

**Activity**  
APPLY

## Captive Breeding Case Studies

How effective are captive-breeding programs?

### Activity Overview

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



50 minutes

Grades 9-12  
Ages 14-18

[VIEW THE RESOURCES FOR THIS ACTIVITY](#)

Photograph by April Meley, My Shot



Activity  
Overview



Smithsonian  
Natio...



World Map

◀ PREV

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## 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

### Geography

- Human Geography
- Physical Geography

### Science

- Biological and life sciences

## Learning Objectives

Students will be able to:

- 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

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**Connections to National Standards****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

**Resources Provided**

*The resources are also available at the top of the page.*

**Supporting Resources**

- World Map

**Websites**

- Smithsonian National Zoological Park: Endangered Species Science

**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

- None

## Recommended Prior Activities

- Captive Breeding and Species Survival
- Introduction to Captive Breeding

## Vocabulary

Term ▼	Part of Speech ▼	Definition ▼	Encyclopedic Entry ▼
<b>biodiversity</b>	<i>noun</i>	all the different kinds of living organisms within a given area.	
<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.	

## For Further Exploration

### Websites

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

## Credits

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