

TOUR NOTE OF SHRI S. BARARI, PCCF & HEAD OF FOREST FORCE, WEST BENGAL ON THE TOUR OF NORTH BENGAL IN SEPT-OCT 2019

Itinerary

28th Sep : Departed by train.

29th Sep : Reached Siliguri. Visited Salugarah and Buxa Tiger Reserve areas.

30th Sep : Visited Buxa Tiger Reserve and Jaldapara N.P areas.

01st Oct : Attended M.I.C Forest's programme in Bengal Safari.

02nd Oct : Visited Topkaydara, Dowhill.

03rd Oct : Returned to headquarters.

TOUR NOTE

Salugarah Soil Laboratory, Silviculture North Divn

Observations:

Following could be ascertained on interaction with the DFO, FR, Soil analysts and staff of soil laboratory.

1. Soil analyses of forest areas of North Bengal is being done as a programme. Soil samples are collected from the forest areas @ 1 sample per 50 ha. and N,P,K, available N,P,K, CEC, pH, Sulphur etc are being analysed.
2. All soil samples are being tagged with a serial no. and with GPS co-ordinates of the pits from where the soil samples are being collected.
3. Good record keeping. All records are being maintained in a register, against each serial no.
4. A Soil Analyses Form has been designed, which is filled up by the collector. A copy of the form is sent to the concerned division with the soil report for record. The form shows the serial no. of the sample, detail location and GPS coordinates. This will help in verification / review of the report, if required.
5. The soil laboratory has improved a lot. It is neat and clean and kept sanitized. Installation of sophisticated instruments including automatic soil digester (automated Kjeldahl's analyser) has improved the rate of analyses.

Suggestions:

1. *Soil analyses report, chiefly of N, P, K, pH should be overlaid on digitized forest boundary map. This may be tasked to GIS wing. The digitized soil analyses maps may form a part of working plans volume III.*
2. *Research wing should organize workshops for territorial DFOs, FRs and DR/Fr, for dissemination of the purpose of the soil analyses, its methodology and how it could be used in forestry works. The workshop may include presentation of the works and practical demonstration in laboratory.*
3. *The reports of soil analyses should be published in booklets, preferably in English, Bengali and Nepali and also uploaded in the website of Forest Dept.*

Experimental Plantation area -Salugarah Research plots

Observations

This area has been handed over to the research wing by Baikunthapur Division few years back. The area is in two parts -14 ha and 5 ha., on two sides of the approach road. The whole area is fenced. Following are the observations:

1. **Acacia experimental plot** : Acacia clones brought from Karnataka have been planted here and the growth vis-à-vis seedling plants of Acacia (raised from seed stand seeds). This is 2018 exptl plantation. It appears that the growth in height of clones is better than the seedlings.
2. **Chikrasi experimental plot** : It is an experimental plot for comparing the growth and survival of Clone, Air layered plants, Seedlings 1 yr old and Seedlings of current year. Though the air layered plants appear taller these have to be compared with the seedlings, since the air layered plants have been developed in matured branches of the tree, rooted and cut back for planting. Clones do not appear very promising and 1 yr old seedlings, given their age has less growth in diameter.

Suggestions

1. In Acacia experimental plot, observation for another 2 years should be done, before drawing conclusion. The production of biomass of the clones and the seedlings should be compared after 3 years.
2. Identity of each Acacia clone brought from Karnataka must be maintained in field and in records, so that it could be brought from Karnataka future, if found promising.
3. For Chikrasi experiment, staking of plants should be maintained. The increment in height rather than total height should be assessed for comparison.

Buxa Tiger Reserve

On 29th Sept., visited 25th mile watch tower, fodder plantation, 22nd mile Core-buffer boundary road, Jainty, Sangai road and 23rd mile tower.

