

Mor

Newsletter of World Pheasant Association - India





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Editorial

Dear Members & Readers,

Welcome to the new issue of 'MOR'.

This is the first issue of the current calendar year. In current issue we have some interesting articles on selection of Kalij Pheasant as a J&K state bird, poaching of Monal Pheasant in Uttarakhand, Habitat shifting of Satyr Tragopan in Himalayas due to climate change, first sighting of Black breasted Quail in Aravalli Biodiversity Park, Delhi.

Interesting news is about the rise of peafowl population in Kerala. Scientists are thinking of it due to climate change. The information on current rate of climate change is dramatically affecting the community assemblages on Earth's Biodiversity hotspots. As we all know Himalayas are home to pheasants and the article on climate-driven habitat shifting of Satyr Tragopan is a wakeup call to stop further alteration of Himalayan habitats.

We are thankful to Duleep Matthai Nature Conservation Trust for funding the publication of MOR. As mentioned earlier the success of MOR depends on the feedback and support received from the readers. So, we look forward to receiving your newsletter contributions in this year. Enjoy reading this newsletter!

Please send your feedback to: wpaindia@gmail.com.

Dr. M. Shah Hussain, Hon. General Secretary



Pair of Satyr Tragopan



Black-breasted/ Rain Quail *(Coturnix coromandelica)*– a novel record in Aravalli Biodiversity Park, Delhi.



Photo: Raju Karia, Rajkot

The first author had been assigned the task of daily monitoring in the Aravalli Biodiversity Park during the summer season from May-July 2019. On 23rd June 2019, the open area near the Vasant Kunj mall side of the park was selected to monitor. It was a warm sunny day with no hint of rain or clouds yet, the first author started noting down his observations at about 6:45 am early in the morning. The habitat type was a thorny scrubland with patches of *Prosopis juliflora* and rocky ditches interspersed with thorny shrubs. At a rocky portion of area about 50m from the ground with abundant dry-thorny shrubs, a small bird about the size of a Common myna just appeared and he thought of it as a Grey Francolin chick. On trying to search a bit more for a few seconds, it was identified as a quail species near dense shrubs. He tried to take a photograph but it flushed into one of the deep ditches in the area. Upon further photographic references from eBird as well as field guide, it was finally identified as a male Black-breasted/ Rain quail *(Coturnix coromandelica)*.

The morphological observations had been the following; It was a quail species with upright pearshaped posture. The bird was fully streaked brown-black with uniform white-spiny feathers from back. It's head and facial parts had long white supercilium, dark brown loral stripe near eye, black moustachial as well as sub- moustachial stripe along with chin stripe and small black beak with brown crown. The most revealing identification point was its well streaked black breast visible from sideways. After noting down these few points it had already disappeared from the sight.





Photo: Himanshu Sharma

The record of the quail species was the first for the Biodiversity park. There are only few scattered records of this species from Delhi region. The quails are one of the most elusive Galliformes species. Some previous and few recent records had been from Yamuna Khadar, Wazirabad – North-east Delhi (Kelsey, 2003; Sehgal, 2007; Singal & Singal, 2018), Okhla bird sanctuary (Kelsey, 2002; 2003) as well as Chilla Khadar (Kelsey, 2003), South-east Delhi; Leela Ambience hotel, NH-8, South Delhi (Hugel, 2011); Najafgarh jheel area, South-west Delhi (Childs, 1990; Gulalia, 2019; Kumar, 2020) and Asola Bhatti Wildlife Sanctuary, South-east Delhi (Madan,2020). Rain quail is a resident species in South-east Asia including Bangladesh, Cambodia, India, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. It is a habitat specialist species that inhabits terrestrial ecosystems like shrubland and grassland. The quail was sighted exactly in the similar habitat and it shows that Aravalli Biodiversity Park of Delhi is increasingly inhabited by quails that are resident or migratory. One previous unique record of Jungle Bush Quail had also been there from the Biodiversity park. These records provide an indispensable insight into the distribution of these species from Delhi-NCR.

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Why Kalij Pheasant as JK bird is a wrong choice

Throughout the globe, governments prefer to adopt endangered or threatened birds. But the newly declared Kalij Pheasant is neither an endangered or threatened species.



Among the most googled words these days in Jammu and Kashmir is a bird named Kalij Pheasant abundantly found in parts of the Himalayas.

Kalij Pheasant or *Lophura leucomelanos* came into sudden limelight lately when the J&K administration headed by Lieutenant Governor Manoj Sinha declared it as the Union Territory Bird of Jammu and Kashmir.

The bird replaced the Black-Necked Crane, which earlier used to be the state bird of the erstwhile Jammu and Kashmir, including Ladakh. But after the state reorganization on August 5, 2019, Ladakh adopted the endangered species, Black Necked Crane and Snow Leopard, as UT bird and animal respectively.

