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A Retrospective with enormous thanks and appreciation acknowledging past efforts and future sustainability dedicated to our Honorary Member

Mario Herbert Pichler

On 15th December 2020, our Vice-President Mario Herbert Pichler received the German "Bundesverdienstkreuz", the German Federal Cross of Merit. One receives this highest ranking merit for especial efforts in political, economical, cultural, philosophical or in honorary engagements.
It was granted to recognise his great efforts for ARCO-NEPAL in development aid for international collaboration, culture and scientific advances.

Arco-Nepal is extremely proud about having Mario as Vice-President, more so as greatest sponsor for the construction of our TRCC in Jhapa, creating employment for local collaborators and paving the way economically for most of the activities being realised by our Society during the last decades.

Photo credit: City of Buchloe, Germany

Mario Herbert Pichler and life partner Marlene Greil (in centre), left Mayor R.Pöschl and Ex-mayor J. Schweinberger (photo: https://www.kreisbote.de/lokales/kaufbeuren/gesundheitsministerin-huml-ueberreicht-herbert-pichler-das-bundesverdienstkreuz-am-bande-90150192.html

As president of Arco-Nepal and close personal friend of Mario for over thirty years, I feel much pride in our friendship that started with "real war and hard combat" in sport when we both met for years playing in squash tournaments.
Often Mario won but it strengthened my warriorship in fighting and we gained friendships which still exist.

Mario is one of only three honorary members of Arco-Nepal.

This is definitely also the moment to repeat grateful thanks and appreciation and acknowledge all the friends, members or donors and helpers who have contributed to the achievements of Arco-Nepal as a small registered association.
All acknowledgments are listed and mentioned at the entrance gate of Budo Holi Turtle Rescue & Conservation Centre in Jhapa. Hopefully not forgetting anyone from the beginning of our news letters in the year 2012 to the signing of our MOU for constructing a first international non-governmental Conservation Centre in East Nepal (now TRCC Jhapa).

Of course others must be mentioned, close friends and collaborators who enabled all the publications, support for financing master and Ph students, constructions of parts of our rescue centres, publications of books, newsletters and any other material (alphabetical):

AEG-ID, Aquarium Roquetas, Dr. C.C. Anders, Dr. M. Baur, British Chelonian Group, W.D. Dziakonski, European Studbook Foundation, Dutch-Belgium Turtle Society, Gifkins, E.,D. Giri. Herpetofauna Foundation, Prof. Dr. R. Hoffmann†, Idea Wild, Dr. W. Kästle (ex-honorary member)†, Kiesl, L., J.M. Linde-Rodriguez, Dr. T. M. Maskey†, NBSV, Oasys Parque Tematico, Dr. Oefner, S., Rutherford, D., Tovar, D., TSA Europe, Prof. Dr. K.R. Rai (honorary member & Nepali country representative), Prof. Dr. N.K. Rai (Ex-ambassador), R. van Rossem, H. Zwartepoorte†, and all other SUMMEF delegates without whose help we never could have developed the first municipality supported TRCC in Nepal.
If I have forgotten others – I apologise.

We received great interest from many international well known societies including invitations for presentations on congresses – but regrettably no financial aids and consultations received. But Arco-Nepal did it its way although sometimes we got the feeling that it was to stake claims and limit competitions or interest from other fast grown and well financed societies.

We had and still have the backbone for our altruistic society – our members, friends and institutions to support us.

I just want to say:

Thank you my dearest friend MARIO HERBERT PICHLER for all what you did for our research and conservation efforts in Nepal, a country you never visited yourself.

Dear Mario,

I and the whole Arco-Nepal family wish you a long and healthy life, great continuous future sportsman ship and all wished with the hope to have you for ever as much appreciated vice-president, advisor and great friend on the board of our Arco-Nepal reg. soc.

Most cordially embracing you

Hermann Schleich

Is *Batagur kachuga* extinct from Nepal?

Introduction

Batagur kachuga (GRAY, 1831), the rainbow of the turtle world is a freshwater turtle endemic to South Asia. It is popular with the name Red-crowned roofed turtle. Some also call them Bengal roofed turtles while others Painted roofed turtles. They inhabit deep flowing freshwater rivers with terrestrial nesting sites. They mainly consume water plants. Despite the extensive historic range of *Batagur kachuga* in Nepal, India, and Bangladesh; it is rarely found.

Distinguishing characteristics

It is one of the most striking turtles in the world. At the end of the rainy season, males develop a spectacular courtship coloration of bright red, yellow, white, and blue colours on their head and neck. This colour combination can only be seen in a painter's pallet. As a result, this makes them unique and beautiful.

Fig. 1. Female *Batagur kachuga* and head of the male during the breeding season (bottom left)

Its head is moderate in size with a slightly prominent snout and has fully webbed digits. The smaller males have a maximum shell length of 29 cm, width of 22.1 and height of 10.9 cm. Males are almost half the size of females but have longer tails. Females weigh approximately 22 kg while males weigh only 3.1 kg (SCHLEICH, 2012). Females can grow up to the carapace length of 56 cm and lay eggs with a clutch size of 11 to 30 in April and March.

