

Name of the Programme: M. Sc. Zoology

Course Code: ZOO-531

**Title of the Course: Wildlife Conservation & Management
(Theory)**

Number of Credits: 03

Effective from AY: 2023-24

Pre-requisites for the Course:	Basic knowledge in wildlife conservation and management	
Course Objectives:	<ol style="list-style-type: none">1. To provide knowledge on the status of Indian wildlife and the importance of conservation.2. To create opportunities for learners to explore different approaches to wildlife conservation and management3. To develop skilled learners to undertake research in the field of wildlife biology4. To inculcate a deeper understanding of scientific principles and policies/ legislations and their enforcement in wildlife conservation	
Content:	Module 1 Wildlife conservation and management: Introduction to Indian Wildlife, History and Diversity, Biogeographic zones, Value of Wildlife, Important Indian fauna and their distribution, Protected Areas, Endemic species;	7 hours
	IUCN red list: Extinct species of India, Endangered, Threatened, Least concern and Critically Endangered. Climate change and its impact on wildlife. Impacts of pesticides on fauna.	8 hours
	Module 2 Environmental Ethics and Management: Conservation and Management of Wildlife: Conservation and management: In-situ conservation and Ex-situ conservation; Reintroduction, Ecological Restoration.	4 hours
	Innovative Methods in Wildlife: Camera Trap, Conservation Drones, Remote Sensing, Radio Telemetry, GIS, GPS Mobile App, Capturing and marking techniques, trapping, darting, tagging and banding, scat analysis, sign surveys.	6 hours
	Wildlife Census and Indices: Methods of animal census,	5 hours

	<p>counting methods. Animals in Indian Mythology. Major Projects. Ecotourism and Environment Impact Assessment</p> <p>Module 3</p> <p>Human Wildlife Conflict: Types of conflict, Prevention or precautions, Human Elephant Conflict, Conflict between human, Tiger and Leopard, Conflict with Sloth Bear.</p> <p>Wildlife Trade and Crime: Wildlife products CITES, TRAFFIC, Wildlife Crime Control Bureau in India, Wildlife Forensics.</p> <p>Law, Ministry and Organizations: Wildlife Protection Act of (1972), National Board of Wildlife, Environment Protection Act (1986), Biological Diversity Act (2002), The First National Wildlife Action Plan (NWAP) (1983), National Wildlife Action Plan (2017-2031), MoEFCC</p> <p>International organizations; UNESCO, IUCN, PETA. National Institutes/Organizations; NTCA, ZSI, BSI, CZA, WII, SACONH, ENVIS. Non-Government Organizations.</p>	<p>4 hours</p> <p>3 hours</p> <p>5 hours</p> <p>3 hours</p>
Pedagogy:	Practicals/ Mini projects/ Group Activities	
References/ Readings:	<ol style="list-style-type: none"> 1. A.J. Urfi, Birds beyond Watching, India: University Press Pvt. Ltd., 2004. 2. R.F. Dasmann, Wildlife biology, New York: John Wiley and Sons, 1964. 3. M.J. Groom, K.G. Meffe, and C.R. Carroll, Principles of Conservation Biology – 2nd ed. Massachusetts: Sinauer Associates, Inc Sunderland, 2005. 4. R.H. Giles Jr., Wildlife management techniques - 3rd ed, The wildlife society, Washington D.C, 1984. 5. R. Grimmet, C. Inskipp, and T. Inskipp, Pocket Guide to the birds of Indian Subcontinent. New Delhi: Oxford University Press, 1999. 6. B.B. Hosetti, Wetlands Conservation and management. Jaipur: Pointer Publishers, 2003. 7. K. Kazmerezak, and V.P. Ber, A field Guide to the birds of India. New Delhi: OM Book Series, 2000. 8. W.L. Robinson, and E.G. Bolen, Wildlife Ecology and Management. New York: Millen Publishing Co., 1984 9. S. Ali, The book of Indian Birds, revised edition. New Delhi: BNHS & 	

	<p>Oxford University press, 2002.</p> <p>10. B.K. Sharma, and H. Kaur, Environmental Chemistry. Goel Publishing House, Meerut, 1986.</p> <p>11. R.D. Teague, ed., A Manual of wildlife conservation. The Wildlife Society Washington D.C., 1980.</p> <p>12. R.B. Primack, Essentials of Conservation Biology, 6th ed. Sinauer Associates, 2014.</p> <p>13. R. Mathur, Wildlife Conservation and Wildlife Management. Rastogi Publications, 2018.</p>
<p>Course Outcomes:</p>	<p>The learner will</p> <ol style="list-style-type: none"> 1. Outline the reasons behind the decline of wildlife 2. Gain insight on the different methods and techniques in wildlife conservation 3. Formulate strategies for wildlife conservation and management 4. Plan for long term conservation of wildlife