

Preface

NORTH AMERICA IS A PART OF THE WORLD where wildlife populations are considered to be valued treasures. We value wild animals for the pleasure we experience when we see them in their natural surroundings. We enjoy the birds and animals that have adapted to a world where we humans have modified the environment to suit our own purposes. We value the wild creatures that are seldom seen, and our laws attempt to provide protected habitats for the wild animals that struggle to survive in our changing world. We also value the role that each wildlife species plays in the ecosystem that we jointly share.

Despite the value that Americans place on wildlife, we must continually cultivate an awareness of the things we do that make it difficult for wild animals to coexist with us. Wild animals are vulnerable in many ways. As the human population grows, the availability of favorable wildlife habitat declines. Direct competition for habitats exists between humans and many wild animals. It is a result of land development for housing, manufacturing, farms, recreation, and other uses. This textbook edition is written in the early years of a new century and a new millennium. Interactions between humans and wild animals will increase with the passing years, and the opportunity for future generations to enjoy wildlife will depend largely upon our integrity in applying science to the conflicts that arise between the needs of humans and those of wild creatures. Broad areas of disagreement exist among those who conduct research on the needs of wild animals. It is particularly distressing when "scientific" studies appear to be intentionally designed to achieve results that favor a particular political position on a wildlife issue. Continuation of this practice will prove deadly to wildlife populations.

Sound scientific research is needed in order to reduce the contention that exists between those who see little need for protecting vulnerable wildlife species and those who are willing to sacrifice modern industries to restore wildlife habitat. A serious attempt has been made in this textbook to present both sides of major issues affecting wild animals and humans. It is the belief of the author that we should seek to find "middle ground" in resolving environmental issues and that it is wise to avoid radical positions on either side of an issue.

This textbook is organized in five sections:

SECTION I: Zoology and Ecology Basics

SECTION II: Zoology and Ecology of Mammals

SECTION III: Zoology and Ecology of Birds

SECTION IV: Zoology and Ecology of Fish, Reptiles, and Amphibians

SECTION V: Conservation and Management

The first section of the textbook deals with our understanding of the sciences of zoology and ecology, including the principles of science that are related to the life, growth, structure or anatomy, and classification of individual animal species. It also addresses our understanding of how the earth and the various ecosystems function. Sections II, III, and IV present specific information about the wild animals that are found in the North American ecosystem. Section V addresses the issues of conserving and managing fish and wildlife populations.

Chapter features include:

Objectives outline important concepts that will be covered within the chapter.

Key Terms highlight the critical vocabulary words that students need to be familiar with.

Animal Profiles provide detailed information on select animals, including where they live, their food preferences, their appearance, and more.

Ecology Profiles take a look at how certain modern-day events have affected the animal environment.

Key Internet Search Words provides terms that will lead the student to internet sites that provide additional information on the topics discussed in the chapter.

Career Option explores select career choices that relate to chapter content. Information includes a description of the career, job duties, and educational requirements.

Looking Back, found at the end of each chapter, summarizes important chapter content.

Chapter Review section includes Discussion and Essay, and Multiple Choice questions that test student comprehension of content, and Learning Activities that allow the student an opportunity to investigate topics in more detail.

Full-color photographs and illustrations assist students as they seek understanding of the concepts that are presented.

A great deal of effort has been directed toward schools to integrate the principles of math and science in the context of how the knowledge of the subject will be used. This textbook is an example of how science can be integrated into a subject in such a way that the student can understand how the principles of science apply to the wild animal populations found in North America.

ALSO AVAILABLE FOR THE INSTRUCTOR:

Instructor's Guide – ISBN 1-4354-1964-2

Instructor's Guide to Accompany *Fish and Wildlife: Principles of Zoology and Ecology* includes a chapter overview, list of chapter objectives, the Ecology Profile, and Answers to Review Questions.

ClassMaster - ISBN 1-4354-1965-0

ClassMaster CD-ROM to Accompany Fish and Wildlife: Principles of Zoology and Ecology is a powerful electronic resource designed to assist instructors in presenting the materials in the text. This instructor resource includes everything you will need to prepare for and teach about Fish and Wildlife.

The CD contains Lesson Plans for each chapter, beginning with a list of the chapter objectives, then sample interest approach ideas followed by how to present the content in the various sections within the chapter. In addition, the CD contains 450 instructor slides created in PowerPoint® that focus on each chapter's key points to facilitate classroom discussion. Lastly, the CD includes a computerized test bank of over 790 questions in multiple choice, true false, completion and short answer format, as well as the accompanying answers, organized by chapter, and can be used to generate tests and quizzes. Delivered via the ExamView Pro test generator platform, instructors can use the questions as provided or modify and add questions as needed to generate tests that meet their specific needs.