

MAMMALS OF SHUKLAPHANTA

An Account from Camera Trap Survey



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LAXMAN PRASAD POUDYAL
BABU RAM LAMICHHANE
UMESH PAUDEL
SUDIP RAJ NIROULA
ANIL PRASAI
SABITA MALLA
NARESH SUBEDI
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Greater One-horned Rhinoceros by Chungba Sherpa



FOREWORD

Nepal has a strong commitment for conservation of its rich biodiversity, allocating nearly one fourth of its landmass as protected areas. Shuklaphanta National Park (ShNP) is one of the important protected areas in Nepal representing the Western part of the Terai Arc Landscape. It lies at the south-western corner of Nepal in Kanchanpur district (Far West State). The Park is comparatively small covering 305 km² within the altitude range of 175 to 1300m. The core area of the park is surrounded by buffer zone where people live in high density. However, The ShNP is the home for many rare and globally threatened species of flora and fauna. The park has transboundary importance as it is connected to the Indian protected areas through the biological corridors and frequent movement of large mammals has been well documented. Although, park is rich in biodiversity, there are only a few attempts to systematically document it.

On this background, the ShNP attempts to publish this book with photographs of the mammalian species obtained during camera trapping surveys from the park. There are 37 mammalian species with photographs in the park out of 56 species recorded there so far. Among them, 12 are globally threatened and 20 are nationally threatened. This confirms ShNP as a site of international significance for the wildlife conservation. The distribution maps and the photographs of each species presented in the book will serve as an invaluable resource for the researchers interested in particular species or mammalian species of the park.

The Department of National Parks and Wildlife Conservation always encourages in updated information about the status of wildlife and their habitat in protected areas network. Such information also helps in setting conservation priorities in the respective parks. In this context, Shuklaphanta National Park has published this camera trapped photographic book with the technical support from National Trust for Nature Conservation, WWF Nepal and ZSL Nepal. I would like to congratulate Shuklaphanta National Park and all the compilers for publishing this book and thank for their efforts to reveal this valuable scientific work.

I strongly believe that this book will generate big interests in people towards conservation and supports in enhancing wildlife tourism in ShNP.

Gopal Prakash Bhattarai
Director General



Ref. no.:

Date:

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On behalf of Shuklaphanta National Park Office, I would like to thank all staff of Shuklaphanta National Park (ShNP) including Account Officer Shankar Singh Kunwar, Section Officer Gauraj Bahadur Limbu, Assistant Conservation Officers Uttam Kumar Chaudhary and Sailendra Chaudhary; Rangers Janaki Bhandari, Prayash KC, Anil Rasaili, Yam Bahadur Rawat, Dharmajit Saud, Puran Dev Mishra and Gyanendra Bahadur Shah; Computer Operator Laxmi Bhatta; Kharidar Chanu Ram Rana, Kumari Renu Yadav and Ganesh Dutt Bhatta; Senior Gamescouts, Gamescouts, Office Assistants, Drivers, Elephant Staff and all crew members of the field survey. I would like to thank ShNP's former Chief Conservation Officer Bed Kumar Dhakal and Assistant Conservation Officer Gopal Bahadur Ghimire, and DNPWC's Assistant Ecologists Rishi Ranabhat and Bhupendra Prasad Yadav.

I would like to thank Sudarshan Neupane, Pramod Subedi, Hemanta Yadav (former Office-In-Charge) from NTNC/SCP. The camera trapping fieldwork in Shuklaphanta would not be possible without the tireless efforts of NTNC's wildlife technicians Dev Raj Joshi, Ganesh Rana, Amar Singh Thakur, Shankar Lal Tharu, Jog Raj Rana, Deep Prasad Chaudhary, Ramesh Darai, Binod Darai, Om Prakash Chaudhary, Suman Malla and Shreeram Tharu.

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I would like to thank all the authors of this book for their determined work during the photo extraction and analysis, map preparation and write up the manuscript.

Laxman Prasad Poudyal
Chief Conservation Officer

Preface

The Shuklaphanta National Park is often mirrored with the largest herd of Barhasinga (Swamp Deer) which is true but it does not end here. The Park also provides habitat for many other wildlife including Tiger, Rhino, Elephant, Sloth Bear, Leopard etc. At one point in history it was famous for its highest tiger density in the world. Not only has the big and charismatic wildlife, the park also held lesser known wildlife such as Rusty-spotted Cat, Ruddy Mongoose, Hispid Hare and Chinese Pangolin. In the past decade, regular and intensive surveys in the park using digital camera traps enabled us to detect various fascinating but cryptic wildlife which would not be seen otherwise.

Most of these camera trapping surveys were conducted targeting at Tigers. The Tiger photographs are immediately analyzed to estimate the Tiger population and rest of the photographs remain in the depository. In one hand, such data remained unused at the data depository and often high risk of data loss due to lack of institutional arrangement to store data. On the other hand, conservationists, researchers and others interested in these species cannot access such information. Only those who are directly involved in camera trapping have some information in raw form about these species. Realizing such situation, we initiated to publish this book with camera trap records of all mammal species in the Shuklaphanta National Park. We carefully looked at the pictures of wildlife obtained in camera traps during National Tiger and Prey Base Survey 2018 and prepared the list of species. We also incorporated the species which were photographed in previous years between 2013 and 2017 but not during the survey of 2018. The survey of 2018 covered a larger landscape in the North and East of the Park but we focused on the species photographed in the Park and forests.

All the photographs of species presented in this book are taken exclusively in and around the Shuklaphanta National Park; most of them were obtained from the camera traps. As camera trap pictures are not high resolution and animals not always come close or pose to the cameras, pictures may not be very impressive but these serve as evidence of the species existence in the Park. For each species we have presented the distribution of photographed locations (map and table), standard capture rate (number of independent detections) along with common name, scientific name and protection status. The maps presented in this book partially represents the distribution of the species as it shows only the camera trapped location; the actual species distribution might be larger. We hope this book will be useful for the researchers, tourists and anyone interested to wildlife of Shuklaphanta. We will highly appreciate any feedback on the book.



Asian Wild Elephant by Yam Bahadur Rawat

Abbreviations and Acronyms

| | |
|-----------------|---|
| BCC | Biodiversity Conservation Center |
| BCP | Bardia Conservation Program |
| CITES | Convention on International Trade in Endangered Species of Wild Fauna and Flora |
| DNPWC | Department of National Parks and Wildlife Conservation |
| IUCN | International Union for Conservation of Nature and Natural Resources |
| NPWC | National Parks and Wildlife Conservation |
| NTNC | National Trust for Nature Conservation |
| SCP | Shuklaphanta Conservation Program |
| ShNP | Shuklaphanta National Park |
| Km ² | Square Kilometer |
| NA | Not Available |
| LC | Least Concern |
| VU | Vulnerable |
| EN | Endangered |
| CR | Critically Endangered |
| DD | Data Deficient |

Background

| Shuklaphanta National Park and Buffer Zone: A Fact Sheet | |
|--|--|
| Location | District: Kanchanpur; State: Far West |
| Establishment | 1969 – Royal Hunting Forest, Area: 131 km ² 1976 – Royal Shuklaphanta Wildlife Reserve, Area: 155 km ² (19 July 1976) 1994 – Extended east from Chaudhar River, 150 km ² (23 May 1994) 2004 – Buffer Zone declared, Area: 243.5 km ² (22 May 2004) 2017 – Status Changed to National Park (20 February 2017) |
| IUCN Category | National Park II and Buffer Zone VI |
| Area | National Park 305 km ² and Buffer Zone 243.5 km ² |
| Physiographic Zone | Terai & Siwaliks |
| Altitude range | 175 - 1300 m |
| Latitude | 28° 45' 47" - 29° 02' 52" |
| Longitude | 80° 05' 45" - 80° 21' 43" |
| Floral Diversity | 118 Family 665 Species |
| Faunal Diversity | Mammals 56 Birds 450 Reptiles 12 Amphibians 20 Fish 24 |
| Buffer zone | Buffer Zone User Committees: 9 Community Forests: 42 |

Introduction

Shuklaphanta National Park

Shuklaphanta National Park is situated at the southwest corner of Nepal in Kanchanpur district of Far West State. It lies between 28° 45' 47" - 29° 02' 52" latitudes and 80° 05' 45" - 80° 21' 43" longitudes. The altitude ranges from 175 - 1300m above sea level.

The park was a famous hunting area for royalties of Nepal and their distinguished guests for a long time. It was declared as Royal Hunting Forest with an area of 131 km² in 1969. Later it was promulgated as the Royal Shuklaphanta Wildlife Reserve in 1976 covering an area of 155 km² and extended to the present size of 305 km² in 1994. The area of 243.5 km² surrounding the reserve was declared as buffer zone in 2004 to join the hands with local people for conservation and development. The reserve was renamed as Shuklaphanta Wildlife Reserve in 2006 and its status was changed to a National Park in 2017. The name Shuklaphanta is taken from the largest grassland of Nepal **Shuklaphanta** which is a home to the largest herds of Swamp Deer in the world.

| Boundary | Major landmarks |
|----------|---|
| North | Settlements, forests and Dadeldhura District boundary in the Siwalik Hills. The park adjoins with two municipals of Kanchanpur: 1. Bhimdutta 2. Bedkot and one municipal of Dadeldhura: 1. Parashuram |
| East | Syali River. The park adjoins with two municipals of Kanchanpur: 1. Shuklaphanta 2. Laljhadi |
| South | Settlements and Nepal India Boarder. The park adjoins with two municipals of Kanchanpur: 1. Beldadi 2. Belauri. Lagga Bagga forests and grasslands of Pilibhit Tiger Reserve lie in the Indian side. |
| West | Mahakali River. The park adjoins with one municipal of Kanchanpur: 1. Mahakali |

The park is a part of the transboundary Terai Arc Landscape (TAL), and connected to Dudhuwa National Park, India towards East via Laljhadi Forest corridor and Nandoor Wildlife Sanctuary, India towards Northwest via Boom-Bhramadev forest corridor and Mahakali (known as Sarada in India) River. Majority of the park lies on the Gangetic flood plains and the common soil types are sandy loam, silty loam and clay loam.

Camera Trap Survey

List of the mammals prepared in this book are primarily based on the species records on camera trapping survey of 2018. We have also included some species photographed in camera traps between 2013 and 2017 but not photographed in 2018. The camera trapping followed the tiger and preybase monitoring protocol (DNPWC, 2017*) with primarily objective to study the density and abundance of tigers. In addition to tigers, the camera traps also detect various other wildlife including rare and endangered species.

Systematic survey was carried out overlaying 2x2 km² continuous grid cells across the Shuklaphanta National Park and adjoining forests. Paired camera traps were placed for 15 days at a location maximizing the probability of photographing tigers and safety of camera traps within each grid cell. Motion sensor camera-traps (Reconyx 500 & 550, Bushnell Trophy Cam HD, Panthera camera V4, V5, V6 and Cuddeback attack) were positioned 45 cm above ground, perpendicular to, and 5-7 meter either side of game trails, forest roads, and riverbeds without using any bait or lure. Camera traps were mounted on trees or on wooden poles and checked at least twice in a week. These motion sensors cameras took three pictures per trigger with no delay between the triggers when or other animal moved in front. Photos obtained in camera traps were systematically sorted species wise into folders.

