

RESOURCE LIBRARY  
ACTIVITY : 50 MINS

## Captive Breeding Case Studies

Students complete a case study for one species in a captive-breeding program and evaluate the effectiveness of the program.

### GRADES

9 - 12+

### SUBJECTS

*Biology, Geography, Human Geography, Physical Geography*

### CONTENTS

1 Link, 1 PDF

## OVERVIEW

Students complete a case study for one species in a captive-breeding program and evaluate the effectiveness of the program.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/captive-breeding-case-studies/>

## DIRECTIONS

### 1. Introduce the activity.

Tell students they will complete a detailed case study for one species in a captive-breeding program and evaluate the effectiveness of the program. Have students go to the Smithsonian National Zoological Park's Captive Breeding page to choose and research a species.

### 2. Have students complete their case studies.

Students' case studies should include the following information:

- species name, natural range, and habitat
- a simple world map showing the species' historic and current ranges and/or historic and current population statistics
- reason the species is threatened or endangered
- when the captive breeding program began
- difficulties with maintaining the species' population in the wild
- difficulties with breeding the species in captivity
- assessment of whether or not the captive-breeding program has been successful and why
- explanation of how the program might help the overall biodiversity of the regions where the species naturally lives

### 3. Have students present their findings to the class.

Have each student present their findings to the class. Encourage students in the audience to ask questions.

## OBJECTIVES

## Subjects & Disciplines

### Biology

### Geography

- Human Geography
- Physical Geography

## Learning Objectives

Students will:

- complete a case study for one species in a captive-breeding program
- present their findings

## Teaching Approach

- Learning-for-use

# Teaching Methods

- Discussions
- Research

## Skills Summary

This activity targets the following skills:

- Critical Thinking Skills
  - Applying
  - Evaluating
  - Remembering
  - Understanding
- Geographic Skills
  - Answering Geographic Questions

## National Standards, Principles, and Practices

### NATIONAL GEOGRAPHY STANDARDS

- Standard 14:

How human actions modify the physical environment

### NATIONAL SCIENCE EDUCATION STANDARDS

- (9-12) Standard C-4:

Interdependence of organisms

### Preparation

### What You'll Need

### MATERIALS YOU PROVIDE

- Paper

- Pencils
- Pens

## REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per learner

## PHYSICAL SPACE

- Computer lab

## GROUPING

- Large-group instruction

## BACKGROUND & VOCABULARY

### Background Information

Captive-breeding programs breed endangered species in zoos and other facilities to build a healthy population of the animals. By becoming familiar with the issues surrounding these programs, you can make judgments about whether or not they save species from extinction.

### Prior Knowledge

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### Recommended Prior Activities

- [Captive Breeding and Species Survival](#)
- [Introduction to Captive Breeding](#)

### Vocabulary

Term	Part of Speech	Definition
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**biodiversity** *noun* all the different kinds of living organisms within a given area.

<b>Term</b>	<b>Part of Speech</b>	<b>Definition</b>
<b>captive-breeding program</b>	<i>noun</i>	plans, research, and work done by an organization, such as a zoo, to control reproduction of rare species in that organization's facilities (not in the wild).
<b>habitat</b>	<i>noun</i>	environment where an organism lives throughout the year or for shorter periods of time.
<b>species range</b>	<i>noun</i>	native, geographic area in which an organism can be found. Range also refers to the geographic distribution of a particular species.

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## For Further Exploration

### Websites

- [IUCN: Red List of Threatened Species](#)
- [U.S. Fish & Wildlife Service: Endangered Species Program](#)
- [Smithsonian National Zoological Park: Endangered Species Science](#)
- [Association of Zoos and Aquariums: Species Survival Plan Program](#)

