

Key Areas for Long-term Conservation of Galliformes in Northwest India: Phase I - Uttarakhand

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Abstract

The state of Uttarakhand contains the highest diversity of Galliformes in the northwest Himalaya, supporting 22 species represented by eight pheasants, seven partridges, five quails and two snowcocks. This includes the threatened Western tragopan *Tragopan melanocephalus* and the critically endangered Himalayan quail *Ophryisia superciliosa*. The Key Areas Project documented their distribution in detail and identified key areas for their conservation based on extensive field sampling, use of spatial data and landscape analysis tools. During the two years of survey, 415 km of foot surveys were done in the temperate region dominated by pheasants and partridges. Of these assemblages, Himalayan monal *Lophophorus impejanus* (n = 300), Koklass *Pucrasia macrolopha* (n = 150) and Hill Partridge *Arborophila torqueola* (n = 180) were recorded more frequently, with mean (\pm SE) encounter rates (no/km survey) of 0.9 ± 0.2 , 0.4 ± 0.1 and 0.5 ± 0.1 respectively. Black francolin was found widely in the agriculture mosaic, with a maximum of 6 birds/km. Significantly, the Key Areas Project confirmed the eastern limit of geographic distribution of Western tragopan in the Garhwal, and discovered a substantial population of Satyr tragopan *Tragopan satyra* in the Kumaon, providing new insights on their distribution and conservation focus. One sighting and 13 calling males of Western tragopan were obtained westwards from Bhilingna valley (Tehri District), while four sightings and 28 calling males of Satyr tragopan were obtained eastwards from Pindari valley (Bageshwar District). Highest encounter rate of Satyr tragopan (2.7/km) was from the forests in Namik valley (Pithoragarh District), which together with the adjoining areas support substantial population of this species. The field data formed the basis for species-habitat association analysis and for mapping their distribution surface in Uttarakhand. Interestingly, much of the areas in this state where pheasants occur in good populations are either under reserve forests being extensively used by people or under direct village administration, suggesting that conservation efforts here is likely to take the shape of participatory management as 'Pheasant Community Reserve/Conservation Reserve' or develop innovative models. The project identified 'Pilang Valley' in Garhwal and 'Namik Forest Complex' in Kumaon as the key areas for long-term conservation of Galliformes in the state.