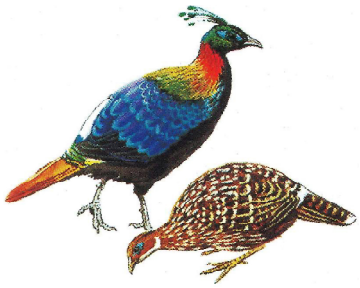
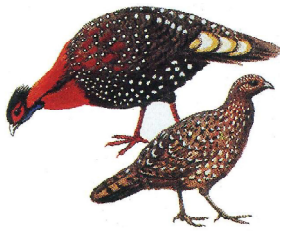
Mor

Newsletter of World Pheasant Association - India

Indian Peafowl
Pavo cristatus
National Bird
&
Odisha State Bird



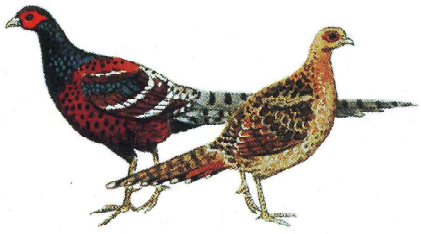
Himalayan Monal
Lophophorus impejanus
Uttarakhand State Bird



Western Tragopan
Tragopan melanocephalus
Himachal Pradesh State Bird

Blood Pheasant
Ithaginis cruentus
Sikkim State Bird

Blyth's Tragopan
Tragopan blythii
Nagaland State Bird



Hume's Pheasant
Syrmaticus humiae
Manipur and Mizoram
State Bird

Pheasants as National & State Birds

Mor *is the newsletter of WPA-India for private circulation. Its publication is being supported by the Duleep Matthai Nature Conservation Trust.*

Editorial

Dear Readers,

All birders know that field observation of the more elusive bird species presents both a challenge and an exciting adventure. Several species of the Galliformes group come in this category, on account of their rarity as well as their innate human avoidance behaviour. Field birders are constantly researching into additional methods of observation beyond just visual sighting, and these may include sounds, nests, droppings, feathers and other signs. Bird calls (vocalizations) present perhaps the second most direct evidence in species observation and identification. In this issue, we bring you a fascinating study on the identification of Jungle Bush-Quail and Rock Bush-Quail, based on their vocalizations. Similarly exciting is the news item regarding what is believed to be the first photographic record from India, of a male bird of the extremely rare subspecies Koklass Pheasant. This report comes from Walong –India's eastern most town – nearour trijunction border with Myanmar and China.

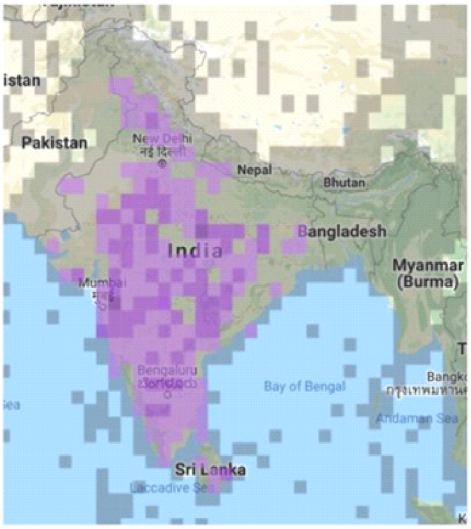
Another enigma in the ornithological world is the Himalayan Quail (Mountain Quail) whose recorded time between "first description" and supposed "extinction" was only four decades. In this issue we bring you the abstract of an article that describes attempts at reviving the search for this mysterious bird. The Himalayan Monal pheasant, too, merits a high degree of conservation attention throughout its range. We present a study focusing on the Uttarkashi district of Uttarakhand, where the authors have attempted to recapitulate its distribution, survival threats and suggested conservation actions.

Enjoy reading and as always, Mor requests the feedback on this issue and articles for the next new issue.

