Animals

- **Fish: (General term used throughout the document)**
- **Possess adaptations to survive in various aquatic environments (freshwater, saltwater, deep sea).**
- **Examples and specific adaptations:**
- **Deep-sea fish: Adapted to low oxygen and high pressure; some have large gills with fine capillaries for efficient oxygen extraction.**
- **Electric Eel: Deep-water fish with large gills and ability to slow metabolism in low-oxygen environments.**
- **Icefish: Deep-sea fish in Southern Oceans; compressed body, lacks hemoglobin, absorbs oxygen directly from water.**
- **Tilapia: Has a gas-filled swim bladder for buoyancy control.**
- **Salmon: Migrates between freshwater and saltwater; adapts to changes in salinity and oxygen.**
- **Sharks: Maintain water balance by controlling urea levels in their blood.**
- **Rays: Compact bodies, may lack swim bladders; may have liquid-filled bladders and rely on oil-rich livers for buoyancy.**
- **Tuna and Barracuda: Live in warm tropical waters.**
- **Cod: Prefer colder waters.**
- **Predatory fish: Help maintain ecosystem balance by controlling prey populations.**

Plants

- **Plants: Found in various terrestrial and aquatic environments.**
- **Trees: Important for carbon sequestration, climate regulation, and habitat.**
- **Wheat: Agricultural crop negatively affected by high temperatures.**
- **Tomato: Needs specific temperatures for optimal growth.**
- **Tropical plants: Require high humidity.**
- **Desert plants: Adapted to low humidity.**
- **Legumes: Host nitrogen-fixing bacteria in roots, improving soil fertility.**

Conservation Success Stories

- **Bald Eagle: The bald eagle in the United States was endangered due to the use of the pesticide DDT, which affected the birds' reproduction. Because of laws banning DDT and conservation programs, the eagle population increased dramatically, and it was removed from the endangered species list.**
- **Southern White Rhinoceros: Because of conservation and captive breeding efforts, the southern white rhino population has increased from near extinction, showing the effectiveness of these strategies.**