

REPORT ON TURTLE RELEASE AT TURTLE SANCTUARY, VARANASI
14.06.2018



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

TURTLE RELEASE REPORT

TURTLE RELEASE IN TURTLE SANCTUARY, VARANASI

Operation Report

14th JUNE 2018

Component IV- Rescue and Rehabilitation

WII-NMCG Biodiversity Conservation and Ganga Rejuvenation Project

Research Team

Project leader : Dr. S.A Hussain , Scientist G

Coordinating Faculty : Dr. Pradeep K Malik , Scientist G

Dr. Parag Nigam , Scientist F

Team

Subject matter

Speacialist (VHM) : Dr. Gowri Mallapur

Veterinary Officer : Dr. Animesh Talukdar

Project Fellow : Mr. Akshay Bajaj, Project Fellow

Field Assistant : Brijesh Maurya, IshuVerma, Pyarelal

Volunteer : Jyoti Singh

Background:

Rescue and rehabilitation is gaining prominence as a species conservation aid across the world. With anthropogenic pressures gaining intensity, rescue and subsequent rehabilitation and release cannot go unnoticed in the area of conservation planning. Component IV- Rescue and Rehabilitation is thus an integral part of the larger WII-NMCG Biodiversity Conservation and Ganga Rejuvenation Project goals. Considering the aim of these two centres has been working for rescue, rehabilitation and release at Narora and Sarnath under NMCG-WII with collaboration of Forest department and NAPS (Nuclear power plant station, Nrra).

The Kachua Punarvas Kendra at Sarnath houses head started and rescued turtles. The rescued animals are rehabilitated and then released back into the Ganges river or its surrounding wetland habitats based on the species requirement.

A written order was received from the PCCF, Uttar Pradesh Forest Department regarding release of 65 turtles from the Kachua Punarvaas Kendra to Kachua sanctuary, Varanasi on 14th June, 2018. After health assessment fifty one turtles of three different species(*Geoclemys hamiltonii*, *Lissemys punctata andersonii*, *Pangshura tentoria circumdata*) were found to be fit for release and released in the protected stretch of the Turtle Sanctuary at Varanasi as directed.

The Divisional Forest Officer, Kashi Wildlife division attended the release program along with the staff of the Kachua sanctuary. The release sites were pre- decided based on an intensive survey by the team of component IV for the specific purpose (Ref: *WII-NMCG (2018). Kachua Punarvas Kendra, Sarnath, Release site assessment survey, WII-NMCG Biodiversity Conservation and Ganga Rejuvenation Project. Pp 18*) and after through discussion with Survey team, NMCG-WII based on prior evidence of turtle presence. The details of animals released were as follows

SI No	Common Name	Scientific Name	Release
1	Spotted Pond Turtle	<i>Geoclemys hamiltonii</i>	14
2	Indian Flap Shell Turtle	<i>Lissemys punctata andersonii</i>	22
3	Indian Tent Turtle	<i>Pangshura tentoria circumdata</i>	15
		Total	51

Turtle Release

For the release of turtle's various stage wise protocol was followed at Kachua Punarvaas Kendra as follows :

- Stage I : Pre- release acclimatization**
- Stage II : Health assessment of Turtles**
- Stage III : Selection of release sites**
- Stage IV : Transportation of turtles to release sites**
- Stage V : Release of Turtles**

Stage I: Pre- release acclimatization

The turtles identified for release had been housed at the Kachua Punarvas Kendra, Sarnath. The turtles were housed in species specific enclosures with appropriate enclosure attributes at the Kachua Punarvaas Kendra, Sarnath. The turtles were appeared to follow normal activity patterns and they were feeding well. As part of the rehabilitation exercise and for acclimating turtles to release they were fed with live as well as dead local fish.