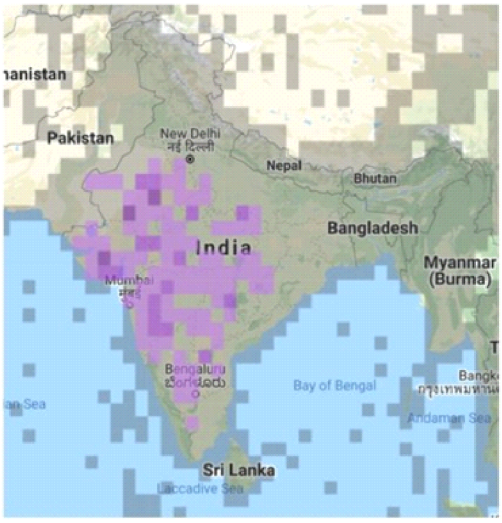
Dr. M. Shah Hussain, Hon. General Secretary

Some tips on vocal identification of Jungle and Rock Bush-Quails in Peninsular India

Introduction : Two Perdicula bush-quails—Jungle Bush-Quail *(Perdicula asiatica)* and Rock Bush-Quail *(Perdicula argoondah)*, are widespread in Peninsular India in scrub-jungle and grassland habitats. Like many quails, they are most vocal when breeding. However, they are often shy around human beings and difficult to see, and the subtle plumage differences mean they can be difficult to tell apart. Both species occur together (or at least in adjacent areas) in many parts of their range, including Pune where the recordings in this article were made, and they can pose an identification challenge for birders within this district.



Distribution map of Jungle Bush-Quail from eBird



Distribution map of Rock Bush-Quail from eBird

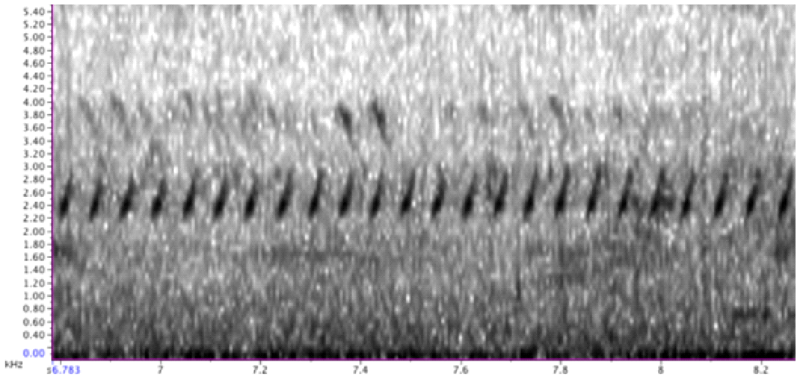
Vocal repertoires of Perdicula quails: Salim Ali and Dillon Ripley, in the "Handbook of the Birds of India and Pakistan", Volume 2, describe a whistling call and a grating "chee-chuck, chee-chuck" for the Jungle Bush-Quail. They do not distinguish the Rock Bush-Quail from the Jungle Bush-Quail vocally. However, important differences exist, as outlined in Rasmussen and Anderton's "Birds of South Asia". This writeup elaborates on these differences between the two species' long, whistled 'trill' calls with examples, to provide a key for identification. Using this key will hopefully help provide some clarity on the distributions of the two species around Pune. Using recording apps such as SpectrumView you can record any bush-quails on your mobile phones and identify them from a spectrogram, which represents frequency (pitch) on the y axis and time on the x axis. Recordings on online databases (eg: Xeno-canto: https://www.xeno-canto.org/ and AVoCet: https://avocet.integrativebiology.natsci.msu.edu/ , as well as the Macaulay library: https://www.macaulaylibrary.org/) can help you get more familiar with the sounds before venturing into the field.

Tips on vocal identification: Below is a description of various parameters using calls recorded within Pune, as a means of providing pointers about how to identify the calls of the two species.

