

04.03 Biology Notebook: Ecosystems

Note: Do not submit the guided notes as your assignment.

Page 1: Predators in the Jungle

What affect do predators have on the ecosystem?

Key Terms: Jot down terms and definitions that are new to you. You will see them used in the lesson.

Page 2: Population Dynamics

What is the focus of the study of population dynamics? What do ecologists investigate? What is a habitat?

In the table below, describe the factors that affect population size.

Factor	Effect on Population Size
Habitat	
Migration	
Immigration	
Emigration	
Birth	
Death	

How do wildlife managers ensure the survival of future generations?

Page 3: Limiting Factors

What are open systems?

What are limiting factors?

Describe the limiting factors that can affect carrying capacity.

How can abiotic factor affect population size?

How can biotic factor affect population size?

What is a niche?

What impact do invasive species have on the ecosystem?

Page 4: Carrying Capacity

What is carrying capacity?

What is biological surplus?

How do ecologists determine carrying capacity?

Describe the two patterns used to describe carrying capacity:

- Peak phenomena
- Sigmoid phenomena

Page 5: Primary and Secondary Succession

Describe the two types of succession and when they occur:

- Primary succession
- Secondary succession

Page 6: Community Ecology

What is symbiosis?

Define the following community interactions and niches that influence population growth and decline.

1. Mutualism
2. Parasitism
3. Commensalism
4. Competition
5. Predation

How does competition affect an ecosystem?

Fill in the review chart on the types of relationships that can be found in an ecosystem.

Relationship	Benefits	Example
Parasitism		
Commensalism		
Mutualism		
Competition		
Neutralism		

Page 7: Predator-Prey Relationships

Explain the predator-prey relationship.

Complete the interactive. Describe the cycle of predator-prey relationships.

Page 8: Invasive Species

What is globalization?

How does globalization affect the biodiversity of an ecosystem?

Describe two situations where invasive species have impacted ecosystems.

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Practice question:

Commensalism is a type of relationship in which ____.

- A. one species benefits and the other species is harmed.
- B. neither species benefits nor is harmed.
- C. both species benefit and neither are harmed.
- D. one species benefits and the other species is unaffected.