

**THE WORLD HERITAGE VOLUNTEER PROGRAM ORGANISED BY KHANGCHENDZONGA NATIONAL
PARK, FOREST & ENVIRONMENT DEPARTMENT, GOVT OF SIKKIM.**

1st to 9th October, 2023 (extended till 12th October)

Report

Prepared by Dr. Vivek Sarkar

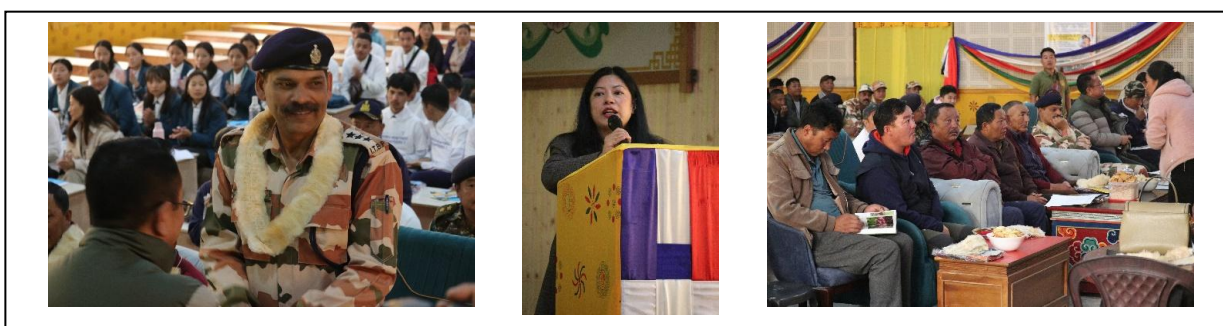
Background: World Heritage Volunteers (WHV) Initiative, led by the UNESCO World Heritage Centre, is a campaign to encourage young people to undertake concrete actions and play an active role in the protection, preservation and promotion of World Heritage. It consists of action camp projects organized by organizations or institutions, involving national and international volunteers in awareness-raising and hands on activities. These projects are implemented in cooperation with multiple stakeholders and partners, including the local communities, who work together towards the preservation of our common cultural and natural heritage.

As part of the World Heritage Volunteers (WHV) 2023 Campaign, project activity proposal submitted by Khangchendzonga National Park (KNP) Management Authority, Sikkim was selected to carry out action camp projects around the World Heritage Site. Upon invitation by the KNP authority, WII-C2C participated as resource person for the programme during its first phase in April 2023. An invitation has again been received for participation of WII-C2C during its second phase from 1st to 9th October, 2023. Dr. Vivek Sarkar have been nominated.

WII-C2C contributes by supporting site management authorities to enhance awareness of stakeholders about the World Heritage Convention and strengthening the Centre's outreach mandate.

Day 1: (01-10-2023)

The registration commenced at approximately 10:00 am, marking the beginning of the event. Upon the arrival of guests and participants, a traditional offering called Khadas was presented. The program was formally inaugurated by Mr. Tashila Lachenpa, the Chief Officer of KNP Chungthang. Mrs. Bhumika Rai, the Divisional Forest Officer, provided an insightful overview of various aspects of KNP, including its geological values, biodiversity, and challenges. Emphasizing the Outstanding Universal Values of the park, she also delved into the World Heritage Volunteers program. To visually enhance understanding, a short documentary film was screened, particularly beneficial for younger participants from schools and colleges.