While Ladakh adopted two endangered species, Jammu and Kashmir opted for two types — one (Hangul) from Kashmir valley, and other (Kalij Pheasant) from Jammu region.

Distributed in foothills of India, Nepal, Bhutan, Myanmar and Thailand, the Kalij Pheasants are medium size birds—males measuring 60 to 75 cm in length and weigh 800 to 1150 grams, while the females measure 50 to 60 cm in length and weigh 500 to 1000 grams. The males have glossy bluish plumage, while the females are brown. The bare facial skin is red in colour. They inhabit evergreen and deciduous forests and feed on roots, seeds, small reptiles, insects and forest yams. They breed during May and June.

The International Union for Conservation of Nature (IUCN) has categorized and listed nine subspecies of the pheasant family as of 'Least Concern'.

Notably, adopting a bird or animal as a state or UT species has a symbolic importance.



Throughout the globe, governments prefer to adopt those birds and animals of the respective regions which are either endangered or threatened. "The practice helps in their protection," says Nuzhat Malik, a Zoology scholar from Srinagar. Interestingly, the newly declared Kalij Pheasant is neither an endangered or threatened species.

"The bird is commonly present in forested areas of J&K and is a symbol of diverse fauna in this Himalayan region," Nuzhat adds.

In fact, says Dr. Khursheed Ahmad, a wildlife expert, pheasants are among the common birds found in Asia. "They're a common among the high altitudes of Jammu region, mostly found in Jasorta, Mansar, Bhaderwah, Doda and Surinsar forest areas. However, their population in the valley is very meager. These birds are limited to few hilly areas in the valley."

Mostly absent from the valley of Kashmir, Kalij Pheasant is found in some parts of Uri. Pertinently, in the run-up to this recent declaration, there was an issue regarding the adoption of bird and animal for newly carved UT's of Ladakh and Jammu Kashmir.

Earlier, Haseeb Drabu, a former Finance Minister of J&K, had batted for Beilbechur or Bulbul to be officially adopted as UT bird. Referring to its historical, cultural and geographical importance, Drabu had delved on the relevance of Bulbul as a better choice. However, experts believe that it's the popularity and common appearance of the bird in Jammu parts that has prompted the authorities to adopt Kalij Pheasant as a Union Territory bird.



Source, Free Press Kashmir Webdesk, November 1, 2021



Six crests of 'Himalayan Monal' recovered in Chamba, four held

Divisional forest officer Kamal Bharti said the plumes have been sent to forensic lab to ascertain to which bird they belong

The Dalhousie police in Chamba have recovered six plumes suspected to be that of threatened bird Himalayan Monal and arrested four persons, including a woman.

Dalhousie DSP Vishal Verma said a police team led by Constable Vipan Kumar had set up a naka at Lahru near Chowari town as a routine exercise on Sunday. "They stopped a car coming from Chamba side for checking. The occupants in the car were jittery after seeing the police which raised the suspicions of them being involved in some illegal act," he added.

Upon checking, the police found six plumes and some feathers in their possession. The accused have been identified as Hans Raj, Anil Kumar and Han Raj from Salooni area of the district while the woman Sajo Devi belongs to Kullu.

He said the accused have been booked under the provisions of the Wildlife Protection Act and being quizzed to trace the source where they procured the plumes.

Meanwhile, divisional forest officer Kamal Bharti said the plumes have been sent to forensic lab to ascertain to which bird they belong.

The Monal, which belongs to the pheasant family, is poached for its colourful plumes. It is the national bird of Nepal, where it is known as the 'danphe', and the state bird of Uttarakhand. It was also the state bird of Himachal Pradesh until 2007. Its colourful crest is used to decorate caps.

Though hunting the Himalayan Monal *(Lophophorus impejanus)* was banned in Himachal in 1982, there has been little check on its poaching and its plumes are smuggled in the market.

Wearing a cap with a monal crest is a tradition in upper reaches of Himachal. Such caps are also gifted on auspicious occasions, especially marriages.

The state forest department imposed a complete ban on wearing such caps this year. Offence would be punishable with seven year imprisonment or Rs. 10,000 fine or both.

Though the bird is one of the least concerned species in the International Union for Conservation of Nature's list of endangered species, the monal is under threat in this part of the Himalayas due to large-scale poaching.