Number of locations (grid cells), the species was captured, number of independent detections and the detection rate (per 100 trap days) for each species were calculated from the camera trap photographs. For this calculation we only used the camera trap records of the species within Shuklaphanta National Park during 2018 survey. Photograph of a species taken within an hour from a location was considered an independent detection. Species which were photographed in previous years but not in 2018 survey were also included in the list of the list of mammals photographed in camera-trap but number of independent detections and detection rate was not calculated. The Detection rate for species photographed in 2018 survey was calculated using the following formula.

$$\text{Detection rate (per 100 trap nights)} = \frac{\text{Number of independent detections of a species}}{\text{Total effort (trap days) of entire survey}} \times 100$$

Camera traps are very effective in detecting many cryptic wildlife but all the mammal species found in the Park might not have been photographed. There could be camera placement bias and/or behaviour of the species to avoid cameras. The camera traps are effective tools recording the medium and large sized animals but may not adequately detect the small mammals and other small-sized animals.

* Department of National Parks and Wildlife Conservation (DNPWC) 2017. Tiger and Prey Base Monitoring Protocol (Nepal). Government of Nepal, Ministry of Forests and Soil Conservation, Department of National Parks and Wildlife Conservation, Kathmandu, Nepal.

Results

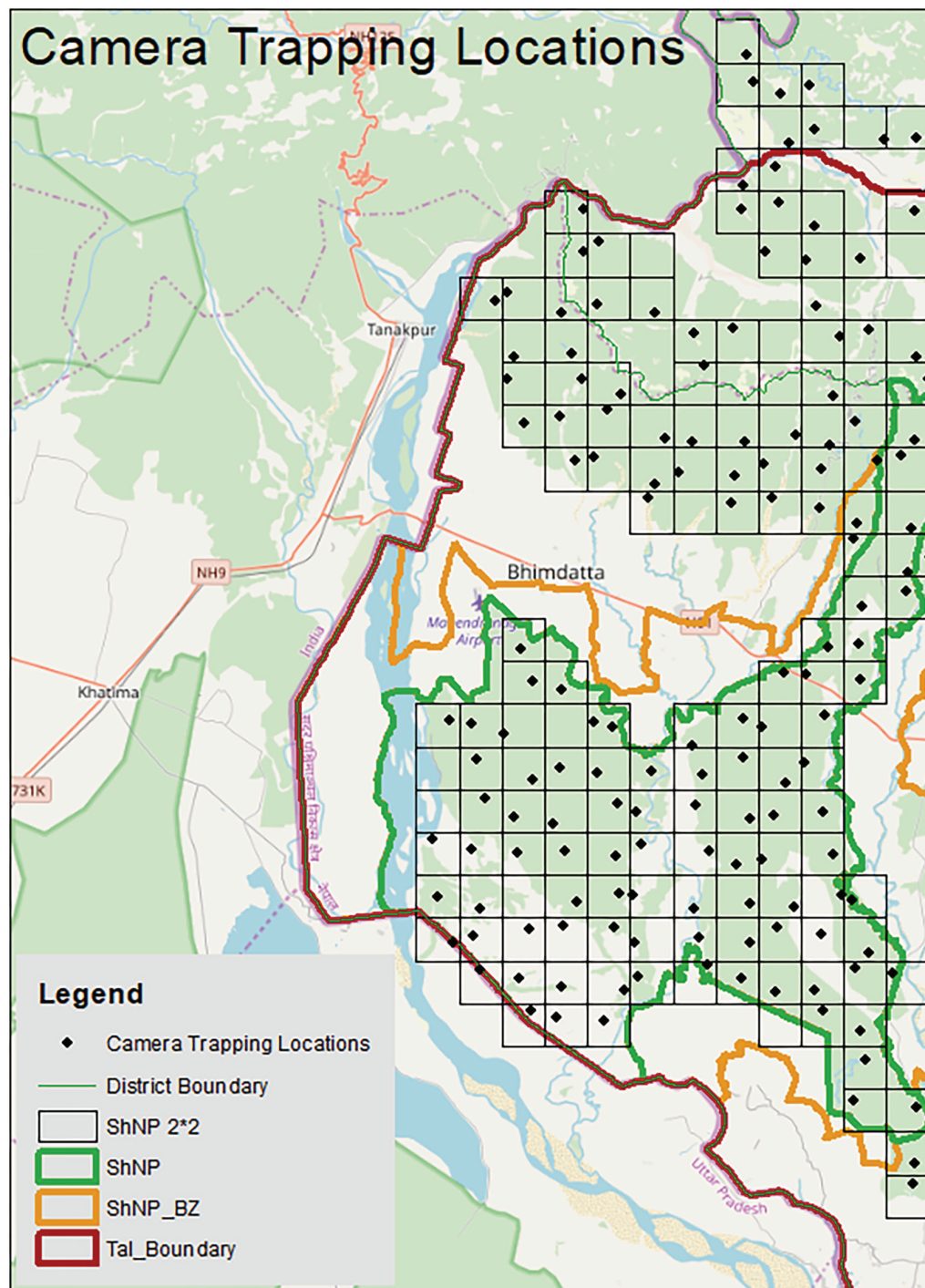
The camera trap survey of 2018 resulted a total effort of 1,605 trap days in 107 camera trap locations in Shuklaphanta NP, Buffer Zone and peripheral forests (including corridors). We recorded a total of 37 mammalian species including 32 species photographed in the camera trap survey of 2018 and additional five species were photographed during the previous surveys (2013 – 2017). Out of the 37 species recorded, more than half (n=20) were carnivores (belonging to the order Carnivora). Chital had the highest detection rate followed by Wild Boar, Indian Hare, Golden Jackal, Barking Deer, Bengal Tiger and Common Leopard. Chinese Pangolin, Masked Palm Civet, Ruddy Mongoose, Striped Hyaena, Large Indian Civet and Yellow-throated Marten were photographed only once with detection rate 0.06. Details of each species along with their detection rate and distribution map based on camera trap records is provided in following sections.

Conclusion and Recommendations

Camera trap surveys are very useful as they reveal various cryptic wildlife which otherwise remains un-noticed. Although we found more than three dozens of mammals, our records may not represent the true index of the species occurrence in the park. A species specific camera trap surveys are recommended to understand their status, distribution and threats in the park. We recommend species specific surveys for the following

- **Sloth Bear:** Recorded once in 2013 and they have not been photographed afterwards, although signs were found.
- **Sambar Deer:** This animal is photographed in few locations though this is the highly preferred prey of tigers.
- **Pangolin:** Both the pangolins are recorded in the park however Indian Pangolin is not photographed during the camera trap survey and Chinese Pangolin is photographed only in two locations.
- **Asiatic Wild Dog (Dhole):** Despite their records from Shuklaphanta, we could not find the camera trap photographs.
- **Small mammals including bats:** Most of the members of Rodentia, Chiroptera occurring in the park are missing in the camera trap photographs.

Camera Trapping Locations



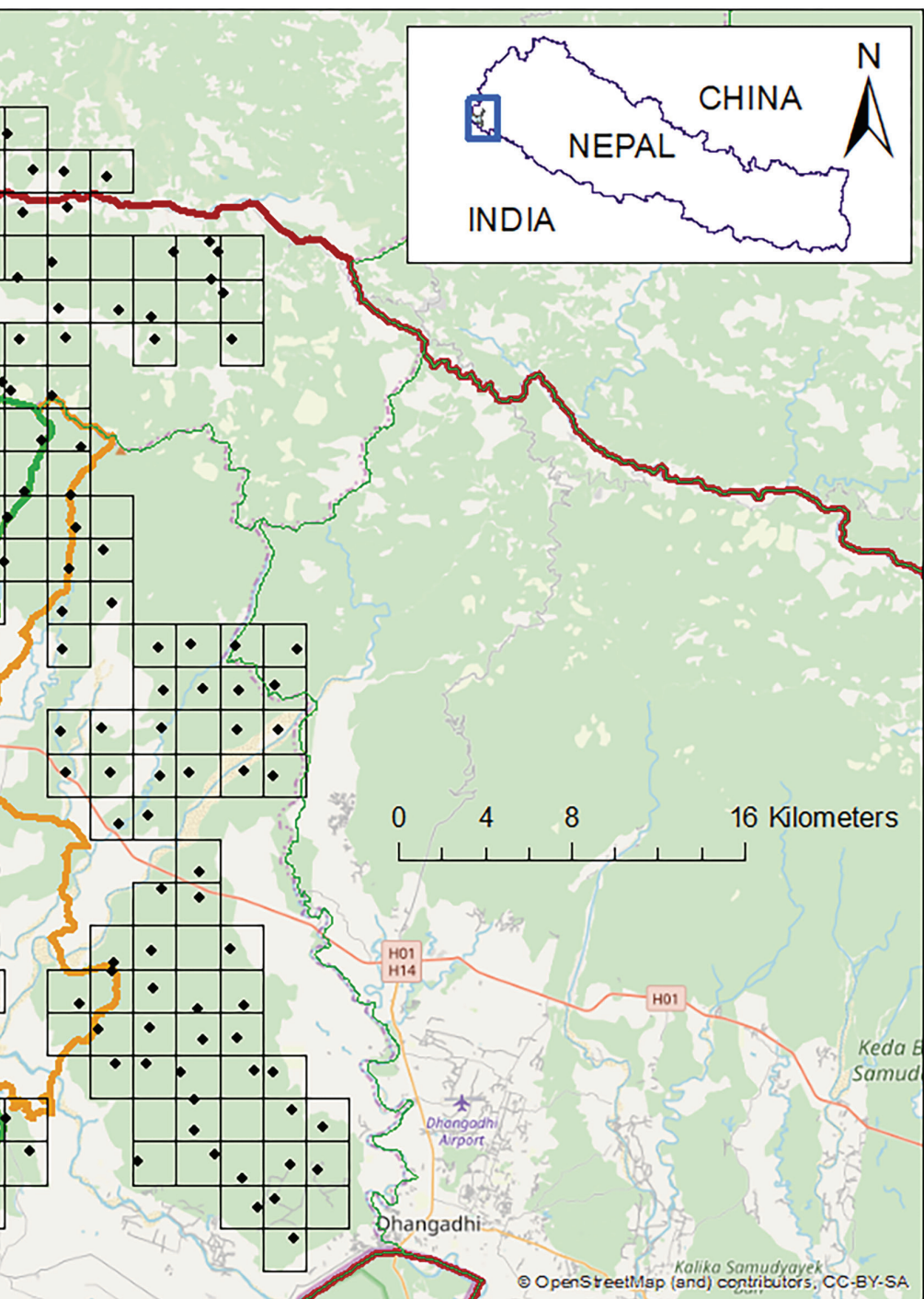


Table 1: Camera trapped mammals of ShNP and surroundings during the Bengal Tiger survey 2013-2018

| SN | Order/English Name | Nepali Name | Scientific Name | Body Weight (Kg) |
|---------------------------|------------------------|------------------|-----------------------------------|------------------|
| ORDER – PHOLIDOTA | | | | |
| 1 | Chinese Pangolin | कालो सालक | <i>Manis pentadactyla</i> | 9 |
| ORDER : CHIROPTERA | | | | |
| 2 | Painted Bat | रङ्गीचङ्गी चमेरो | <i>Kerivoula picta</i> | 0.005 |
| ORDER : PRIMATES | | | | |
| 3 | Rhesus Monkey | बाँदर | <i>Macaca mulatta</i> | 7 |
| 4 | Tarai Gray Langur | हनुमान लङ्गुर | <i>Semnopithecus hector</i> | 11-18 |
| ORDER : CARNIVORA | | | | |
| 5 | Golden Jackal | स्याल | <i>Canis aureus</i> | 8-12 |
| 6 | Bengal Fox | फ्याउरो | <i>Vulpes bengalensis</i> | 3-4 |
| 7 | Sloth Bear | काठे भालु | <i>Melursus ursinus</i> | 80-140 |
| 8 | Smooth-coated Otter | खैरो ओत | <i>Lutrogale perspicillata</i> | 7-11 |
| 9 | Yellow-throated Marten | मलसाँप्रौ | <i>Martes flavigula</i> | 3.8-5.7 |
| 10 | Honey Badger | रतेल | <i>Mellivora capensis</i> | 8-12 |
| 11 | Large Indian Civet | ठुलो नीरबिरालो | <i>Viverra zibetha</i> | 5-11 |
| 12 | Small Indian Civet | सानो नीरबिरालो | <i>Viverricula indica</i> | 2-4 |
| 13 | Asian Palm Civet | ताडी नीरबिरालो | <i>Paradoxurus hermaphroditus</i> | 3-5 |
| 14 | Masked Palm Civet | गाजले नीरबिरालो | <i>Paguma larvata</i> | 3.6-6 |

