

### **Final Evaluation Report**

Your Details	
Full Name	Sarabjeet Kaur
Project Title	Foraging ecology of Great slaty woodpecker ( <i>Mulleripicus pulverulentus</i> ) in and around Pawalgarh Conservation Reserve in Western Himalayas
Application ID	25987-1
Date of this Report	6 May, 2022



#### 1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To assess the distribution and abundance of Great Slaty woodpecker in and around Pawalgarh Conservation Reserve (PCR)				The study area is administered by two different forest divisions (FDs), a) Terai West FD (TWFD) and b) Ramnagar FD (RFD). The total area of the Pawalgarh Conservation Reserve (PCR) is 58.25 km <sup>2</sup> of which 54 km <sup>2</sup> is governed by the RFD and the remaining by the TWFD. The survey was also carried out in the immediate forest surrounding the reserve under RFD with an area of 24 km <sup>2</sup> . Therefore, a total of 78 km <sup>2</sup> was surveyed both inside (54 km <sup>2</sup> ) and outside (24 km <sup>2</sup> ) the protected area which resulted in sightings of 14 groups of great slaty woodpecker.
To study the foraging strategies adopted by the Great Slaty Woodpecker during seasonal change				Winter season coincides with the post- breeding (October-January) and the summer season with breeding (April- July). A total of 25 and 51 foraging observations were recorded during the two post-breeding and breeding seasons each among the groups of the great slaty woodpecker. We found that the egg-laying by the focal species was initiated in the May 2019 and June 2020.
To address the potential threats and disturbances to the species in and around the study area				We observed that selective logging in small areas within the conservation reserve resulted in the change in the territory boundary of one group when compared for 2 years. This may lead to potential disturbance during their nesting period if they are unable to locate appropriate nesting tree in the newly acquired area. We witnessed Indian grey hornbills predating on the eggs of great slaty woodpecker twice. We didn't witness



		any other threat during our surveys albeit presence of any raptor species in their foraging areas made them cautious and highly vocal making other members of the group aware of the threat. No anthropogenic threat was recorded during the surveys.
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#### 2. Describe the three most important outcomes of your project.

**a).** Ecological baselines have been established on the actual number of groups and individuals of great slaty woodpecker from the reserve as well as elsewhere in India.

**b).** In addition to foraging observations for the focal species, we also used the opportunity to assess the nest site characteristics and nest success for the species. No prior studies have been conducted on the nesting of GSW.

**c).** We are proud that we could get two locals completely invested in the awareness of these woodpecker species especially GSW as they also helped us during our surveys. They have not stopped looking after the groups till date and keep their keen eyes out for any change in the group size and share it with us as they have continued their working with the forest department on full basis.

**d).** Our awareness material (a pictorial guide) printed on woodpeckers helped the locals and children alike to clearly differentiate between a woodpecker species from Eurasian hoopoe and Indian grey hornbill. Both these species are commonly confused for woodpeckers and great slaty woodpeckers respectively.

## 3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

#### PERMISSIONS

The survey was only carried out in the area administered by RFD as we didn't receive permissions from TWFD for carrying out our survey due to the active movement of a pair of tigers in that particular area that falls under the boundary of PCR. Therefore, a total of 78 km<sup>2</sup> was surveyed both inside (54 km<sup>2</sup>) and outside (24 km<sup>2</sup>) the protected area.

#### FIRE SEASON

The surveys that were carried out during the breeding season also overlap with the crucial fire season (March-June). During this time availability of the forest staff to assist us with the surveys becomes very difficult due to their limited number. Therefore, to mitigate this and not to miss out on our survey days we hired two personnel from the village who had the knowledge of the forest and had been associated with forest department prior to assisting us in this survey. They were briefed about the woodpeckers in general as well as the methodologies prior to undertaking the surveys.



#### SURVEY TRACKS AND AREAS

On several occasions we had to leave our survey incomplete due to the movement of large carnivores (tiger), elephants and sloth bear in those areas for days. Sloth bear moved very actively during the fruiting season of *Diospyros melanoxylon* which they cherished. There were several tracks and areas recognised which overlap in the use both by the group(s) of great slaty woodpecker as well as these animals. This is one of the reasons for not carrying out our survey in an area of approximately 6 km<sup>2</sup> throughout the study period in the conservation reserve partially due to inaccessibility of the area.

## 4. Describe the involvement of local communities and how they have benefitted from the project.

Village of Pawalgarh is located on the west side of Pawalgarh Conservation Reserve with the locals dependent on the agriculture. Prior to this, no research has been carried out with the involvement of local villagers for 12 months. Therefore, before engaging these locals, proper permissions were acquired from the superiors concerned with the conservation area. These two villagers became active members of our team for the complete study period and have been reporting about the recognised groups of the focal species actively even till date.

#### 5. Are there any plans to continue this work?

Yes.

#### 6. How do you plan to share the results of your work with others?

We are analysing the field data and inferring the results of our study for submission to peer reviewed journals as research manuscripts and popular article so that the findings shall be shared with a wider global research and conservation fraternity.

After the first step, we will share a final report of the same with the forest department and the funding agency.

#### 7. Looking ahead, what do you feel are the important next steps?

No comment.

# 8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes.

 In March 2019, I attended the 8th International Woodpecker Conference (IWC) in Bialowieza, Poland and discussed my work with other woodpecker specialists from all over the world in addition to your foundations support for carrying out the study.



- I briefed about the progress of our study sponsored by your foundation through a presentation at a National level Workshop cum Symposium on "Traditional & Modern Animal Taxonomy and IPR Issues for Biodiversity Protection & Conservation" held from 25-29 November 2019.
- A pictorial guide was published as awareness material for locals and children on the 12 most common species of woodpecker that occur around them out of the total 19 woodpecker species that have been listed from the conservation reserve.

In January 2021, the pictorial guide was distributed among the local children and a bird walk was conducted on the edge of village and forest between 0900 hrs-1230 hrs. A total of six woodpecker species were sighted and identified by the children using the guide which was a first attempt for all of them and a successful one.

In March 2022, some of the pictorial guides were distributed among the nature guides of Uttarakhand, Himachal Pradesh and Nepal. The guides had enrolled themselves for a certificate course on "Bird Identification and Basic Ornithology" organised by Wildlife Institute of India (WII) ENVIS Resource Partner under the Green Skill Development Programme.

Starting from April-May 2022, the work carried out on the woodpeckers supported by your small grant will be shared through a small lecture titled "Woodpeckers" with the participants of two batches of the course on "Bird Identification and Basic Ornithology" organised by WWF ENVIS Resource Partner under the Green Skill Development Programme. The course aims to enlighten the students with basic bird identification as well as practical field studies so that they can act responsibly and report the birds around them more robustly.

#### 9. Provide a full list of all the members of your team and their role in the project.

#### Myself

**Dr. V. P. Uniyal** (Scientist-F, Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand, India). He is looking into the entomology and related habitat component and helping in the identification and preparation of the list of termites collected from the study area.

**Dr Gopi G. V.** (Scientist-E, Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand, India). He is helping with the bird and related habitat component analysis for the work carried out.

Two local villagers from Village Pawalgarh and one villager from Village Devirampur assisted me in the fieldwork. They were trained regarding the identification of woodpeckers of Pawalgarh Conservation Reserve and contributed immensely to the study by providing their insight on the subject by framing questions on the woodpeckers and the habitat.



I also received help from the members of youth group 'Pawalgarh Prakriti Prahari' and birders of the villages situated outside the Conservation Reserve who helped me indirectly by reporting their sightings of the species based on both aural and visual cues.

#### 10. Any other comments?

No.