Conservation status

They are under maximum threat for extinction and is considered Critically Endangered in IUCN (International Union for Conservation of Nature and Natural Resources) and listed in Appendix II in

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). In Nepal, they are under the category of Vulnerable species.

They were thought to be widespread in western and central Terai of Kailali and Chitwan District respectively, but now no proven records have been found there. According to BHUJU et al. (2007) Narayani- Rapti section, which is also the lifeline of Chitwan National Park is believed to provide optimum habitat to *Batagur kachuga*.

CHETTRI et.al, (2013) have mentioned *Batagur kachuga* from Koshi Tappu Wildlife Reserve but its occurrence is not verified. According to ARYAL et al. (2010), the species is supposed to occur in Kailali, Bardia, Nawalparasi, and Chitwan Districts but no evidence of its occurrence is given. Therefore, the occurrence of *Batagur kachuga* in Nepal still remains questionable (KÄSTLE et al., 2013).

Threats

Batagur kachuga is listed among the 25 most threatened turtles of the world by Turtle Conservation Coalition in 2018 (RHODIN et al., 2011). They are highly desired for their meat, eggs, shells, and traditional medicine. Moreover, water pollution, habitat loss, and sand mining have posed a serious threat to the species.

Due to their rareness and peculiar appearance, they are desired in the international wildlife trade market, too. Also if people find they prefer to keep them as pets. Wildlife Justice Commission (WJC; 2018) mentioned that the rare species of turtles are preferred in trade than common species. Buyers say 'the rarer, the better.

In 2017, Turtle Survival Alliance in Uttar Pradesh state of India reported confiscation of 23 *Batagur kachuga* from two poachers linked with the illegal international wildlife trade (GRAY, 2017). Those turtles were immobilized with packaging supplies and stuffed into suitcases with the purpose of selling them.

Fig. 2 & 3. Red-crowned roofed turtles packed in suitcases for illegal trading. (Photo: TSA, India)

In 2016-2018, a total of 28 Red-crowned roofed turtles were seized from wildlife traders while 306 individuals were offered for their protection by the traders in the fear of punishment Wildlife Justice Commission (WJC, 2018) report confirmed.

Conservation efforts

In 2011 to assess the status and threats of *Batagur kachuga*, a project based in Karnali River lowlands in western Nepal funded by The Mohamed bin Zayed Species Conservation Fund was implemented (Mohamed bin Zayed Species project number 11052044; 2011). This section of the river is comparatively safe for aquatic animals; but human encroachment, fishing, traditional gold extraction from banks, and illegal poaching impacted the turtles present there.

To collect reliable data on this species, now *Batagur kachuga* conservation, awareness, and education project is being carried out by Shyam Kumar Pun in Chitwan. Along with *Batagur kachuga*, *Batagur dhongoka*, another critically endangered turtle of Nepal is also covered under the project. The project has the goals of assessing the population status, distribution, habitats, and threats of the species.

Other than this, organizations like Turtle Conservation Fund (TCF), IUCN Tortoises and Freshwater Turtle Specialist Group have been supporting the research projects by providing grants mainly prioritizing critically endangered and endangered turtles like *Batagur kachuga* to support their conservation initiatives worldwide.

In Nepal, the Amphibian and Reptile Conservation Society of Nepal (ARCO-Nepal) has been working for more than two decades for the conservation of turtles. The first turtle conservation centre in Nepal was established in Chitwan National Park. Similarly, the first and only community-based Turtle Rescue and Conservation Centre-TRCC in Jhapa District is actively working for the conservation of turtles in Nepal.

Hence, *Batagur kachuga* which possesses significant importance in the biodiversity of the country balancing the aquatic ecosystem needs more attention among all conservationists, nature enthusiasts, and local people. Population status, distribution, and threat across its historic range must be urgently assessed. Proper research that helps in formulating the strategy for the conservation of the turtles for the long term action plan should be given a major focus. Otherwise, the dayis not far off, when we have to declare the species extinct from Nepal.

Acknowledgements

I would like to express my sincere gratitude to Mr. Tapil Prakash Rai, Lead Keeper and Representative of Turtle Rescue and Conservation Centre (TRCC), Jhapa for the inspiration and continuous guidance. I am also thankful to Mr. Saugat Bolakhe for his suggestions and support.

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Eureka! Rescuing of Female Elongated Tortoise

On getting an opportunity to be the Representative of Turtle Rescue and Conservation Centre-TRCC (SUMMEF & ARCO-Nepal), I have explored different wetlands and forests in search of turtles. As Jhapa is my home district, I have done repeated surveys in many forests of Jhapa. And Dahijhoda forest is one of the most surveyed forests by our team. Dahijhoda Community Forest is a large forest with an area of 746.70 hectars and this forest connects northern Jhapa with southern Ilam District.

Our team is well aware that this community forest still has wildlife hunting practices, including turtles. Recently, with collaboration of my students and local people we had succeeded to rescue one male Elongated tortoise from the area. As such I personally met with the hunter and requested him to show me the exact location where he caught that tortoise. But they denied helping us and per se we engaged in heated arguments. I emphasized them about wildlife laws but instead they threatened that we will not be allowed to do survey in the area. Later, I tenderly persuaded those local hunter men to guide us to the exact location from where the tortoise was caught.

