

Contents



Part One An Approach to Zoology

- 1 Introduction 3 2 Cell Chemistry and Morphology 8
3 Tissues and Organs 30 4 Taxonomy and Phylum Synopsis 40

Part Two Animal Diversity: Invertebrates

- 5 Phylum Protozoa 53 6 Phylum Mesozoa 83 7 Phylum Porifera 85
8 Phylum Cnidaria (the Coelenterates) and Phylum Ctenophora 93
9 Flatworms 112 10 Rotifers and Roundworms 121
11 Bryozoans, Lamp Shells, and Arrow Worms 130
12 Segmented Worms 134 13 Joint-footed Animals 151
14 Mollusks 189 15 Echinoderms 203

Part Three Animal Diversity: Vertebrates

- 16 Chordates 213 17 Lampreys, Sharks, and Bony Fishes 222
18 Frogs and Other Amphibians 242 19 Reptiles 267
20 Birds 286 21 Mammals 305

Part Four The Design and Function of Organ Systems

- 22 Animal Behavior 329
23 Integumentary, Skeletal, and Muscular Systems 345
24 Digestion and Excretion 358
25 Circulatory and Respiratory Systems 370
26 Nervous System, Sense Organs, and Endocrine System 383

Part Five The Continuity of Life

- 27 Reproduction and Development 405
28 Genetics and Heredity 420 29 Organic Evolution 440
30 Animal Ecology and Distribution 455 31 The Human Species 478