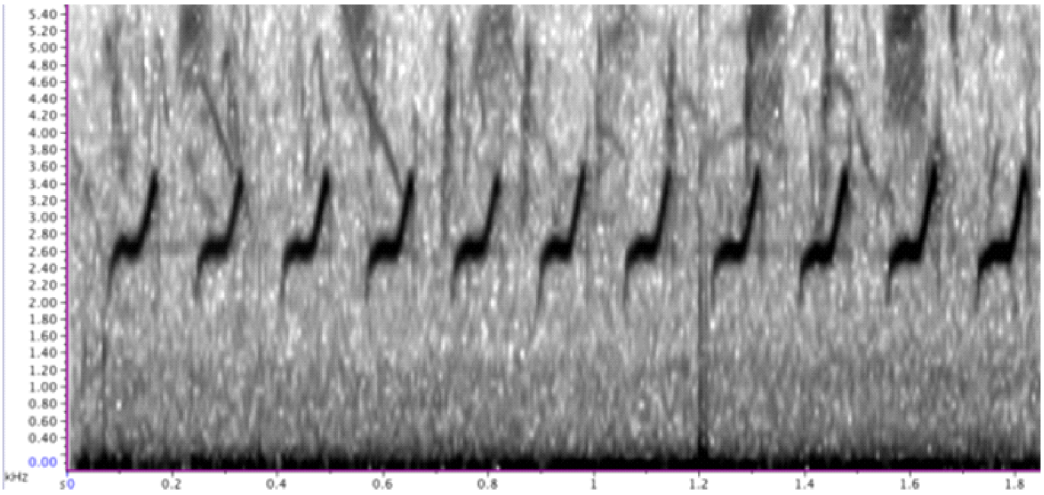
We generally find the Jungle Bush-Quail to be commonest in the west and south of Pune, in wetter hilly areas such as Sinhagad and Pabe Ghat westwards, whereas the Rock bush-quail is commonest in the drier semiarid locations to the east such as Saswad. We have never heard the calls of both species together in Pune so far (although this does not rule out coexistence). In other parts of their range, there may be local overlap in some areas, but a lot remains to be learned about the relative distributions of both these quails.

The "trill" calls of each species, uttered mostly during the monsoon, are distinctive, although both span a broader range of frequencies toward the end, thus appearing to reach a crescendo.

Calls of Jungle Bush-Quail: The Jungle's call is much faster (in the example below, starting at 18-19 notes per second, slightly slowing down to about 16 notes per second in the end), and over a narrower bandwidth (the difference between highest and lowest frequency), or range of frequencies (in the beginning, between 2.4-2.7 kHz, in the middle about 2.2-2.8 kHz, and by the end about 2.2-3.1 kHz), sounding like a tremulous, quavering whistle, which reaches a crescendo.



Calls of Jungle Bush-Quail: The Rock's call is slower (about 6 notes per second early on in the example shown below, slowing down slightly to 5 notes per second in the end) and over a larger frequency range or wider bandwidth (2.1-3.6 kHz in the beginning, and about 2-3.8 kHz at the end) with each note well-separated and an apparently less-pronounced crescendo. The result sounds less like a single long whistle, and more like a deliberate series of whistles (roughly transcribed as wee–wee–wee as opposed to the faster wi-wi-wi-wi-wi of the Jungle Bush-Quail). Because some of the fine frequency structure may be lost if the bird is at greater distances, the vocal rates (number of notes per second) are the best guide to telling these birds apart.