The first talk was by Mr. Tseten Tashi Bhutia, from the Resource Collection Centre (RCC) of Yuksom. His talk focused on the creative solution to reach the 'zero waste' goal. He not only focused with the innovation in waste management but also spoke on hurdles he faced while doing it. He showed a way to promote his effort and built up the ownership in his own community at Yuksom. Mr. Tseten Tashi Bhutia reuses different objects at his RCC and share these ideas with local students and encourages them as well to do the same at their home. He involved the students in different waste management Activities in special days like the Earth Day. With the help of local administration, he is trying to introduce policies to encourage the students to recycle and reuse and just to have the first step, he initiated an award programme to different schools to acknowledge their effort to zero waste. In other efforts, RCC Yuksom also installed dustbins at the Yuksom market, started a small setup so that LED bulbs can be repaired and reused. Apart from all the efforts to produce zero waste, Mr. Tseten also started taking feedback from the tourists, started showing his machines used in junk recycling in media such as news channels and newspapers. I also wrote articles in newspaper where he discusses ways to deal with waste at the domestic level by doing various things such as Vermicomposting of organic waste, and reusing daily stuff that we usually throw as well as the children's park at RCC using Recycled wastes. He suggested that waste management is a significance issue for KNP and its surrounding areas and he pointed out that KNP should have well maintained 'Seasonal Garbage Record' at the range office for all the ranges.



The second presentation was given by Mr. Ugen Palzor Lepcha who runs an NGO named M.L.A.S, based in Dzongu, North Sikkim. He spoke on the ownership of KNP and its Natural Heritage of Sikkim by the local communities. He and his NGO's work is focused on making fibres out of Nettle (*Urtica* sp.) by the Lepcha community, a site-specific traditional ecological activity. This activity vividly evolved with the landscape and it became more evident as he explained the entire process. The nettle grows commonly in the mountain slopes so the primary ingredient is readily available. The process requires the dry Nettle fibres to be rinsed thoroughly in running water which is done on the torrential mountain streams. The Nettle fibres then mixed with a particular type of clay which is found near the village and kept for drying for one week. The dried fine clay then removed and threads are hand made by spinning the spindle. These threads are extremely strong and durable, so much so that in older days the Lepcha warrior's battle dress use to be prepared with them. Mr Ugen and his NGO is making sure that this traditional practice endures the test of time and doesn't get lost and this traditional practice can also provide livelihood to the local community as well. He and his NGO not only teaching the newer generation this practice but also helping them in the marketing of their product. In addition, the byproducts of the process also has various usage in the community such as the dried nettle leaves are used for livestock feeding, nettle wash water are used as disinfectant and handwash, and all other leftover of the product can be used as manure. Mr. Ugen showed a bag that is made of this traditionally produced fabric. A similar bag was gifted to the finance minister of the state as a proof of its durability and to experience it first hand and he also mentioned about his strategies to bring this traditional practice in main stream. He mentioned that it is only by practicing the traditional ecological practices, like this one, the local communities can fully embrace and own the biodiversity of the Heritage Site, KNP.



After lunch and a group photo session, Dr. Vivek Sarkar presented on the Outstanding Universal Values (OUV), Criteria, and World Heritage Sites. He used a small movie to initiate a discussion on the World Heritage Convention, emphasizing the value of heritage and the principles of OUVs. Criteria iii, vi, vii, and x were explained with specific reference to the values held by KNP. The interactive session aimed to deepen participants' understanding of the OUVs and the impacts of the World Heritage Convention, concluding with a screening of a short film highlighting its impact.



The final session of the day was led by Mr. Lakpa Tenzing Sherpa, a renowned birdwatcher from Sikkim. He highlighted the crucial roles of birds in the ecosystem, discussed local bird diversity, and provided insights into birdwatching. The session concluded with an announcement that a birdwatching session would commence at 6:00 am the following day, October 2, 2023.



The vote of thanks is given by Mr. Karma Wangyal Lepcha, DFO (KNP) at the end of the programme.



Day 2: (02-10-2023)

The day started with a birdwatching session where students got to know about the bird identification skills, not only by observing them but also by the calls. 18 species of birds were observed.



The second activity was visiting Lachen Monastery and having a cleanliness drive which went on till afternoon.



There were no heavy activities kept for the second day as there was a tough 11km high altitude trek for the third day.

