

Animal endangerment and its causes

By Gale, Cengage Learning, adapted by Newsela staff on 04.06.20

Word Count **876**

Level **950L**



The Siberian tiger is an endangered tiger subspecies. Three tiger subspecies are already extinct. Photo from the public domain.

Living things have been disappearing since the beginning of life on our planet. In fact, most species that have ever lived on Earth are now extinct, or no longer living.

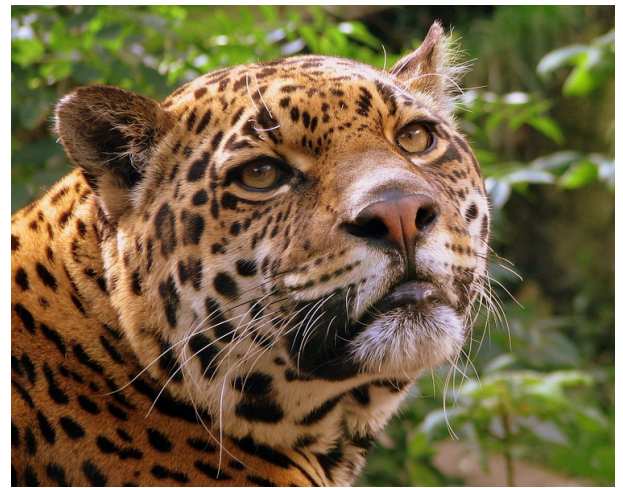
Extinction can occur naturally as a normal process, or it can be the result of a major event. For example, scientists believe an asteroid struck Mexico about 65 million years ago. Almost 50 percent of plant species and 75 percent of animal species, including the dinosaurs, became extinct.

Species are continually disappearing. This is the result of diseases, competition from other species or natural change in their climate. Scientists have identified five extinction episodes like this before humans existed.

When humans became the most powerful species, the extinction rate of other species began to increase dramatically.

Species are disappearing faster than they can be created. Therefore, the planet has entered a sixth wave of mass extinction. Scientists believe this wave is caused by human activity.

It is impossible to measure the number of species going extinct because there are millions that have not even been discovered yet. It is thought that amphibians and corals are the animal groups at highest risk of extinction. About 40 percent of each group is threatened. About 25 percent of animals and 13 percent of birds are at risk.



People are endangering species in three ways: habitat destruction, commercial use of animals and plants, and the introduction of new species into habitats. Human activity has also sped up climate change. If climate change continues at its current level, 25 percent of all species could be at risk by 2050.

Habitat Destruction

The destruction of habitats is the main reason species are becoming extinct. Houses, buildings, farms and roads sit on what used to be forests, deserts and wetlands. The pollution from people and our activities also threatens habitats. For example, sewage and chemicals can change rivers and streams that animals depend on.

For instance, 46,000 to 58,000 square miles of forest each year are destroyed worldwide. That is the equivalent of 36 football fields each minute. Tropical rain forests, home to 50 percent of all animal and plant species, once occupied 6 million square miles worldwide. Now, only 2.4 million square miles remain.



When species' habitats become smaller, more species are crowded together. This can cause more competition for fewer resources and space. So, access to food, water and mates may become limited.

Commercial Exploitation

Throughout history, animals have been hunted by humans for their meat and to be used to create clothing, medicines, art and other things. Overhunting has threatened many species, including whales, the black rhinoceros and the bluefin tuna.

Other species are threatened because they are collected or captured as pets or for trading.

International treaties outlaw the capture and trade of certain species, but these laws are difficult to carry out. Many endangered species live in very remote places. These places are difficult for law enforcement officials to monitor.

Introduced Species

Native species have lived in a certain place for a long period of time. They have adapted to the environment, climate and other species also living there.

Introduced species have been brought into an area by humans. This can be either by accident or on purpose.

In some cases, these introduced species may not cause harm and may adapt in time.

But, most often introduced species throw off ecological balances. They compete with native species for food and shelter. Often, introduced species prey on the native species and may bring new diseases.

When introduced species cause harm, they are called invasive species. More than 40 percent of threatened or endangered species are at risk because of invasive species.

