



## Extinction Extravagance

### Summary:

Discuss what it means for species to be endangered and extinct. Research a Puerto Rican animal species that is endangered and create a poster about it.

### Background Information:

Many species have gone extinct. Many are endangered and it is up to humans to help protect them. The purpose of this lesson is to make students aware of how our actions are impacting the living world, give them a glimpse of how nature is intertwined, and start them thinking about changes we can make.

### Puerto Rican Parrot:

The Puerto Rican Parrot is an endemic species found in Puerto Rico and also one of the ten most endangered birds in the world. In the 1800's there were over one million Puerto Rican Parrots, by the early 1900's there were only 2,000, and by 1975 only 13 remained in the wild. These birds prefer to live in mature forests. They live in cavities that have formed in trees. Some trees take 250 to 700 years to produce a cavity deep enough for the Puerto Rican Parrot. The reasons for their declining population are deforestation, agriculture urban development, industrial development, pressures of increased human population, predators & competitors (red-tailed hawk, honey bees, rats, mongoose, feral cats, etc.), and natural disasters such as hurricanes. To help increase the Puerto Rican Parrot population a captive program started in 1972. Chicks are hatched in artificial nests and they receive a special diet. Birds in the wild are closely monitored and if a chick is sick, a captive born chick will be switched with the sick wild chick (usually only if under 30 days old), captive birds are raised and eventually trained for release. Today there are close to 40 birds in the wild with about 130 in aviaries. The goal of the program is to have two or more wild populations of 500 parrots. (This information was presented by Jafet Velez-Valentin, Caribbean National Forest, 2004)

**Grade Level:** 2<sup>nd</sup> – 5<sup>th</sup>

**Goal:** For students to understand how humans impact many species and think about how we can change our actions to be more “species friendly” in the future.

**Key Concepts:** Endangered Species, Extinct Species  
Human Impact

**Objectives:** Upon completion of this lesson, students will:

- 1) be able to define what endangered species means.
- 2) be able to define what extinct species means.
- 3) be able to give at least three reasons for species being endangered.
- 4) be able to give at least three ways humans can improve their actions to help slow the process of species endangerment and extinction.

**Teaching Location:**  
In the classroom

**Materials:**

- Computer with internet access
- List of Extinct and Endangered Animals (On transparency, chalkboard or handouts)
- Poster board, crayons, markers, scissors, glue
- Books or computer print-outs of extinct animal pictures
- Reference materials

**Set-Up:**

- Have a list of endangered and extinct species available to the students. I used the U.S. Fish and Wildlife website [www.fws.gov](http://www.fws.gov) for the endangered species lists (you can choose nation wide, by region, or state for this.)  
I used [www.bagheera.com](http://www.bagheera.com) for a list of extinct species.
- Have information about Dodo birds from [www.bagheera.com/inthewild/ext\\_dodobird.htm](http://www.bagheera.com/inthewild/ext_dodobird.htm)
- Set up a guest speaker for activity 3, or choose another way to talk about a certain species in your area that is endangered.
- Have research materials available, library time, or computer lab internet access scheduled for Activity 6.

**Procedure:****Introduction.**

Our actions affect many things around us and in the following activities we will see a relationship between what we do and how it affects many different animal species.

**Activity 1. Discuss the Term “Endangered”**

Begin by reading a list of endangered animals to your students. (Show them pictures if you have them available.) Tell them that all of these animals have something in common – they are endangered. Ask if anyone knows or wants to guess what the word “endangered” means. Discuss that being endangered means that those animals are in danger of disappearing from the Earth forever.

**Activity 2. Discuss the Term “Extinct”**

Begin by reading a list of extinct animals to your students.

**Lesson Time:**

This lesson should be spread over a one to two week time period.