Day 3: (03-10-2023)

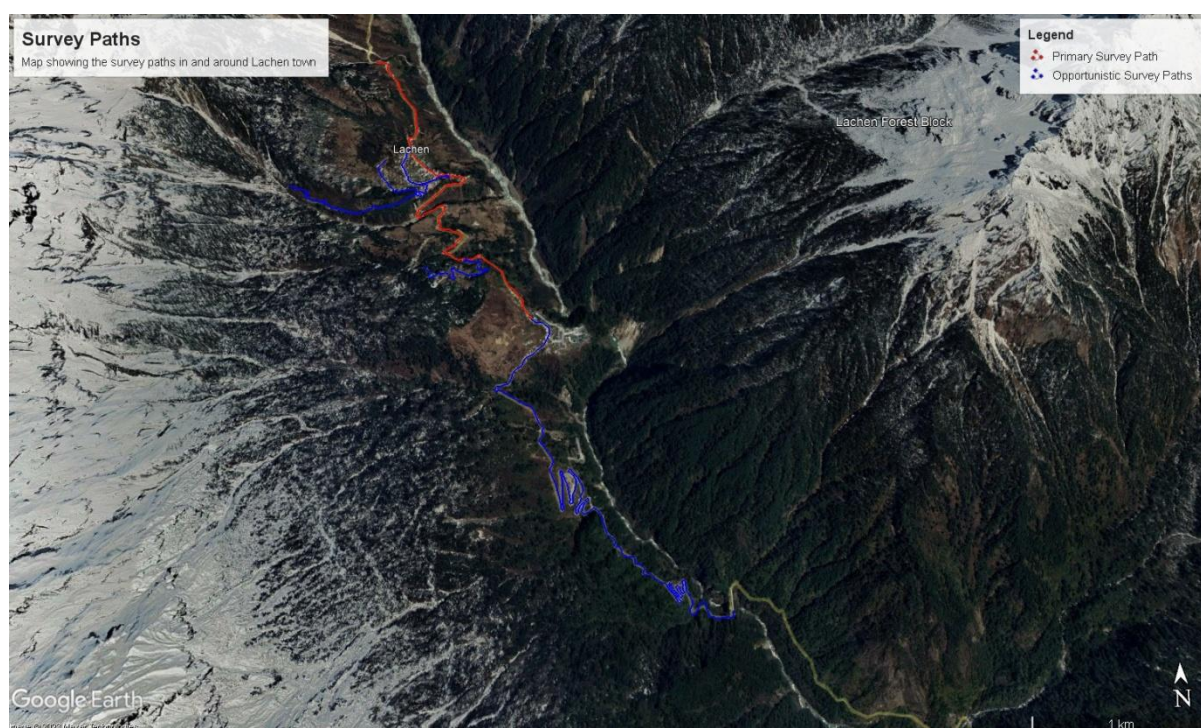
Third day the trek started from a point beyond Thangu. The trek goes to high altitude alpine plateau from the side of the Tangu-Gurudongmar road and goes to the other side called Lahsar valley. The scenic beauty of the valley is the testimony to the beauty of KNP. Interesting sightings are Marmots, Blue Sheep and Himalayan Weasel.



On the 3rd of October, 2023, Sikkim encountered a flash flood caused by the collapse of a glacier lake, resulting in severe disruptions to essential services, including road and mobile connectivity, as well as activities related to the ongoing World Heritage Volunteer Programme.

Opportunistic biodiversity documentation:

From the evening of 30th September to the morning of 12th October, all the fauna that are encountered were documented and an inventory was prepared in a personal capacity. A visual encounter search was conducted from September 30 to October 12, 2023. The same road viz. from northern most bridge of Lachen to the Chaten town was surveyed on foot everyday between 1900 hrs to 2100 hrs. Subsequently, we also noted the number of animal encountered. The systematic part of the survey was conducted within a 4.25 km stretch of road (from the northernmost bridge of Lachen to Chaten town); in addition to 10.69 km of treks and roads covered opportunistically whenever there was a free time.