On 30th Sept. visited Shikari line, Pan-Jainty road, 26th mile anti-poaching camp, Jainty river, 25th mile, Sangai road glades and water holes, Eco-tourism zone, 22nd mile anti-poaching camp, Vulture Release Aviary, Vulture Conservation and Release Centre (VCBC) Rajabhatkhawa, Butterfly Centre Rajabhatkhawa, Dog Squad Rajabhatkhawa, West Damanpur range plantations. Following are the observations:

Observations

1. Some portion of the roads need maintenance post monsoon season.
2. Fodder plantation raised may need cleaning.
3. The towers are being manned properly and with round the clock vigil. Solar panels have been installed for providing power for communication from towers/camps.
4. Wells have been dug in the camps and towers for water supply of staff on duty. In fact, the Field Director informed, that the towers / camps where the bore well failed, tankers are sent everyday for supplying water.
5. Though 23rd mile watch tower is a place for sighting of elephants on a regular basis, they could not be sighted, ostensibly due to continuous rainfall on the day.
6. Cleaning along the main access roads have been done.
7. The bed of Jainty river along the Forest Rest House as well as the 26th mile anti-poaching camp has risen alarmingly. The deck of the bridge over Jainty river near the FRH has been completely covered with debris. A rough estimate shows that the river bed has risen @ at least 1.5 ft per year.
8. Four consecutive glades and water holes at Sangai road has been maintained well. In dry season water tanks are required to fill the water holes. The glades have maintained well.

9. The water hole no.13 is full of water and the glade with salt pit has been maintained very well.
10. The tourist routes except 23rd mile has been cleaned well (Eco-tourism zone).
11. Towards 22nd mile watch tower a wooden bridge of small span got damaged and is being repaired for better mobility.
12. At 22nd mile, adjacent to the watch tower, East Damanpur range has raised experimental fodder plantation—10 ha and 4 ha patch. A small portion of it is under shade and lopping may be required to be done to allow sunlight.
13. Adjacent to the 22nd mile tower, the **Vulture Release Aviary** has been constructed and presently housing 6 no. Himalayan Griffon Vultures. While 5 nos. vultures were perching on a log, one was sitting isolated. The whole aviary is surrounded with net so that the carcass provided outside the aviary for other scavengers to feed is completely visible to them. This is to train their instinct to scavenge food, so that post release, they could replicate in the wild. The whole structure is guarded by energized fencing to prevent damage by wild animals. The release and post release monitoring would be worthwhile to see.
14. The experiment of vulture breeding started in **VCBC, RVK** in 2006. It has been doing very good work on revival of vulture population and conserving them in the wild. The infrastructures include colony aviary, nursery aviary, quarantine aviary, display aviary, incubator room, brooder room, Laboratory, office and staff accommodation. This is a joint project of Forest Dept, W.Bengal, BNHS and MoEF. This project happens to be the most successful vulture breeding and conservation centre in India and presently, there are 131 vultures, out of which 67 are captive born. There have been no vulture deaths so far. This is indeed creditable.
15. The PTT chip weighing 22 gms only will be planted on the vultures to be released in the wild and will be tracked by a French satellite. The monitoring within 100 kms radius from point of release (Rajabhatkhawa) will be the most critical part since it would require very good co-ordination between countries like Bangladesh, Bhutan, Nepal and India. Even within India, the co-ordination between the various districts would be required.
16. Presently the vultures in the aviaries are being monitored through close circuit camera. The vultures are taking flight and perching inside the aviary and scavenging on the carcasses given to them. One of the high points of the centre is that the vultures are provided with carcasses of freshly slaughtered animals with skin removed and are fed only after following a tight protocol prior to slaughtering to ensure that no Diclofenac or other harmful elements enter the body of vulture.
17. The **Butterfly Rearing and Release Park** in Rajabhatkhawa has been maintained very well. Many flowering plants have been planted for the butterflies. Record keeping of rearing and release of various types of butterflies is being done methodically. The eggs are collected from the host plants. In fact the identification and isolation of eggs can be done mostly from the host plants. Released a few butterflies.
18. Demonstration at **Dog Squad, Rajabhatkhawa** by the handler and assistant handler. Dog Karim demonstrated the skills of chasing and capturing. The dog appears to be very fast and agile and has been trained very well.
19. Inspected the **Miscellaneous spp. Plantation 2019 at West Garam** beat, West Damanpur range along the N.H. The total area is 10 ha. The stock and growth is good. Due to incessant rains, waterlogging in few places was noticed, which needs to be drained out. Only 1 ha out of 10 ha could be cleaned owing to non-release of plantation maintenance fund. It was directed that the rest of

the plantation should be cleaned immediately and the fund would be arranged from SFDA.

20. Inspected **Miscellaneous plantation 2019 at Poro East** beat, West Damanpur range along N.H. The total area planted is 15 ha. The area was degraded forest land (near Rava busty). The growth is moderate. Due to incessant rain for the last few days waterlogging at few places observed. As reported, 50% of the area could be cleaned owing to non-release of maintenance fund.
21. Inspected **CAMPA funded 2017 plantation at Poro East beat**. The growth of plantation is very good and survival % is also high. The fund release by CAMPA has been regular and the plantation has established well. Cleaning has been done on time.