| Generation Time (in years) | Main Habitat | Food Habit | Activity Pattern |
|----------------------------|---|---------------------------|---------------------------------------|
| 7 | Forest, Shrubland, Grassland | Insectivorous | Nocturnal |
| NA | Artificial/Terrestrial, Forest | | Nocturnal |
| NA | Artificial/Terrestrial, Forest, Savanna, Shrubland | Omnivorous | Diurnal |
| NA | Artificial/Terrestrial, Forest | Folivorous | Diurnal |
| 3-5 | Forest, Grassland, Shrubland, Savanna, Artificial/Terrestrial | Omnivorous | Diurnal |
| NA | Grassland and Shrubland | Omnivorous | Nocturnal and crepuscular pattern |
| 10 | Shrubland, Grassland, Forest, Savanna; Artificial/Terrestrial | Insectivorous, Folivorous | Nocturnal or crepuscular pattern |
| 10 | Artificial/Aquatic, Wetlands (inland), Forest, Grassland, Shrubland | Omnivorous | Diurnal |
| 7.2 | Forest, Shrubland, Artificial/Terrestrial | Carnivore | Primarily diurnal, nocturnal |
| NA | Forest, Shrubland, Savanna | Carnivore | Nocturnal |
| NA | Artificial/Terrestrial, Forest, Shrubland | Carnivore | Nocturnal/ occasional day time active |
| NA | Forest, Shrubland, Artificial/ Terrestrial, Grassland, Savanna, Wetlands (inland) | Omnivorous | Nocturnal |
| NA | Shrubland, Forest, Grassland, Artificial/ Terrestrial, Introduced Vegetation | Omnivorous | Crepuscular or nocturnal |
| NA | Forest, Shrubland, Artificial/Terrestrial | Omnivorous | Nocturnal |

| SN | Order/English Name | Nepali Name | Scientific Name | Body Weight (Kg) |
|-------------------------------|-------------------------------|--------------------|---------------------------------|------------------|
| 15 | Indian Grey Mongoose | ठुलो न्याउरीमुसा | <i>Herpestes edwardsii</i> | 1-2 |
| 16 | Crab-eating Mongoose | गँगेटे न्याउरीमुसा | <i>Herpestes urva</i> | 1.8-2.3 |
| 17 | Ruddy Mongoose | रातो न्याउरीमुसा | <i>Herpestes smithii</i> | 1-2 |
| 18 | Striped Hyaena | हुँडार | <i>Hyaena hyaena</i> | 25-45 |
| 19 | Jungle Cat | वनबिरालो | <i>Felis chaus</i> | 3-12 |
| 20 | Leopard Cat | चरीबाघ | <i>Prionailurus bengalensis</i> | 3-7 |
| 21 | Fishing Cat | मलाहा बिरालो | <i>Prionailurus viverrinus</i> | 6-12 |
| 22 | Rusty-spotted Cat | खियाथोप्ले बिरालो | <i>Prionailurus rubiginosus</i> | 1-2 |
| 23 | Common Leopard | चितुवा | <i>Panthera pardus</i> | 31-65 |
| 24 | Bengal Tiger | पाटेबाघ | <i>Panthera tigris</i> | 160-300 |
| ORDER - PROBOSCIDAEE | | | | |
| 25 | Asian Elephant | जङ्गली हाती | <i>Elephas maximus</i> | 3000-5500 |
| ORDER : PERISSODACTYLA | | | | |
| 26 | Greater One-horned Rhinoceros | एकसिङ्गे गैंडा | <i>Rhinoceros unicornis</i> | 2000-2500 |
| ORDER : ARTIODACTYLA | | | | |
| 27 | Wild Boar | जङ्गली बँदेल | <i>Sus scrofa</i> | 50-250 |
| 28 | Swamp Deer | बाहसिङ्गा | <i>Rucervus duvauceli</i> | 170-200 |
| 29 | Sambar Deer | जरायो | <i>Rusa unicolor</i> | 130-270 |

| Generation Time (in years) | Main Habitat | Food Habit | Activity Pattern |
|----------------------------|--|------------|-----------------------------------|
| 4.3 | Forest, Shrubland, Artificial/Terrestrial, Grassland | Omnivorous | Diurnal |
| 6.5 | Forest, Shrubland, Artificial /Terrestrial, Grassland | Carnivore | Diurnal |
| 4.6 | Forest, Shrubland, Artificial/Terrestrial | Omnivorous | Diurnal |
| 6 | Wetland, Savanna, Shrubland, Forest, Grassland | Carnivore | Nocturnal |
| NA | Forest, Wetland, Grassland, Shrubland, Savanna | Carnivore | Diurnal and Nocturnal |
| NA | Grassland, Wetlands, Artificial/Terrestrial, Shrubland, Forest | Carnivore | Nocturnal |
| 5 | Wetlands, Shrubland, Grassland, Forest, Artificial/Terrestrial | Carnivore | Nocturnal |
| 4 | Savanna, Grassland, Shrubland, Artificial/ Terrestrial, Forest | Carnivore | Crepuscular |
| 7.42 | Forest, Grassland, Savanna, Shrubland | Carnivore | Nocturnal |
| 6-10 | Forest, Grassland, Savanna, Shrubland | Carnivore | Nocturnal and crepuscular pattern |
| | | | |
| NA | Shrubland, Forest, Grassland | Herbivore | Nocturnal and crepuscular pattern |
| | | | |
| NA | Wetland, Forest, Grassland | Herbivore | Diurnal and Nocturnal |
| | | | |
| NA | Wetland, Forest, Grassland, Savanna, Artificial/Terrestrial, Shrubland | Omnivorous | Crepuscular |
| 8 | Savanna, Grassland, Shrubland, Wetland, Forest | Herbivore | Diurnal |
| 8-10 | Forest, Artificial/Terrestrial, Savanna, Shrubland, Grassland, Wetland | Herbivore | Nocturnal and crepuscular pattern |

| SN | Order/English Name | Nepali Name | Scientific Name | Body Weight (Kg) |
|---------------------------|--------------------------|-------------------|--------------------------------|------------------|
| 30 | Spotted Deer | धित्तल | <i>Axis axis</i> | 45-90 |
| 31 | Hog Deer | लगुना | <i>Axis porcinus</i> | 30-50 |
| 32 | Barking Deer | रतुवा | <i>Muntiacus vaginalis</i> | 15-30 |
| 33 | Nilgai | नीलगाई | <i>Boselaphus tragocamelus</i> | 100-300 |
| ORDER : RODENTIA | | | | |
| 34 | Turkestan Rat | तुर्किस्ताने मुसा | <i>Rattus pyctoris</i> | 0.1-0.3 |
| 35 | Indian Crested Porcupine | जुरेदुम्सी | <i>Hystrix indica</i> | 11-18 |
| ORDER : LAGOMORPHA | | | | |
| 36 | Indian Hare | खैरो खरायो | <i>Lepus nigricollis</i> | 1.5-3.5 |
| 37 | Hispid Hare | लघुकर्ण खरायो | <i>Caprolagus hispidus</i> | 1.5-2.5 |

Table 2: Other Photographic evidences of Mammals of ShNP during field visits 2013-2019

| SN | Order/English Name | Nepali Name | Scientific Name | Body Weight (Kg) |
|--------------------------|----------------------------------|--------------------------|-----------------------------|------------------|
| ORDER: CHIROPTERA | | | | |
| 1 | Greater Asiatic Yellow House Bat | ठुलो एसियाली पित्त चमेरा | <i>Scotophilus heathi</i> | 0.04-0.05 |
| ORDER: RODENTIA | | | | |
| 2 | Five-striped Palm Squirrel | पाँचधर्के लोखर्के | <i>Funambulus pennantii</i> | 0.1-0.2 |

| Generation Time (in years) | Main Habitat | Food Habit | Activity Pattern |
|----------------------------|---|------------|---------------------------|
| 10 | Forest, Grassland, Savanna, Artificial/Terrestrial | Herbivore | Diurnal |
| 7 | Savanna, Shrubland, Grassland, Wetland | Herbivore | Diurnal |
| NA | Forest, Artificial/Terrestrial | Herbivore | Cathemeral |
| 5.7 | Grassland, Artificial/terrestrial, shrubland, forest | Herbivore | Diurnal and Nocturnal |
| | | | |
| 1 | Forest, Artificial/Terrestrial | Omnivorous | |
| 7 | Forest, Shrubland, Artificial, Grassland | Herbivore | Nocturnal |
| | | | |
| NA | Grassland, Artificial/Terrestrial, Shrubland, Forest, Wetland | Herbivore | Crepuscular and nocturnal |
| 3 | Grassland and Wetland | Herbivore | Crepuscular |

| Generation Time (in years) | Main Habitat | Food Habit | Activity Pattern |
|----------------------------|---|------------|------------------|
| | | | |
| NA | Shrubland, Artificial/Terrestrial, Forests | Omnivorous | Nocturnal |
| | | | |
| 4 | Forest, Grassland, Savanna, Artificial/Terrestrial, Shrubland | Omnivorous | Diurnal |

Location Maps and Animal Photographs Captured in Camera Traps

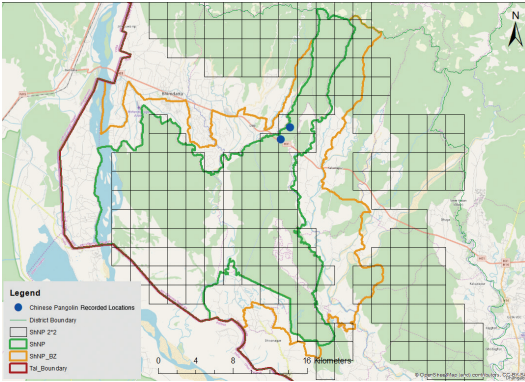
ORDER: **PHOLIDOTA**



Indian Pangolin by Yam Bahadur Rawat

Chinese Pangolin

| | |
|-----------------|---------------------------|
| Nepali Name | कालो सालक (Kalo Salak) |
| English Name | Chinese Pangolin |
| Scientific Name | <i>Manis pentadactyla</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 2.00 |
| No. of Detection | 2.00 |
| Detection Rate | 0.12 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | CR |
| CITES | I |
| NPWC Act | P |



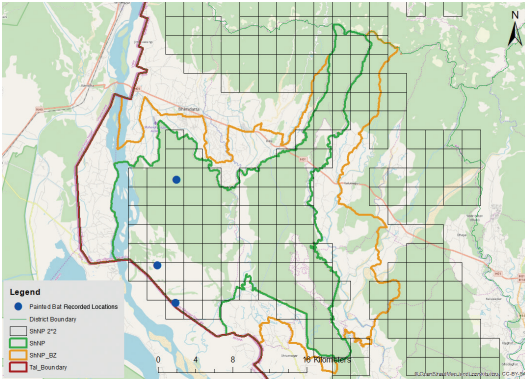
ORDER: **CHIROPTERA**



Greater Asiatic Yellow House Bat by Yam Bahadur Rawat

Painted Bat

| | |
|-----------------|--|
| Nepali Name | रङ्गीचङ्गी चमेरो (Rangichangi Chamero) |
| English Name | Painted Bat |
| Scientific Name | <i>Kerivoula picta</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |

* not recorded during 2018 survey.