In total, 6 species of Mammals, 91 species of birds, 2 species of frogs, 1 species of snake and 8 species of butterflies were recorded. In Mammals (annex-1), the red panda was directly sighted on 1st October morning, feeding on new bamboo shoot. However, images could not be taken due to poor lighting condition and dense cloud/mist. Marmot, Pika and blue sheep was observed on 3rd October at the alpine meadow of Lashar Valley. Signage such as scratch marks and fresh scats of Clouded Leopard was observed at the upper part of the Lachen, in a thick and contiguous rhododendron forest. An unknown species of Shrew was also observed at the smaller drainages of Lachen town. In birds total of 91 species (annex-2) were recorded including rare species like Great Parrotbill and Brown Parrotbill. Stonechat and Brown Bullfinch was not recorded from Lachen (according to EBird) which got recorded for the first time. Only one species of snake was recorded, *Trachischium guentheri*. A total of 25 individuals of *Trachischium guentheri* were encountered from the study site between 2549 - 2918 m asl. Out of them, 2 were alive and rests were road kills. Two species of frogs (annex-4), Annandale's Paa Frog and Sikkim Paa Frog was recorded. The finding of

Annandale's Paa Frog has confirmed and validated its occurrence in Sikkim. In cicadas, although Ringing Bell Cicada (*Dundubia hastata*) and *Pycna repanda* were observed on the way to lichen but in Lachen *Tibeta zenobia* was recorded. This species has been observed even in Thangu and Lashar Valley. This is the first ever record of cicada beyond 4500m ASL. Eight species of Butterflies (annex-6) were spotted. Notable mention was a species of Royal (*Tajuria* sp.) as this genus has not been recorded beyond 3000 m ASL.

Annexure-1

List of Mammals

Sl. No	Common Name	Scientific Name	IUCN Status	Location	Note
1	Red Panda	<i>Ailurus fulgens</i>	Endangered	Above Lachen. At the edge of the treeline. At 3112m	Direct sighting, Could not be photographed
2	Clouded Leopard	<i>Neofelis nebulosa</i>	Vulnerable	Above Lachen. In the Rhododendron forest. At 2820m	Scat and scratch mark observed.
3	Himalayan Marmot	<i>Marmota himalayana</i>	Least Concern	Alpine meadows of Lashar Valley	Many dens were observed in the valley. 8 individuals sighted and two of them photographed. All of them had visibly high body fat which shows they were well prepared for winter.
4	Blue Ship	<i>Pseudois nayaur</i>	Least Concern	Alpine meadows of Lashar Valley	as many as 25 individuals were observed. Range Officer, Dzongu, Mr. Tenzing Lepcha photographed them.
5	Sikkim Pika	<i>Ochotona sikimaria</i>	Not Evaluated	almost everywhere	This was earlier considered as a subspecies of Moupin Pika and in 2016 described as a different species. As of now, it's endemic to Sikkim only.
6	Shrew				Could not be identified or photographed.



Shrew Sp.



Himalayan Marmot with at the opening of its burrow.



Close up of Himalayan Marmot.