Fig. 1: Female Elongated tortoise rescued by the team; right: showing posterior carapace damage.

On 15 March 2020 our team got a phone call from the hunter that he will spare his time for us. So we hurriedly drove to the forest and then followed the hunters into the dense forest. The prime challenge of this dense forest is of wild Asian elephants. Fresh foot prints and dung are widespread as we entered into the forest. There are cases of people being killed in this forest by elephants not long ago. Finally, the exact location was reached and information on habitat was noted. At the same time those hunters started their hunting activities. To the great surprise an Elongated tortoise was caught and more fortunate is, it

Fig.2: Situation of the Dahijhoda Forest

Fig.3: Photo of the habitat

was a female. This specimen has cracks (fig. 1) in the posterior part of its carapace. It might be due to the

stepping of elephants as there are no cliffs and highly elevated land surfaces in the remote dense forested area.

However, the hunters were not willing to handover this tortoise easily. They have a misconception that it will be sold at higher prices to zoos and to wealthy people for keeping it as pet or for consuming it as medicine. Ultimately, they were convinced and the tortoise was brought to Turtle Rescue & Conservation Centre. On bringing it to the Centre the Park´s president and manager were informed. Currently this female Elongated tortoise is hiding under leaf litters at the quarantine section. It is healthy and has augmented chances for successful breeding.

Fig 4: With collaborators after successfully rescuing of female Elongated tortoise

It was a great achievement to my team of wonderful collaborators after years of exploring forests. My special thanks go to Sabin Adhikari, Saroj Chauhan, Balika Chapagain and anonymous hunters. Similarly, I would like to thank Dahijhoda Community Forest Users Group, SUMMEF Park, Bigyan Kharel, Roshan Pahari, Ram Chandra Wagle, Bhuwan Pradhan and Nilu Phuyel.

Tapil P. Rai, Lead Keeper and Representative
TRCC (ARCO-Nepal & SUMMEF)
2020-04-05

My Experience as a TRCC Volunteer

It doesn't come as a surprise for me now when people know me more for my interest in turtles rather than my name itself. In Nepal, it's more of a trend to subdue a person by calling names sarcastically based on his unusual choices. As such, volunteering for wildlife conservation and talking in favour of animals was never an easy start. Moreover, it is a highly praised but less preferred task. Here, I'm trying to make a difference. I see it an opportunity to educate people whenever they're trying to make a mockery out of me and believe me when I tell this I've succeeded most of the time.
My name is Sabin Adhikari, a resident of Arjundhara-09, Jhapa, Nepal. I possess an academic background in Environmental Science and am currently working as full time volunteer in Turtle Rescue & Conservation Centre (TRCC). My journey with TRCC started back in 2016 A.D. when we were first invited for a volunteering.

program. TRCC, back then, was marching towards becoming a full-fledged research station and conservation centre with its new buildings and infrastructures. To be honest, I didn't know anything about turtles when I first attended the program, nor have seen any a turtle before.

The volunteering program mostly consisted of field works where we cleaned the aquatic weeds from ponds, dug the dumping site for waste management, collected the turtle food and were involved in sanitation. It wouldn't be unjust to say some major attractions of TRCC now such as hut-shaped boards containing information on Nepal´s herpetofauna were set back then by volunteers during the program.

The next part was an orientation program led forward by the representative of TRCC and indeed it came to my first formal knowledge on chelonian species of Nepal. ***'TRCC-Turtle's Club'*** was also first formed in the same time with a motive to engage students in the field of conservation. Later that month, we were invited again to attend the program and met a very special guest Miss LARISSA KIESL. Professionally a teacher, she had made all her way from Germany to Nepal to teach and educate students like us about the importance of turtles and their conservation.

I must have been highly motivated subconsciously by then. I realized it only later when we set up an information stall to disseminate knowledge on conservation of turtles and I was enjoying it thoroughly.

The journey continued since then but the programs were very limited at those times. In late 2017, I got more in touch with TRCC when I decided to do my dissertation on herpetofauna for my bachelor's degree. My supervisor Mr. Tapil Prakash Rai, also representative of ARCO-Nepal and TRCC gave me insight about our country´s world of amphibians and reptiles. Most of those times were spent searching for herps through which I got more acquainted with their cryptic and elusive behaviour, the threats they were facing and needs of conserving some species which were at higher risk. As such, turtles became my priority.

In late 2018, I took student membership of ARCO-Nepal to be officially part of the conservation program. By then, we had already conducted several programs focusing on the research and conservation of turtles. Luckily, I was the first student grantee of Arjundhara Municipality to receive fund for conducting my dissertation work based on herpetofauna. During this time I strengthened my relationship with the local bodies as well. Later, I arranged a presentation program involving stakeholders, members of surrounding community forests, local bodies and concerning authorities. I highlighted about the herpetofauna species that are at higher risk in our community and its urgency to conserve them. As fruitful as it could get, our continuous effort rewarded back us on World Turtle Day 2019, where a MOU was signed between the concerning authorities to declare Arjundhara Municipality as the first "Turtle Protected Area" among the municipalities of Nepal.

