

Chapter 10: Biodiversity

Section 2, Biodiversity at Risk

Biodiversity at Risk

- The extinction of many species in a relatively short period of time is called a _____.

Current Extinctions

- The rate of extinctions is estimated to have increased by a multiple of _____ since 1800, with up to 25 percent of all species on Earth becoming extinct between 1800 and 2100.
- The current mass extinction is different from those of the past because humans are the _____ cause of the extinctions.

Species Prone to Extinction

- Large populations that adapt easily to many habitats are _____ to become extinct.
- However, _____ in limited areas can easily become extinct.
- Species that are especially at risk of extinction are those that _____, those that need large or special habitats, and those that are exploited by humans.
- An _____ is a species that has been identified to be in danger of extinction throughout all or a significant part of its range, and that is thus under protection by regulations or conservation measures.
- A _____ is a species that has been identified to be likely to become endangered in the foreseeable future.

How Do Humans Cause Extinctions?

- The major causes of extinction today are
 - _____
 - _____
 - _____
 - _____

Habitat Destruction and Fragmentation

- In the process, we _____ the habitats of other species.
- It is estimated that habitat loss causes almost _____ of the extinctions now occurring.

Invasive Exotic Species

- An _____ is a species that is not native to a particular region.
- Exotic species can _____ native species that have no natural defenses against them.

Harvesting, Hunting, and Poaching

- _____ is the illegal harvesting of fish, game, or other species.

Pollution

- The bald eagle was endangered because of a pesticide known as _____. Although DDT is now illegal to use in the United States, it is still manufactured here and used around the world.

Areas of Critical Biodiversity

- An _____ is a species that is native to a particular place and that is found only there.
- Ecologists often use the numbers of endemic species of plants as an _____ of overall biodiversity because plants form the basis of ecosystems on land.

Tropical Rain Forests

- Biologists estimate that over half of the world's species live in these forests even though they cover only _____ of the Earth's land surface.

Coral Reefs and Coastal Ecosystem

- Nearly _____ of Earth's coral reefs are threatened by human activities, such as pollution, development along waterways, and overfishing.

Islands

- When an island rises from the sea, it is colonized by a _____ of species from the mainland. These colonizing species may then evolve into several new species.

Biodiversity Hotspots

- The most threatened areas of high species diversity on Earth have been labeled _____ and include mostly tropical rainforests, coastal areas, and islands.
- Most of these hotspots have lost at least _____ of their original natural vegetation.

Biodiversity in the United States

- The United States includes a wide variety of unique ecosystems, including the _____, the California coastal region, Hawaii, the Midwestern prairies, and the forests of the Pacific Northwest.

Biodiversity in the United States

- The _____, a biodiversity hotspot, is home to 3,488 native plant species.
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