Annexure-2
List of Birds

Sl. No	Common Name	Scientific Name	Note
1	Kalij Pheasant	<i>Lophura leucomelanos</i>	saw
2	Common Kestrel	<i>Falco tinnunculus</i>	saw
3	Northern Goshawk	<i>Accipiter gentilis</i>	Photographed
4	Golden Eagle	<i>Aquila chrysaetos</i>	Photographed
5	Mountain Hawk-Eagle	<i>Nisaetus nipalensis</i>	saw
6	Solitary Snipe	<i>Gallinago solitaria</i>	saw
7	Blue Rock Pigeon	<i>Columba livia</i>	saw
8	Oriental Turtle-Dove	<i>Streptopelia orientalis</i>	Photographed
9	Asian Emerald Dove	<i>Chalcophaps indica</i>	saw
10	Little Owl	<i>Athene noctua</i>	saw
11	Ward's Trogon	<i>Harpactes wardi</i>	saw
12	Crested Kingfisher	<i>Megaceryle lugubris</i>	saw
13	Darjeeling Woodpecker	<i>Dendrocopos darjellensis</i>	Photographed
14	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Photographed
15	Long-tailed Shrike	<i>Lanius schach</i>	Photographed
16	Hair-crested Drongo	<i>Dicrurus hottentottus</i>	Photographed
17	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Photographed
18	Yellow-bellied Fantail	<i>Chelidorhynch hypoxanthus</i>	saw
19	Yellow-billed Blue Magpie	<i>Urocissa flavirostris</i>	saw
20	Common Green-Magpie	<i>Cissa chinensis</i>	Photographed
21	Grey Treepie	<i>Dendrocitta formosae</i>	saw
22	Large-billed Crow	<i>Corvus macrorhynchos</i>	Photographed
23	Spotted Nutcracker	<i>Nucifraga caryocatactes</i>	Photographed
24	Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	saw
25	Yellow-billed Chough	<i>Pyrrhocorax graculus</i>	saw
26	Yellow-browed Tit	<i>Sylviparus modestus</i>	Photographed
27	Rufous-fronted Bushtit	<i>Aegithalos iouschistos</i>	Photographed
28	Black-throated Bushtit	<i>Aegithalos concinnus</i>	saw
29	Ashy Bulbul	<i>Hemixos flava</i>	saw
30	Himalayan Black Bulbul	<i>Hypsipetes leucocephalus</i>	saw
31	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	saw
32	Mountain Tailorbird	<i>Phyllergates cucullatus</i>	Photographed
33	Chestnut-headed Tesia	<i>Cettia castaneocoronata</i>	saw
34	Grey-bellied Tesia	<i>Tesia cyaniventer</i>	saw
35	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	Photographed
36	Ashy-throated Warbler	<i>Phylloscopus maculipennis</i>	Photographed
37	Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	Photographed
38	Buff-barred Warbler	<i>Phylloscopus pulcher</i>	Photographed
39	Lemon-rumped Warbler	<i>Phylloscopus chloronotus</i>	saw
40	Whistler's Warbler	<i>Phylloscopus whistleri</i>	Photographed

41	Grey-hooded Warbler	<i>Phylloscopus xanthoschistos</i>	saw
42	Chestnut-crowned Warbler	<i>Phylloscopus castaniceps</i>	Photographed
43	Black-faced Warbler	<i>Abroscopus schisticeps</i>	saw
44	White-throated Laughingthrush	<i>Pterorhinus albobularis</i>	Photographed
45	Scaly Laughingthrush	<i>Trochalopteron subunicolor</i>	Photographed
46	Blue-winged Laughingthrush	<i>Trochalopteron squamatum</i>	Photographed
47	Chestnut-crowned Laughingthrush	<i>Trochalopteron erythrocephalum</i>	Photographed
48	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Photographed
49	Chestnut-tailed Minla	<i>Actinodura strigula</i>	Photographed
50	Blue-winged Minla	<i>Actinodura cyanouroptera</i>	Photographed
51	Red-tailed Minla	<i>Minla ignotincta</i>	saw
52	Rufous-winged Fulvetta	<i>Schoeniparus castaneiceps</i>	Photographed
53	White-browed Fulvetta	<i>Fulvetta vinipectus</i>	Photographed
54	Rufous Sibia	<i>Heterophasia capistrata</i>	Photographed
55	Stripe-throated Yuhina	<i>Yuhina gularis</i>	saw
56	Rufous-vented Yuhina	<i>Yuhina occipitalis</i>	saw
57	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Photographed
58	Brown Parrotbill	<i>Cholornis unicolor</i>	saw
59	Great Parrotbill	<i>Great Parrotbill</i>	saw
60	Fire-tailed Myzornis	<i>Myzornis pyrrhura</i>	saw
61	Goldcrest	<i>Regulus regulus</i>	saw
62	Brown Dipper	<i>Cinclus pallasii</i>	saw
63	White-throated Dipper	<i>Cinclus cinclus</i>	saw
64	White-tailed Nuthatch	<i>Sitta himalayensis</i>	Photographed
65	Wallcreeper	<i>Tichodroma muraria</i>	saw
66	Rusty-flanked Treecreeper	<i>Certhia nipalensis</i>	saw
67	Scaly Thrush	<i>Zoothera dauma</i>	saw
68	Blue Whistling-Thrush	<i>Myophonus caeruleus</i>	Photographed
69	Grey-winged Blackbird	<i>Turdus boulboul</i>	saw
70	Himalayan Shortwing	<i>Brachypteryx cruralis</i>	Recorded
71	Himalayan Bluetail	<i>Tarsiger rufilatus</i>	saw
72	White-capped Redstart	<i>Phoenicurus leucocephalus</i>	saw
73	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	saw
74	Plumbeous Redstart	<i>Phoenicurus fuliginosus</i>	Photographed
75	Black Redstart	<i>Phoenicurus ochruros</i>	Photographed
76	Grandala	<i>Grandala coelicolor</i>	saw
77	Stonechat/ Bushchat sp.		Photographed, First record for Lachen
78	Rufous-gorgeted Flycatcher	<i>Ficedula strophilata</i>	Photographed
79	Slaty-blue Flycatcher	<i>Ficedula tricolor</i>	Photographed
80	Verditer Flycatcher	<i>Eumyias thalassinus</i>	Photographed
81	Grey-headed Canary-Flycatcher	<i>Culicicapa ceylonensis</i>	saw

