

ACTIVITY 2: Conservation Biology

Activity Objective: Research and locate a species or ecosystem that is in rapid decline or in possible danger of extinction and develop a plan to retard that decline/extinction, then present that plan in Power Point presentation.

Materials: Chapter 15, paper, computer, printer, Internet Access, MS Power Point

Definition: *Conservation biology* is an actual scientific practice that focuses on protecting species and ecosystems from rapid decline and extinction. A good example of conservation efforts that are working through hard work of researchers and biologists is the protection of elephants and rhinos. These animals have been killed (poached) for their ivory as well as by local farmers due to the elephant's destruction of their crops. Through efforts by conservationists, the elephant population decline has peaked and is now back on the increase.

There is actually a Center for Biological Diversity (CBD), located in Tucson, Arizona. Their mission is "for those who come after us to inherit a world where the wild is still alive." The CBD believes that biodiversity, in all forms, plays an intrinsic role for the continuation of all species. Through science and law lobbying, they focus on protecting ecosystems (lands and waters) that help continue species and stave off extinction. There are numerous organizations that are devoted to the avoidance of plant and animal extinction. These groups, like WWF, work with local governments throughout the world, to help protect species through changes in laws as well as assurances of protecting ecosystems. While these efforts help, the planet's extinction rate continues to grow. The United Nations Convention on Biological Diversity reported that as many 150 different species (plants and animals) become extinct every day. Other think tanks and ecological organizations have that number as low as 24 a day. Despite numerous studies, it's difficult to come up with an accurate number. All of the aforementioned estimates are merely based upon computer calculations and algorithms, with little to no scientific proof. With millions of living species on the planet, it's tough to prove that something has actually gone extinct, or if their numbers are just significantly diminished. According to data from the International Union for Conservation of Nature (IUCN), only about 800 extinctions have actually been documented in the past 400 years. What is irrefutable is the declining numbers of species and increasing rate of decline.

REVIEW VIDEOS:

Introduction to conservation biology: <https://www.youtube.com/watch?v=8jC4UNmciqs>

Procedure:

1. Work as partners or small teams.
2. Research and brainstorm a species or ecosystem that is in rapid decline or in possible danger of extinction.
3. Develop a plan that will reduce this decline or extinction and present that plan in a Power Point presentation, with pictures.



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4 World-Class Learner	3 Proficient Learner	2 Developing Learner	1 Emergent Learner
Learner at this level has gone beyond mastery of knowledge, skills, & attitudes described in project. World-class learner consistently exhibits high-quality performance.	Learner at this level has had opportunities to apply knowledge, skills, & attitudes of component of project. Proficient learner has mastered essential attributes, thus proving mastery.	Learner at this level has been exposed to & had opportunity to apply knowledge, skills, & attitudes of project. Developing learner may have only a few essential attributes to master before mastery.	Learner at this level may or may not have been exposed to knowledge, skills, & attitudes required by academic standards of the project.

1= Emergent Learner

2 = Developing Learner

3 = Proficient Learner

4 = World-Class Learner