TRCC-Turtle's Club was revived under my representation. We have been conducting varieties of conservation related program. I've shared my knowledge and experience with more than a dozen school students. Through this, we are in hope to build a chain of network to disseminate knowledge to a large number of people. Besides, we also attend rescue calls from different parts of Jhapa District. This is also the most thrilling part, where we not only save a species from the possible threat but also get chance to aware local people in their community itself. I see it as open platform for those who want to learn and enhance their skill. Students from different universities also come for internship here where we're able to share our knowledge with people with different level of understanding and experiences. Apart from this, we also invite young enthusiasts to work with us to enhance their knowledge and skill. Recently, we organized the first turtle camp for students of secondary level students, which was a huge success.

Above all, it is personal development that is most fruitful to an individual. Frankly, those willing to make an income out of it are not recommendable. Those who wish to explore, learn and contribute can make the best out of them. Over all these years of involvement in conservation, when one asks what I have gained, I can proudly say I've met some of the world renowned scientists of my field, build a network of conservationists of my country and more of that I've contributed a bit from my side to make this world a better place for one of the oldest vertebrates on earth.

- *Sabin Adhikari*
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First breeding of Elongated tortoise *Indotestudo elongata* (Blyth, 1854) at Turtle Rescue & Conservation Centre, Jhapa in eastern Nepal

The Elongated Tortoise *Indotestudo elongata* is a terrestrial turtle that inhabits low to mid-elevation habitats in Southeast Asia, primarily in evergreen and deciduous forests, hills, high plateaus and mountains, grasslands and secondary forests (SCHLEICH & KÄSTLE, 2002; KÄSTLE et al., 2013; IHLOW et al., 2016; RAI, 2020). Including Nepal, its occurrence is native to Bangladesh, Bhutan, Cambodia, India, Lao People's Democratic Republic, Malaysia, Myanmar, Thailand and Vietnam (SCHLEICH & KÄSTLE, 2002; IHLOW et al., 2016; RAHMAN et al., 2019). In Nepal, it is well recorded from lowlands of Terai and some from midlands (SCHLEICH & KÄSTLE, 2002; KÄSTLE et al., 2013). The species is listed as Critically Endangered in IUCN Red List (RAHMAN et al., 2019) and is included in Appendix II of CITES. The Elongated tortoise is mainly threatened due to habitat loss, trade, collecting for pet, consumption as food, human induced wildfires and keeping in temples and houses for religious reason (SCHLEICH & KÄSTLE, 2002; KÄSTLE et al., 2013; IHLOW et al., 2016; RAI, 2017).

Turtle Rescue and Conservation Centre (TRCC) is the only community based turtle conservation centre in Nepal which was established in 2012 as a joint program of Amphibian and Reptile Conservation Society of Nepal (ARCO-Nepal) and Sukhani Martyrs Memorial Foundation (SUMMEF) in Southeast Nepal (RAI, 2017). The Centre is geographically located at 26°40'26.5"N, 88°00'56.4"E with an elevation of 147 m in Arjundhara municipality-9 of Jhapa district. At present 7 species of turtles namely *Indotestudo elongata*, *Melanochelys tricarinata*, *Cyclemys gemeli*, *Geoclemys hamiltonii*, *Pangshura tentoria*, *Nilssonia hurum* and *Lissemys punctata* are maintained at the centre.

Fig. 1. Newly constructed terrestrial enclosure at TRCC. Photo: TP Rai / ARCO-TRCC

The successful hatching happened in a above shown semi in-situ terrestrial enclosure of TRCC (fig. 1). In TRCC the courtship and mating of the Elongated tortoise (fig. 2) was observed from May to July, although IHLOW et al. (2016) have mentioned it can be observed throughout the year in captivity. During breeding

season, pink nuptial coloration on the skin around the eyes and nostril of both the sexes are visible (SCHLEICH & KÄSTLE, 2002; IHLOW et al., 2016; RAI, 2020). The adult male follows the female persistently for several hours to days and knocks her viciously with anterior shell. The receptive female exposes cloaca with averted tail and mating typically lasts for 5-7 minutes (RAI, 2020).

Fig. 2. Mating Elongated tortoise at TRCC.photo: T.P. Rai / ARCO-TRCC
Fig. 3, right. Clutch of Elongated tortoise at Bhadrapur ARCO-TCC. Photo: Kaluram Rai / ARCO-Nepal

Previously, the successful captive breeding of Elongated tortoise in Nepal has been reported from Turtle Conservation Program (TCP) at Chitwan National Park in 2004 (KHADKA, 2014). The starter group of breeders of this species was brought by ARCO-Nepal to TCP (ibid.). Another successful breeding was done at Turtle Conservation Centre (ARCO-TCC), Bhadrapur in 2007 (pers. obs. K.R. RAI). In September 2006, a gravid female Elongated tortoise laid 4 eggs (fig. 3) in the grassland of ARCO-TCC. The average size of eggs was measured 43 mm x 39 mm. After 10 months (approx.) on 15 July 2007, 3 hatchlings were discovered at ARCO-TCC (pers. obs. K.R. RAI). One hatchling survived into adulthood and was transferred from ARCO-TCC to TRCC in early 2018. The morphometry of this specimen was taken on 4 April 2018 and had a carapace size (straight length x straight breadth) of 22.5 cm x 14.5 cm, height 10 cm and weight 1946 g (Individual Data Sheet of ARCO-TRCC, 2020).

