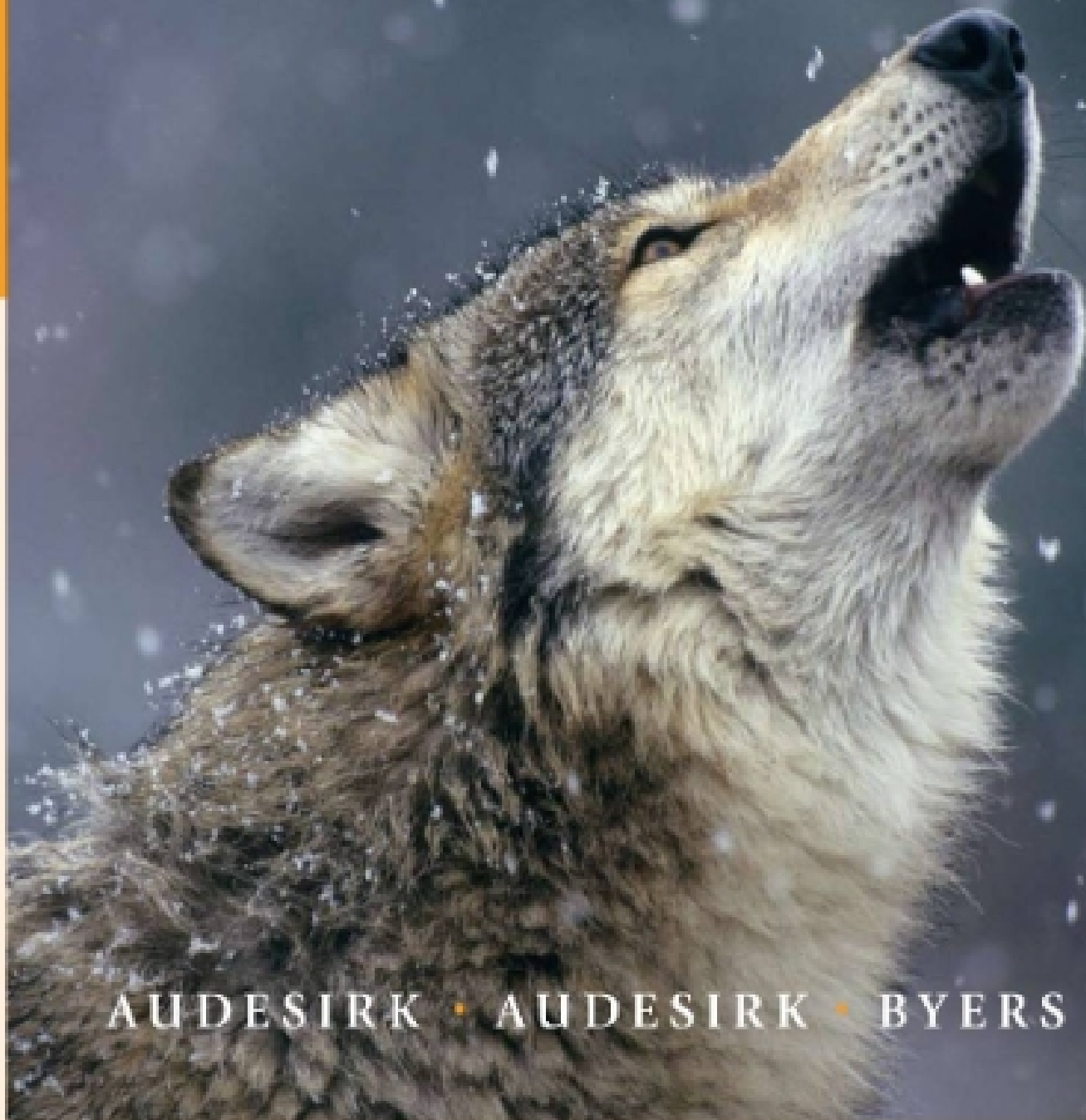


NINTH EDITION

BIOLOGY

LIFE ON EARTH



Chapter 24

Animal Diversity II: Vertebrates

Lecture Outlines by Gregory Ahearn,
University of North Florida

24.1 What Are the Key Features of Chordates?

- All chordates have four distinctive structures
 - A **notochord**: a stiff flexible rod extending the length of the body
 - A dorsal, hollow **nerve chord**: lies above the digestive tract and expands anteriorly to form the brain
 - **Pharyngeal gill slits**: located in the pharynx that may form respiratory organs or may appear as grooves
 - A **post-anal tail**: the chordate tail extends past the anus

24.1 What Are the Key Features of Chordates?

- Humans are members of the phylum Chordata
 - In humans, the chordate features are best seen during embryonic development, but later, we lose our notochord, gill slits, and tails
 - Only the dorsal nerve cord is retained in post embryonic human development