Source: HT Correspondent, Dharmashala, Hindustan Times, December 2, 2021



Predicting climate-driven habitat shifting of the Near Threatened Satyr Tragopan (*Tragopan satyra*; Galliformes) in the Himalayas

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Abstract: Current rates of climatic change will affect the structure and function of community assemblages on Earth. In recent decades, advances in modelling techniques have illuminated the potential effects of various climatic scenarios on biodiversity hotspots, including community assemblages in the Himalayas. These techniques have been used to test the effects of representative concentration pathways (RCPs) AR5-2050, based on future greenhouse gas emission trajectories of climate change scenario/ year combinations, on pheasants. Current bioclimatic variables, Miroc-esm, Hadgem2-AO and Gfdlcm3, in future climate change scenario models, were used to predict the future distribution and the gain/loss of future habitat area, within the Himalayas, of the pheasant, Satyr Tragopon (Tragopan satyra). The results indicate that future climatic conditions may significantly affect the future distribution of Satyr Tragopon and the effectiveness of protective areas (PAs). Using the python based GIS toolkit, SDM projection, regions of high risk under climate change scenarios were identified. Topredict the present distribution of the species, environment parameters of bioclimatic variables, red reflectance, blue reflectance, solar azimuth angle, altitude, slope, aspect, NDVI, EVI, VI, and LCLU were used. The forest cover (NDVI) and the canopy cover (EVI), and variables affecting forest structure, namely altitude, slope, solarazimuth angle and Bio7, were the primary factors dictating the present distribution of T. satyra. The predicted trend of habitat shifting of T. satyra in the Himalayas to higher altitudes and latitudes will gradually become more prominent with climate warming.

Introduction: Current rates of climate change will dramatically affect community assemblages on Earth's biodiversity hotspots (Wiens et al., 2009; Wang et al., 2014; Hu et al., 2015). These changes have become prominent in the Himalayas where temperatures have risen by 0.74 °C over the past 100 years (Du et al., 2004; Solomon et al., 2007b), and are projected to climb by 0.3–4.5 °C by the end of the 21st century (Stocker et al., 2013). As a result, many historical ecosystems have become fragmented, which has had subsequent ramifications on the Himalayan biodiversity hotspot (Chazdon et al., 2009; Hu et al., 2015). Additionally, a small fluctuation in temperature can convert ice and snow into water or vice versa ,and extreme fluctuations may lead to rapid changes in climatic zones over small distances, and will result in noticeable impacts in terms of biodiversity (Sharma et al., 2009). The Himalayas are the home of a number of the world's endemic and most threatened species, as well as primitive tribes, who are highly dependent on biological resources (Kollmair et al., 2005). High altitude ecosystems are particularly vulnerable to the effects of climate change (Shrestha et al., 1999; Liu and Chen, 2000)



and as a result, in 2004, the Convention on Biological Diversity developed a programme to reduce the loss of mountain biological diversity at global, regional, and national levels by 2010. However, owing to the complexities of mountainous landscape records on populations and climate, data on the most threatened species are sparse. Therefore, conservation directives have a traditional focus on protecting single species using habitat suitability assessments (Wiens et al., 2009; Hu etal., 2015); however determining the geographical range of a species is a critical part of these endeavours (Mace et al., 2008; Boakes et al., 2010), especially in a changing climate scenario. Advances in modelling techniques have illuminated the potential effects of various climatic scenarios on biodiversity hotspots. Some climate models have proven particularly useful in the understanding of distribution range and the impact of climate change on threatened species. In recent years, MaxEnt has shown the potential to predict biodiversity loss under future climate scenarios (Bertrand et al., 2012) and has also significantly contributed to the prediction of threats to species by upcoming climate change (Wang et al., 2014; Hu et al., 2015), based on python-based GIS toolkit and SDM projection (Brown et al., 2014). Modelling techniques have helped contextualise these global changes in terms of ecosystems. MaxEnt has become a popular model in the conservation scene for its utility in climate-driven habitat shifting. In particular, representative concentration pathway (RCP) models help to illuminate future climate scenarios and their impact on distribution range and the suitable habitat of species based on possible future greenhouse gas emission trajectories. Four RCPs (RCP2.6, RCP4.5, RCP6.0, and RCP8.5) were coded according to the possible range of radiative forcing values in the year 2100 relative to pre-industrial values (+2.6, +4.5, +6.0, and+8.5 W m-2, respectively) (Weyant et al., 2009). Climate change has significantly affected the behavioural ecology of avian species throughout the Himalayas, however, existing reports generally lack the quantitative analysis needed to have an impact on conservation policies. Global climate change will pose several threats to the biodiversity of endemic avian species in the Himalayas, and these changes have been described in general terms, including range shifts (Acharya and Vijayan, 2007; Chettri et al., 2010). It is crucial that these changes are taken into account when conservation planning, in part because the existing range may soon shift beyond protected areas (PAs). For a better understanding of the threats towards avian fauna of the Himalayas by global climate change, these models were adopted on a species of pheasant, Satyr Tragopan (Tragopan satyra, Galliformes). In this article, our objectives were to: (i) predict the present potential habitat distribution of this Near Threatened species, Satyr Tragopan, in the Himalayas, covering four countries:India, Bhutan, Nepal and P.R. China to promote and strengthen their conservation status; (ii) assess whether the management of PAs of the Himalayas represents adequately the conservation concerns for Satyr Tragopan, (iii) identify the key climatic factors associated with this Near Threatened species for habitat shifting under present and future climate scenarios; and (iv) project and quantify the spatial pattern of change of suitable potential habitat distribution of the species under various future climate scenarios.