Fig. 4. Hatchlings of Elongated tortoise at TRCC . Photo: T.P. Rai / ARCO-TRCC

In August, 2019 several holes dug by female Elongated tortoise were discovered at a small terrestrial enclosure of TRCC (pers. obs. T.P. RAI). Next month this gravid female was transferred to a newly built

large and secured terrestrial enclosure at TRCC with no disturbance except feeding and health check-up (fig. 1). Next year on 4 August 2020, three hatchlings of Elongated tortoise (fig. 4) were spotted by TRCC staff NILU PHUYEL while doing routine clean up of the terrestrial enclosure. Initially she found one hatchling which produced a hissing sound as she approached near for observation. On searching in the terrestrial enclosure, two more hatchlings were found. The second hatchling was found 7 meters away from the first one and the third one was found hiding under leaf litters, 3 meters away from the second one. Similarly, the first author discovered fourth and fifth hatchlings from the same terrestrial enclosure on 20 August and 25 August 2020 respectively. All the specimens were carefully transported to the TRCC laboratory and its detailed measurements carried out by the first author (Table 1).

Table 1. Morphometry of hatchlings of Elongated tortoise at TRCC

	Date	**Straight Carapace** (in mm)		**Straight Plastron** (in mm)		**Height** (mm)	**Weight** (g)
		Length	**Width**	**Length**	**Width**		
1	2020-08-4	51	49	45	43	25	33
2	2020-08-4	54	51	49	46.5	27	34
3	2020-08-4	55	51	47.5	47	27	36
4	2020-08-20	53	50	47	47	29	35
5	2020-08-25	56.5	53	47.5	47.5	29	34
Average		53.9	50.8	47.2	46.2	27.4	34.4

On observation of the shell (fig. 5 & 6), the umbilical scar of hatchlings can be assumed to be 5-7 days old (KÄSTLE et al., 2013). The hatchling´s shell shape is rather round and it is light yellow in colour with serrated anterior and posterior marginal plates. A mid-dorsal keel is noticeable on the carapace of hatchlings. Limbs are black in colour and the toes have very pointed piercing claws. The average carapace

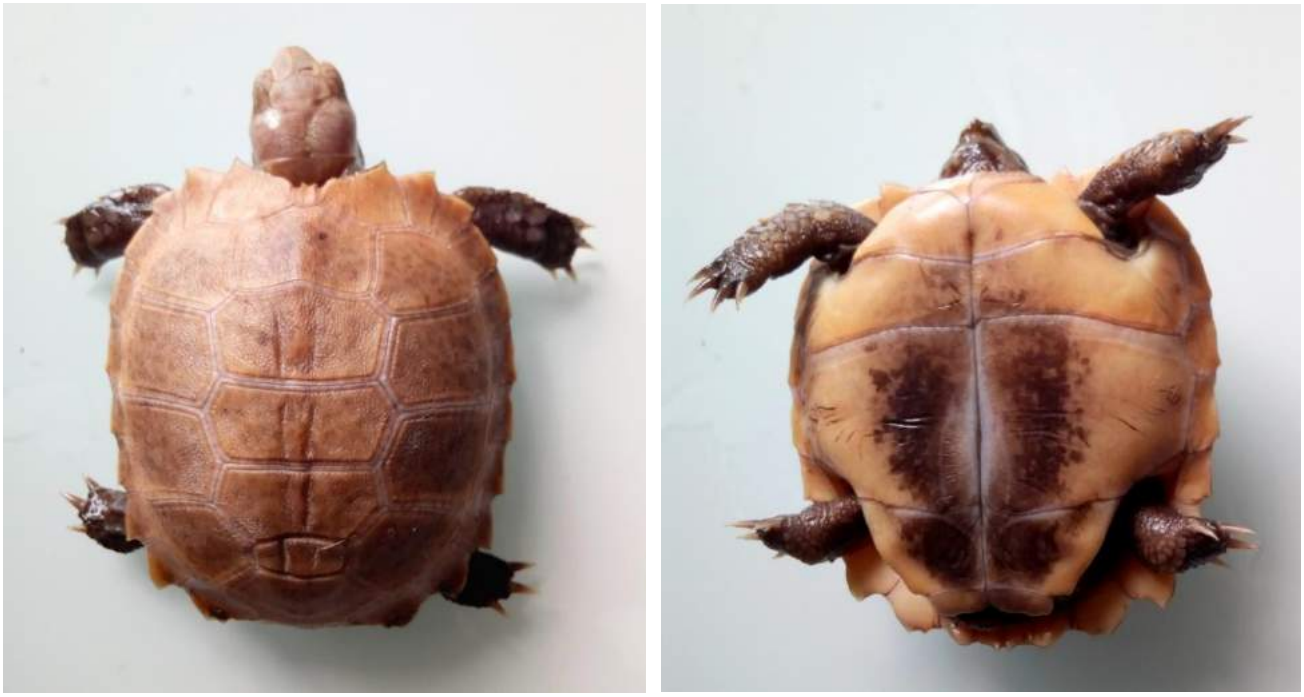

Fig. 5. Dorsal and ventral view of hatchling at TRCC. Photo: T.P. Rai / ARCO-TRCC

size of hatchlings is 53.9 mm x 50.8 mm, plastron size 47.2 mm x 46.2 mm, height 27.4 mm and weight 34.4 g. The hatchlings are active and readily fed on small chunks of ripe banana.

