

STANDARDS CORRELATIONS

This Zoo Trek was designed for students in middle and high school. Participation in the Protecting Species Zoo Trek supports the Next Generation Science Standards (DCIs) and Maryland College and Career-Ready Standards listed below. Because conservation of species and habitats is inherently an interdisciplinary endeavor, this Zoo Trek also complements social studies topics including world cultures, economics, human geography, psychology, and government.

LS1.B
LS2.A,C
LS4.C,D
ESS3.A,C,D
WHST.6–8.8
WHST.6–8.9
SL.8.1
ETS1.B
WHST.9–12.9

Science and Engineering Practices:

- Constructing Explanations and Designing Solutions

Crosscutting Concepts:

- Cause and Effect
- Stability and Change
- Systems and System Models
- Structure and Function
- Scale, Proportion, and Quantity

Maryland Environmental Literacy Standards

1.A; 1.B
4.A.1; 4.B.1; 4.C.1
5.A.1,2; 5. B.1
7.A.1; 7.B.1; 7.C.1; 7.D.1; 7.E.1
8.B.1; 8.C.1; 8.D.1, 8.E.1; 8.F.1

zoo trek

PROTECTING SPECIES

Teacher Guide

The term "conservation" appears in many different contexts, from using resources such as water and energy wisely, to restoring and preserving historical buildings and works of art. In the context of the diversity of living things on Earth—or biodiversity—conservation is about protecting species and their habitats. Conservation involves any activities that substantially enhance the survival of species and habitats. For modern accredited zoos and aquariums conservation is a primary part of their missions. In addition to breeding endangered species, educating guests about animals and habitats, and inspiring and facilitating conservation actions, these zoos provide funding and expertise to projects that are working to benefit species, habitats, and local people around the world.

For more information about conservation efforts at accredited zoos and aquariums, we recommend these resources:

- The Maryland Zoo in Baltimore [conservation programs](#)
- Association of Zoos and Aquariums [conservation programs](#)
- [World Association of Zoos and Aquariums Conservation Strategies](#)

USING THE ZOO TREK ON YOUR FIELD TRIP

Print at least one copy of the Zoo Trek for each group. Encourage students to read the materials for each featured species and to engage in discussion with each other as they visit each featured species. Students and chaperones can access an [interactive Zoo map](#) on their phones. You can also print a pdf version of the [Zoo map](#) to provide students.

Please keep in mind that every day is different at the Zoo. Some animals may be off exhibit during your visit.

MARYLAND
ZOO

CLASSROOM QUESTIONS FOR DISCUSSION

The questions below are intended as topics for discussion in your classroom before or after your field trip visit. They can also be used as jumping off points for student essays and independent projects. To serve the widest range of grades and subject areas as possible, we included some questions that are intended for older students or those who would benefit from more complex challenges. These are marked with an asterisk.

How does a fast-growing human population affect the amount of resources available for other species?

*What is the relationship between commercial overfishing by humans and the carrying capacity of the penguins' marine ecosystem?

What happens when humans in some parts of the world use many more resources than people in other parts of the world?

As the number of elephants in the world becomes smaller and smaller, do you think ivory will become more expensive or less expensive? Why?

*Many musicians and antique dealers are against a full ban on the ivory trade, because some antique instruments and artifacts contain ivory. Do you agree with them that some trade in ivory should be legal? Why or why not?

*Many efforts to stop poaching focus on finding and arresting the poachers themselves. Do you think this is the most effective strategy for ending poaching of animal such as elephants? Why or why not?

As humans dam streams or dump silt into them, what effect do you think that has on the flow of water in hellbender habitat?

*What do you think are some of the challenges to getting people excited about protecting species like hellbenders?

*Countries at war often cannot provide basic services to their citizens. What do you think are some of the relationships between people living in poverty and a species at risk of extinction?

*What would be the benefits of removing the last members of a critically endangered species from the wild to protect them? What could be the drawbacks?

