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Project Name	Project – Digital Naturalist - AI enabled tool for biodiversity researchers
Maximum Marks	4 Marks

## LITERATURE SURVAY

- Habitat Characteristics and Their Effects on the Density of Groups of Western Hoolock Gibbon (*Hoolock hoolock*) in Namdapha National Park, Arunachal Pradesh, India

**AUTHOR :** Ray P.C., Kumar A., Devi A., Krishna M.C., Khan M.L., Brockelman W.Y. (2015).

**Journal :** Department of Forestry, North Eastern Regional Institute of Science & Technology, Nirjuli, Itanagar, Arunachal Pradesh 791 109, India; Department of Environmental Science, Tezpur University, Napam, Tezpur, Assam 784 028, India; Department of Botany, Dr. Hari Singh Gour Central University, Sagar, Madhya Pradesh 470 003, India; Ecology Lab, Bioresources Technology Unit, Science Park, Klong Luang, Pathum Thani 12120, Thailand

**Abstract :** Understanding the relationship between a species and its habitat is crucial for conservation action planning. The Endangered western hoolock gibbon (*Hoolock hoolock*) has a fragmented distribution in northeast India, Bangladesh and parts of western Myanmar. Namdapha National Park in Arunachal Pradesh contains the largest population of western hoolock gibbons in India. We carried out an auditory sampling survey and habitat analysis of western hoolock gibbons in the park from September to December 2012 in three potentially suitable forest types: tropical broad-leaved forest, tropical wet evergreen forest, and wet temperate forest.. Group detectability declined sharply beyond a listening radius of 600 m. Auditory sampling across 15 listening areas revealed an estimated mean density of 3.65 groups km<sup>-2</sup>. We found no significant differences in density among forest types. The habitat study revealed a total of 122 species of trees (girth at breast height >30 cm) in the three forest types, representing 73 genera in 41 families, with the highest number of tree species in wet evergreen forest (93) followed by tropical broad-leaved forest (52) and wet temperate forest (40). This study adds to our knowledge of the habitat requirements of hoolock gibbons and indicates that Namdapha National Park is more important to conservation of the western hoolock than previously thought. © 2015, Springer Science+Business Media New York.

2. Discovery of the leaf deer *Muntiacus putaoensis* in Arunachal Pradesh: An addition to the large mammals of India  
**Author :** Datta A., Pansa J., Madhusudan M.D., Mishra C.(2003)  
**Journal :** Wildl. Conserv. Soc. - India Prog., 403, Seebo Apartments, 26-2, Aga Abbas Ali Road, Bangalore 560 042, India; Ctr. for Ecol. Res. and Conservation, Nature Conservation Foundation, 3076/5, 4th Cross Gokulam Park, Mysore 570 002, India; Namdapha Tiger Reserve, P.O. Miao, Changlang 792 122, India;
3. A review of two decades of conservation efforts on tigers, co-predators and prey at the junction of three global biodiversity hotspots in the transboundary far-eastern himalayan landscape  
**Author :** Sarkar M.S., Amonge D.E., Pradhan N., Naing H., Huang Z., Lodhi M.S.(2021)  
**Journal :** North-East Regional Centre, GB Pant National Institute of Himalayan Environment (GBPNIHE), Itanagar, 791113, India; International Centre for Integrated Mountain Development (ICIMOD), GPO Box 3226, Kathmandu, 44700, Nepal; Wildlife Conservation Society Myanmar Program, No. 100, Yadanar Myaing Street, Ward (1), Kamayut Township, Yangon, 11041, Myanmar; Institute of Eastern-Himalaya Biodiversity Research, Dali University, No. 2 Hongsheng Road, Dali, 671003, China  
**Abstract :** Addressing the effects of human-caused habitat destruction on free-ranging threatened large carnivores requires actions that go ‘beyond borders’ in conserving and protecting their habitat and prey base. In this review, we compiled information from available literature on 20 years of conservation efforts aimed at tigers, co-predators, and their prey in the Far-Eastern Himalayan Landscape that is situated at the confluence of three global biodiversity hotspots covering parts of India, Myanmar, and China. © 2021 by the authors. Licensee MDPI, Basel, Switzerland.
4. Cafeteria-style feeding trials provide new insights into the diet and nutritional strategies of the black snub-nosed monkey (*Rhinopithecus strykeri*): Implications for conservation  
**Author :** Yang Y., Li Q., Garber P.A., Grueter C.C., Ren G., Wang X., Huang Z., Xiang Z., Xiao W., Behie A.(2020)  
**Journal :** Institute of Eastern-Himalaya Biodiversity Research, Dali University, Dali, Yunnan, China; School of Archaeology and Anthropology, Australian National University, Canberra, ACT, Australia; Collaborative Innovation Centre for Biodiversity and Conservation in the Three Parallel Rivers Region of China, Dali, Yunnan, China; Yunnan Province Key Lab of Animal Nutrition and Feed Science, Yunnan Agricultural University, Kunming, China; Department of Anthropology, Program in Ecology, Evolution, and Conservation Biology, University of Illinois at Urbana-Champaign, Urbana, IL, United States; School of Human Sciences, The University of Western Australia, Perth, Australia; Centre for Evolutionary Biology, School of Biological Sciences, The University of Western Australia, Perth, Australia; Lushui Bureau of