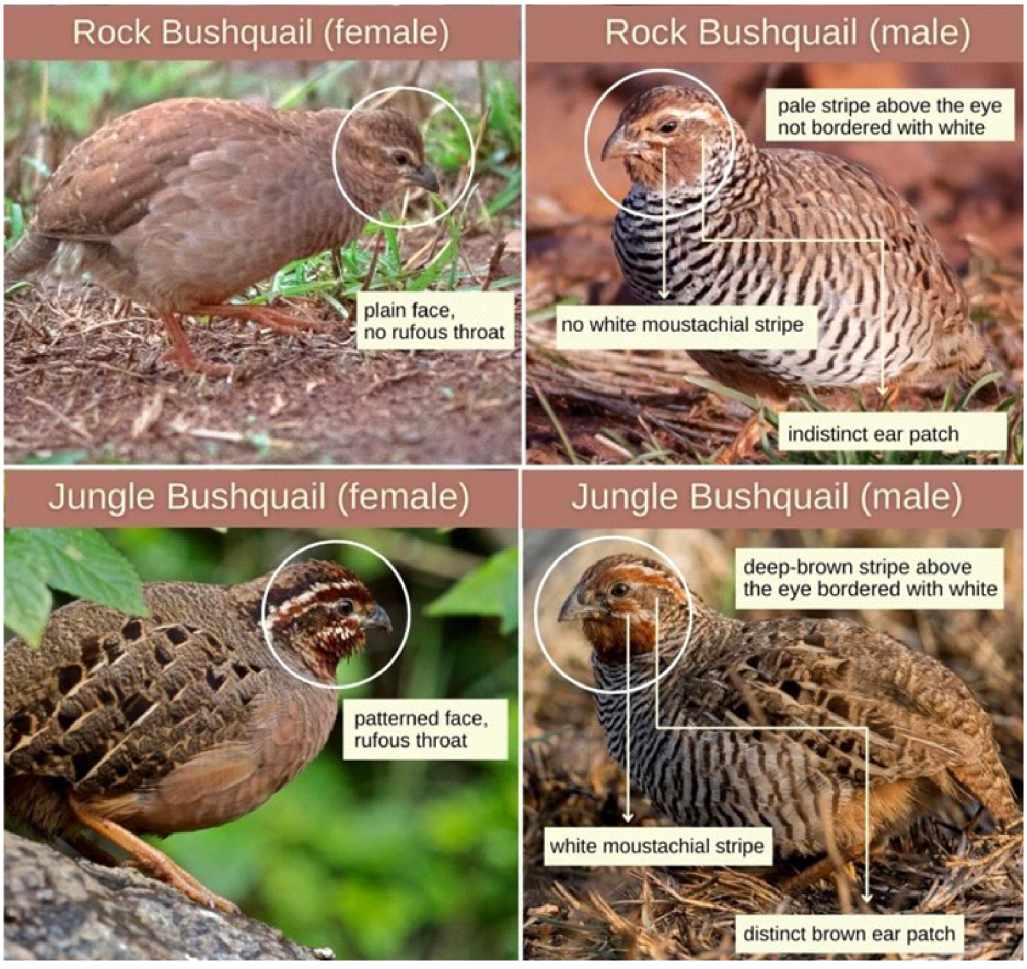


As you can see, the spectrograms of both species show the difference in notes per second. The Rock Bush-Quail's call is only a third as fast as the Jungle Bush-Quail's. So keep your eyes and ears open, record calls of bush-quails as you see them on your mobile phone, and use these parameters to get an ID, especially if you don't see the birds themselves.

Identification by Plumage: In case you do observe either species in the field, and they are not vocalizing, the female plumages are immediately distinguishable: the female Rock has a plain face, whereas the female Jungle is patterned like the male. In the males, the Rock has a white brow running through and above the eye, with a rufous-brown stripe above it, which is not bordered with white. The male Rock does not possess a white moustachial stripe and lacks a distinct brown ear patch. The male Jungle, on the other hand, has a deep rufous brow running immediately above the eye, bordered with white. The male possesses a white moustachial stripe and a distinct brown ear patch. This simple key has proved rather reliable and helpful to me in the field, but I personally still recommend using vocalizations above anything else. Learning how to recognize the calls of the two species will inform you of their presence even if the birds themselves are unseen. More information from birders recording with mobile phones will help improve our knowledge of these calls, and therefore the distributions of these quails.

Jungle Bush-Quail (*Perdicula asiatica*)	Rock Bush-Quail (*Perdicula argoondah*)
Vocal identification	
Faster call with higher note rate (notes/second)	Slower call with lower note rate (notes/second)
Smaller range of frequencies*	Larger range of frequencies*
Identification by plumage	
Female has facial markings like the male, unbarred below with a rufous throat.	Female has a plain-looking face without a rufous throat, unbarred below.
Male has a deep-brown stripe above the eye bordered with white.	Male has a narrow pale stripe above the eye
White moustachial stripe.	No white moustachial stripe.
Distinct brown ear patch.	Lacks a brown ear patch

Table summarizing the major identification points highlighted in this article



(Credits-clockwise from above: Vaidehi Gunjal, Vaidehi Gunjal, Vasanthan Panchavarnam, Rofikul Islam)

by: Anand Krishnan and Sarthak Malusare, January 27, 2021, Bird Count India

Rare subspecies of male Koklass Pheasant photographed for the first time in India

The *Pucrasia macrolopha meyeri* was clicked by Gurugram-based wildlife photographer, Rajeev Dasgupta, in the rich forests around Walong in Arunachal Pradesh.

