

3.04 Biodiversity

Big Picture: How do biotic factors impact biodiversity in an ecosystem?

Define biodiversity:

Complete the chart with a summary of each biodiversity type:

Diversity type	Description
Species	It describes the Richness: Abundance:
Genetic	
Ecological	

Native Versus Invasive Species

Define native species:

Complete the chart with information about these two categories of native species:

Keystone	Indicator	Endemic
Invasive		
How Invasive Species Travel NOAA According to most federal organizations, an invasive species is any An invasive species can be introduced to an area through four mechanisms. Explain each:		

Summarize the impact of introducing Asian honeybee to fight off the Asian giant hornet.

Biotic Interactions and Numbers

Describe three main factors that can impact the size of a population in an ecosystem **and** explain how rich diversity is.

1.
2.
3.

Define biological surplus:
One consequence of biological surplus is

Human Impact on Diversity

Examples of natural disruptions to ecosystems are
Examples of human disruptions to ecosystems include

Complete the chart with information about these human-induced disturbances:

Deforestation	Agriculture	Dams

Define extinction and describe how humans have led to them.

Critically Endangered Species

List some endangered species around the globe and explain why they have become endangered:

Biodiversity Threats

Explain why biodiversity is important:
Six major threats to biodiversity referred to by the acronym HIPPCO are:

Complete the sections with information about some biodiversity threats:

Habitat destruction

Summarize the key points about habitat destruction and how it impacts biodiversity.

Explain what **fragmentation** is and its impacts:

Population Growth

Summarize the key points about how human population growth impacts the environment.

Explain how these three activities impact habitats:

Human expansion:

Pesticides:

Cleared land and mining:

Overexploitation

Summarize the key points about the interactions between organisms and the distribution of the ecosystems:

Over-modification	
Over-fishing	
Over-hunting	

Species Survival and Reproduction

Biotic Potential

Define biotic potential:

Explain how human population growth continues despite relatively low biotic potential.

Video. Mangrove Forests Adaptations | GHOF

How do mangroves survive in no man’s land? Explain. Write about their roots’ properties and how they filter salt.

Generalists versus Specialists

Compare and contrast generalist and specialist species. Given an example of each type and their characteristics.

Reproductive Strategies

Complete the chart:

r-selected	K-selected
Description	
Examples	
Reproduction: Explain why some species have less offspring than others?	

Invasive versus K-selected

Compared to native species, invasive species are often

Native species are often

Summarize what happens when invasive species enter a new environment and the impact on K-selected species.

Conradina Grandiflora

Summarize how an invasive species has impacted the Conradina Grandiflora.

How is this endemic species’ growth being promoted?