

Concepts in Wildlife Management

2nd Revised and Enlarged edn



B.B. Hosetti

Concepts in Wildlife Management

— 2nd Revised & Enlarged Edition —

by

Dr. B.B. HOSETTI

Chairman

*Post-graduate Department of Applied Zoology
Kuvempu University, Shankarghatta, District Shimoga
Karnataka State, India*

2013

DAYA PUBLISHING HOUSE®

A Division of

Astral International Pvt. Ltd.

New Delhi - 110 002

© Dr. Basaling Basappa Hosetti (b. 1957–)

First Edition, 1994

Second Edition, 2005

Printed Format: 2006 EBOOK 2013

ISBN 978-93-83129-12-6

Despite every effort, there may still be chances for some errors and omissions to have crept in inadvertently. No part of this publication may be reproduced in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without the prior permission of the copyright owners.

The views expressed in various articles are those of the authors and not of editor or publisher of the book.

Published by

:Daya Publishing House®

A Division of

Astral International (P) Ltd

81, Darya Ganj, Near Hindi Park,

Delhi Medical Association Road,

New Delhi-110002

Phone: +91-11-43549197, 23278134

Fax: +91-11-23243060

e-mail: info@astralint.com

website: www.astralint.com

Acknowledgements

The idea of writing a book on wildlife management was conceived in my mind while I was teaching at the Department of Environmental Science and Life Science, Kuvempu University, Shankarghatta, Shimoga during 1990-1993. Since then I started collecting literature pertaining to wildlife management. I feel pleasure to mention the help rendered by my students in this task. I would like to place on record various individuals and agencies who have helped me directly or indirectly in the completion of the book.

1. Dr. B.A. Giridhar, the then Chairman, Department of Environmental Science, Kuvempu University, Shimoga.
2. Prof M.I. Savadatti, Vice-chancellor, Mangalore University, Mangalore.
3. My colleagues—Prof M. Abdul Rahiman, Prof M.J. Hegde, Prof S.N. Hegde, Dr. K.R. Sridhar, all belonging to the Department of Bioscience, Mangalore University, Mangalore.
4. Prof. Peter Stiling, University of South Florida, USA.
5. Mrs. Belinda Wright, Wildlife Protection Society of India, New Delhi.
6. Prof. Stanly Frost and Dr. Paul Reese, Department of Life and Environmental Science, University of Salford, England.
7. Prof. Guy R. Lanza, Director, Environmental Resource Program, University of Massachusetts, Amherst, USA.
8. Prof. Prashant Bowmik, Department of Weed Science, Stockbride Hall, University of Massachusetts, Amherst, USA.
9. Dr. A.A. Desai, Karnataka State Forest Department, Bangalore.
10. Dr. Sulubha Phathak, Mount Carmel College, Goa.
11. Dr. S.S. Rana, Dr. Charan Singh University, Meerut, India.
12. Mr. Prashant Mahajan and Neelema Patel, BNHS, Mumbai.
13. Mr. M.K. Seth and Ajay Bhandari, Himachal Pradesh University, Shimla.
14. Mr. Ishwar Bhatt, Bhuvanendra College, Karkala, Karnataka State, India.

I also thank the assistance provided by Mr. K. Mahesh, Junior Assistant, Department of Bioscience, Mangalore University, Mangalore and Mrs. Bhagya Hosetti.

Dr. B.B. Hosetti

Preface to First Edition

The present title “Concepts in Wildlife Management” is intended to provide a comprehensive and complete information about Wildlife Management in India. It will be one of the rare books available so far to the readers that deciphers the information about wildlife. It is useful to the students of Biological Sciences of all the colleges and Universities of India. Recently the subject of Wildlife Management has emerged out as an independent branch of Environmental Science. So far no book containing upto date information on the subject is available. However, many titles incorporated partially some topics under the ecological text book titles. This book is first of its kind to embody subjects like Integrated Concepts of Ecosystem Management, Wildlife Conservation and Management, Ethical, Ecological and Recreational importance of wildlife, Endangered flora and fauna of India, Wildlife zones, Special conservation schemes on Tiger, Elephant, Lion, Musk Deer, Brow antler, Crocodile, Great Indian Bustard etc., Protection of Orchid and Butterflies diversity, Wildlife Protection Act-1972, Important methodologies about Environmental Impact Assessment, and Government and non-government organizations concerned to the protection of wildlife, Environmental waste auditing for siting industries. The book is written in ten Chapters. Any comments and critics from the readers are welcomed and will be incorporated into the next volume.

