

CONTENTS

Foreword		vii
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Preface		xv
Part I: Introduction		1
Chapter 1	Biodiversity, between Speciation and Extinction	3
Part II: Biodiversity from Cells to Gaia		19
Chapter 2	Biodiversity in Time	21
Chapter 3	Biodiversity in Space	49
Chapter 4	Biodiversity and Gaia	89
Part III: Monitoring Biodiversity		111
Chapter 5	Sampling Biodiversity	113
Chapter 6	Analyzing and Measuring Biodiversity	141
Part IV: Biodiversity in the Anthropocene		187
Chapter 7	Economy and Biodiversity	189
Chapter 8	Evaluating Anthropogenic Impacts on Biodiversity	207
Chapter 9	Biodiversity and Climate Change	239
Part V: Present and Future of Biodiversity		265
Chapter 10	Biodiversity: Open Questions and Some Answers	267

References	287
About the Author	343
Index	345

CONTENTS

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The Publisher has taken every precaution to ensure that the information contained in this book is accurate and up-to-date.

Chapter 1: Introduction to the field of biology. This chapter provides a general overview of the field of biology, including the history of the discipline and the various subfields of biology.

Chapter 2: The scientific method. This chapter describes the scientific method, which is the process by which scientists investigate the natural world. It includes a discussion of the importance of hypothesis testing and the role of peer review.

Chapter 3: Cell biology. This chapter discusses the structure and function of cells, which are the basic units of life. It covers topics such as cell division, cell signaling, and the organization of the cell.

Chapter 4: Molecular biology. This chapter discusses the structure and function of molecules, which are the building blocks of life. It covers topics such as DNA, RNA, and proteins.

Chapter 5: Genetics. This chapter discusses the inheritance of traits, which is the study of how characteristics are passed from parents to offspring. It covers topics such as Mendelian genetics and the structure of chromosomes.

Chapter 6: Evolution. This chapter discusses the process of evolution, which is the change in the characteristics of a population over time. It covers topics such as natural selection and the fossil record.

Chapter 7: Ecology. This chapter discusses the interactions between organisms and their environment. It covers topics such as population dynamics and the flow of energy through ecosystems.

Chapter 8: Systematics. This chapter discusses the classification of organisms, which is the study of the relationships between different groups of organisms. It covers topics such as taxonomy and phylogenetics.