! | 5 |
| • | The Education Centre still can be finalized and awaits your contribution | 7 |
| • | Kechana Jhil and Kechana Kalan – important cultural place and turtle wetland habitat | 8 |
| • | One more book to help Nepal' s peoples in cases of snakebites, education and for proper snake identification! | 9 |
| • | First release of captivity bred turtles at Chitwan National Park | 10 |

Video of the ARCO-Nepal project now on You Tube

Every Euro or Dollar is wanted for crowdfunding! Please go to:

http://www.youtube.com/watch?v=LWZtEJkv90I

Turtle survival is becoming just a question of extinction?

Several excursions to potential turtle habitats were carried out in summer this year (2014) by the ARCO-TRCC repersentative Nabin Bhattarai and yielded most updated information on the conservation status of turtles in an area of SE Nepal.

A place visited amongst others is situated about 20-25 km SW of the TRCC project area. This, Chillagad lake, is seen as a natural lake for very many years and also a holy place for Hindu people. There is a lady priest (see photo below) who is worshipping daily since 2025 BS (1968), according to her there were 4 types of turtles but these days there is only one type *Lissemys punctata* surviving. At the beginning of her duty, there was a very dense forest and she added that at that time there lived tricarinate hill turtle (*Melanochelys tricarinata*) and yellow headed turtle (*Indotestudo elongata*) in the surroundings.

Close to this particular locality runs Kankai mai, a big river system of east Nepal after Koshi river, which is only 500 m far from this lake so there might be chances to discover other species too what needs more frequent observation.







ARCO Veröffentlichungen - Newsletter 08, September 2014



This is the place where Lissemys punctata and Indotestudo are kept for their own interest only. But they told that they received some money from animal catchers (actually poachers) when those people want to kill turtles for their flesh. They kept Lissemys in small ditch shown below and Indotest*udo* in an enclosure together with guinea-pigs and rabbits, and they used to feed rice to both mammals and turtles.





I myself found *Lissemys* still more abundant during my field trips but this was the first time I saw *Indotestudo* (except Chitwan NP and TCC Bhadrapur). I tried to convince them to give that tortoise to us but still decision is pending as they requested some money from us.



Another but not live record was the 5 year old shell of an *Indotestudo* which was found in a settler's house at Kankai river bank. The house owner told me that he has collected from the local poacher, he also added that the poacher collected it from the Jungle which is 4-5 km distant. According to their experience the population of the *Indotestudo* is sharply in decline these days that is due to overcollection and habitat destruction by deforestation and losses of bushy area in the forest.



We are very grateful and pleased to mention donations (alphabetically) by

Gifkins, Mr.&Mrs



This school girl is carrying the shell of a *Lissemys*. Her father killed this species a week before when he found it on his paddy field ploughing for plantation. I have convinced the girl's mother and finally she donated it free for teaching and demonstration purpose at our TRCC lab.

I have visited many places of Jhapa district and adjacent districts, sometimes I saw live *Lissemys* but too often only their shells in hands of local people – testimony of being used as food item.

Concluding these observations means here in Jhapa, there is very much emerging danger to *Lissemys* and this species is being first choice of poachers for its meat.

We must focus on this species also in our conservation issues because it might be much depleted in number or even lost within future years in Nepal.



;;;URGENTLY NEEDED!!!

Your collaboration and donation for realizing the final fencing of the whole BudoHoli - TRCC

We need general <u>security fencing</u> for 170 meters with several courses of brick from ground level,

Herpetofauna Foundation

Pichler Mario

Pandey Prasad

Rutherford Douglas

Turtle Survival Alliance Europe



Two of the ponds built in 2014 at the TRCC





The new tortoise enclosure at TRCC



The tortoise enclosure in its final stage, being fenced and supplied with drinking water dishes, sand baths and natural vegetation ready to receive *Indotestudo* and *Melanochelys tricarinata*



Two of the three finalized artificial ponds measuring each approx. 40-60 sqm below.



All photos: NabinBhattarai / TRCC-ARCO-Nepal

The Education Centre still can be finalized and awaits your contribution



Shown is the existing former picnic shelter which needs a new roof and horizontal beams for supporting the panels

we need EUR 5.500.-

We need EUR 2.500.-

... for restoring the building and preparing it with beams and panels for fixation of the 32 weatherproofed 100 x 100 cm posters for in- and outside

..... and we need another

EUR 3.000.-

.....for the nature path at our TRCC with 20 posters and roofed metal stands on the amphibians & reptiles of Nepal



The TRCC-

Education Centre

with following units:

- Exhibition
- Didactical Nature Walk
- Mobile Education Unit

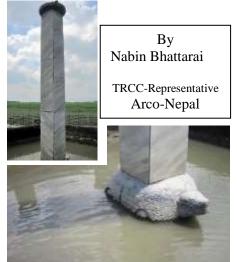
The physical units of the education centre shall be realized by

- Conversion of the existing Picnic shelter into an Education Centre
- Didactical open air course with explicative panels at the tortoises' reserve
- "Travelling suitcase" with information material to be brought to schools in Terai
- A mobile education unit set up in a suitcase to be used at the various schools and institutes containing the exhibition parts with its general information for education and conservation

Thirteen panels of $100 \ge 100$ cm will fit inside the first hall and four more in the entrance area. And another thirteen will be mounted outside – all of them telling the Natural History of turtles of Nepal also its significance in para-medicine, religion and superstition.