Conclusions: This article uses recent advances in ecological modelling to quantitatively justify management strategies of Himalayan pheasants. The results indicate that 28,406.15 km² is the present suitable habitat for Satyr Tragopan under the very high threshold category. The forest cover (NDVI)



and the canopy cover (EVI), and variables affecting forest structure, such as altitude, slope, solar azimuth angle and Bio7, were the primary factors dictating the final shaping of the present distribution of *T. satyra*. Based on three ensemble models (GCMs) of future climate projection of different scenarios under RCP-2050, our study revealed that the suitable habitats of the species will shift towards higher altitude and latitude landscapes and would be lost in low altitude and latitude landscapes in future climate scenarios except for the mode IRCP4.5-2050, which showed that some suitable habitats extend towards lower altitudes and latitudes. The trend of habitat shifting to higher altitudes and latitudes are gradually becoming more prominent and significant, and the potential habitat of Satyr Tragopan will shrink with green house gas intensification. Overall, the article suggests that Satyr Tragopan are a suitable model species to predict climate-driven habitat shifting, and therefore could be used to inform guidelines for improving the conservation and management of the species and other associated climate sensitive vulnerable species of the Himalayas.

Source: 2018, Avian Biology Research



Why the number of peacocks are on the rise in Kerala

The increasing number of the bird is an indicator of climate change in Kerala, say scientists

A newly married couple on motorbike met with a tragic end in Thrissur on Monday after a flying peacock hit the rider on the chest. The man lost his life in the accident, while his wife sustained injuries. This is not an isolated case. Incidences of peafowls, isolated and in groups, causing threat to motorists are perhaps frequent now, especially near paddy fields. Peafowls, whose appearances were quite rare in the State earlier, are now spotted even in densely populated areas.



P.O. Nameer, Head of Centre for Wildlife Studies, College of Forestry, Kerala Agricultural University, Thrissur, says the increasing sightings of the Indian Peafowl *(Pavo cristatus)*, a dry-land species, are an indicator of the changing climate in Kerala.

Bioindicator: "Birds can be regarded as a bioindicator of environmental change as they are very sensitive to vagaries of climate. However, only limited analysis is available on the effect of climate change on the distribution of birds in India.

During recent years, the Indian Peafowl, an arid-land species, have been found to be expanding in Kerala, a region falling under humid tropics," notes Dr. Nameer, who conducted a study, along with Sanjo Jose V., Academy of Climate Change Education and Research, Kerala Agricultural University. The study attempted to understand the expanding distribution of peafowls, influence of climatic variables and their future extent of distribution.

According to the study, currently 19.15 % area in the State provides a suitable habitat for the peafowl, while predictions suggest that this area may expand to 41.44% and 55.33% by 2050.

Central Kerala is found to be the hotspot for its expansion, and the distribution may be prominent towards south-east and north-west during the 2050s and 2070s respectively.

"In Kerala, 500 bird species are present, of which 17 are endemic species. There have been sightings of several dry-land bird species over Kerala," notes Dr. Nameer.

The Indian Peafowl is commonly seen in scrub jungles and forest edges, with an affinity towards dry deciduous forests, semi-desert areas and semi-arid biomes. But they can also be found in agricultural fields and vegetations near streams and even in human habituations in semi-feral conditions.

Conflict with humans: The human-peafowl conflict often arises when the birds damage paddy crops. "Frequent attack of peafowls on paddy fields is a major concern for farmers. The birds sometimes come in groups and finish paddy spikes in a large area," says Sreeja, an organic farmer at Arangottukara along the Thrissur-Palakkad border.

One of the earliest systematic bird surveys carried out in 1933 by eminent ornithologist Salim Ali did not record the Indian Peafowl in Kerala. Scientists say peafowl, commonly found in dry areas of nearby States like Tamil Nadu, started making an appearance in large numbers in the State from the late 80s.

Due to its status as the National Bird, people often refrain from attacking peacocks. Moreover, its meat is not consumed in the State.

The central and northern parts of Kerala, eastern slopes of Wayanad district, Chinnar range in Idukki district and Thenmala range in Kollam district are deemed suitable habitats for the Indian Peafowl.

Source: Mini Muringatheri, The Hindu, Thrissur, August 17, 2021



Resource Material - available on request

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- Pheasants of India
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