82	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	Photographed
83	Rufous-bellied Niltava	<i>Niltava sundara</i>	Photographed
84	Yellow-bellied Flowerpecker	<i>Dicaeum melanozanthum</i>	Photographed
85	Mrs. Gould's Sunbird	<i>Aethopyga gouldiae</i>	saw
86	Eurasian Tree Sparrow	<i>Passer montanus</i>	saw
87	Russet Sparrow	<i>Passer cinnamomeus</i>	saw
88	White Wagtail	<i>Motacilla alba</i>	Photographed
89	Rosy Pipit	<i>Anthus roseatus</i>	Photographed
90	Olive-backed Pipit	<i>Anthus hodgsoni</i>	Photographed
91	Brown Bullfinch	<i>Pyrrhula nipalensis</i>	Photographed, first record for Lachen



Northern Goshawk



Golden Eagle



Common Green-Magpie



White-browed Fulvetta



Chestnut-crowned Laughingthrush



Scaly Laughingthrush



Blue Whistling-Thrush



Rufous-bellied Niltava



Tickell's Leaf Warbler



Yellow-bellied Flowerpecker



Brown Bullfinch



Chestnut-tailed Minla

Annexure-3

List of Reptile

Sl. No	Common Name	Scientific Name	IUCN Status	Location	Note
1	Günther's oriental slender snake	<i>Trachischium guentheri</i>	Vulnerable	Between Lachen to Chaten	A total of 25 individuals of <i>Trachischium guentheri</i> were encountered from the study site between 2549 - 2918 m asl. Out of them, 2 were alive and rests were road kills.



Annexure-4

List of Amphibians

Sl. No	Common Name	Scientific Name	Location	Note
1	Annandale's Paa Frog	<i>Nanorana annandalii</i>	Lachen	Photographed and observed to note natural history
2	Sikkim Paa Frog	<i>Nanorana liebigii</i>	Lachen	Photographed.



Annandale's Paa Frog



Sikkim Paa Frog

Annexure-5
List of cicada

Sl. No	Common Name	Scientific Name	Location
1	N.A.	<i>Tibeta zenobia</i>	Present from Chaten to Thangu. First record of cicada beyond 4500m



Tibeta zenobia

Annexure-6
List of Butterflies

Sl. No	Common Name	Scientific Name	Location	Note
1	Great Satyr	<i>Aulocera padma</i>	Lachen	
2	Treebrown Sp	<i>Lethe</i> sp.	Lachen	
3	Himalayan Queen Fritillary	<i>Issoria issaea</i>	Upper Lachen	
4	Powdery Green Sapphire	<i>Heliophorus tamu</i>	Everywhere	
5	Indian Tortoiseshell	<i>Aglaia caschmirensis</i>	Everywhere	
6	Painted Lady	<i>Vanessa cardui</i>	Lachen	
7	Royal Sp.	<i>Tajuria</i> sp.	Higher elevations of Lachen	First record of this genus beyond 3000m ASL
8	Dark Clouded Yellow	<i>Colias fieldii</i>	Upper Lachen	