Last November, Gurugram-based wildlife photographer Rajeev Dasgupta hit the jackpot when he got the first photographic evidence of the rare subspecies of male Koklass Pheasant *Pucrasia macrolopha meyeri* near the Helmet top in Walong, Arunachal Pradesh. Earlier, a few birders had caught a flitting glance in April-May 2015, and later in January 2021. But there had been no definitive evidence as the elusive, reclusive bird is not easy to photograph. The previous birders had recorded their observations about the rare subspecies only verbally on the e-Bird website.

Avibase, the world bird online taxonomic database, and books such as Birds of the Indian Subcontinent by Richard Grimmet, Carol and Tim Inskipp and Birds of South Asia: The Ripley Guide mention Koklass pheasant as a resident bird of the Western Himalayas. Of the nine subspecies identified across the world, four are found in the states of Uttarakhand, Jammu and Kashmir and Himachal Pradesh in India. The male subspecies — *meyeri* — had not been not recorded outside China and Tibet. The bird bears a distinctive golden ring around the neck and its emerald green head distinguishes it from the female. While the bird has been declared extinct in Tibet now, the golden ring is not seen in the other subspecies found in India.

The lucky shot: On November 22, 2020, Dasgupta got lucky enough to get a clear shot of the bird. “It is not one of my best photographs,” he says, “because the bird was perched on a pine tree 500 metres away. Not only was the distance long, there was no place to fix the tripod either.” He then climbed down a steep valley to reduce the distance between him and the rare catch by 200 metres. Hiding behind the trees, he finally found a narrow gap between him and the bird and clicked with his Cannon 1D X Mark2 held in hand.

“Initially, the bird stay put, oblivious of my presence. When I tried to get closer, I stepped on a twig, accidentally. With that soft crackling sound, the bird flew away immediately,” he recalls.

Binanda Hatiboruah, a well known birding guide from the Northeast who has been taking birders to Walong since 2011, is the happiest. "I go into the Walong forests at least six times a year but had never seen this bird. On this trek, when I heard the prolonged 'keek-kew-kok-kok' throaty territorial call of the Koklass Pheasant, I told Dasgupta to quickly take a photo," he says over a phone call from Assam. "And he gave us a lifer in the year of pandemic and lockdown!"

"While reviewing the images, we noticed the golden ring near the bird's neck, which was not there in my earlier images of Koklass Pheasant taken in Uttarakhand. I checked with ornithologist Neerav Bhatt, and Pravin Jayadevan, the editor of Indian Birds, who confirmed this was indeed the rare male subspecies," says Dasgupta.

Rare recording: Dasgupta is now writing a paper on his experience of sighting the rare subspecies and hopes to get it published in Indian Birds or the Bombay Natural History Society Journal. Delhi-based ornithologist Sarwandeep Singh says though people know about the existence of Koklass Pheasant, since the subspecies has not been mentioned in popular literature and guides for lack of evidence, Dasgupta's photographic documentation is a rare record.

He says Koklass Pheasants are not known for migration and are essentially residential birds of mid-altitude dense forests in the Himalayas. The easternmost town in India, Walong is roughly 20 km south of the China border, so there is a possibility that the birds may have flown as part of general shift in their geographical location. It can be assumed that the subspecies may be residing in Walong's terrain but not spotted as hunting is rampant in that area. "You have to be lucky to photograph the shy bird in dense foliage and from that distance," he says.

Source: Soma Basu, The Hindu, June 02, 2021.

Gone in 40 years, the curious case of the Himalayan Quail: an attempt at rediscovery and implications for conservation