Kechana Jhil and Kechana Kalan important cultural place and turtle wetland habitat

This Kechana Kalan is the border place to India and the lowest altitude (58 m) of Nepal. Wet land is seen on the periphery of this area. At this place a pillar had been constructed during the regime of King Mahendra. The pillar is placed above a turtle shell. Some local people told that the turtle and King both are symbolic forms of god Vishnu. So the king has set such monument in this area as others told that this is the place for turtle and so he kindly establishe that construction. King Mahendra also gave his name to the famous King Mahendra Trust for Nature Conservation (KMTNC). During my visit, I was talking to more than 30 persons about the wetland of Kechana area and its situation for turtles.



In the past there was a very big natural pond at Kechana a small market place. Now this natural pond is divided into 7 big and 2 small ponds for fish farming by the Village development committee (VDC). This is the boarder market at the Indian frontier and lies 3 km S and 1 km E.

Nowadays turtles are sold at this market only occasionally but it was a regular item 7-8 years before. Local fishermen of this area stated that Lissemvs punctata and Melanochelys trijuga can be found in this natural pond (according presentation of ARCO's turtle poster for identification). Also Nilssonia hurum and gangetica are thought being still common species in the 5-6 ft deep Mechi river. But this is not a confirmed result however we hope that there are still chances for these species to be found in that area, what also had been documented by Prof. K. Rai.

Five contacted persons from that area promised to collaborate informing us when fishermen collect those turtle species.

Nowadays the turtle situation is deteriorating in Kechana Kalan because most of indigenous people living here collect and eat the turtle whenever they can find. But happily the collection frequency is very low in these days. Except Muslims all people kill turtle for meat as food item.

For our TRCC at Sanichare some aquatic plants including big sized lotus (Nelumbo) were transferred form here and visits will continuously be repeated.

For the future we are planning to realize awareness programs for local people about turtles and their importance. I think that after such educative inputs killing of turtle can't be avoided but it may help us to rescue specimens of Nilssonia hurum and gangetica.

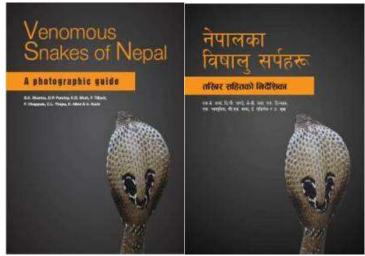


This lake needs some conservation issues for being protected for its unique wetland habitat as more as it is regarded as cultural place, too. Nevertheless locals are searching for food at its premises including also protected turtle species.

One more book to help Nepal' s peoples in cases of snakebites, education and for proper snake identification!

VENOMOUS SNAKES OF NEPAL

Snakebite envenoming is one of the most neglected diseases of the 21st century and affects several million people every year. It is most common in tropical and subtropical regions where it is an occupational disease of the young rural poor population and a disaster-related health hazard (e.g., after extreme weather events like floods). Children are highly vulnerable and especially severely envenomed. The morbidity and mortality or long-term disability of young people that is caused by snakebite envenoming has profound socioeconomic consequences for these developing nations. In many countries, snakebite envenoming is also a true disease of poverty in the sense that it mostly affects the poorest of the poor, and further perpetuates poverty by causing treat-



ment costs, loss of income during illness or due to disability, or the death of a family's bread-earner.

One of the most fundamental impediments to improving the management of snakebite envenoming is ignorance of the species of snake that cause bites. This has, for example, resulted in the production of therapeutic immunoglobulin preparations (antivenoms) that cover an insufficient number of species, or regionally irrelevant species. Ignorance of the local venomous and non-venomous snake species is also at the root of the indiscriminate killing of any snake that is widespread in countries where snakebite is a problem. This in turn can lead to ecological problems such as growing populations of rodents that eat crops and transmit diseases but are normally controlled by predators like snakes. Finally, most people do not know what to do if they are bitten by a snake, or believe in ineffective and often harmful "first aid" measures.

As part of Swiss and German cooperation with Nepal, a team of biologists and physicians from the three countries has prepared a book on the venomous snakes of Nepal that is the first to help identify these dangerous reptiles based on photographs and text in separate Nepali and English editions. The book also contains information on snakebite first aid and treatment. This information is countryspecific and reflects the present state of scientific evidence on this topic in the Nepali context. While part of the information and recommendations given have general validity, readers should bear in mind that others may apply to the situation in Nepal only, or may change over time as new evidence becomes available.

