ES 0E3: WILDLIFE AND CONSERVATION

Number of Theory Credits	Number of lecture hours/semester
3	42

Content of OPEN ELECTIVE Theory Course	
Unit – 1	
Wildlife: Definition, significance – Values of wildlife: Ecological, Economic, Cultural, Aesthetic, Scientific, Recreational and Medicinal. Biogeographical zones of India. Significant wildlife of India. Causes for wildlife depletion – HIPPO Habitat	
destruction, Invasive species, Pollution, Population (human overpopulation), Overharvesting by hunting and fishing. Forest fires and wildlife depletion. Effects	
of depletion of wildlife – Ecological, Economic Socio-cultural. Urban wildlife. Human-wildlife conflict and management - Kyasanur Forest Disease.	
Categories of Wildlife: IUCN Red data categories - Extinct, Extinct in wild, Critically endangered, Endangered, Vulnerable, Near threatened, Least concerned, Data deficient, Not evaluated. IUCN Red data book. Keystone species, Flagship species,	
Umbrella species. Priority species, Indicator species.	
Unit - 2	14
Wildlife conservation: Need for conservation of wildlife. History of wildlife conservation in India. Biosphere reserves, National parks, Wildlife sanctuaries, wildlife reserves, protected areas, privately owned wildlife reserves &, Single species/single habitat-based conservation areas, Area of special scientific interest (ASSI). Conservation practices - Ex-situ and in-situ conservation. Captive breeding - Role of Zoos in conservation. Community conserved areas - Devarakadu and Pavitra Vana. Case studies: Project tiger, Project elephant. Role of BSI and ZSI in conservation.	
People and conservation: Traditional knowledge, Traditions and cultures, Women and people's participation in managing protected areas. Role of NGOs in conservation. Conservation Institutions – Bird Life International, GEF, IUCN,	

UNEP, WCS, WWF; BNHS, WTI.

Unit - 3	
Wildlife tourism: Definition, scope and relevance. Role of Zoos and Botanical parks in tourism and awareness creation. Bird and butterfly watching. Positive	
and negative impacts of wildlife tourism. Conflicts related to wildlife tourism.	
Wildlife trade and legislation: Wildlife trade and impacts. The Convention on	
International Trade in Endangered Species of Wild Fauna and Flora (CITIES).	
Wildlife Trade Monitoring Network (TRAFFIC). Salient features of Indian	
Wildlife Act, 1972.	

References

Bindra, P. S. (2017). The Vanishing: India's Wildlife Crisis. Penguin Random House India.

Donald Letcher Goddard and Sam Swope. (1995). Saving Wildlife: A Century of Conservation. Wildlife Conservation Society.

E.P. Gee. (2002). The Wild Life of India. HarperCollins India

Goutam Kumar Saha , Subhendu Mazumdar. (2017). Wildlife Biology: An Indian Perspective, PHI Learning Pvt. Ltd. India

Herbert H. T. Prins, Jan Geu Grootenhuis and Thomas T. Dolan. (2000). Wildlife Conservation by Sustainable Use. Springer publication.

Jedediah F. Brodie, Eric S. Post, and Daniel F. Doak. (2012). Wildlife Conservation in a Changing Climate. The University of Chicago Press.

Manfredo, Michael J. (2008). Who Cares About Wildlife?. Springer publication.

Morrison, M.L., Block, W.M., Strickland, M.D., Collier, B.A., Peterson, M.J. (2008).

Wildlife Study Design, Springer publication.

Nagendra, H., & Mundoli, S. (2019). Cities and canopies: trees in Indian cities.

Penguin Random House India Private Limited.

Roth, Harald H., Merz, Gu" nter (Eds.). 1997. Wildlife Resources - A Global Account of Economic Use. Springer publication.

Underkoffler, Susan C, Adams, Hayley R. (Eds.). (2021). Wildlife Biodiversity Conservation - Multidisciplinary and Forensic Approaches, Springer publication.