Abstract: Himalayan Quail *(Ophrysia superciliosa)* is a Galliforme species currently classified as Critically Endangered by the IUCN. Given the fact that the species has only been recorded over a period of 40 years in the 19th century, this classification needs more scrutiny. The aim of this study was to explore the possibility of detecting the species in their known historical distribution in the lower Himalayas, and understand if possible, the factors which led to their decline or extinction. The potential habitats in districts of Nainital and Dehradun of Uttrakhand (India), where the species which has been recorded between 1836 to 1876, have been scoured thoroughly insofar as logistics and other factors permitted using trail and point transects. We did not detect any sign of the species in any of the areas, thereby corroborating the results of past surveys/expeditions in search of this species. Domesticated/feral species (grazing pressure and hunting by dogs), natural predation by species such as Yellow-throated Marten *(Martes flavigula)*, hunting by humans, population growth and resulting land-use change, biogeochemical events, and

tourism may all have contributed in varying degrees to their decline or extinction. It was found that most, if not all, proposals of strategies to find the species have been thus far unemployed or futile. We suggest improving the chances of re-discovering this species using tools such as molecular/genetic analysis and Unmanned Aerial Vehicles. Management recommendations include stress on grazing laws, sterilization of dogs, awareness about unchecked human population growth and measures for limiting the effects of unsustainable tourism.

Introduction: It is common scientific knowledge that species are going extinct at an astounding rate, especially within vulnerable taxa like Amphibia and Mammalia (Ripple et al., 2017). Although birds are safer compared to the afore-mentioned taxa due to abilities such as flight, they're also under the hammer of the ongoing 'Sixth Mass Extinction' (Ceballos et al, 2017). This is more pronounced for taxa like Galliformes, characterized by ground-dwelling habit. Since the 1500, atleast 150 species of birds have gone Extinct or Possibly Extinct and majority of them were geographically isolated (close to 90%) – they lived in islands (Butchart et al, 2006). The most recently updated IUCN Red List, has logged in 800 species of birds as Vulnerable, 461 as Endangered and 225 as Critically Endangered accounting for a total of 14% of the extant bird species (Tables 1a & 2, IUCN, 2020). According to the latest version of HBW checklist, 78 species of the order Galliformes are threatened (in the Vulnerable, Endangered or Critically Endangered categories) and two are extinct (Table S1). Himalayan Quail aka Mountain Quail *(Ophrysia superciliosa)* (hereafter 'HQ') is one such Galliforme species.

Results: After extensive surveys of potential habitats in Nainital and Dehradun, no signs of HQ had been detected in any of the areas surveyed (approximately 6.5 Km^2 in Nainital and 3.1 Km^2 in Dehradun). There are very few potential habitats left in the areas surveyed, as most of the historical range has been turned into agricultural land or used for tourism purposes. Those which still exist, is heavily to moderately disturbed by anthropogenic causes. Most of the slopes with large patches of long grasses were found to lie in the south-facing direction, which is in concordance with the observation of Reiger and Walthonzy (1993). In both districts, there is abundance of insects, and in some places, berries, both of which probably formed a part of the species' diet, in addition to seed grasses (Oates, 1898) (Plate S2).

Full article on: https://doi.org/10.1101/2020.07.14.201137.

Source: https://www.biorxiv.org/

by: Paul Pop (Amity Institute of Forestry and Wildlife (AIFW), Amity University, Sector 125, Gautam Buddha Nagar, Noida - 201313, Uttar Pradesh & Zoology Department, Govt. College Bilaspur, Bilaspur - 174001, Himachal Pradesh), Puneet Pandey (Amity Institute of Forestry and Wildlife (AIFW), Amity University, Sector 125, Gautam Buddha Nagar, Noida - 201313, Uttar Pradesh and Seoul National University College of Veterinary Medicine, Seoul - 08826, Republic of Korea) and Randeep Singh (Amity Institute of Forestry and Wildlife (AIFW), Amity University, Sector 125, Gautam Buddha Nagar, Noida - 201313, Uttar Pradesh).

Understanding distribution and occupancy of Himalayan Monal in Uttarkashi district, Uttarakhand

