

RESOURCE LIBRARY | ACTIVITY : 50 MINS

The Power of Story

Students encounter the power of storytelling through two different approaches to sharing the stories of endangered species: Photo Ark and 3D modeling. They begin with the Photo Ark, a collection of photos aimed at documenting every animal in human captivity in the world. They also watch a video about one person's use of 3D modeling to allow anyone to encounter the critically endangered Sumatran rhino virtually. Students then consider the use of storytelling as a tool to promote conservation of their target species.

GRADES

6, 7, 8

SUBJECTS

Biology, Ecology, Conservation

OVERVIEW

Students encounter the power of storytelling through two different approaches to sharing the stories of endangered species: Photo Ark and 3D modeling. They begin with the Photo Ark, a collection of photos aimed at documenting every animal in human captivity in the world. They also watch a video about one person's use of 3D modeling to allow anyone to encounter the critically endangered Sumatran rhino virtually. Students then consider the use of storytelling as a tool to promote conservation of their target species.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/power-story/>

In collaboration with

DIRECTIONS

This activity is part of the Extinction Stinks! unit.

1. Introduce the importance of storytelling in conservation through a discussion and video.

- Ask: *How do people tell stories?*
 - Based on their everyday experiences, students' responses may include: sharing stories out loud, writing them down or publishing them in books, creating art, or sharing a photo or video on social media.
- *How might storytelling be used as a tool for conservation?*
 - Students may respond by considering the ways stories engage people to think from a new point of view, evoke emotions, or draw them in to learn more.
- Show a short clip of the video Saving the Creeps with Emerging Explorer and zoologist Lucy Cooke [3:41-7:33].
 - Ask: *How does Cooke use storytelling to protect the "creeps"?*
 - Emphasize how Cooke, the "Amphibian Avenger," creatively uses social media and humor as important strategies to promote the story of the "ugly" species she works to protect, and how these strategies could help in students' final projects.
- Explain that this activity will profile two different people using storytelling to support the conservation of endangered species. This will help students design their conservation strategies for their target species in a way that engages their audience.

2. Explore two methods of storytelling to help endangered species.

- Introduce one method of storytelling by watching this Photo Ark video of Joel Sartore's work.
 - Before watching the video, ask students to pay attention to what feelings arise when watching the video. Afterwards, ask them to share some of their feelings and ideas.
- After the video and discussion, give students time to explore the Photo Ark gallery on their own or with a partner. Ask students to share new information they learned and describe a

species in the Photo Ark. Then, ask them to identify some of the ways the photos drew them in to learn more about the species.

- Next, watch the [*Saving the Sumatran Rhino: Behind the Scenes*](#) video to learn how National Geographic Explorer Cory Jaskolski is using 3D modeling to help save the Sumatran rhino.
- Generate a discussion by having students compare and contrast Joel Sartore and Cory Jaskolski's efforts to use media to tell the stories of species at risk of [extinction](#). Guide students to consider the strengths and weaknesses of each method, and ask them to consider if one approach is more compelling than the other.

3. As the next step in their project work, prompt students to brainstorm storytelling techniques that they will use when communicating about their endangered species.

- Have students meet with their target species group and brainstorm ways to use storytelling to help promote the conservation of their species.
- After brainstorming, prompt groups to share their ideas with the class for feedback and more ideas about how to share the story of their target species. Collect ideas for later reference when students are preparing their final pitches during the [*Sharing Our Solutions*](#) lesson of the *Extinction Stinks!* unit.

Informal Assessment

Use students' responses to discussion questions and personal reflections to assess their understanding of the power of storytelling and how it can enhance their final product.

Extending the Learning

Have students create their own art piece that focuses on their target species or a species they care about. They could use drawings, photos, or a catchy slogan to engage the viewer and capture their attention to learn more about the issues facing that species. Encouraging diverse forms of creative expression reinforces that there are many ways to tell stories that help connect people to nature. This could be used as an extension of their work to support their target species or an independent enrichment activity.

OBJECTIVES

Subjects & Disciplines

Biology

- Ecology
- Conservation

Learning Objectives

Students will:

- Explain the importance of storytelling in motivating action to save endangered species.
- Evaluate two different storytelling strategies used to promote conservation.
- Apply storytelling ideas to inject narrative into their strategy for protecting an endangered species.

Teaching Approach

- Project-based learning

Teaching Methods

- Discussions
- Multimedia instruction
- Visual instruction

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Information, Media, and Technology Skills
 - Information Literacy
 - Information, Communications, and Technology Literacy
 - Media Literacy
 - Learning and Innovation Skills
 - Communication and Collaboration
 - Creativity and Innovation

- 21st Century Themes
 - Environmental Literacy
 - Global Awareness
- Science and Engineering Practices
 - Obtaining, evaluating, and communicating information

National Standards, Principles, and Practices

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- **CCSS.ELA-LITERACY.RH.6-8.7:**

Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

NEXT GENERATION SCIENCE STANDARDS

- **Crosscutting Concept 2:**

Cause and Effect

- **ETS1.B: Developing Possible Solutions:**

There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem.

- **LS2.C: Ecosystem Dynamics, Functioning, and Resilience:**

Biodiversity describes the variety of species found in Earth's terrestrial and oceanic ecosystems. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of its health.

- **LS4.D: Biodiversity and Humans:**

Changes in biodiversity can influence humans' resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on— for example, water purification and recycling.

- **MS. Interdependent Relationships in Ecosystems:**

MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

- **Science and Engineering Practice 8:**

Obtaining, evaluating, and communicating information

Preparation

What You'll Need

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, 1 computer per learner, Projector, Speakers

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction
- Small-group work

BACKGROUND & VOCABULARY

Background Information

Joel Sartore has used his work as a photographer to capture portraits of many of the world's endangered species. His "Photo Ark" project aims to photograph every species in captivity in the world. Another creative way that individuals have used to capture the essence of species that are too protected or threatened to be practical for the public to encounter firsthand is 3D modeling. By using 3D scans, virtual reality can bring anyone around the world up close and personal with some of the most threatened species, like the Sumatran rhino. Technology can be an excellent way to connect people with species around the world and inspire their protection.

Prior Knowledge

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Recommended Prior Activities

- [Bouncing Back from Extinction](#)

Vocabulary

Term	Part of Speech	Definition
captivity	<i>noun</i>	confinement or imprisonment.
conservation	<i>noun</i>	management of a natural resource to prevent exploitation, destruction, or neglect.
digital story	<i>noun</i>	fictional or nonfictional narrative told through the use of media such as photos, maps, video, and audio recordings.
endangered species	<i>noun</i>	organism threatened with extinction.
extinction	<i>noun</i>	process of complete disappearance of a species from Earth.
species	<i>noun</i>	group of similar organisms that can reproduce with each other.

For Further Exploration

Articles & Profiles

- [Pegasus Foundation: Five Ways Technology is Working to Save Endangered Species](#)
- [National Geographic Education Blog: Can Technology Save Endangered Species?](#)

Instructional Content

- [National Geographic: The Power of Images in Storytelling](#)



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