

Chapter 10: Biodiversity

Section 3, The Future of the Biodiversity

Saving Species One at a Time

- Methods to preserve individual species often involve _____ the species in captivity.

Captive-Breeding Programs

- Wildlife experts may attempt to restore the population of a species through _____.
- These programs involve breeding species in _____, with the hopes of reintroducing populations to their natural habitats.
- This type of program has been used successfully with the _____, for example. But the question remains whether or not these restored populations will ever reproduce in the wild.

Preserving Genetic Material

- _____ is hereditary material (chromosomes and genes) that is usually contained in the protoplasm of germ cells and may be stored as seeds, sperm, eggs, or pure DNA.

More Study Needed

- Also, small populations are _____ to infectious diseases and genetic disorders caused by inbreeding.

Preserving Habitats and Ecosystems

- The most effective way to save species is to _____ their habitats.
- Therefore, protecting the habitats of endangered and threatened species often means _____ large areas.

Conservation Strategies

- One strategy is to _____ areas of native habitat that can be preserved, restored, and linked into large networks.
- Another promising strategy is to _____ products that have been harvested with sustainable practices.

Legal Protection for Species

- The _____ is designed to protect any plant or animal species in danger of extinction.

U.S. Laws

- Under the first provision of the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) must _____ a list of all endangered and threatened species in the United States.
- As of 2002, _____ species of plants and animals were listed.
- The second main provision of the act _____ listed species from human harm.
- The third provision _____ the federal government from carrying out any project that jeopardizes a listed species.

Recovery Plans

- Under the fourth main provision of the Endangered Species Act, the USFWS must _____ a species recovery plan for each listed species.

Habitat Conservation Plans

- A _____ is a land-use plan that attempts to protect threatened or endangered species across a given area by allowing some tradeoffs between harm to the species and additional conservation commitments among cooperating parties.

International Cooperation

- At the global level, the International Union for the Conservation of Nature and Natural Resources _____ facilitates efforts to protect species and habitats.
- The IUCN publishes _____ of species in danger of extinction around the world, advises governments on ways to manage their natural resources, and works with groups like the World Wildlife Fund to sponsor projects such as attempting to stop poaching in Uganda.

International Trade and Poaching

- One product of the IUCN has been an international treaty called _____ (the Convention on International Trade in Endangered Species).
- The CITES treaty was the first effective effort to _____ the slaughter of African elephants being killed by poachers who would then sell the ivory tusks.

The Biodiversity Treaty

- One of the most ambitious efforts to tackle environmental issues on a worldwide scale was the United Nations Conference on Environment and Development, also known as the first _____.
- An important result of the Earth Summit was the Biodiversity Treaty.
- The _____ is an international agreement aimed at strengthening national control and preservation of biological resources.

The Biodiversity Treaty

- The treaty's goals are to _____ biodiversity and ensure the sustainable and fair use of genetic resources in all countries.