

## **Communities, Disturbance, and Succession**

- Ecological Communities: Species and Relationships
- Map: Yellowstone National Park
- How Communities Change: Disturbance and Succession
- Simulating Succession in Yellowstone
- What Processes Drive Succession?
- Three Conceptual Models of Succession
- Summary of Facilitation, Inhibition, and Tolerance
- Do Conceptual Models Apply to Real Communities?
- Disturbance and Non-equilibrium Dynamics
- Summary of Part 1
- Quiz Questions
- Questions About Concepts?

## **Food Chains and Indirect Effects**

- Herbivores, Predators, and Ecosystem Engineers
- Investigating Food Chains in Yellowstone
- Top-Down Control
- Trophic Cascades
- Reintroducing Wolves to Yellowstone
- Behavioral Cascades
- Predation Risk and the Ecology of Fear
- Ecosystem Engineers: Another Indirect Player
- Summary of Part 2
- Quiz Questions
- Questions About Concepts?

## **Top-Down vs. Bottom-Up Control**

- An Introduction to Ecological Theory
- Top-Down Control
- Bottom-Up Control
- What Determines Food-Chain Length?
- Top-Down vs. Bottom-Up: A False Dichotomy?
- Summary of Part 3
- Quiz Questions
- Questions About Concepts?

## **Community Stability**

- Components of Stability
- Resistance, Return Time, and Resilience
- Alternative Stable States
- Change Without Disturbance
- What Promotes Stability?
- Keystone and Dominant Species
- Community Importance and Total Impact
- Species Invasions
- Summary of Part 4
- Quiz Questions

- Questions About Concepts?