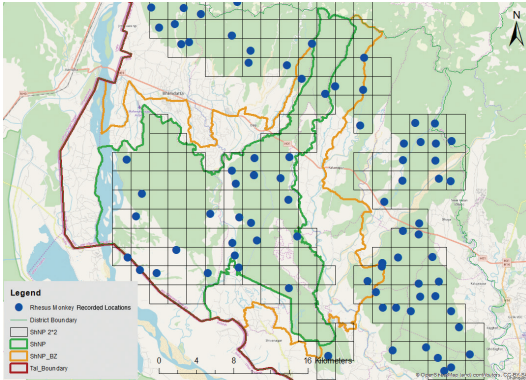
ORDER: PRIMATES



Terai Gray Langur by Yam Bahadur Rawat

Rhesus Monkey

| | |
|-----------------|---|
| Nepali Name | बाँदर, रातो बाँदर (Bandar, Rato Bandar) |
| English Name | Rhesus Monkey, Rhesus Macaque |
| Scientific Name | <i>Macaca mulatta</i> |

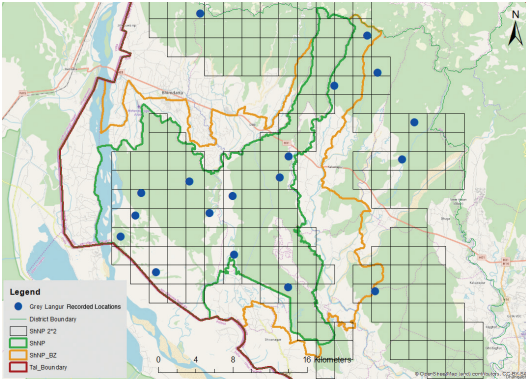


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 28 |
| No. of Detection | 113 |
| Detection Rate | 7.04 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | |
| NPWC Act | - |



Terai Gray Langur

| | |
|-----------------|--|
| Nepali Name | हनुमान लङ्गुर, लङ्गुरे बाँदर, गुना, ढेडु बाँदर(Hanuman Langur) |
| English Name | Terai Gray Langur |
| Scientific Name | <i>Semnopithecus hector</i> |



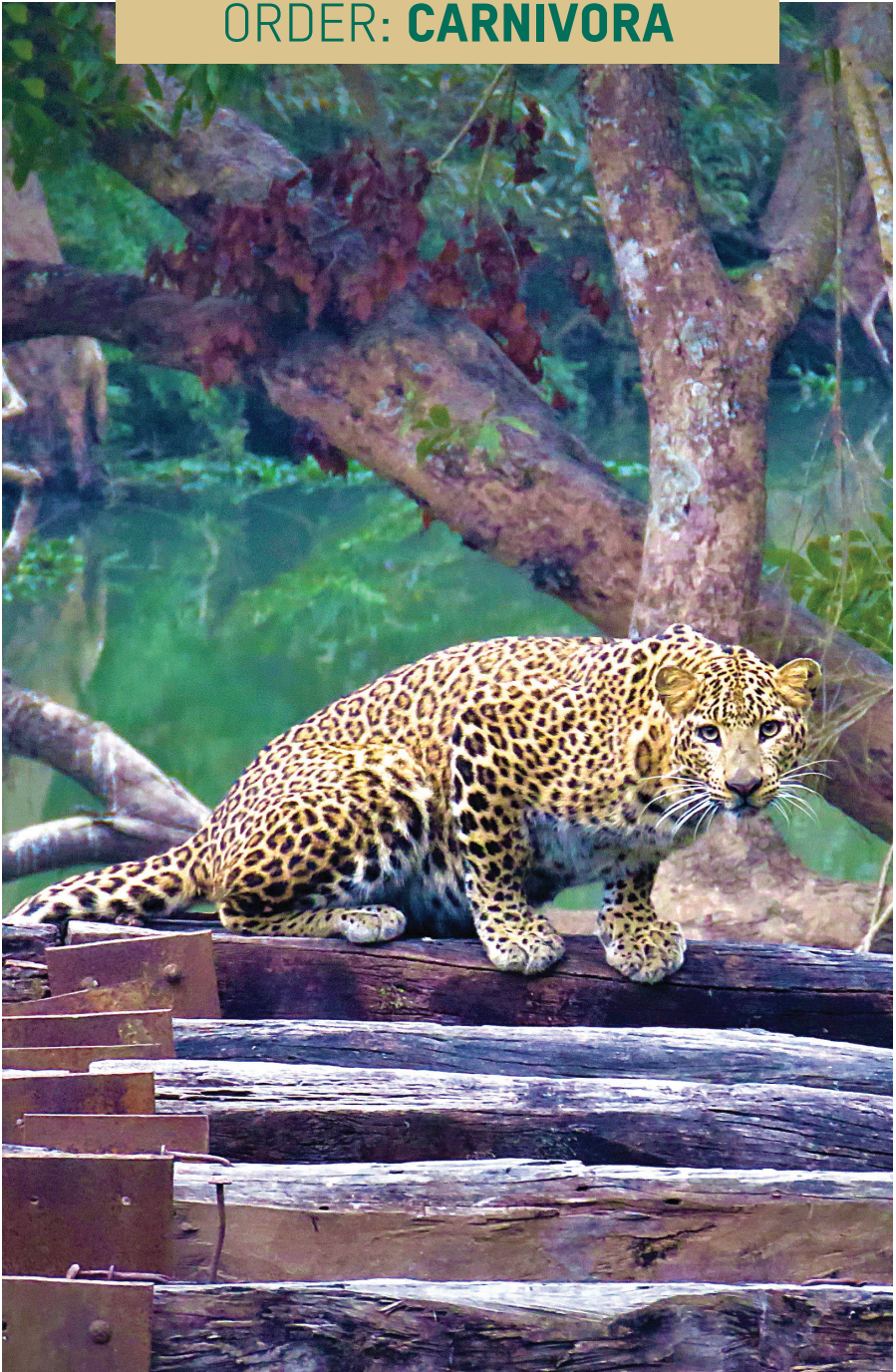
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 18 |
| No. of Detection | 18 |
| Detection Rate | 1.12 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | NT |
| CITES | I |
| NPWC Act | - |





Wetland, grassland and forest a mosaic habitat by Laxman Prasad Poudyal

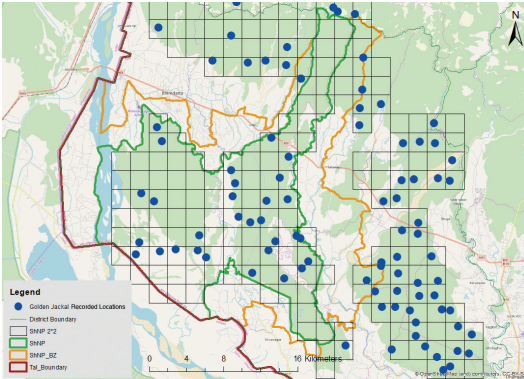
ORDER: **CARNIVORA**



Common Leopard by Dhiraj Chaudhary

Golden Jackal

| | |
|-----------------|---------------------|
| Nepali Name | स्याल (Syal) |
| English Name | Golden Jackal |
| Scientific Name | <i>Canis aureus</i> |



Detection Rate in Shuklaphanta National Park 2018

| | |
|------------------|------|
| No. of Location | 31 |
| No. of Detection | 125 |
| Detection Rate | 7.79 |

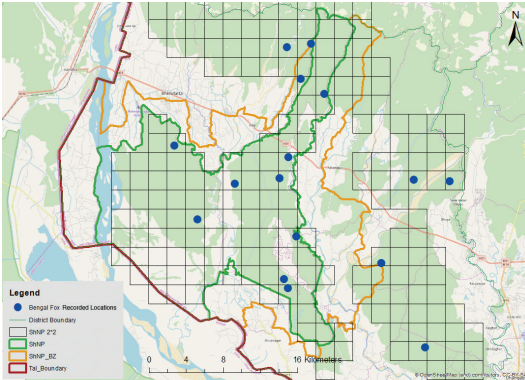
Conservation Status

| | |
|------------------------------|-----|
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Bengal Fox

| | |
|-----------------|---------------------------|
| Nepali Name | फ्याउरो (Phyauro) |
| English Name | Bengal Fox |
| Scientific Name | <i>Vulpes bengalensis</i> |

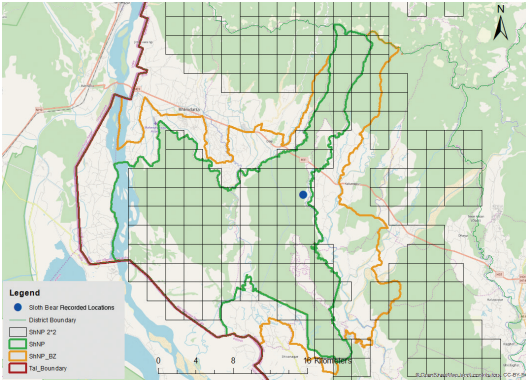


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 11 |
| No. of Detection | 25 |
| Detection Rate | 1.56 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Sloth Bear

| | |
|-----------------|-------------------------|
| Nepali Name | काठे भालु (Kathe Bhalu) |
| English Name | Sloth Bear |
| Scientific Name | <i>Melursus ursinus</i> |



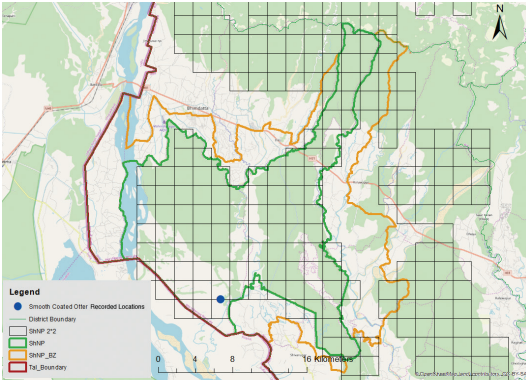
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | VU |
| CITES | I |
| NPWC Act | - |

* not recorded during 2018 survey.



Smooth-coated Otter

| | |
|-----------------|--------------------------------|
| Nepali Name | खैरो ओत (Khairo Ont) |
| English Name | Smooth-coated Otter |
| Scientific Name | <i>Lutrogale perspicillata</i> |



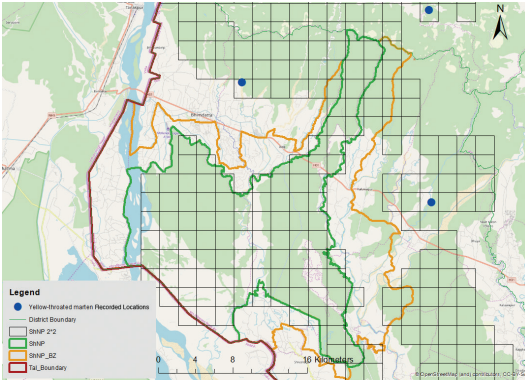
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | VU |
| CITES | II |
| NPWC Act | - |

* not recorded during 2018 survey.