Climate Change

People burn fossil fuels such as coal to make electricity. This is one way to heat our homes and provide light. We burn oil, in the form of gasoline, to power our cars. Burning fossil fuels releases carbon dioxide into the air, which traps Earth's heat. The levels of carbon dioxide in the atmosphere have increased since the 1800s. This is when many countries began using machinery.

Earth's temperature is still continuing to increase, which is called global warming. Climate change is a related term. It refers to all major, long-lasting changes in climate. This includes global warming but also severe heat waves and changes in rainfall that lead to floods or droughts.

Climate change threatens different species in many ways. Melting sea ice causes sea levels to rise, which could take over areas where animal and plant species live. Warmer temperatures on land can force animals to move or wake animals too early from hibernation.

Often the effects of climate change cause a chain reaction. One example is when rising temperatures reduce the algae population in oceans. This harms sea animals that eat algae, which then harms whales that eat these sea animals.

Some scientists believe climate change has already contributed to the extinction of one species: the golden toad, a small, bright orange amphibian from Central America.

Quiz

1 What is an animal that may become extinct because of commercial exploitation?

- (A) coral
- (B) golden toad
- (C) bluefin tuna
- (D) zebra mussels

2 Read the following selection from the section "Habitat Destruction."

This can cause more competition for fewer resources and space. So, access to food, water and mates may become limited.

Which of the following words, if it replaced the word "limited" in the sentence above, would CHANGE the meaning of the sentence?

- (A) smaller
- (B) reduced
- (C) abundant
- (D) obscure

3 Based on the current rate of climate change, what percent of species will be at risk of extinction by 2050?

- (A) 13%
- (B) 25%
- (C) 40%
- (D) 50%

4 Read the selection from the section "Habitat Destruction." Then, fill in the blank.

For instance, 46,000 to 58,000 square miles of forest each year are destroyed worldwide. That is the equivalent of 36 football fields each minute. Tropical rain forests, home to 50 percent of all animal and plant species, once occupied 6 million square miles worldwide. Now, only 2.4 million square miles remain.

The phrase, "That is the equivalent of 36 football fields each minute" in the section above tells the reader that ____

- (A) is a large size of land being destroyed yearly
- (B) things are being built when habitats are cleared
- (C) tropical rain forests should replace football fields
- (D) habitat extinction is more important than football

5 How would taking out introduced species help reduce the chances of native species becoming extinct?

- (A) Native species would not adapt.
- (B) Native species would go extinct.
- (C) Native species can only adapt when they are alone.
- (D) Native species would not have to fight for food and shelter.

- 6 How do the image and the text in the introduction [paragraphs 1-7] give a coherent understanding of animal endangerment?
- (A) The text explains the reasons jaguars are endangered and the image gives an example of animals facing endangerment.
 - (B) The text explains why humans are to blame for the extinction of animals and the image gives an example of an extinct animal.
 - (C) The text explains the various causes of extinction and the image gives an example of an animal facing endangerment.
 - (D) The text explains the causes that contribute to animal extinction and the image gives an example of one of the causes of endangerment.
- 7 How is climate affecting whales?
- (A) Whales are affected directly because they are hunted.
 - (B) Whales are affected directly because the water is becoming too warm for them to adapt.
 - (C) Whales are affected indirectly because their habitat is becoming polluted, which causes disease.
 - (D) Whales are affected indirectly by a reduction in food sources for the sea animals they eat.
- 8 Which answer choice accurately compares and contrasts how the images in the article contribute to your understanding of endangerment?
- (A) The images at the top of the article and near the end of the introduction [paragraphs 1-7] show animals that are endangered, while the image in the section "Habitat Destruction" depicts one way that humans destroy species' habitats.
 - (B) The images at the top of the article and near the end of the introduction [paragraphs 1-7] show animals that have become extinct, while the image in the section "Habitat Destruction" depicts the area where they used to live.
 - (C) The images at the top of the article and near the end of the introduction [paragraphs 1-7] show endangered animals in captivity, while the image in the section "Habitat Destruction" shows how the animals' habitats are being rebuilt.
 - (D) The images at the top of the article and near the end of the introduction [paragraphs 1-7] show that endangered species can produce offspring, while the image in the section "Habitat Destruction" shows that the offspring have nowhere to live.