Teacher's Guide

Endangered: Extinction's Cost

NATURE Science Education Series

Grade Levels:
5-12

Subject Areas:
Sciences
Life Sciences
Biology
Ecology

Synopsis:
With an emphasis on the need to protect habitats from deforestation, this segment follows the work of wildlife biologists involved in captive breeding programs around the world. The episode features programs to restore endangered species such as the Yangtze rafetus turtle, Indonesia's Sumatran rhinoceros, Brazil's spix's macaw, Spain's Iberian lynx, and Madagascar's few remaining lemurs.

Learning Objectives: Students will:

- Provide several examples of habitat loss that have affected animal populations.
- Explain how wildlife biologists are attempting to restore populations of endangered species.
- From an environmental point of view, describe the dangers of species loss.

Vocabulary:
evolution, extinction, paparazzi, clutches, gene pool, vocalizations, sanctuary, isolation, quarantine, habitat destruction, forage, nocturnal carnivores, mixomatosis, sifakas, lemurs, primates

Pre-Viewing Discussion:
Why should we be concerned about endangered species? Should their numbers be restored? Why or why not?

Name some endangered species. How are wildlife biologists attempting to restore these species to health?

How do species become endangered? What human activities have put some animals at risk of extinction?

Where are the Galapagos Islands located? Why do nature lovers travel to the Galapagos? Why are some Galapagos Island species in danger of extinction?

Post-Viewing Discussion:
Do you think that captive breeding programs should be continued? Why or why not? What concerns the wildlife biologists who work with endangered species?

Which captive breeding program did you find the most interesting? Why did you find it so interesting? What did you learn about wildlife conservation or the work of wildlife biologists in this example?

Why is the re-introduction of lemurs to Madagascar of particular concern to wildlife biologists? What environmental factors suggest that these animals may no longer be able to survive in the wild?

Why was the tiny nation of Qatar able to build a rain forest in the middle of a desert? Why was the rain forest built? Why is it highly unlikely that the Spix's macaw will ever be returned to the wild?

Further Activities:
Find other examples of endangered species being restored by captive breeding programs. In each case, consider the likelihood of the species being reintroduced into nature.

Find out if there are threatened or endangered plants and if anything is being done to restore their populations?

Find out how Sir Charles Darwin became the first person to document species found only on the Galapagos Islands. Also investigate the influence of his findings on the scientific community of his day.

Investigate the latest predictions of how global warming is likely to affect animal life in Arctic Regions.

Related New Dimension Media Titles:
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