Gaoligongshan National Nature Reserve, Liuku, Yunnan, China; Institute of Evolutionary Ecology and Conservation Biology, Central South University of Forestry & Technology, Changsha, Hunan, China

**Abstract :** Anthropogenic changes and fragmentation of natural habitats often exert a negative effect on resource availability and distribution, and the nutritional ecology and feeding behavior of nonhuman primates. The goals of this study are to examine food choice and to identify the nutritional profile of foods consumed by the Critically Endangered black snub-nosed monkey (*Rhinopithecus strykeri*). To accomplish our study goals, we presented cafeteria-style feeding trials of fresh food items collected in the home range of wild black snub-nosed monkeys to the only two captive *R. strykeri*, and compared the nutritional profiles of the leafy foods (buds, young, and mature leaves, 100 items from 70 plant species) selected with those avoided (54 items from 48 plant species). © 2020 Wiley Periodicals, Inc.

5. Influence of traditional ecological knowledge on conservation of the skywalker hoolock gibbon (*Hoolock tianxing*) outside nature reserves

**Author :** Zhang L., Guan Z., Fei H., Yan L., Turvey S.T., Fan P.(2020)

**Journal :** School of Life Sciences, Sun Yat-sen University, Guangzhou, Guangdong, China; Yunnan Academy of Biodiversity, Southwest Forestry University, Kunming, Yunnan, China; Cloud Mountain Conservation, Dali, Yunnan, China; Institute of Zoology, Zoological Society of London, Regent's Park, London NW1 4RY, United Kingdom

**Abstract :** Although many species are threatened by hunting or resource extraction from indigenous human communities, traditional ecological knowledge (TEK) of local communities has the potential to support management and conservation of natural resources and wildlife. The newly described skywalker hoolock gibbon (*Hoolock tianxing*) is found on the border of China and Myanmar, and a large proportion of the remaining population in China occurs outside nature reserves. TEK appears to limit poaching of gibbons, thus contributing to their survival. The persistence of gibbons outside nature reserves may depend on incorporating TEK within community-based conservation strategies. © 2019 Elsevier Ltd

6. Lesser Cats of Nandapha National park

**Author :** Chandiramani S.S., Das A.K., Singh N.(2002)

**Journal :** Nandapha (Project tiger), Miao, Changlang, Arunachal Pradesh, India

7. Nonhuman primates in the Nandapha National Park, Arunachal Pradesh, India

**Author :** Chetry D., Medhi R., Biswas J., Das D., Bhattacharjee P.C.(2003)

**Journal :** Anim. Ecol./Wildlife Biology Lab., Department of Zoology, Gauhati University, Guwahati 781014, Assam, India; Primate Research Centre, Northeast India, Guwahati, Assam, India

**Abstract:** Namdapha National Park and Tiger Reserve in the Changlang District of Arunachal Pradesh in northeastern India are rich in biodiversity. The dense evergreen forest of the park with high canopy coverage supports a variety of fauna including primates. In February, 2002, we surveyed the primates in Namdapha National Park to assess their status. We directly sighted, 5 species of diurnal primates, and secondary information shows the presence of stump-tailed macaques and slow lorises. We encountered 10 groups of hoolock gibbons (33 individuals), 9 troops of capped langurs (61 individuals), 15 groups of Assam macaques (209 individuals), 6 groups of rhesus macaques (74 individuals) and one unidentified group of macaques (?15 individuals). Hunting, rather than habitat destruction, is the chief potential threat for primates in the park.

8. Occurrence and conservation status of small carnivores in two protected areas in Arunachal Pradesh, north-east India  
**Author :** Datta A., Naniwadekar R., Anand M.O.(2008)  
**Journal:** Nature Conservation Foundation, Mysore, India
9. Records of small carnivores from in and around Namdapha Tiger reserve, Arunachal Pradesh, India  
**Author :** Naniwadekar R., Shukla U., Viswanathan A., Datta A.(2013)  
**Journal :** Nature Conservation Foundation, Mysore, India  
**Abstract:** For most of Northeast India's diverse assemblage of small carnivores, direct observations and ecological information are limited. Opportunistic direct observations and camera-trap records from 2008 to 2013 in eastern Arunachal Pradesh recorded 11 small carnivore species of the 20 likely to occur. Observations included the first confirmed Smalltoothed Palm Civet *Arctogalidia trivirgata* sighting from India; dietary observations on five species; and hunting of two species.
10. Status of selected mammal species in North Myanmar  
**Author :** Rabinowitz A., Khaing S.T.(1998)  
**Journal :** Wildlife Conservation Society, 185th Street and Southern Boulevard, Bronx, NY 10461, United States  
**Abstract:** During 1996 and 1997, data on the status of selected mammal species were collected from a remote region of North Myanmar. Of the 21 species discussed in this paper, the black muntjac, stone marten and blue sheep are new records for the country. One species, the leaf muntjac, has never been described. At least three species that once inhabited the region - elephant, gaur and Sumatran rhinoceros - are no longer present, and the tiger has been nearly extirpated. Himalayan species that are declining elsewhere, such as takin, red goral and red panda, are still relatively abundant despite hunting pressures. Musk deer are in serious decline. The wolf, while not positively confirmed, may be an occasional inhabitant of North Myanmar.