Activity 1: 20 minutes

Activity 2: 20 minutes

Activity 3: 30 minutes

Activity 4: 30 minutes

Activity 5: 30 minutes

Activity 6: 100 minutes

Activity 7: 60 minutes

**Subject Areas for Infusion:**

Science, Social Studies, Language Arts, Art

**Standards:**

Wisconsin State Standards:

Environmental Education: A.4.1, A.4.2, A.4.3, A.4.4, C.4.4, C.4.5, D.4.3, D.4.5

Science: B.4.1, C.4.2, C.4.5, C.4.6, C.4.8

Language Arts: A.4.4, C.4.1, C.4.2, C.4.3 E.4.1

(Show them pictures if you have them available.) Tell them that all of these animals have something in common just like all the endangered animals – they are extinct. Ask if anyone knows or wants to guess what the word “extinct” means. Discuss that being extinct means that those animals have disappeared from the Earth forever – they no longer exist.

### Vocabulary

**Endangered Species:**

Species in immediate danger of becoming extinct.

**Extinct Species:** Species no longer in existence.

**Endemic Species:** Species found only in one place of the world.

### Activity 3. Story of the Dodo Bird

Use the website

[www.bagheera.com/inthewild/ext\\_dodobird.htm](http://www.bagheera.com/inthewild/ext_dodobird.htm) to tell the story of the Dodo bird. Change the wording to match the grade level you teach. Discuss the dodo bird: where it lived, its life style, how it was adapted to its sheltered life on an island, what led to its extinction, how its extinction was connected to the near extinction of a tree species etc. Talk with students about how intertwined all life is and the loss of one species can have a huge affect on other species. When discussing the endangerment of various Puerto Rican species in later activities, refer to this activity and ask students what other species may be affected by the loss of the one being discussed.

### Activity 4. Guest Speaker

The goal of this activity is to bring the lesson closer to home. Introduce your guest speaker. In this case, Rick Anderson from the Clark County Forest Department will come to speak about an endangered species in our own back yard – the Karner Blue Butterfly. He will show pictures of the habitat they need, what the butterflies look like, how to tell them apart from other similar-looking butterflies, and what the county is doing to help the Karner survive. Encourage students to be good listeners and to ask questions that come to mind. At the end of the presentation tell students that they will be learning about endangered species from the island of Puerto Rico and looking for similarities between the reasons for Karner Blue Butterfly endangerment and the endangerment of Puerto Rican animals.

### Activity 5. Puerto Rican Parrot

Introduce students to the Puerto Rican Parrot. It is an endangered species in Puerto Rico. Discuss the history of the Puerto Rican Parrot: where it lives, the reasons for its declining numbers, and what is being done to improve their populations.

### Activity 6. Research an Endangered Puerto Rican Animal Species

Use the library or computer lab internet access (the following website has a list of endangered Puerto Rican animal species: [www.fws.gov](http://www.fws.gov) ) for students to find an endangered animal to research. Students will need time to choose an animal, find materials about it, and make a poster about the animal that includes the following information: The name of the animal, what it looks like (picture or drawing), where it lives in Puerto Rico (show on a map), describe its habitat, what it eats, reasons for its endangerment, and what is being done to improve its population.

### **Activity 7. Poster Sharing and Discussion**

Students will each take a turn to go in front of the class, show their poster, and tell us what they learned about their endangered Puerto Rican animal. Following each presentation, discuss the reasons for the species endangerment and what changes we/humans can make to slow down endangered species from going extinct in the future.

### **Conclusion.**

Conclude the lesson by calling on volunteers to tell the difference between endangered and extinct species. Ask students to provide reasons for species endangerment. Review what students discussed about changing our actions in the future to help species survive.

### **Assessment.**

- Posters will be assessed separately to determine if students understood the reasons that caused or are causing their animals to be endangered.
- An individual oral test will determine if students can identify reasons for species endangerment and if they understand what changes can be made in the future to help slow species endangerment and extinction.

**Adaptations:** This lesson can be modified for different ability levels by pairing students up or having them work in groups to complete a poster. Information required on the poster can be changed to accommodate the grade level involved. Instead of a poster, students could write a story from the point of view of the animal telling humans what it needs in order to survive.

### **References:**

Jafet Velez-Valentin of El Yunque, Caribbean National Forest

Websites used:

US Fish and Wildlife Service [www.fws.gov](http://www.fws.gov)

Bagheera: A Website for our Endangered Species

[www.bagheera.com](http://www.bagheera.com)

Endangered Specie Website for information on specific species:

[www.endangeredspecie.com](http://www.endangeredspecie.com)