Dr. B.B. Hosetti

Preface to Second Edition

I am much delighted to state that my first book *viz.* Concepts in Wildlife Management is now available as second edition in its revised and enlarged form. It was first published in 1994 while I was teaching at the Departments of Bioscience and Applied Zoology, Mangalore University, Mangalore. In those days I was an unexperienced writer and hence some typographic errors were crept in the book. Even then all the copies of the first edition were sold out in a span of few years. This evidenced the popularity and importance of the subject. Significant changes are made in the contents and approach as well.

The entire wildlife resource of the nation is housed in only about 4.7 per cent of the our land mass. The protected area network encompasses Wildlife Sanctuaries, National Parks and Biosphere Reserves. The Government of India has designed special conservation schemes for critically endangered species of animals, however still they are not free from the danger of extinction. The IUCN has increased the number of hot spots of biodiversity of the earth from 18 to 25, but the total biodiversity is diminishing day by day. Therefore it is wise to protect and conserve the remaining wildlife as our national heritage for the future generations.

The first edition was only about 200 pages explaining the basic aspects of: Forest as an integrated ecosystem; Conservation of Endangered flora and fauna; Special conservation schemes; Wildlife protection act 1972; Protection of butterflies and orchids, Environmental impact assessment and management and auditing. In addition to the above, the second edition contains some new chapters like Status of wildlife management in India; Extinction organisms; Elephant conservation project; Wetland management; Wetland birds, Asian water fowl census; Mysteries of migration; Basics and theories of biodiversity; Recently amended wildlife schedules; National and state level symbols of plants and animals are incorporated. The book is restructured and rewritten by looking into the needs of University and college students. I hope that this time also all the readers will welcome this new edition.

Dr. B.B. Hosetti

Contents

Acknowledgements

Preface to First Edition

Preface to Second Edition

1. Wildlife Conservation and Management

General importance

Causes for endangering the species

Important zones in India

Protected species of India

Management packages

2. Status of Wildlife Management in India

Introduction

Biological diversity

The current status of India's wildlife

Floral wealth

Endemic plant species

History of wildlife management

India's protected area network.

3. Endangered Flora and Fauna of India

Introduction

General background to the problem of threat to plant species

Wildlife zones for flora

Himalaya and Eastern India

Rajasthan and Gujarat

Gangetic plan

Peninsular India

Andaman and Nicobar

Lacunae in our understanding about endangered plants

Protection strategies

Endangered fauna of India

Save endangered species

The Indian scene

Mammals

Birds

Reptiles

Amphibians.

4. Extinction of Organisms

Introductionwid

Trends of extinction

Endangered species

Species characteristics and extinction..

5. Special Conservation Schemes

Introduction

Project tiger

Status of tiger in the world

Achievement of the Project tiger

Threat to the tiger

Global tiger forum (GTF)

Gir lion sanctuary project

Crocodile breeding project

Project hangul

Himalayan Musk Deer-ecology and conservation project

Shangi or Manipur brow-antlered deer project or Manipur deer Project

Project elephant

Project on great Indian Bustard

Summary.

6. Management of Rangelands, Forests and Wildlife Corridors

Types of rangelands

Plant biomass, Productivity and food web

Characteristics of rangelands

Types of grazing animals

rangeland conditions

Forests

Forest types

Depletion of forests

Management of forests

Wildlife corridors.

7. Wildlife Reserves and National Parks

Introduction

Protected area management categories

National parks

Wildlife sanctuaries

Biosphere reserves.

8. Protection of Orchids and Butterflies

Orchids

Historical aspects

Present status

Protection measures

Butterflies

Insect culturing

Butterfly species of India

Protection measures.

9. Role of Zoos, Parks and Sanctuaries for Conservation of Wildlife

Introduction

Indian scenario

Common wild animals in Indian zoo

National parks and wildlife sanctuaries

Legislations and recommendations of the global committee for conservation

Feeds and feeding of some wild mammals

Breeding of wild mammals

Management of wild mammals

Healthcare of wild mammals.