Abstract: The Himalayan Monal is a conservation priority species in its entire distribution range. Its population is declining in many areas due to various anthropogenic threats. The information on species distribution and its abundance is lacking in many areas which are vital for conservation and management planning. Hence, through the present study, we have assessed the abundance and occupancy of Himalayan monal in Uttarkashi district (Uttarakhand). We used camera traps and conventional sign surveys for documenting the species during 2018-2019. We installed a total of 69 camera traps (2819 trap nights) and surveyed 54 trails (650 km) which represents entire habitat and topographic variability of the landscape. The occupancy and detection probability was modelled using the habitat variables. The top model showed that occupancy probability of Himalayan monal was positively influenced by the slope ((ß=27.52 ±16.25) and negatively influenced by Reserve Forest (RF) ((ß = -8.14 SE ± 4.99). The observed naïve occupancy of Himalayan Monal was 0.69 in the study area, which was slightly lower than the estimated occupancy. However, in the null model, the site occupancy estimated was found to be 0.82±0.08 and with detection probability 0.23±0.03. The overall abundance of monal was estimated about 171.58 ±10.2 in the study area with an average density of 0.62/ km^2. The activity pattern analysis indicates that monal remains very active between 6.00 hrs - 12.00 hrs and relatively less active during mid-day when humans are most active 11.30 hrs-16.30 hrs. The present study is a first attempt to estimate occupancy and abundance using camera traps as well as sign survey for the species primarily from non-Protected Area (PA). We found that Himalayan monal is abundant outside the PAs, which is a good indication for its long-term viability and also identified areas for conservation and management prioritization in Uttarkashi.

Introduction: The Himalayan bio-geographic zone is situated at the junction of three bio-geographical realms viz., Palaearctic, Africo-tropical and Indo-Malayan and home to some of the top conservation priority fauna Mani (1974). Its rich habitat and climatic variability have resulted in the creation of safe adobe for over 30,000 different faunal species Chandra et al (2018). The Pheasants belong to order Galliformes, a group of charismatic animals among all the faunal elements distributed in the Himalayan landscape. These pheasant species found in India are most abundant in the middle and high altitude valleys of the Himalayan range, and the majority of them are endemic to Himalayas Sathyakumar et al (2011). They are very sensitive to anthropogenic disturbance and habitat degradation Fuller & Garson (2000), hence also considered as bio-indicators, they also form a prey base of carnivores birds and mammals Johnsgard (1986). These birds are popular in folklore and have been used for conservation campaigns as icons because of their importance in ecosystem and unique breeding displays Nawaz et al (2000). Having a distinct and unique colouration pattern, pheasant species can easily be differentiated from other species of birds Ali (1981). Of the 51 species of 16 genera of pheasants found in Asia, of which 17 species are reported to be present in India Ali & Ripley (1987). Out of 17 species, 16 species of pheasants are reported from the Himalaya, among which Himalaya beholds five threatened species Sathyakumar & Kaul (2007). These birds are reported from diverse habitats from lowlands tropical forests to temperate coniferous forest.

Most of the pheasant species are expanding their ranges to subalpine scrub, alpine meadows, montane grass scrub, and broad-leaved evergreen forests up to the highest physiologically possible elevation in the Himalayas. The Himalayan monal *(Lophophorus impejanus)* a bird with beautiful plumage and

with prominent sexual dimorphism is distributed in the upper-middle elevations of Himalayas Delacour (1977). Hence, because of the species is iconic and is off conservation importance, these birds have been given the status of National bird of Nepal and State bird of Uttarakhand state of India. It occupies the montane ecosystem of Himalaya from eastern Afghanistan, Pakistan, India, Nepal, Bhutan, China and Myanmar Sathyakumar & Kaul (2007); BirdLife-International (2020). The species mostly occupies the upper temperate forests of conifer and oak with open grasslands slopes between the elevational ranges of 2400 – 4500 m Grimmett et al (1998). Researchers have observed that Himalayan monal exhibited with seasonal migration along with the altitudinal gradient Gaston & Garson (1981), mostly distributed at altitudes between 2620 m and 3350 m in summer and between 2000 m and 2800 m in winter, with relative preference to the sub-alpine oak forest in spring and conifer, dominated forest during winter Ramesh (2003).

In the entire Himalayan range, recent developmental activities, high level of human disturbance, increase in livestock population has led to degradation and deforestation of forested habitats Bhattacharya et al (2009); Jolli & M. Pandit (2011). The reductions in the forested area, along with the fragmentation of habitat, has adversely impacted the pheasant's distribution and population abundance Diamond (1974); Sathyakumar (2007); Ramesh (2003); Singh et al (2011). Habitat loss and degradation, hunting for food, sport & trade and human disturbance as other major threats of Himalayan monal and other pheasants throughout their distribution range Fuller & Garson (2000). Despite this, limited information is available on the pheasant population biology and behaviour due to their elusive nature, and rugged terrain in their habitat makes them difficult to observe. Hence, conventional methods did not yield significant information necessary for making strategies for conservation and management. However, camera traps have been found useful in documenting these birds distribution and abundance Dinata et al (2008); Li et al (2010); Suwanrat et al (2015). Nevertheless, more information is needed on the species distribution, abundance and other ecological aspects of the species for making informed management strategies throughout its entire range.