Project leader: Dr. Ulrich Kuch

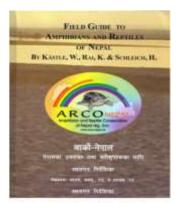
Additional authors of the book:

Prof. Sanjib Kumar Sharma, B.P. Koirala Institute of Health Sciences (Dharan, Nepal)/ Prof. Karan Bahadur Shah, Natural History Museum, Tribhuvan University (Kathmandu, Nepal) / Frank Tillack, Museum für Naturkunde (Berlin, Germany) Prof. Dr. François Chappuis, Geneva University Hospitals (Geneva, Switzerland) / Dr. Chhabilal Thapa, Sindhuli District Hospital (Sindhuli, Nepal) / Dr. Emilie Alirol, Geneva University Hospitals (Geneva, Switzerland)

Free electronic copies of the book (4.1 MB) are available for download here: http://www.bik-f.de/root/index.php?page_id=77&projectID=55

The new **ARCO-NEPAL Field Guide (2013) about reptiles and amphibians in Nepal** - don't miss it! With *identification keys and distribution maps, Size A 5, 625 pages, 52 pl./156 color photographs,* **177 maps, over 1000 black/white illustrations, Nepali & English** Published by ARCO-Nepal reg.soc.

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First release of captivity bred turtles at Chitwan National Park

Five captive Elongated Tortoises, *Indotestudo elongata* were released in Chitwan National Park on the occasion of "World Biodiversity Conservation Day of 22 May 2014" with the presence of students of primary school level. The released tortoises hatched in different years (see table below) and were reared at a separate enclosure managed with a semi-natural habitat at the Gharial & Turtle Conservation Breeding Center (GTCBC) Kasarah of Chitwan National Park.



Soft release enclosure

Tortoises were not released directly into the forest area, but they were transferred into a small soft release open air enclosure at those parts of forest areas where shrubs, herbs and fruit trees (if fruits falls from the tree they additionally can feed on it) grow. For hiding purposes there exists a naturally uprooted hollow trunk so they have adequate facilities to adapt to natural conditions. The soft release enclosure consisting by its proper own natural habitat (GPS location 0237055, 3049399) lies in an area close to south at GTCBC in part of a Sal (*Shorea robusta*) forest. Tortoises were individually measured, weighed and photographed (front/dorsal and ventral side) before release. They were transported in cardboard boxes to the release site. They ought to remain there for adaptation in that enclosure and in time they will break through that provisional enclosure by themselves to escape completely into their natural habitat. These enclosures are made up of Elephant grass (*Nerenga porphyrocoma*) and size of this enclosure was 10 x 6 m where they remained for 2 weeks and finally freed themselves through broken parts into the wild on 4th June 2014. Now we hope they will adapt well into the natural conditions at Chitwan National Park.

Following table: (IDS = Individual data sheet as practiced by ARCO)

ARCO Veröffentlichungen - Newsletter 08, September 2014

| Hatching year Measurement (cm) | | | | | Remarks |
|--------------------------------|--|---|---|--|---|
| | Carapace/ | | Plastron | | |
| | length x width | | length x width | | Kg. |
| 2005/064 | 19 | 15 | 12 | 7 | 0.50 |
| 2005/064 | 18.5 | 14.5 | 11.5 | 6 | 0.50 |
| 2006/063 | 22 | 16 | 13 | 8 | 0.90 |
| 2005/064 | 18 | 14 | 11 | 7.2 | 0.55 |
| 2005/064 | 19.2 | 14.2 | 12.5 | 7.0 | 0.60 |
| | 2005/064 2005/064 2006/063 2005/064 | Carap length 2005/064 19 2005/064 18.5 2006/063 22 2005/064 18 | Carapace/ length x width 2005/064 19 15 2005/064 18.5 14.5 2006/063 22 16 2005/064 18 14 | Carapace/ length x widthPlastre length2005/0641915122005/06418.514.511.52006/0632216132005/064181411 | Carapace/ length x widthPlastron length x width2005/06419151272005/06418.514.511.562006/06322161382005/0641814117.2 |



Enclosure site selection was chosen where there was that uprooted hollow trunk in natural condition and wild fruit tree of Tatari (*Dillenia pentagyna*) are available. This is to help tortoises to hide underneath that hollow trunk and to feed on fruits when fallen from the tree inside the enclosure. According to our observation tortoises feed on mature fruits of *Dillenia pentagyna*. We manage also to provide additional food Pumpkin (*Cucurbita pepo;* mature yellow colour and sweet taste) and Chickpea (*Cicer arientium* being soaked one day before offered) from first day until final escape from enclosure.

By: Bed Bahadur Khadka; Assistant Conservation officer, Chitwan National Park. Email: <u>bed.khadka@gmail.com</u>

We are excited and grateful for a slowly growing list of donors that are supporting Turtle Conservation in Nepal

Without your generous donations, we would not have already achieved what has been done so far. We would like to express our acknowledgment and

THANK YOU!!!

(mentioned below are donations received of 200 EUROS and more)

British Chelonian Group

Herpetofauna Foundation, NL

W. Kaestle

NBSV Nederland

H.M. Pichler

Van Rossem

Rutherford, Bristol

Studbook Foundation, Klaaswaal

Turtle Survival Alliance Europe



Please write us your opinion on our conservation issues at email: arco-nepal@t-online.de

or to Prof. Dr. Kaluram Rai (drkrkhambu@gmail.com) - Or simply post it on facebook at arconepal and find more about our project at Youtube!!

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A publication of ARCO

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