

High School Science Virtual Learning Environmental Science Endangered Species May 13, 2020



High School Environmental Science Lesson: May 13, 2020

Objective/Learning Target:

Students will identify the types of Endangered species and how we can protect them.



1. What do all of these organisms have in common?

2. What are some reasons for their populations to be smaller in the last 100 years?





1. They are on the endangered watch list.

2. Human interactions, human caused climate change, poaching, pollution, and habitat loss.



Lesson Activity:

Directions: You will be reading an article and watching a video as they both cover the levels of endangerment and how they happen. You will want to take notes as you explore to organize your thoughts. Here is an example of how:

Least concern	Near threatened	Vulnerable	Endangered	Critically endangered	Extinct in the wild	Extinct

Link(s): Nat Geo Article Endangered species conservation



Practice

You will use the notes and video from the activity on slide 5 to answer the following questions.



Practice Questions

- 1. How many endangered species were there when the video was made in February?
- 2. What are the three levels of threatened on the spectrum?
- 3. What is the rate of extinction currently?
- 4. What is the key to having a healthy population for a species?
- 5. What are some of the methods used to protect the endangered species?



Answer Key

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

- 1. 16,500 endangered species.
- 2. Vulnerable, endangered, and critically endangered.
- 3. Extinction is estimated to be 1,000-10,000 times higher than what would occur naturally.
- 4. Genetic variation to ensure they will survive if there is a change of the environment.
- 5. Creation of wildlife parks, captive breeding programs, education, national parks that are protected.



More Practice

You will use the notes and article from the activity on slide 5 to answer the following questions.



More Practice Questions

- 1. What are the two main reasons species become endangered?
- 2. What can loss of habitat do to animals and other organisms?
- 3. Why is inbreeding a problem for animals?
- 4. What is monoculture?
- 5. What are the different thresholds for the threatened categories?



Answer Key

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

- 1. Loss of habitat and loss of genetic variation.
- 2. Loss of habitat can directly eliminate, indirectly effect, limit species' range, and increase encounters between wild species and people.
- 3. They have little genetic variation which makes disease more common and deadly.
- 4. The agricultural method of growing a single crop, and reducing genetic variation.
- 5. Population reduction rate, geographic range, population size, population restrictions, and probability of extinction in the wild is at least 10% within 100 years.



Additional Practice

If you would like to explore more about endangered species and what you as an individual can do to help, you can check out these resources:

What is killing the Tiger?

Naturally extinct species vs Human influence

List of Endangered Species

National wildlife federation