The information available on this species is mostly scattered and focused on Protected Areas (PA) that is considered the best habitats of the species. However, no information is available from forested habitats outside the PA network, which may be acting as a biological corridor connecting PAs. There are large size PAs viz., Gangotri National Park (GNP), Govind Pashu Vihar National Park (GPVNP) and Govind Pashu Vihar Wildlife Sanctuary (GPVWLS) are located in Uttarkashi district which possess Himalayan monal populations. Still, the non-PA or the territorial forest/reserve forest between these PAs have never been assessed. However, this area may be acting as a biological corridor or mediating gene flow which is vital for the viability of Himalayan monal population in PAs. Therefore, we designed the present study aiming at assessing the distribution, site occupancy, abundance estimation and activity pattern analysis of Himalayan monal in forested habitats outside PA network in Uttarkashi district of Uttarakhand. We hypothesised that human disturbance will impact the Himalayan monal occupancy and its activity pattern Nawaz et al (2000). Further we attempted to understand the key habitat predictors and their influence on occupancy of Himalayan monal in the study landscape.

Source: https://www.biorxiv.org/

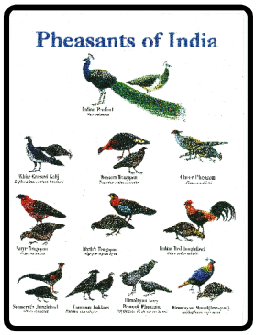
by: Amira Sharief, Hemant Singh Rana, Bheem

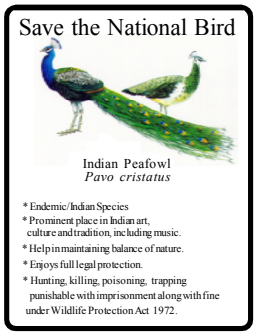
Dutt Joshi, Tanoy Mukherjee, Kailash Chandra, Mukesh Thakur and Lalit Kumar Sharma

Resource Material - *available on request*

Posters

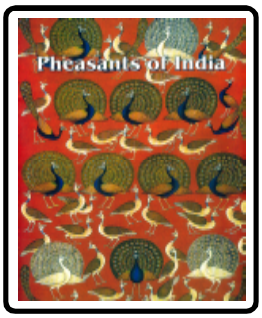
- Pheasants of India
- Pheasants of Arunachal Pradesh
- Pheasants of Himachal Pradesh
- Pheasants of Uttarakhand
- Pheasants of Assam
- Pheasants of J&K
- Pheasants of Sikkim
- Pheasants of Nagaland
- Pheasants of West Bengal
- National and State Birds
- Save the National Bird
- Himalayan Monal

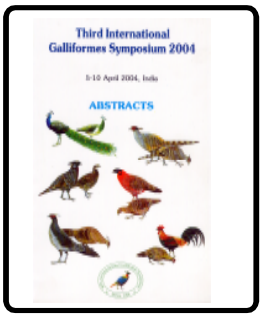


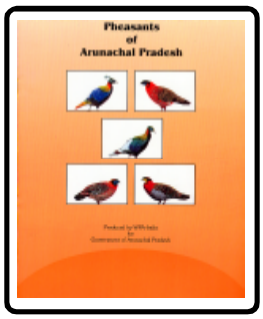


Booklets

- Pheasants of India
- Pheasants of Arunachal Pradesh
- Third International Galliformes
- Symposium Abstracts
- Pheasants of Himachal Pradesh







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For application form or any other purpose, contact: phone no. 9971981959, (Email- wpaindia@gmail.com).
For Correspondence: 782, Sector – 17-A, Dwarka, New Delhi - 110078 and H-3/120, Ground Floor, Bengali Colony, Mahavir Enclave-1, Palam, New Delhi - 110045.