SCHLEICH & KÄSTLE (2002) have mentioned that hatchlings from in-situ birth are more robust than incubated ones but hatchlings in the wild are vulnerable to numerous threats. It has also been observed at TRCC, predation of turtle eggs are done by Small Indian Mongoose, Indian Rat Snake, House Crow, Greater Coucal and Common Myna. The Elongated tortoise is listed as Critically Endangered in IUCN Red List due to rapid decline across its range by at least 80% in the last 90 years (RAHMAN et al., 2019). Therefore, captive breeding programs like TRCC could play a significant role in compensating the decreasing population of this threatened species.

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The authors would like to thank Amphibian and Reptile Conservation Society of Nepal (ARCO-Nepal) and Sukhani Martyrs Memorial Foundation (SUMMEF) for the establishment of Turtle Rescue and Conservation Centre (TRCC), thus created an opportunity to carry out this research. We also acknowledge Division Forest Office of Jhapa district for regular monitoring of the Centre and supporting turtle conservation work. Last but not least, we are indebted to TRCC staff Miss NILU PHUYEL, SUMMEF Park's staff and TRCC-Turtle Club for fruitful collaboration.

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Summary of Status of Turtles of Nepal

Family	Genus & Species	IUCN	CITES	NRDB
Geoemydidae	*Batagur dhongoka* (GRAY, 1834)	CR	II	S*
Geoemydidae	*Batagur kachuga* (GRAY, 1831)	CR	II	V*
Geoemydidae	*Cyclemys gemeli* (FRITZ, GUICKING, AUER, SOMMER, WINK & HUNDSDÖRFER, 2008)	NE	II	-
Geoemydidae	*Geoclemys hamiltonii* (GRAY, 1831)	EN	I	-*
Geoemydidae	*Hardella thurjii* (GRAY, 1831)	VU	II	S
Geoemydidae	*Melanochelys tricarinata* (BLYTH, 1856)	EN	I	V
Geoemydidae	*Melanochelys trijuga* (SCHWEIGGER, 1814)	LC	II	S
Geoemydidae	*Morenia petersi* (ANDERSON, 1879)	VU	II	S*
Geoemydidae	*Pangshura smithii pallidepes* (MOLL, 1987)	NT	II	S
Geoemydidae	*Pangshura smithii smithii* (GRAY, 1863)	NT	II	S
Geoemydidae	*Pangshura tecta* (GRAY, 1831)	LC	I	S
Geoemydidae	*Pangshura tentoria circumdata* (GRAY, 1834)	LC	II	-
Geoemydidae	*Pangshura tentoria flaviventer* (GÜNTHER, 1864)	LC	II	-
Testudinidae	*Indotestudo elongata* (BLYTH, 1854)	CR	II	S
Trionychidae	*Chitra indica* (GRAY, 1831)	EN	II	S
Trionychidae	*LISSEMYS PUNCTATA* (LACEPEDE, 1788)	LC	II	S
Trionychidae	*Nilssonia gangetica* (CUVIER, 1824)	VU	I	V
Trionychidae	*Nilssonia hurum* (GRAY, 1831)	VU	I	S

Summary of status of turtles of Nepal.

NRDB = National Red Data Book, Nepal. *=still unproven for Nepal but listed in literature.
S= Susceptible, V= Vulnerable, E= Endangered ,

IUCN = International Union for Conservation of Nature: V=Vulnerable, S= Susceptible, CR= Critically Endangered, EN= Endangered, VU= Vulnerable, NT= Nearly Threatened, LC= Least Concern, NE= Not Evaluated.

CITES = Convention Int. Trade Endangered Spec.: I= all species endangered with extinction; trade prohibited. II= species may become threatened with extinction. III= species that are listed country wise to avoid illegal exploitation.

Compiled by ARCO-Nepal, 2021.

Media News show us the reality and pressure on the shrinking turtle fauna of S-Asia

Indian Flapshell seized in Uttar Pradesh, India

Indian soft-shell turtles are used to be found in the ponds, lakes, as well as in the river systems of the Indus and Ganga drainages. The population of them all over the country are disappearing rapidly. As per of Uttara Mendiratta 2017[1] the Indian flapshell turtle (*Lissemys punctata*) is the third most illegally traded turtle to various Southeast Asian countries but they are also used by local villagers for consumption of meat. In last few years, the most emerged route of turtle trade observed in Northern India is from Uttar Pradesh to Kolkata via Bihar. The Kolkata is the state from where majority of shipments observed to be taken up to the Southeast Asian countries.