Stage II: Pre-release Health assessment of Turtles

Health assessment was done on site and the parameters assessed were; gross physical examination for abnormalities and ecto-parasites, size class and weight, fecal examination for endo-parasites. Swabs (rectal) samples were taken for fecal analysis by direct smear method. The analysis was done at the Ganga Aqualife Laboratory set up at the Kachua Punarvas Kendra, Sarnath. Individuals of appropriate weight and size, having no physical injury and no internal and external parasite were considered fit to be released. Blood profiling was done for at least 10% of the population. Blood samples were collected randomly for examination of Hematology, Biochemistry parameters. Samples were sent to a local pathology laboratory. The Blood parameters for most Native species are thus far not standardized. Therefore the samples were processed mainly for collecting reference values.

Stage III: Selection of release sites

Based on the survey by the team of Component IV in May-June 2018 (Ref: *WII-NMCG (2018). Kachua Punarvas Kendra, Sarnath, Release site assessment survey, WII-NMCG Biodiversity Conservation and Ganga Rejuvenation Project. Pp 18*) and supplementary discussions with the survey team, NMCG-WII, two release sites were selected as during surveys these two sites have the evidence of presence of turtles and sites were within the Turtle sanctuary. This was also in agreement with the stipulated permit.

SITE 1: Sand bank Opposite Manikarnika Ghat

SITE 2: Sand Bank Opposite Assi Ghat

Stage IV: Transportation of turtles to release sites

Pre-release the animals were kept unfed for one day prior to transportation. Turtle to be released were kept separately based on species and age class and loaded afterwards on the crates in the morning of release date. The crates were loaded in Transport vehicle and transported to the release sites with utmost care. The vehicle was supported with a team of assistants and medical kit along with one biologist and one vet. The vehicle speed was maintained at a constant speed of 20- 30 km/ hr. At 07:45hrs animals along with the team reached to Raj Ghat, Two boats were also hired for crossing the river for reaching the release sites and to release the animals at the Kachua Sanctuary. Two teams were formed for convenient release as Team A and Team B. At Raj Ghat, crates i.e 20



Image 1: Unloading at Raj Ghat

animals [*Lissemys punctata* (14) + *Geoclemys hamiltonii*(6)] were offloaded along with Team A. Team B went ahead with the other animals to Gaai ghat .

For Team A, Mr. Akshay Bajaj (Project Fellow, NMCG – WII) was leading the release operation along with one field assistant (Ishu) and one volunteer (Jyoti) from NMCG-WII. For Team B, Dr. Animesh Talukdar (Veterinary Officer, NMCG-WII) lead the release operation along with Field assistant (Brijesh and Pyarelaal). Crates were soon loaded onto pre-booked boat (07: 50hr) along with Team A and forest department staff. On reaching GAAI Ghat (0800hrs) ,



Image 2 : Turtle within crates during transportation

rest other animals (*Geoclemys hamiltonii* (8) + *Pangshura tentoria* (15) + *Lissemys punctata andersonii* (8) were loaded to boat (0810hrs) along with Team B and other forest department staff.