Yellow-throated Marten

| | |
|-----------------|-------------------------|
| Nepali Name | मलसाँप्रौ (Malsanpro) |
| English Name | Yellow-throated Marten |
| Scientific Name | <i>Martes flavigula</i> |



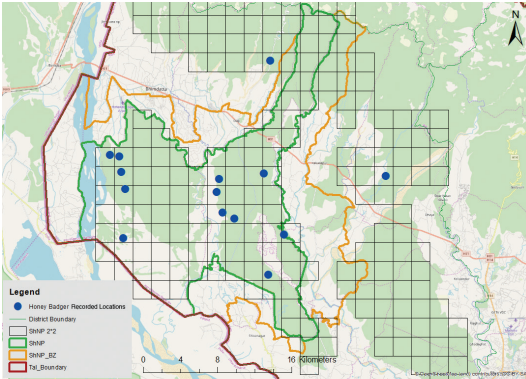
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |

* not recorded during 2018 survey.



Honey Badger

| | |
|-----------------|---------------------------|
| Nepali Name | रतेल (Ratel) |
| English Name | Honey Badger |
| Scientific Name | <i>Mellivora capensis</i> |

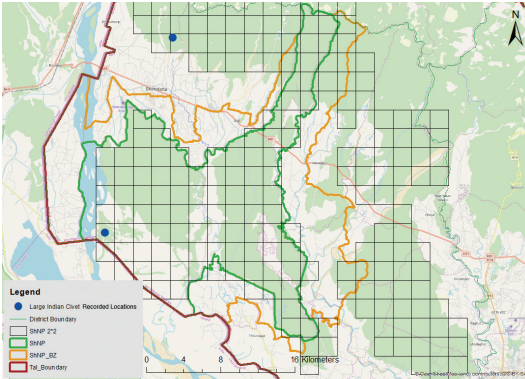


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 12 |
| No. of Detection | 27 |
| Detection Rate | 1.68 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Large Indian Civet

| | |
|-----------------|----------------------------------|
| Nepali Name | ठुलो नीरबिरालो (Thulo Nirbiralo) |
| English Name | Large Indian Civet |
| Scientific Name | <i>Viverra zibetha</i> |

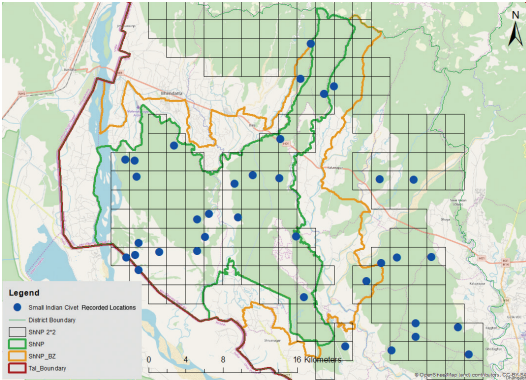


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 1 |
| No. of Detection | 1 |
| Detection Rate | 0.06 |
| Conservation Status | |
| IUCN National Redlist Status | NT |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Small Indian Civet

| | |
|-----------------|---------------------------------|
| Nepali Name | सानो नीरबिरालो (Sano Nirbiralo) |
| English Name | Small Indian Civet |
| Scientific Name | <i>Viverricula indica</i> |

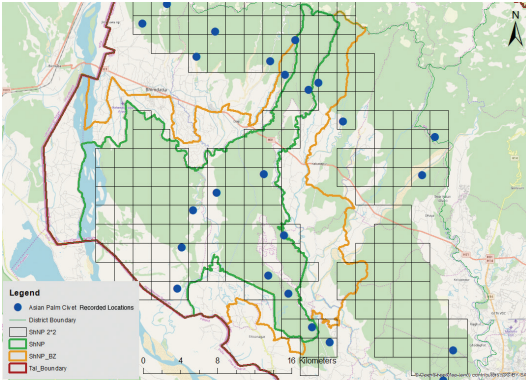


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 24 |
| No. of Detection | 65 |
| Detection Rate | 4.05 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Asian Palm Civet

| | |
|-----------------|-----------------------------------|
| Nepali Name | ताडी नीरबिरालो (Tadi Nirbiraloo) |
| English Name | Asian Palm Civet |
| Scientific Name | <i>Paradoxurus hermaphroditus</i> |

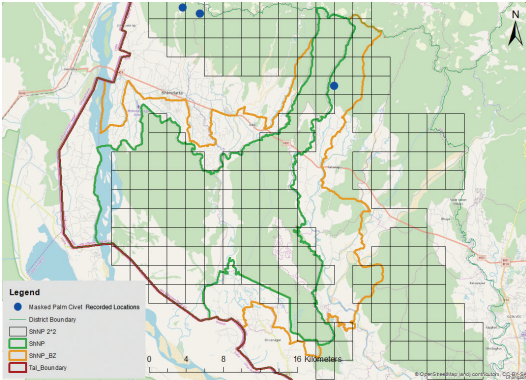


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 13 |
| No. of Detection | 23 |
| Detection Rate | 1.43 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Masked Palm Civet

| | |
|-----------------|-------------------------------------|
| Nepali Name | गाजले नीरबिरालो (Gajale Nirbirallo) |
| English Name | Masked Palm Civet |
| Scientific Name | <i>Paguma larvata</i> |

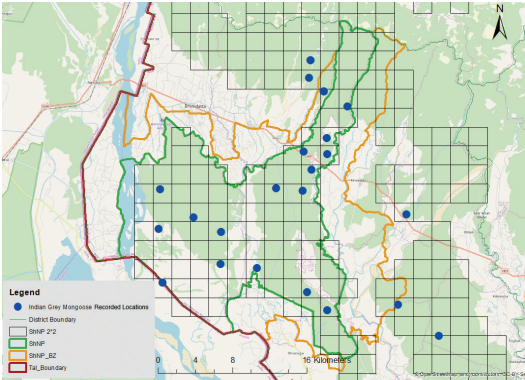


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 1 |
| No. of Detection | 2 |
| Detection Rate | 0.12 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Indian Grey Mongoose

| | |
|-----------------|-------------------------------------|
| Nepali Name | ठुलो न्याउरीमुसा (Thulo Nyaurimusa) |
| English Name | Indian Grey Mongoose |
| Scientific Name | <i>Herpestes edwardsii</i> |

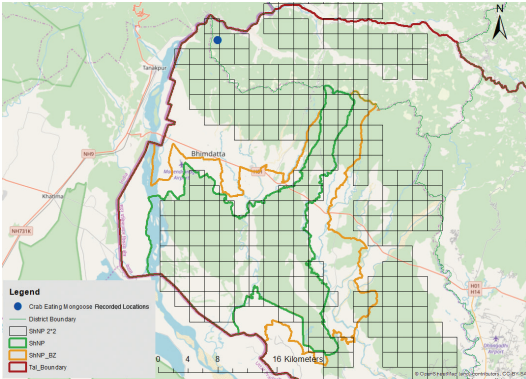


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 17 |
| No. of Detection | 42 |
| Detection Rate | 2.62 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Crab-eating Mongoose

| | |
|-----------------|--|
| Nepali Name | गँगटे न्याउरीमुसा (Gangate Nyaurimusa) |
| English Name | Crab-eating Mongoose |
| Scientific Name | <i>Herpestes urva</i> |



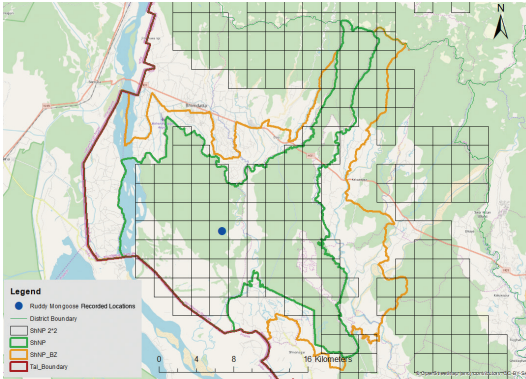
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |

* not recorded during 2018 survey.



Ruddy Mongoose

| | |
|-----------------|------------------------------------|
| Nepali Name | रातो न्याउरीमुसा (Rato Nyaurimusa) |
| English Name | Ruddy Mongoose |
| Scientific Name | <i>Herpestes smithii</i> |

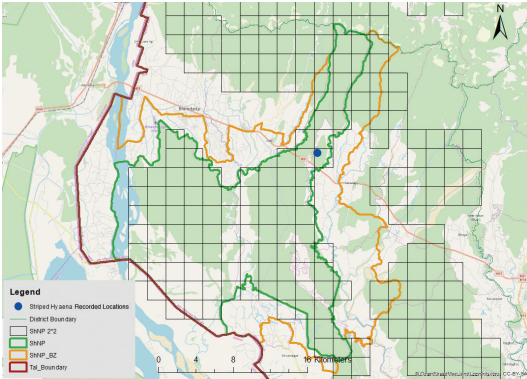


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|-------|
| No. of Location | 1 |
| No. of Detection | 1 |
| Detection Rate | 0.062 |
| Conservation Status | |
| IUCN National Redlist Status | DD |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Striped Hyena

| | |
|-----------------|---------------------|
| Nepali Name | हुँडार (Hundar) |
| English Name | Striped Hyena |
| Scientific Name | <i>Hyena hyaena</i> |

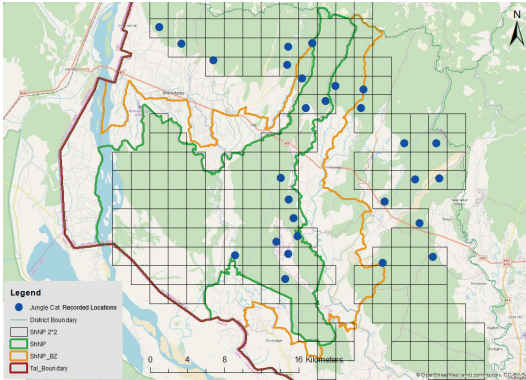


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 1 |
| No. of Detection | 1 |
| Detection Rate | 0.06 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | NT |
| CITES | III |
| NPWC Act | P |



Jungle Cat

| | |
|-----------------|----------------------|
| Nepali Name | वनबिरालो (Banbiralo) |
| English Name | Jungle Cat |
| Scientific Name | <i>Felis chaus</i> |



Detection Rate in Shuklaphanta National Park 2018

| | |
|------------------|------|
| No. of Location | 13 |
| No. of Detection | 24 |
| Detection Rate | 1.50 |

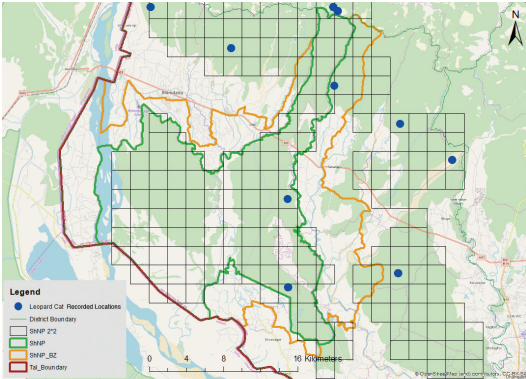
Conservation Status

| | |
|------------------------------|-----|
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



Leopard Cat

| | |
|-----------------|---------------------------------|
| Nepali Name | चरीबाघ (Charibagh) |
| English Name | Leopard Cat |
| Scientific Name | <i>Prionailurus bengalensis</i> |

