

High School Science Virtual Learning

Environmental Science Introduced Species May 12, 2020



High School Environmental Science Lesson: May 12, 2020

Objective/Learning Target:

Students will be able to describe the impact of introduced species on biodiversity loss.



1. How is climate change causing a loss of biodiversity?

2. What would it take to save the natural systems from collapsing?



1. Climate change causes ecosystems to collapse.

2. Avoiding the collapse of ecosystems entails rapidly cutting net emissions of carbon dioxide to zero in the next few decades.



Lesson Activity:

Directions:

- 1. Watch the video and read the article that are linked below. While doing so, take careful notes over what introduced species are and what impact they can have on an ecosystem.
- 2. Create a public service announcement that you could give to people to inform them about introduced/invasive species, the impact they have, and what can be done to mitigate their effect.
 - a. Your PSA should be about 5-7 paragraphs long and take no more than 10 minutes to read through.

Link(s):

Video Article



Practice

You will use the information from the activity on slide 5 to answer the following questions.



Practice Questions

- 1. What is another term for introduced species?
- 2. What is an introduced species?
- 3. What is a native species?
- 4. What are most of the introduced species used for?
- 5. Are all introduced species introduced on purpose?



Answer Key

Once you have completed the practice questions check with the work.

- 1. Exotic species is another term for introduced species.
- 2. An introduced species is any species transferred by humans from native to new habitat.
- 3. A species that occurs in the area naturally without human intervention.
- 4. Most introduced species are used for agricultural purposes.
- 5. No, most are introduced by accident.



More Practice

You will use the information from the activity on slide 5 to answer the following questions.



More Practice Questions

- 1. What percentage of threatened or endangered species are at risk due to introduced species?
- 2. How much money do invasive species cost due to their impact on our natural ecosystems and economy each year?
- 3. What makes an introduced species invasive?
- 4. How are invasive species spread?
- 5. What is the direct threat to wildlife of an invasive species?



Answer Key

Once you have completed the practice questions check with the work.

- 1. Approximately 42 percent of threatened or endangered species are at risk due to invasive species.
- 2. The impacts of invasive species on our natural ecosystems and economy cost billions of dollars each year.
- 3. Species that grow and reproduce quickly, and spread aggressively, with potential to cause harm, are given the label "invasive."
- 4. Invasive species are primarily spread by human activities, often unintentionally. Ships can carry aquatic organisms in their ballast water, while smaller boats may carry them on their propellers.
- 5. The direct threats of invasive species include preying on native species, outcompeting native species for food or other resources, causing or carrying disease, and preventing native species from reproducing or killing a native species' young.



Additional Resources

This is an excellent video that reviews **Invasive Species**

Want more information on the different effects that invasive species have? Here is an excellent article: <u>Invasive Species: How They Affect the Environment</u>

Here is a resource that further explores how invasive species interact with their ecosystem and biodiversity within it: <u>Invasive Species and Biodiversity</u>

This resource serves as more information for the different impacts that invasive species have: <u>Impacts of Invasive Species</u>