On 6th of February, 2021, Saturday depending on prior information Uttar Pradesh Police's Special Task Force (STF) and Uttar Pradesh Environment, Forest and Climate Change Department (UPFD) recovered over 1326 Indian flapshell turtles (*Lissemys punctata*). A truck full of Indian flapshell turtles was seized which was headed to Kolkata from Etawah Uttar Pradesh. Senior police officials also arrested the truck driver Rambrash Yadav and helper Vinod Kumar for their alleged involvement in smuggling the turtles. Police are assuming that an international smuggling net is involved in this incident. During interrogation, the arrested men confessed that their "consignment" was being transported to Petrapol border, Bangaon, West Bengal and from there the turtles are then about to smuggled out of the country to China, Thailand, Hong-Kong and other Southeast Asian countries via Bangladesh and Myanmar. Apart from these, more than twenty people from the adjacent six seven districts were involved in the gang.

Photo: Uttar Pradesh Forest Department

During the rescue operation, divisional officer of UPFD sought the expertise of Turtle Survival Alliance India Program. Ms. Arunima Singh- Ex Situ Coordinator, Dr. Saurabh Dewan- Development Coordinator, Ms. Natasha Ashok- Intern and Mr. Suresh Pal Singh- rescue officer rushed to the place from TSA India office Lucknow to provide expertise. Thirty of the turtles were found dead on arrival, 60 received medications for minor wounds and 13 turtles are receiving special medical attention, as they were found some kind of injuries, wound, or internal haemorrhage. The rest of the turtles were found healthy enough to be released in nearby wetlands. The court has given the release order on the 10th of February to release in protected wetland from the area from where these animals sourced. After getting

Photo: Uttar Pradesh Forest Department

Photo: Uttar Pradesh Forest Department

Photo: Arunima Singh

Photo: Natasha Ashok

final release order, forest division of Kanpur released these animals in the nearest wetland “Lakh bahosi Bird Sanctuary”

Photo: Natasha Ashok

Photo: Saurabh Diwan

Turtle smuggling is still a poignant problem in the field of chelonian conservation. Due to some misbelieves that turtle shell produces medicines thousands of turtles are being smuggled and killed eventually. In many developed country people use to keep them as pets. Being the third most turtle rich country of the world India is a hotspot for smuggling and many lower income group people gets involved easily in these awful business to earn easy money. To eradicate these problems UPFD along with TSA India program are tirelessly working with community by propagating education and awareness.
Previous seizures helped us to reach out the communities involved in illegal trade of turtles and tortoises. With the support of "The Mohamed bin Zayed species conservation fund" team TSA India have identified two communities, majorly involved in turtle trade activities. To trounce this crisis a pilot community level program to provide small alternate livelihood options and evaluating the impact have been initiated. Strict actions are also being taken immediately upon smugglers to reduce this menace and gradual decrease in smuggling cases over few decades in Uttar Pradesh is the silver lining in this foul play. The local community people have also started to understand the need for the chelonian conservation and they are slowly but steadily acknowledging their selfless and thankless efforts in order to make India a safe haven for the chelonians.

Uttara Mendiratta, Vallari Sheel, Shailendra Singh,
Enforcement seizures reveal large-scale illegal trade in India's tortoises and freshwater turtles,
Biological Conservation 2017 Volume 207, Pages 100-105
Photos and text: TSA, India- Great Acknowledgements by ARCO-Nepal

800 Flapshell Turtles Confiscated In India

In 2018, the TSA-India has confiscated more than 7,000 Indian flapshell turtles (Lissemys punctata) destined to be distributed in the illegal pet trade.

https://www.reptilesmagazine.com/800-flapshell-turtles-confiscated-in-india/#:~:text=In%202018%2C%20the%20TSA%2DIndia,Facebook%20post%20by%20the%20TSA

More Than 1500 Flapshell Turtles Confiscated in India

On November 15, 2018, more than 1500 Indian flapshell turtles (*Lissemys punctata*) were confiscated by authorities in Uttar Pradesh, India. In a group effort with private and federal organizations, poachers were arrested in connection to this wildlife crime. Rebekah Pettit

https://www.reptilesmagazine.com/more-than-1500-flapshell-turtles-confiscated-in-india/

On 10 January 2017, the Special Task Force and Forestry Department in Lucknow, Uttar Pradesh, India confiscated one of the largest illegal turtle seizures in India when it intercepted **6,325 river turtles**. Weighing 4.5 tons, the huge consignment consisted of two species of native chelonians with 6,323 Indian Flapshell Turtles (Lissemys punctata) and two IUCN listed Vulnerable Indian Softshell Turtles (Nilssonia gangetica).
https://turtlesurvival.org/6325-wild-turtles-confiscated-in-india/

An illegal trade of tens of thousands

"In the Indo-Gangetic plains, softshell turtles are mostly targeted for meat, while black spotted turtles (having pretty looking yellow-spots) are fast disappearing from the Ganga river basin [due to the] pet trade. The scale [of poaching] is huge. We often encounter seizures involving more than 1,000 turtles, which may only be a fraction of the actual amount of trade," said Saket Badola, who heads TRAFFIC India.