Suggestions:

1. *Roof top rainwater harvesting may be introduced in the watch towers / anti-poaching camps, by use of PVC gutters, pipes and tanks. This could solve the water crisis in camps to certain extent.*
2. *The good works being done in Vulture Conservation and Breeding Centre and the Butterfly Rearing Park may be shown to officers, staff, school children, NGOs and presentation made to explain the works. This will generate awareness for Vulture Conservation and the role of toxic drugs in decline of vulture population.*

Jaldapara National Park

Visited Jaldapara National Park on 30th Sept, 2019 and halted at Hollong FRH. Inspected Tree fodder plantation and went for night safari.

Observations

1. **Tree fodder plantation at Torsha-1** compartment has been raised in 2019. This is a unique venture because such plantations are not taken up these days as a programme and some of the trees planted are presently not included in normal plantations of North Bengal. The area is 10 ha and very close to Hollong FRH and Range Office and therefore the supervision by FRs, B.O and FGs is good. Since seedlings raised in big polybags are more than 1.5 yrs old, they have already established well. It appears that the pattern of plantation is random, to mimic the natural forests. This is a good idea, thinking of future management. Weed is not a problem since the plants have grown at least 5-6 feet tall. The growth in girth However the spacing appeared a bit close, since the species planted viz: *Ficus benghalensis* (Bot), *Dillenia indica* (Chalta), Latore, Dumur, Jalpai, etc would develop large crowns and we actually need bigger crowns for more fodder. Therefore future management of the plantation needs to be clearly chalked out, specially the thinning regime. Presently there is electric fencing and this may be opened when the establishment is complete.
2. **Distribution of Motorbykes to FR and DR/Fr** was done at Hollong on 30th Sept evening. The Pulsar motorbykes, 8 in no. was gifted by "Aaranyak" to Forest Dept for the movement of staff in North Bengal. It was formally received on behalf of Forest Dept by undersigned and the PCCF Wildlife & CWLW and distributed to Jaldapara NP (3nos), Gorumara (2 nos), Japlaiguri Divn (1 no.) and Cooch Behar Divn (2 nos.)
3. Went for **Night Safari at Jaldapara N.P.** Fodder grass planted recently has survived well. However, it was observed that in spite of electric fencing provided for establishment of the plantation, Sambhars of all age were roaming and feeding in the plantation. The electric fence should be checked

and repaired as required. Spotted Sambhar, Barking Deer, Bison, Rhino (one was sitting) at several locations. The population of Bison and Sambhar is substantial. Rhinos, Bisons and Sambhars were observed in the glade opposite Hollong FRH at night. They were quite substantial in number. One rhino came in the garden just in front of the Hollong FRH for feeding on grass. Since it is a regular feature, signages alerting the tourists have been fixed around the FRH. This is a good move.

Inspected the "Sledge" made for proposed translocation of rhino to Patlakhawa. The design is innovative. However, it is felt that the ground on which the sledge would be placed will have to be cut, to place the sledge level with the ground, so that rolling the tranquilized animal to the sledge is easy. Introduction of Rhino in Patlakhawa would be a very interesting experiment.

Suggestions:

1. All the trees in the Tree Fodder plantation may be numbered and their growth in diameter and survival % recorded each year at a specific time.
2. The DFO Gorumara, Jaldapara, Japlaiguri and Cooch behar divisions should provide helmets against each motorbike received by them from Aaranyak.

Bengal Safari

Attended the programme of Hon'ble MIC Forest, MIC Tourism and MIC North Bengal Development Departments of releasing two tigers in Bengal Safari, for public display. The three ministers jointly released the tigers. Took a round of Bengal safari.

Observations:

1. The newly released tigers were playful. The brown skinned tiger appeared more agile than the white tiger.
2. Spotted deer population is quite substantial. A no. of juvenile were spotted.
3. The bear and leopard appeared very healthy.
4. Within the herbivore enclosure, a number of *Ibis* (?) birds could be spotted.

PNHNP Centre at Topkaydara and Dowhill

Visited the satellite centre of PNHNP at **Topkaydara and Dowhill** on 2nd October, 2019. Topkaydara is a centre for breeding of Snow Leopard and Red Panda, where as Dowhill is the conservation and breeding centre for Ghoral, Himalayan Tahr, Blue Sheep and Pheasant. Being breeding centres these are not for public display.

