



High School Science Virtual Learning

Environmental Science

Conservation

May 15, 2020



High School Environmental Science

Lesson: May 15, 2020

Objective/Learning Target:

Students will examine and evaluate a small sample of current conservation programs.



Let's Get Started:

1. What is conservation?
2. Why is conservation important?



Let's Get Started: **Answer Key**

1. Conservation is the study of the loss of Earth's biodiversity, and how that loss can be prevented.
2. Conservation is important to maintain biodiversity and proper functioning of ecosystems. Destruction of any one part of a food web can affect many other components.



Lesson Activity:

Directions:

1. Explore the links below.
2. Answer the questions that follow.

Links:

[Endangered Species
Wolves in Yellowstone
Reintroduction Success](#)



Practice

Complete the following questions using the information you learned during the lesson activity.



Questions: Reintroduction is one method of conservation. Answer the questions below about the impact of wolves and the Yellowstone Park reintroduction effort.

1. How do wolves help the environment?
2. What is a keystone species?
3. How did wolves end up on the endangered species list?
4. What are 3 ways conservation centers such as the one in the video are attempting to save various endangered species?
5. What is the Endangered Species Act and when was the gray wolf added?
6. Has reintroduction been successful? Explain your reasoning.



Once you have completed the practice questions check with the **answer** key.

1. Wolves regulate the prey population, prevent overconsumption of plant habitats, enable trees and shrubbery to flourish to provide homes for other species, etc- they are a keystone species
2. A keystone species is a species that affects all other species in an ecosystem
3. Humans began hunting and trapping wolves, almost eliminating the population.
4. Research/education, captive breeding, reintroduction
5. The ESA was created to protect wildlife from man, making it illegal to harm or kill organisms (could be any, plant or animal) on the list. Gray wolves were added in 1974.
6. Most biologists would answer yes. The articles give a large amount of evidence for students to pick from and discuss.

More Practice: Rainforest conservation efforts

Follow the links below to answer the questions on the next slide.

1. [Importance of rainforests](#)
2. [How to protect the rainforest](#)



Questions: Reintroduction is one method of conservation. Answer the questions below about the impact of wolves and the Yellowstone Park reintroduction effort.

1. Why are rainforests important?
2. Why are rainforests disappearing?
3. What are some ways we can conserve the rainforests?
4. What does it mean to be sustainable?
5. What does it mean to consume responsibly and how does this help save rainforests?



Once you have completed the more practice questions check the **answer** key.

1. Rainforests exchange large amounts of carbon dioxide for oxygen; help stabilize the world's climate; provide a home to many plants and animals; maintain the water cycle; protect against flood, drought, and erosion; are a source for medicines and foods; support tribal people; and are an interesting place to visit
2. Humans are causing deforestation for many reason, some include: wood for both timber and making fires; agriculture for both small and large farms; land for poor farmers who don't have anywhere else to live; grazing land for cattle; pulp for making paper; road construction; and extraction of minerals and energy
3. Teach others about the importance of the environment and how they can help save rainforests; Restore damaged ecosystems by planting trees on land where forests have been cut down; Encourage people to live in a way that doesn't hurt the environment; Establish parks to protect rainforests and wildlife; Support companies that operate in ways that minimize damage to the environment use sustainable business practices (not necessarily giving monetary donations, we need to be responsible consumers)
4. Sustainable means satisfying our own needs without compromising the needs of future generations.
5. Consuming responsibly means to buy products created using sustainable methods. This means companies producing those products are being careful to ensure their use of resources does not deplete it or cause it to be unusable/gone for future generations.



Additional Resources:

[Wolves live webcam](#)

[Wolf Re-introduction to Yellowstone: effects](#)

[The Rainforest Alliance](#)

[Whatever happened to saving the rainforest?](#)