"The trade is flourishing despite laws.

Every year around 5,000-10,000 turtles are captured and killed in Uttar Pradesh alone, [though] actual figures could be much higher," corroborated Jose Louies who leads the division handling wildlife trade control at Wildlife Trust of India (WTI). https://www.thethirdpole.net/en/nature/turtle-poaching/

Turtle Survival Alliance 15 de enero de 2017 ·

Many of you saw the story out of India this week, over 6000 turtles confiscated!

Read below to learn more about it, and the role TSA played!

"On the 10th of January 2017, the Special Task Force (STF) Lucknow intercepted and busted one of the biggest shipments of turtles across India. Two species of river turtles were seized. There were 6325 animals in total and the consignment weighed 4.5 tons. Majority of the seized animals were Indian Indian Flapshell turtle (Lissemys punctata) and there were 2 Indian Softshell turtle (Nilssonia gangetica) as well.They were packed in 140 jute gunny sacks and were being transported by truck. These animals are mostly for the food trade and were being sent to Kolkata markets and there onward to South east Asian countries as well.

https://es-la.facebook.com/TurtleSurvival/posts/many-of-you-saw-the-story-out-of-india-this-week-over-6000-turtles-confiscated-r/10154199762061680/

· India: 605 Indian Flapshell Turtles confiscated in Manipuri district

In a major bust, Mainpuri district forest officials on Friday night seized 605 Indian flapshell turtles (Lissemys puncata), which were allegedly to be smuggled to South Asian countries.
Ấn Độ: 605 cá thể rùa bị tịch thu tại Manipuri
Vào tối thứ 6, ngày 19 tháng 02 năm 2016, các cán bộ kiểm lâm tại Mainpuri đã thu giữ 605 cá thể rùa (Lissemys punctata) được cho là sẽ bị buôn bán sang các nước Nam Á.
http://timesofindia.indiatimes.com/.../artic.../5
https://www.facebook.com/AsianTurtleProgram/posts/1105348992832274/

Indian national arrested with 109 turtles

Kantipur, Asar 2, 2073

Kathmandu – Police have arrested Indian national Mohammad Usman along with 109 turtles. He was arrested on Thursday by the Central Bureau of Investigation (CBI) on the basis of information that he was selling turtles illegally. Police have also found 162 birds of different species along with Usman. Usman of Patna, India has been arrested for trading in illegal birds before. He was handed over to the District Forest Office and released on bail.
https://ekantipur.com/ampnews/2016-06-16/20160616193935.html?is_ifooter=1&fbclid=IwAR1Ye2loAff0Ii8JRyDkrm0iHs1XZBUZlk7WzhFJMP8PEqPrfPFifxJMFDM

One arrested for tortoise smuggling from Kavre Ratopati

Kartik 28, 2074

Kavre – The District Forest Office has arrested a man along with four turtles. The arrested person is Grijlal Magar, 35, of Inaruwa Sunsari district. Police arrested Magar from Mangaltar in Kavre on a scooter carrying four tortoises from Koshi Barrage and handed him over to the District Forest Office. According to Prem Khanal, chief of the District Forest Office, Magar will be prosecuted under National Parks and Wildlife Conservation Act. There is a legal provision of confiscation of used vehicles and a fine of Rs 20,000 and imprisonment for six months.
https://www.ratopati.com/story/21639?fbclid=IwAR1jMc_RaSLW1rP3T_SufiaD91jZoAVF2k04guyBPtIBBOa6JgALbICphi4

Youth of Dolakha arrested with 12 live turtles.

Dolakha, November 9, 2018

A youth from Dolakha has been arrested with 12 live turtles in Kathmandu. The 18 years old Rashik Shrestha of Bhimayshwar municipality, Dolakha was arrested with 12 turtles in the capital. He was arrested by the team of Nepal Police's Central Bureau of Investigation from Gwarko of Lalitpur metropolitan city-7.
https://edolakha.com/news/?fbclid=IwAR2-HAA3LFwIP4zJeDeykvrP5MMo0EMckokqkpjKIpkzUkTsbF9HWPHsgJw

Two arrested with rare wildlife Elongated tortoises

Nature Khabar; Shrawan 12, 2076

Police have arrested two people including a rare wild animal tortoise. Police of Gongbu Metropolitan Police Division have arrested two persons, including a rare wild animal tortoise, from Shrikrishna Guest House at Mitranagar of Kathmandu Metropolitan City on Thursday afternoon.
http://naturekhabar.com/ne/archives/14070?fbclid=IwAR1sus4qxysWhv5ppKeVxk2joWunvgDmnw2WRJ9W7pWSBx1K_iDbFkK_xuk

Compiled by T.P. Rai & Schleich, H., ARCO-Nepal, 2021.
Arco.nepal@gmail.com

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lissemys-punctata-being-dumped-into-pond-when-alerted-by-police-raid_Uttar-Pradesh-Forest-Department-1 (1).jpg photo from https://www.thethirdpole.net/en/nature/turtle-poaching/