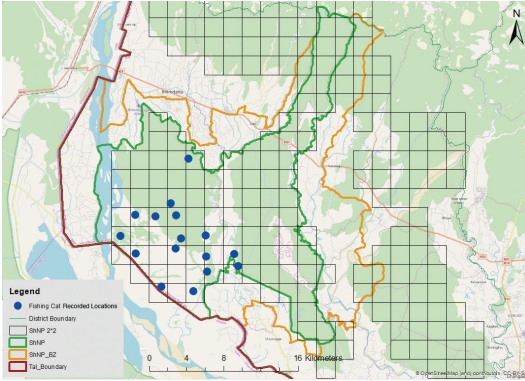


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 3 |
| No. of Detection | 3 |
| Detection Rate | 0.19 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | II |
| NPWC Act | P |



Fishing Cat

| | |
|-----------------|--------------------------------|
| Nepali Name | मलाहा बिरालो (Malaha Biralo) |
| English Name | Fishing Cat |
| Scientific Name | <i>Prionailurus viverrinus</i> |

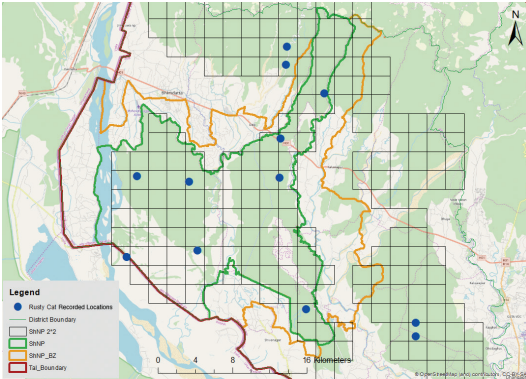


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 16 |
| No. of Detection | 25 |
| Detection Rate | 1.56 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | VU |
| CITES | II |
| NPWC Act | - |



Rusty-spotted Cat

| | |
|-----------------|--|
| Nepali Name | खियाथोप्ले बिरालो (Khiyathople Biralo) |
| English Name | Rusty-spotted Cat |
| Scientific Name | <i>Prionailurus rubiginosus</i> |

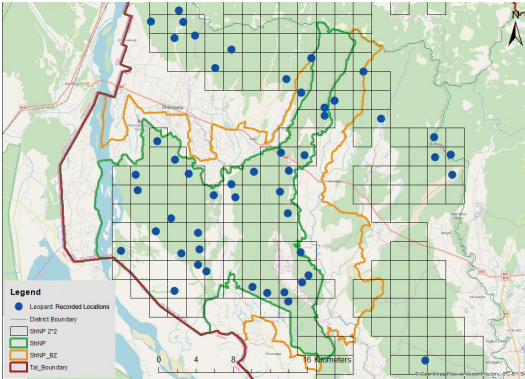


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 8 |
| No. of Detection | 16 |
| Detection Rate | 1.00 |
| Conservation Status | |
| IUCN National Redlist Status | DD |
| IUCN Global Redlist Status | NT |
| CITES | II |
| NPWC Act | - |



Common Leopard

| | |
|-----------------|------------------------|
| Nepali Name | चितुवा (Chituwa) |
| English Name | Common Leopard |
| Scientific Name | <i>Panthera pardus</i> |

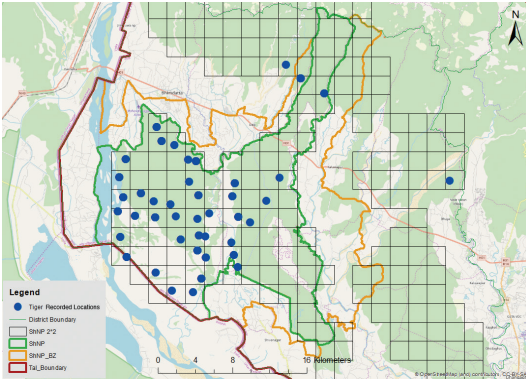


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 35 |
| No. of Detection | 68 |
| Detection Rate | 4.24 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | VU |
| CITES | I |
| NPWC Act | - |



Bengal Tiger

| | |
|-----------------|------------------------|
| Nepali Name | पाटेबाघ (Patebagh) |
| English Name | Bengal Tiger |
| Scientific Name | <i>Panthera tigris</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 41 |
| No. of Detection | 87 |
| Detection Rate | 5.42 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | EN |
| CITES | I |
| NPWC Act | P |





A tigress with three cubs by Kaviraj Bohara

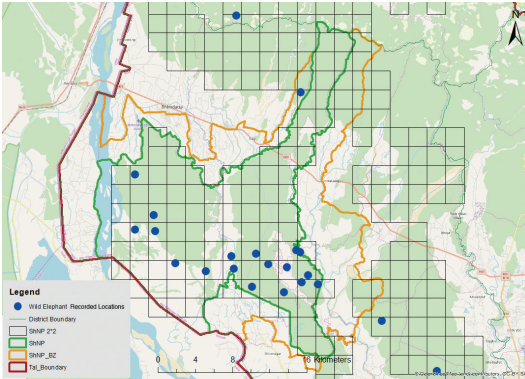
ORDER: **PROBOSCIDAE**



Asian Elephant by Yam Bahadur Rawat

Asian Elephant

| | |
|-----------------|-----------------------------|
| Nepali Name | जङ्गली हाती (Jangali Hatti) |
| English Name | Asian Elephant |
| Scientific Name | <i>Elephas maximus</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 19 |
| No. of Detection | 37 |
| Detection Rate | 2.31 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | EN |
| CITES | I |
| NPWC Act | P |



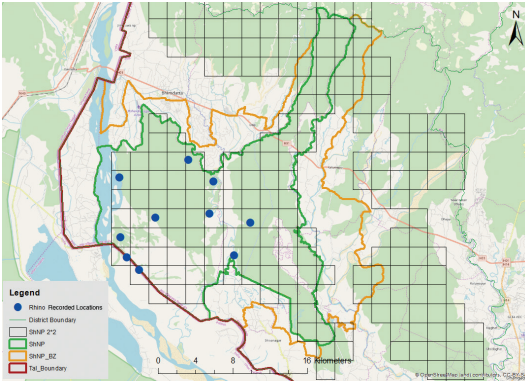
ORDER: PERISODACTYLA



Greater One-horned Rhinoceros by Chungba Sherba

Greater One-horned Rhinoceros

| | |
|-----------------|--------------------------------|
| Nepali Name | एकसिङ्गे गैंडा (Eksing Gainda) |
| English Name | Greater One-horned Rhinoceros |
| Scientific Name | <i>Rhinoceros unicornis</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 10 |
| No. of Detection | 17 |
| Detection Rate | 1.06 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | VU |
| CITES | I |
| NPWC Act | P |



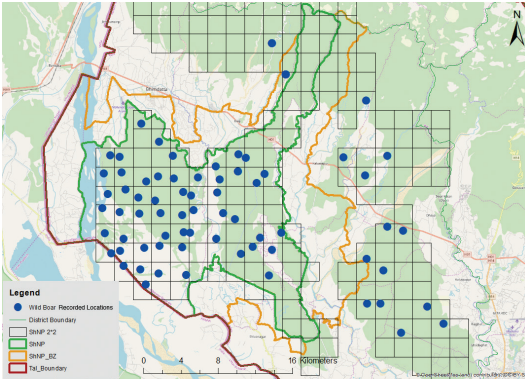
ORDER: **ARTIODACTYLA**



Swamp Deer by ShNP

Wild Boar

| | |
|-----------------|-------------------------------|
| Nepali Name | जङ्गली बँदेल (Jangali Bandel) |
| English Name | Wild Boar |
| Scientific Name | <i>Sus scrofa</i> |

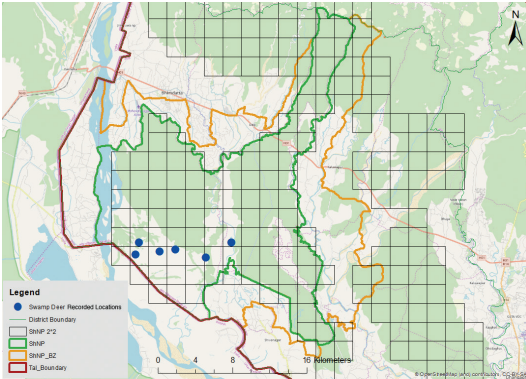


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|-------|
| No. of Location | 54 |
| No. of Detection | 495 |
| Detection Rate | 30.84 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |



Swamp Deer

| | |
|-----------------|---------------------------|
| Nepali Name | बाह्रसिङ्गा (Barasinga) |
| English Name | Swamp Deer |
| Scientific Name | <i>Rucervus duvauceli</i> |

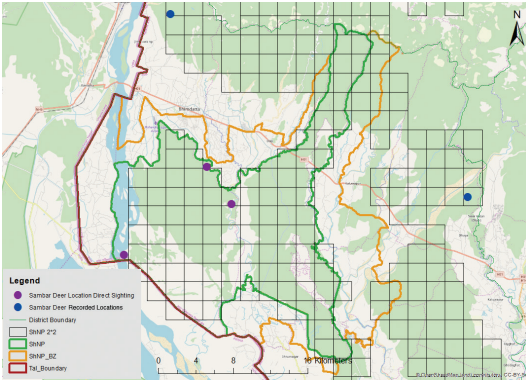


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 6 |
| No. of Detection | 8 |
| Detection Rate | 0.50 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | VU |
| CITES | I |
| NPWC Act | P |



Sambar Deer

| | |
|-----------------|----------------------|
| Nepali Name | जरायो (Jarayo) |
| English Name | Sambar Deer |
| Scientific Name | <i>Rusa unicolor</i> |

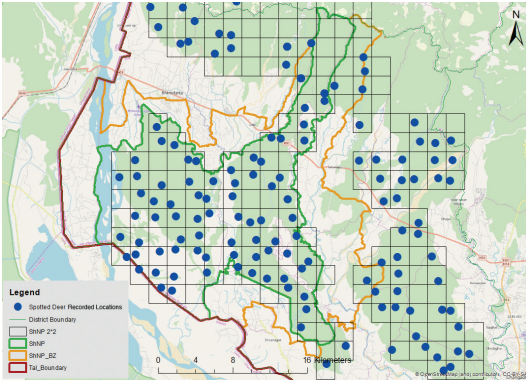


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 3 |
| No. of Detection | 3 |
| Detection Rate | 0.19 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | VU |
| CITES | - |
| NPWC Act | - |



Spotted Deer

| | |
|-----------------|------------------|
| Nepali Name | चित्तल (Chittal) |
| English Name | Spotted Deer |
| Scientific Name | <i>Axis axis</i> |

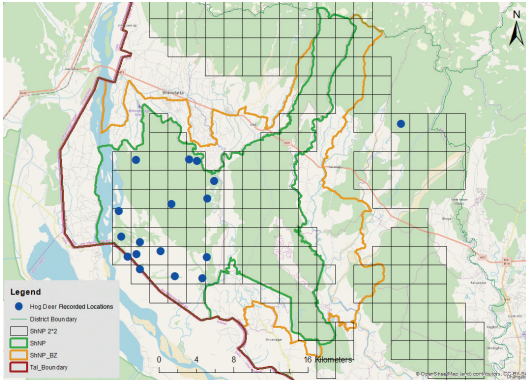


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|-------|
| No. of Location | 78 |
| No. of Detection | 812 |
| Detection Rate | 50.59 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |



Hog Deer

| | |
|-----------------|----------------------|
| Nepali Name | लगुना (Laguna) |
| English Name | Hog Deer |
| Scientific Name | <i>Axis porcinus</i> |