10. Management of Wetland Birds

Introduction

Types of wetlands

Waterfowls

Population and distribution

Habitat use

Food and feeding

Breeding population

Management

Principles

Major groups of wetland birds

Specific requirements

Identification character.

11. Asian Waterfowl Census

Introduction

Asia-pacific migratory waterbird conservation strategy 1996-2000

AWC report on India

Criteria for identifying wetlands of international importance

Guidelines for application of the criteria.

12. Ramsar Wetlands

Introduction

Distribution

Problems faced by lentic systems

Wetland conservation

Criteria for the selection of unique wetlands

Indian wetlands

Case study I: Chilka lake system

Case study II: Kolleru lake

Case study III: Loktak lake, Manipur

Case study IV: Navile tank, Shimoga.

13. The Mysteries of Migration

Migration basics?

Types of migration

Velocity and altitude

Duration and distance

Accuracy and regularity

Bird navigation

Threats to migrating birds

Methods of studying bird migration

Advantages of migration

Origin of migration.

14. Biodiversity Conservation and Management

Preamble

Loss of biodiversity

Conservation of biodiversity

Ancient methods of conservation

Current methods of conservation

Biotechnology and biodiversity

Legal aspects of biodiversity conservation

Wildlife protection act, 1972

Biodiversity Conservation and agenda-21

International biodiversity convention.

15. General Theories of Biodiversity

Explanation to species richness gradients

Co-existence of species or Santa rosalina concept

The diversity stability hypothesis.

16. The Wildlife (Protection) Act, 1972

Chapter III A Protection of specified plants

Chapter IV Sanctuaries, National parks and closed areas.

17. The Wildlife (Protection) Act, 1972 Schedules

Schedule I

Part I

Mammals

Part II

Amphibians and reptiles

Part II A

Fishes

Part III

Birds

Part IV

Crustaceans and Insects

Part IV A

Coelenterates

Part IV B

Mollusca

Part IV C

Echinodermata

Schedule II

Schedule III

Schedule IV

Schedule V

Schedule VI.

18. Wildlife Crimes

Introduction

Wildlife crime

Prevention of wildlife crimes

How large is wildlife crimes?

Agencies to stop wildlife crimes

Laws and regulations of wildlife crimes

What is CITES

Export consignment check

Methods of smuggling

Methods of paching

Collection of evidences

Conducting a criminal investigation

Investigating the time of death

Identification of teeth and claws

Identification of wounds

Post-mortem

How to go to Court.

19. WWF India and BNHS/IBCN

Introduction to WWF India

The Bombay Natural History Society (BNHS)

Hornbill House

The society's logo

Short-term projects and field studies

Conservation education centre

Indian bird conservation network (IBCN).

20. National and State Plants and Animals of India

21. Environmental Impact Assessment (EIA)

General aspects

Aim of EIA

Contents of EIA

EIA in India

Screening and IEE

EIA report

Assessment of methodologies

Industries and environmental guidelines

Ecologically sensitive areas

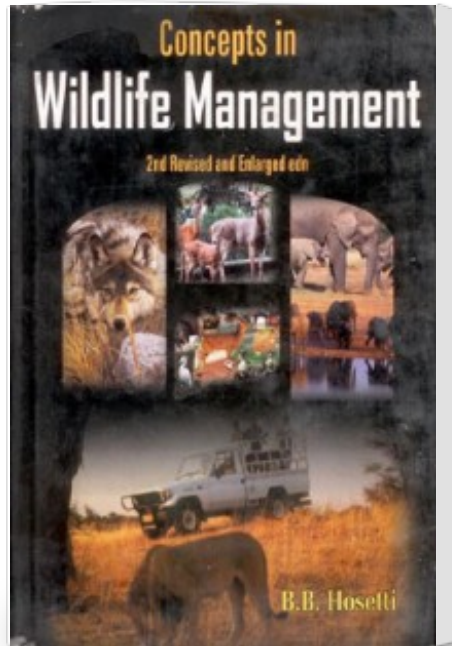
Environmental Master Plan

A case study of human impact on Himalayan ecosystem.

22. Environmental Waste Auditing

Importance

Concepts in Wildlife Management 2nd Edition By B B Hosetti



Publisher : Astral International
Pvt Ltd

ISBN : 9789383048786

Author : B B Hosetti

Type the URL : <http://www.kopykitab.com/product/2143>



Get this eBook