Observations:

1. The conservation of Red Panda and Snow Leopard has been a tremendous and arduous effort for years together. Red Panda and Snow Leopard breeding has been very successful. Red Panda juvenile could be seen under the protection of mother Panda in the shelter box. 4 cubs have reportedly been born.
2. The health of the animals is very good.
3. I appreciate the strict protocol for hygiene developed and maintained by the zoo authorities for so long. This has helped in maintenance and increase of the population of snow leopard and red panda through captive breeding. It is also appreciated that the snow leopards brought from Siberia, France and Kashmir could produce progenies successfully.
4. Release of Red Panda in wild may be considered as future programme.

5. The zoo is very neat and clean and the staff are very dedicated.
6. Ghoral could be bred in Dowhill breeding centre. Also the breeding of Himalayan Tahr, Blue Sheep and Pheasant has been successful here. The breeding centre has been maintained hygienically and the health of the animals appeared very good.

Suggestions:

Roof top rainwater harvesting may be installed in Topkaydara campus.

West Bengal Forestry School, Dowhill

This is one of the oldest forestry schools, established in 1907. Every year the students, presently the Foresters are trained professionally.

Observations:

1. The new class rooms built with JICA assisted Capacity Building programme is well maintained. The design of the class rooms is good.
2. The museum of WBFS has many old taxidermy models in demonstration which requires thorough maintenance. However, in absence of trained taxidermist, the maintenance of such models has become difficult. The wood samples demonstrated as panel woods is a very good collection. There are some spelling mistakes of the species, which may be rectified.
3. The Asst. Director's quarter is nicely built, but lying vacant. This may be used temporarily for Assistant Director PNHZP, Darjeeling. Director PNHZP may take up the matter with Member Secretary WBZA and CF Development Circle.

ACKNOWLEDGEMENT

I thankfully acknowledge APCCF North Bengal, F.D BTR, CCF Hills, DFD BTR East, DFD BTR West, DFO Jaldapara, Director PNHZP, Director WBFS, Dowhill, DFO Silviculture North and all their office, field and laboratory staff for attending the tour and interacting with the undersigned from time to time. I also appreciate their efforts for implementing the govt. works wholeheartedly.

Sae am
21.10.19

(S. BARARI)

PCCF (HoFF) West Bengal

PHOTOGRAPHS TAKEN DURING THE TOUR



Huge deposit of boulders and debris on Jainty river. The bridge on left is covered with debris accumulated over the years.



Vulture Release Aviary near 22nd mile tower, and VCBC, Rajabhatkhawa, at Buxa Tiger Reserve