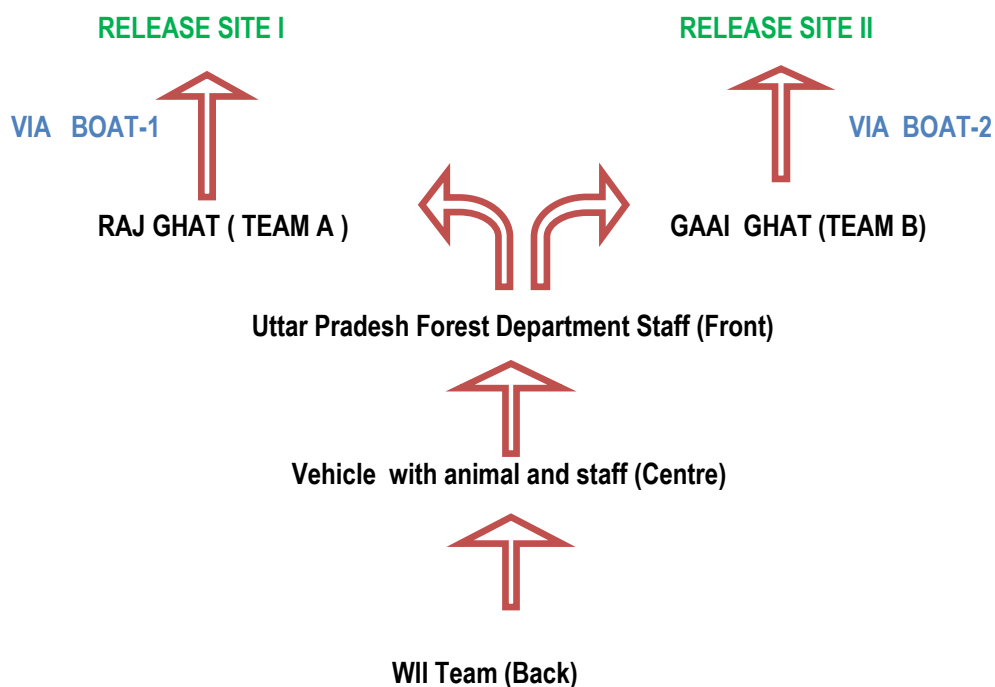


Fig: 1 Pattern Followed During The Transportation



c. Turtles being taken to release point

Team A departed from Raj Ghat via boat and at 0800hrs and reach to release site I at 0810hrs where crates were unloaded to release the animals. Team B departed from Gaai Ghat at 0815hrs and reach to release Site II at 0840hr.

Stage V: Release of Turtles

Reaching the release site as opposite to Manikarnika and Asssi ghat all animals were checked again for any kind of injury during transportation by both the team and started releasing as *Geoclemys hamiltonii* first followed by *Lissemys punctata andersoni* and *Pangshura tentoria*. Turtles were released on the river bank and allowed to move willingly into the water.

Some Images of Release by NMCG-WII team and forest department:



ANNEXURE-1

List of *Lissemys punctata* released:

S.No.	Photographic ID No.	Weight (gm)
1	721	605
2	723	1225
3	732	990
4	738	765
5	741	795
6	756	590
7	760	775
8	764	515
9	767	790
10	771	620
11	774	510
12	791	870
13	793	825
14	796	595
15	798	445
16	801	610
17	803	665
18	806	720
19	807	570
20	808	610
21	809	670



721



756



774



723



760



791



732



764



793



738



767



796



741



771



798

List of *Geoclemys hamiltonii* released: All animals that were released had been marked by scute notching.

S.No.	ID No.	Weight (gm)
1	401	545
2	402	1510.5
3	403	726
4	404	662.5
5	405	1238
6	406	2864
7	407	281.5
8	408	385
9	409	1838
10	410	1097
11	411	718
12	412	811.5
13	413	725.5
14	414	1245.5

List of *Pangshura tentoria circumdata* released : All animals that were released had been marked by scute notching.

S.No	ID No.	Weight(gm)
1	400	84
2	401	54.5
3	402	59.5
4	403	56
5	404	68
6	407	86.5
7	408	65.5
8	410	64.5
9	411	77
10	415	61.5
11	416	55.5
12	417	55.5
13	420	32.5
14	421	67
15	422	80

Annexure - II**List of Uttar Pradesh Forest Department Staff Available During Release**

NAME	POST	Contact Number
Manoj Khare	Divisional Forest Officer	9415084964
Ravi Shanker Shukla	Project Officer	
Mahendra Nath Yadav	Range Forest Officer	9415974903
Md. Imran Khan	Deputy Ranger	9451723742
Rama Shanker Yadav	Forester	9651566291
Nishikant Sonker	Beat Forest Guard	7007786631
Seema Chandan	Forest Guard	6391491012
Ram Moorat	Forest Guard	9415962613
Rakesh	Boatman	7905155147
Vijay Yadav	Postman	9450837482
Madan Yadav	Watchman	9598644018
Rajeev Singh	Forest Guard	9415991401