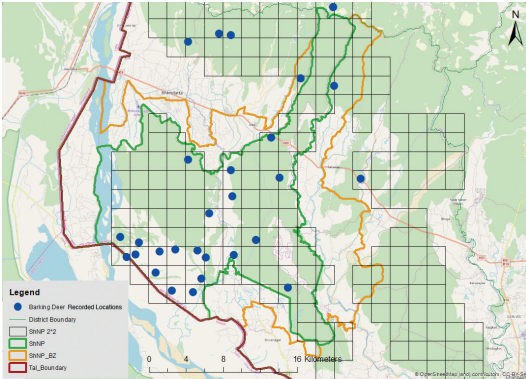


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 16 |
| No. of Detection | 60 |
| Detection Rate | 3.74 |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | EN |
| CITES | III |
| NPWC Act | - |



Barking Deer

| | |
|-----------------|----------------------------|
| Nepali Name | रतुवा (Ratuwa) |
| English Name | Barking Deer |
| Scientific Name | <i>Muntiacus vaginalis</i> |

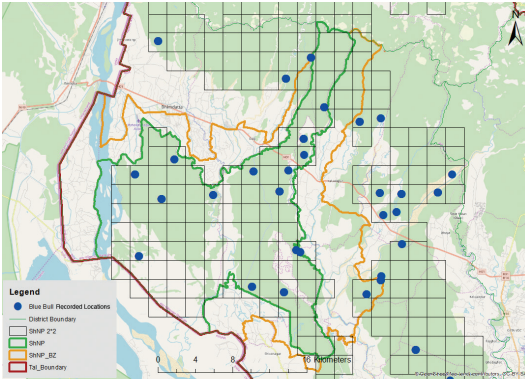


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 23 |
| No. of Detection | 97 |
| Detection Rate | 6.04 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |



Nilgai

| | |
|-----------------|--------------------------------|
| Nepali Name | नीलगाई (Nilgai) |
| English Name | Nilgai |
| Scientific Name | <i>Boselaphus tragocamelus</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 16 |
| No. of Detection | 36 |
| Detection Rate | 2.24 |
| Conservation Status | |
| IUCN National Redlist Status | VU |
| IUCN Global Redlist Status | LC |
| CITES | III |
| NPWC Act | - |



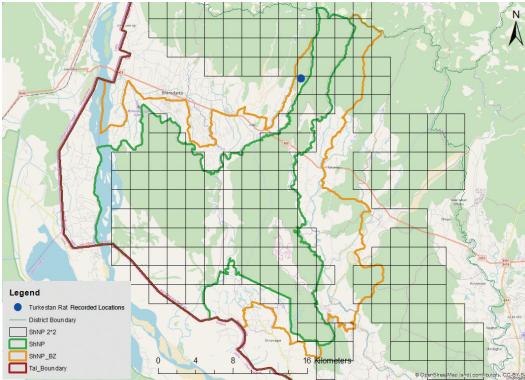
ORDER: **RODENTIA**



Five-striped Palm Squirrel by Kum Karan Thakur

Turkestan Rat

| | |
|-----------------|------------------------------------|
| Nepali Name | तुर्किस्ताने मुसा (Turkstane Musa) |
| English Name | Turkestan Rat |
| Scientific Name | <i>Rattus pyctoris</i> |

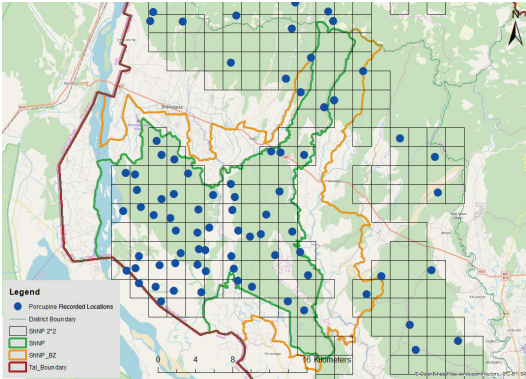


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 1 |
| No. of Detection | 3 |
| Detection Rate | 0.19 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |



Indian Crested Porcupine

| | |
|-----------------|--------------------------|
| Nepali Name | जुरेदुम्सी (Juredumsi) |
| English Name | Indian Crested Porcupine |
| Scientific Name | <i>Hystrix indica</i> |



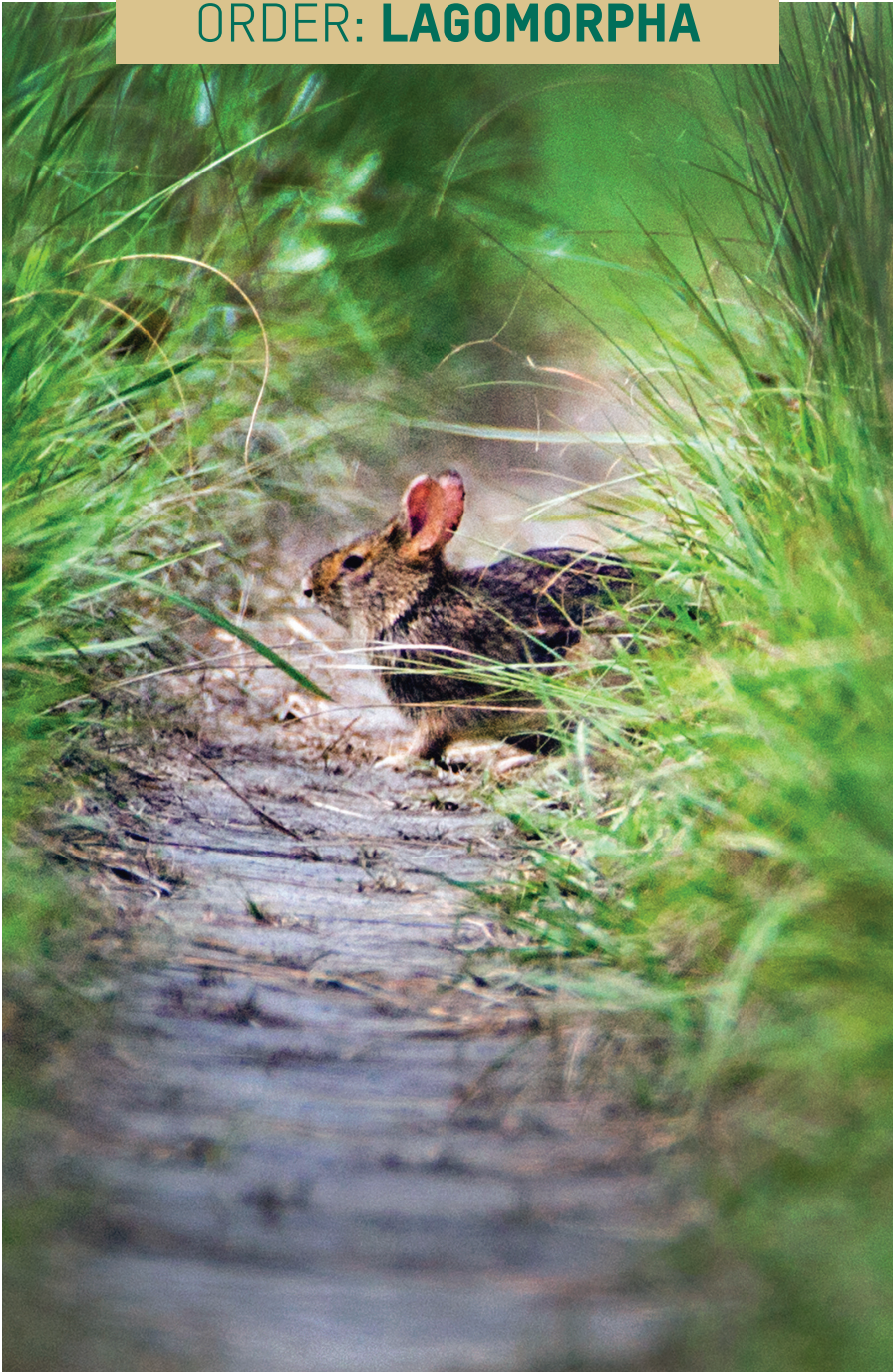
| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | 58 |
| No. of Detection | 66 |
| Detection Rate | 4.11 |
| Conservation Status | |
| IUCN National Redlist Status | DD |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |





Shuklaphanta Grassland with sunset by Vikram Tiwari

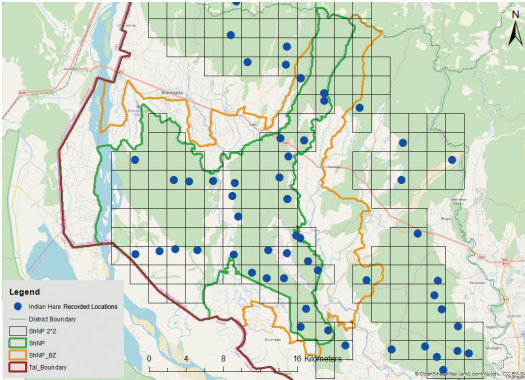
ORDER: **LAGOMORPHA**



Hispid Hare by Vikram Tiwari

Indian Hare

| | |
|-----------------|-----------------------------|
| Nepali Name | खैरो खरायो (Khairo Kharayo) |
| English Name | Indian Hare |
| Scientific Name | <i>Lepus nigricollis</i> |

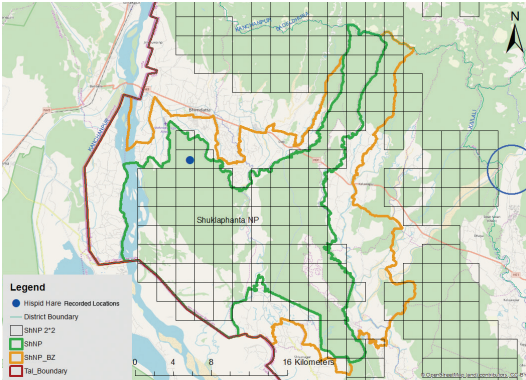


| Detection Rate in Shuklaphanta National Park 2018 | |
|---|-------|
| No. of Location | 32 |
| No. of Detection | 240 |
| Detection Rate | 14.95 |
| Conservation Status | |
| IUCN National Redlist Status | LC |
| IUCN Global Redlist Status | LC |
| CITES | - |
| NPWC Act | - |



Hispid Hare

| | |
|-----------------|------------------------------------|
| Nepali Name | लघुकर्ण खरायो (Laghukarna Kharayo) |
| English Name | Hispid Hare |
| Scientific Name | <i>Caprolagus hispidus</i> |



| Detection Rate in Shuklaphanta National Park 2018 | |
|---|------|
| No. of Location | N/A* |
| No. of Detection | N/A* |
| Detection Rate | N/A* |
| Conservation Status | |
| IUCN National Redlist Status | EN |
| IUCN Global Redlist Status | EN |
| CITES | I |
| NPWC Act | P |

* not recorded during 2018 survey.



