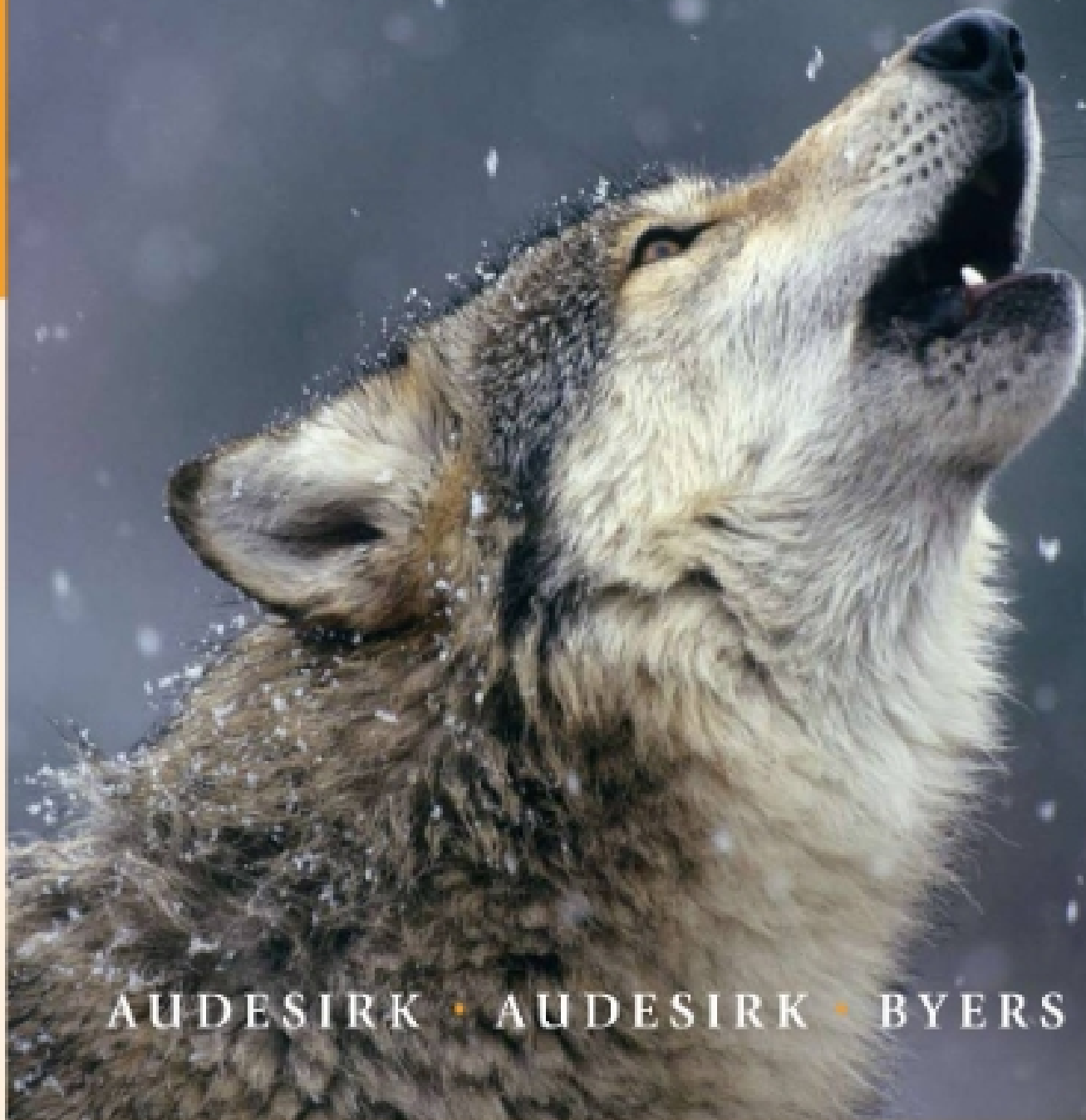


NINTH EDITION

BIOLOGY

LIFE ON EARTH



Chapter 35

The Urinary System

Lecture Outlines by Gregory Ahearn,
University of North Florida

Chapter 35 At a Glance

- 35.1 What Are the Basic Functions of Urinary Systems?
- 35.3 What Are the Functions of the Human Urinary System?
- 35.4 What Are the Structures of the Human Urinary System?
- 35.5 How Is Urine Formed and Concentrated?
- 35.6 How Do Vertebrate Kidneys Help Maintain Homeostasis?

35.1 What Are the Basic Functions of Urinary Systems?

- **Urinary systems** help maintain **homeostasis**—the relatively constant internal environment required to preserve health and life
 - Urinary systems regulate the composition of the blood and **extracellular fluid**, the watery substance that bathes all cells
 - They also help control the concentration, or **osmolarity**, of dissolved substances in cells and in their extracellular environment