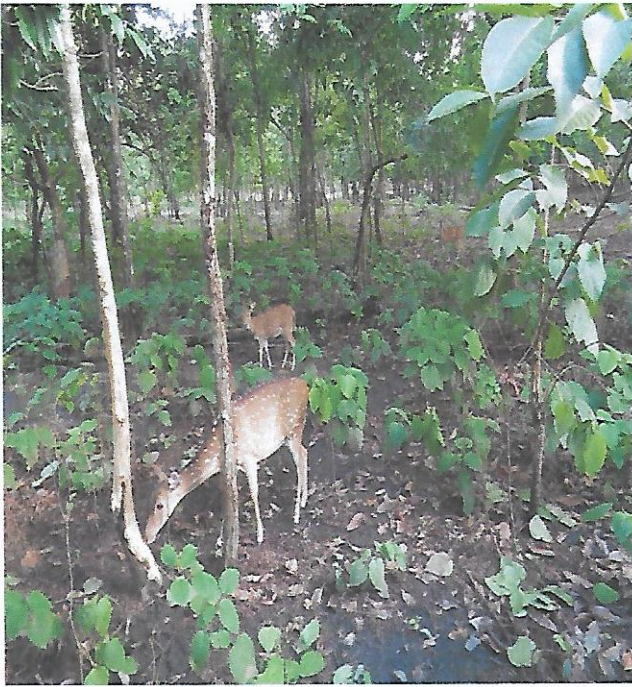


Larvae of butterfly at Butterfly Rearing Centre, RVK

Motorbikes gifted by Aaranyak at Jaldapara



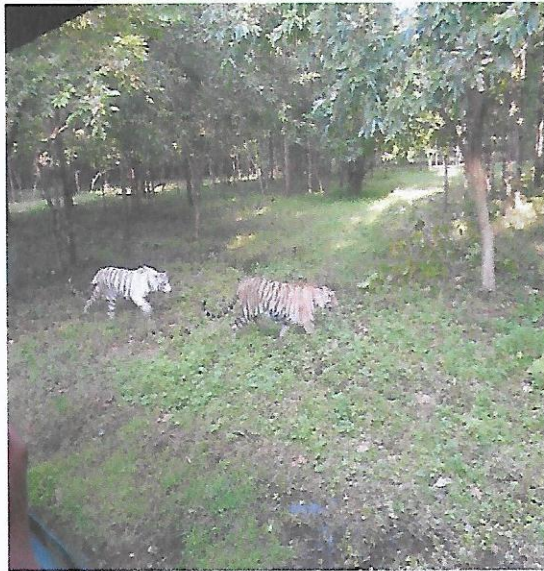
Two views of the glade in front of Hollong FRH. Wild elephants seen on the right



Cheetah with a young in Bengal Safari



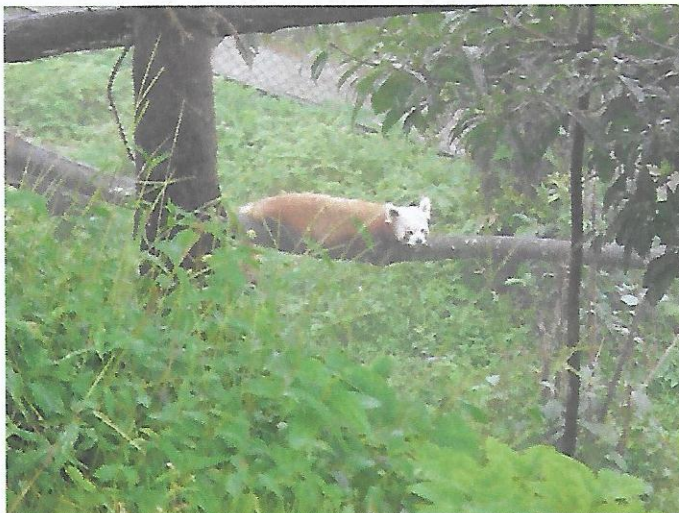
Bear spotted in Bengal Safari



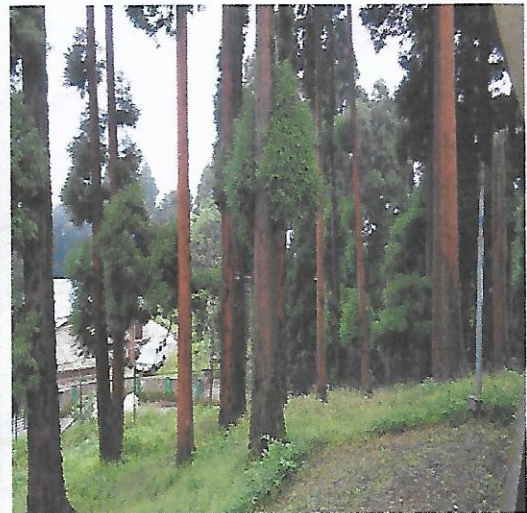
The two tigers released in Bengal Safari on 1st Oct



Red Panda protecting young cub in Topkaydara



Adult Red Panda relaxing in Topkaydara, satellite zoo.



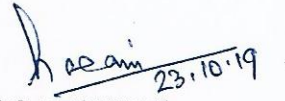
Huge *Cryptomeria* trees in Dowhill



The Museum of Dowhill School on left and the Main building Dowhill School on right

Copy forwarded for information to :-

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- (2) Principal Chief Conservator of Forests, Wildlife, W.B.
- (3) Principal Chief Conservator of Forests, RMD
- (4) Addl. PCCF, North Bengal
- (5) FD, BTR / CCF, Hill Circle
- (6) DFDs, BTR(E) / BTR(W) / DFOs, Jaldapara WL / Silviculture(North) /
Directors, Padmaja Naidu Himalayan Zoological Park, Drjeeling / W.B.
Forest School, Dowhill
- (7) P.S. to MIC, Forests
- (8) P.S. to MoS, Forests


23.10.19

(S BARARI)

Principal Chief Conservator of Forests &
Head of Forest Force, W.B