Other Photographic Evidences

Greater Asiatic Yellow House Bat: Photographed by Yam Bahadur Raut at Park Headquarter Majhgaon on 20 May 2019. This bat was arrived at warden quarter bed room on 19 May 2019 at night 10 P.M. The species skull was badly exposed, might be it has survived from a terrible accident.

| | |
|-----------------|----------------------------------|
| Nepali Name | ठुलो एसियाली पिता चमेरा |
| English Name | Greater Asiatic Yellow House Bat |
| Scientific Name | <i>Scotophilus heathi</i> |



Five-striped Palm Squirrel: Photograph captured by Kum karan Thakur west from shilalekh on 31 January 2016. Mr Thakur Works as a nature guide at Shuklaphanta Jungle Cottage for 5 Years.

| | |
|-----------------|-----------------------------|
| Nepali Name | पाँचधर्के लोखर्के |
| English Name | Five-striped Palm Squirrel |
| Scientific Name | <i>Funambulus pennantii</i> |

ANNEX I: Camera Trapped Tigers of Shuklaphanta National Park 2018



ShNP_F02_Shilalekh Pothi (Right side photo)



(Left side photo)



ShNP_F03_Barkaula Pothi (Right side photo)



(Left side photo)



ShNP_F04_Shuklaphanta Pothi (Right side photo)



(Left side photo)



ShNP_F06_Lalpani Pothi (Right side photo)



(Left side photo)



ShNP_F07_Pani Pothi (Right side photo)



(Left side photo)



ShNP_F08_Bhatpuri Pothi (Right side photo)



(Left side photo)



ShNP_M01_Baba Bhale (Right side photo)



(Left side photo)



ShNP_M02_Suryaphanta Bhale (Right side photo)



(Left side photo)



ShNP_M03_Mahakali Bhale (Right side photo)



(Left side photo)



ShNP_M06_Singhapur Bhale (Right side photo)



(Left side photo)



ShNP_M07_Chandmari Bhale (Right side photo)



(Left side photo)



ShNP_M08_Patayai Bhale (Right side photo)



(Left side photo)



ShNP_M09_Sikari Bhale (Right side photo)



(Left side photo)



ShNP_M10_Majhgaon Bhale (Right side photo)



(Left side photo)



ShNP_M11_Haraiya Bhale (Right side photo)



(Left side photo)

ANNEX II: Up to date checklist of mammals of Shuklaphanta National Park

| SN | Common Name | Scientific Name | Nepali Name |
|---------------------------------|----------------------------------|--------------------------------|---------------------------|
| Order: PHOLIDOTA | | | |
| Family: Manidae | | | |
| 1 | Indian Pangolin | <i>Manis crassicaudata</i> | तामे सालक |
| 2 | Chinese Pangolin | <i>Manis pentadactyla</i> | कालो सालक |
| Order: INSECTIVORA | | | |
| Family: Soricidae | | | |
| 3 | House Shrew | <i>Suncus murinus</i> | घर छुचुन्द्रो |
| Order: CHIROPTERA | | | |
| Family: Pteropodidae | | | |
| 4 | Indian Flying Fox | <i>Pteropus giganteus</i> | बदुरा |
| 5 | Greater Short-nosed Fruit Bat | <i>Cynopterus sphinx</i> | नेप्टे चमेरो |
| Family: Vespertilionidae | | | |
| 6 | Painted Bat | <i>Kerivoula picta</i> | रङ्गीचङ्गी चमेरो |
| 7 | Greater Asiatic Yellow House Bat | <i>Scotophilus heathi</i> | ठुलो एसियाली पित्ता चमेरा |
| Order: PRIMATES | | | |
| Family: Cercopithecidae | | | |
| 8 | Rhesus Monkey | <i>Macaca mulatta</i> | रातो बाँदर |
| 9 | Terai Gray Langur | <i>Semnopithecus hector</i> | हनुमान लङ्गुर |
| Order: CARNIVORA | | | |
| Family: Canidae | | | |
| 10 | Golden Jackal | <i>Canis aureus</i> | स्याल |
| 11 | Asiatic Wild Dog | <i>Cuon alpinus</i> | वन कुकुर |
| 12 | Bengal Fox | <i>Vulpes bengalensis</i> | फ्याउरो |
| Family: Ursidae | | | |
| 13 | Sloth Bear | <i>Melursus ursinus</i> | काठे भालु |
| Family: Mustelidae | | | |
| 14 | Smooth-coated Otter | <i>Lutrogale perspicillata</i> | खैरो ओत |
| 15 | Yellow-throated Marten | <i>Martes flavigula</i> | मलसाँप्रो |
| 16 | Honey Badger | <i>Mellivora capensis</i> | रतेल |
| Family: Viverridae | | | |
| 17 | Masked Palm Civet | <i>Paguma larvata</i> | गाजले नीरबिरालो |

| SN | Common Name | Scientific Name | Nepali Name |
|-------------------------------|-------------------------------|-----------------------------------|-------------------|
| 18 | Asian Palm Civet | <i>Paradoxurus hermaphroditus</i> | ताडी नीरबिरालो |
| 19 | Large Indian Civet | <i>Viverra zibetha</i> | ठुलो नीरबिरालो |
| 20 | Small Indian Civet | <i>Viverricula indica</i> | सानो नीरबिरालो |
| Family: Herpestidae | | | |
| 21 | Indian Grey Mongoose | <i>Herpestes edwardsii</i> | ठुलो न्याउरीमुसा |
| 22 | Crab-eating Mongoose | <i>Herpestes urva</i> | गँगटे न्याउरीमुसा |
| 23 | Ruddy Mongoose | <i>Herpestes smithii</i> | रातो न्याउरीमुसा |
| 24 | Small Indian Mongoose | <i>Herpestes auropunctatus</i> | सानो न्याउरीमुसा |
| Family: Hyaenidae | | | |
| 25 | Striped Hyaena | <i>Hyaena hyaena</i> | हुँडार |
| Family: Felidae | | | |
| 26 | Jungle Cat | <i>Felis chaus</i> | वनबिरालो |
| 27 | Common Leopard | <i>Panthera pardus</i> | चितुवा |
| 28 | Bengal Tiger | <i>Panthera tigris</i> | पाटेबाघ |
| 29 | Leopard Cat | <i>Prionailurus bengalensis</i> | चरी बाघ |
| 30 | Fishing Cat | <i>Prionailurus viverrinus</i> | मलाहा बिरालो |
| 31 | Rusty-spotted Cat | <i>Prionailurus rubiginosus</i> | खियाथोप्ले बिरालो |
| Order: PROBOSCIDA | | | |
| Family: Elephantidae | | | |
| 32 | Asian Elephant | <i>Elephas maximus</i> | जङ्गली हाती |
| Order: PERISSODACTYLA | | | |
| Family: Rhinocerotidae | | | |
| 33 | Greater One-horned Rhinoceros | <i>Rhinoceros unicornis</i> | एकसिङ्गे गैंडा |
| Order: ARTIODACTYLA | | | |
| Family: Suidae | | | |
| 34 | Wild Boar | <i>Sus scrofa</i> | जङ्गली बँदेल |
| Family: Cervidae | | | |
| 35 | Spotted Deer | <i>Axis axis</i> | चित्तल |
| 36 | Hog Deer | <i>Axis porcinus</i> | लभुना |
| 37 | Swamp Deer | <i>Rucervus duvauceli</i> | बाहसिङ्गा |
| 38 | Sambar Deer | <i>Rusa unicolor</i> | जरायो |
| 39 | Barking Deer | <i>Muntiacus vaginalis</i> | रतुवा |

| SN | Common Name | Scientific Name | Nepali Name |
|----------------------------|------------------------------------|--------------------------------|-------------------------|
| Family: Bovidae | | | |
| 40 | Blackbuck | <i>Antilope cervicapra</i> | कृष्णसार |
| 41 | Nilgai | <i>Boselaphus tragocamelus</i> | नीलगाई |
| Order: RODENTIA | | | |
| Family: Scuriidae | | | |
| 42 | Five-striped Palm Squirrel | <i>Funambulus pennantii</i> | पाँचधर्के लोखर्के |
| Family: Pteromyidae | | | |
| 43 | Hodgson's Giant Flying Squirrel | <i>Petaurista magnificus</i> | सुन्दर राजपङ्खी लोखर्के |
| 44 | Red Giant Flying Squirrel | <i>Petaurista petaurista</i> | रातो राजपङ्खी लोखर्के |
| Family: Muridae | | | |
| 45 | Lesser Bandicoot Rat | <i>Bandicota bengalensis</i> | सानो ढाडेमुसो |
| 46 | Large Bandicoot Rat | <i>Bandicota indica</i> | ठुलो ढाडेमुसो |
| 47 | Indian Bush Rat | <i>Golunda ellioti</i> | भाडी मुसो |
| 48 | Little Indian Field Mouse | <i>Mus booduga</i> | सानो खेत मुसो |
| 49 | House Mouse | <i>Mus musculus</i> | डुहुरे घरमुसो |
| 50 | Turkestan Rat | <i>Rattus pyctoris</i> | तुर्किस्ताने मुसो |
| 51 | House Rat | <i>Rattus rattus</i> | घर मुसो |
| 52 | Asiatic Long-tailed Climbing Mouse | <i>Vandeleuria oleracea</i> | लामपुच्छे रुखमुसो |
| 53 | Indian Gerbil | <i>Tatera indica</i> | उफ्रने मुसो |
| Family: Hystricidae | | | |
| 54 | Indian Crested Porcupine | <i>Hystrix indica</i> | जुरे दुम्सी |
| Order: LAGOMORPHA | | | |
| Family: Leporidae | | | |
| 55 | Indian Hare | <i>Lepus nigricollis</i> | खैरो खरायो |
| 56 | Hispid Hare | <i>Caprolagus hispidus</i> | लघुकर्ण खरायो |

Note: Reference for the species except mentioned in Table 1 and Table 2: Poudyal, L.P., Lamichhane, B.R., Baral, H.S. and Basnet, H. (2019). Wild Mammals of the Shuklaphanta National Park. Shuklaphanta National Park Office, Kanchanpur, Nepal.

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Authors Details

Laxman Prasad Poudyal holds an MSc in Natural Resource Management and Rural Development. He currently heads the Shuklaphanta National Park where he had worked as a Park Ranger during 1994-1998.

Babu Ram Lamichhane, PhD is a conservation biologist with interest in large mammals and their interactions with humans. He works as Wildlife Research Officer with National Trust for Nature Conservation.

Umesh Paudel holds Master's Degree in Anthropology. He works as Natural Resource Conservation Assistant (NRCA) with National Trust for Nature Conservation and looks after Wildlife Research and Monitoring at NTNC/BCP.

Sudip Raj Niroula holds an MSc in Environmental Science. He works as Conservation Officer with National Trust for Nature Conservation and now heads the NTNC/SCP.

Anil Prasai holds an MSc degree in Zoology specialized with Ecology from Tribhuvan University. He works as a conservation officer with National Trust for Nature Conservation at NTNC/BCC. He was a Project Chief in NTNC/SCP during 2015-2018.

Sabita Malla obtained her Masters in Wildlife Biology from Wildlife Institute of India and is particularly interested on big-cats ecology, mega-herbivores, landscape management and technologies in wildlife conservation. She is currently working as a Wildlife Biologist-Senior Manager at WWF Nepal.

Naresh Subedi, PhD specializes on large herbivores and works on range of species in Nepal. He works with NTNC as a Conservation Program Manager.

Kanchan Thapa is wildlife lead at WWF Nepal. He holds a PhD in Wildlife Science. His research works focus on carnivore population ecology and dynamics.

Bhagawan Raj Dahal, PhD is a conservation biologist and has been working in the field of wildlife conservation for more than 15 years. He currently works as Deputy Country Representative for Zoological Society of London (ZSL) Nepal office.



Shuklaphanta National Park is managed by the government agency of Nepal under the Department of National Park and Wildlife Conservation (DNPWC). The Park lies in south-west part of Nepal. It is part of the transboundary Terai Arc Landscape; connected with the Pilibhit Tiger Reserve, Dudhwa Tiger Reserve and Nandhaur Wildlife Sanctuary in India through biological corridors. It supports diverse flora and fauna.

Shuklaphanta National Park aims for the conservation and management of wildlife, ecosystems and overall biodiversity while ensuring benefits for the human communities living in the fringe of the Park. Its activities are focused on wildlife and habitat management, wildlife crime control, tourism promotion and development, research and monitoring, and forest independent alternative livelihoods for the local people.



SHUKLAPHANTA NATIONAL PARK

