### Project Update: September 2021

(June 2021 to September 2021)

#### Progress during period:

To build a genetic database of Indian star tortoises to combat illegal wildlife trade, in the first phase, we have covered several field sites across India and collected biological samples while conductive interactive session with forest and zoo staff in the respective areas.

## Field sites: Protected areas (PAs) and zoos in states of Rajasthan, Gujarat and Andhra Pradesh

State	Site	Site type	No. of samples
Gujarat	Gir	National Park	9
	Hingolgadh	Wildlife Sanctuary	10
	Rajkot	Zoological Park	20
	Ahmedabad	Zoological Park	20
Rajasthan	Sariska	National Park	2
	Kumbhalgarh	Wildlife Sanctuary	7
	Udaipur	Zoological Park	20
	Jaipur	Zoological Park	20
Andhra Pradesh	Nagarjuna Srisailam	Tiger Reserve	10
	Sri Venkateshwara	National Park	10
	Tirupati	Zoological Park	20
Telangana	Amrabad	Tiger Reserve	1
	Sangareddy	Reserve Forest	3
	Hyderabad	Zoological Park	10

14 field sites (3 National Parks + 2 Wildlife Sanctuaries + 2 Tiger reserves + 1 Reserve Forest + 6 Zoological Parks) were covered across 4 states in Northwestern and Southern India.



# Outreach programmes: Awareness campaigns in PAs and capacity building workshops in Zoos

In protected areas, interactive awareness building workshops were held with Range officers, Forest guards and Forest watchers. Similarly, interactive seminars were held for Zoo Education officer, Biologists and zoo staff. Promotional materials such as posters (in English and vernacular language), standee and stickers were used. Also, information booklets and species identification booklets were distributed to all attendees. Pictorial power point presentations were used which were followed by interactive discussion sessions.

Through our awareness sessions, we achieved the following:

- Provided the local forest staff and zoo staff with basic knowledge on turtles and tortoises, their behaviour, and rules for immediate rescue steps till Veterinary aid is available.
- Provided knowledge on signs of good and bad health status of Indians tar tortoise, age estimation and sexing, preferred dietary habits, breeding behaviour, favourable environment for egg laying to build suitable enclosures in zoos and augment existing ones and clarified doubts on carapacial deformities such as pyramiding (commonly seen in captive tortoises).
- Basic knowledge on the diet and habitats of local turtle fauna and invasive turtles along with the negative impact of exotic species on native chelonians.
- Identification guides (procured from TRAFFIC, India) were distributed to be used

in field and zoos for reliable identification of local and captive chelonians.

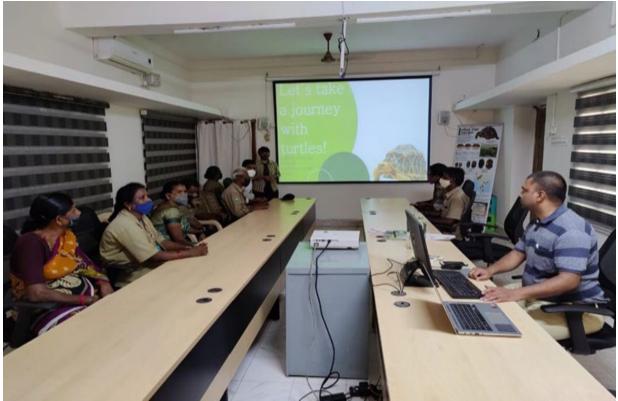
- Posters with information on Indian star tortoise in English and Hindi were provided to zoos and forest offices.
- Stickers of Indian star tortoises for school children visits in zoos were also provided.
- Apart from relaying our share of knowledge, we also received information on probable sites in the respective areas from field Forest officers where the tortoises may be found, apart from many valuable behaviour and ecology traits which were extremely helpful in sighting the rare species for sample collection.



Species identification guides (procured from TRAFFIC, India).



Interactive sessions with PowerPoint presentations in Hingolgadh WLS, Gujarat (L) and Sariska TR, Rajasthan (R).



Awareness programme for Zoo staff at Sri Venkateswara Zoological Park, Tirupati.



Awareness and interactive session with forest department personnel at Sri Venkateswara NP, Tirupati, Andhra Pradesh.



Interactive seminar with Forest department officials from Jaipur Rajasthan.



Interactive seminar with Forest department officials from Jaipur Rajasthan.

### Field survey and sample collection

Field surveys to collect keratin tissue samples of Indian star tortoise (Geochelone elegans) from Northwestern and Southern India were undertaken. The field surveys were carried out with the forest department field staff and locals as Field Assistants. Sampling was done from both natural sites as well as zoological parks from various field sites.



Field area in Sri Venkateshwara NP, Tirupati (L) and a hatchling found in the adjacent area (R).



Field areas in Hingolgadh Sanctuary, Gujarat.



Field staff and assistants searching for Indian star tortoise in SVNP, Tirupati.



Field staff and locals in NSTR, AP (L) and first Star tortoise sighted in Gir NP, Gujarat (R).



Field area in Gir NP, Gujarat.