

Unit 5: Endangered Species

Content Area: **Global Studies**
Course(s): **Global Citizenship**
Time Period: **Week 15**
Length: **3 Weeks**
Status: **Published**

Unit Overview

In this unit, students will become familiar with problems associated with the extinction of species all over the world and the attempts to solve them. Students will by the end of the unit have an idea of things they can be doing in their own communities to help combat the loss of biodiversity and destruction of ecosystems

Standards

SCI.7-8.5.3.8.C	All animals and most plants depend on both other organisms and their environment to meet their basic needs.
SCI.7-8.5.4.8.G.a	Water in the oceans holds a large amount of heat, and therefore significantly affects the global climate system.
SCI.7-8.5.4.8.G.b	Investigations of environmental issues address underlying scientific causes and may inform possible solutions.
SCI.MS-LS2-5	Evaluate competing design solutions for maintaining biodiversity and ecosystem services.
SCI.MS-LS2-2	Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
SOC.6.3.8.B.1	Evaluate alternative land use proposals and make recommendations to the appropriate governmental agency regarding the best course of action.
SOC.6.3.8.CS5	Collaboratively develop and practice strategies for managing and resolving conflict.
SOC.6.3.8.CS10	Accept decisions that are made for the common good.
SOC.K-12.6.2.E.2	The earth is a global community where the actions of one country can affect lives in other countries.
SOC.K-12.6.3.A -H.6	Individuals have the power to make positive changes in society.

Essential Questions

- How does human activity affect the environment?
- How can the public be educated on important issues?
- What is important to preserving a healthy ecosystem, while still providing for basic human needs?
- To what extent should humans interfere with natural processes?
- What responsibility do humans have as stewards of the earth?
- What steps can everyone take to safeguard the environment?

Application of Knowledge: Students will know that...

- Biodiversity is important to the health of an ecosystem
- Causes of species extinction are various, including loss of habitat, poaching/hunting, and extinction of other species
- Government policies like the Endangered Species Act can be seen as controversial
- Invasive species are a leading cause of species endangerment
- Many nations have laws to protect threatened species from hunting and habitat destruction
- The extinction of one species affects the well-being of many other species in an ecosystem

Application of Skills: Students will be able to...

- Discuss the importance of biodiversity to a healthy ecosystem
- Draft creative solutions to issues relating to biodiversity and conservation of threatened species
- Elaborate on current efforts by multiple institutions to conserve endangered species
- Engage in current efforts in New Jersey to help protect endangered species
- Engage in debate on the pros and cons of animal and plant protection policies
- Name and discuss several endangered species and issues involved in conserving them

Assessments

- Research conservation efforts of an endangered or threatened species native to New Jersey and present findings and create an awareness campaign
- Infographics on the effects of invasive species on an ecosystem
- PSA helping to spread awareness on a New Jersey threatened or endangered species
- Reflections on habitat or biodiversity loss in a country of the student's choice
- Informal observations of class discussion on current practices of plant and animal conservation
- Information from this unit will be included on a locally developed, mid-year or end of course benchmark assessment that may take the form of a test, performance based project, or other summative assessment

Suggested Activities

- Visit a wildlife refuge in New Jersey
- Research online about efforts to conserve wildlife a country of the student's choosing
- Discuss effectiveness of conservation practices after research on practices of different countries
- Write reflections on excerpts from policy documents, news articles
- Create maps or dossiers about endangered or invasive species, share with class

Activities to Differentiate Instruction

Differentiation for special education:

- General modifications may include:
 - Modifications & accommodations as listed in the student's IEP
 - Assign a peer to help keep student on task
 - Modified or reduced assignments
 - Reduce length of assignment for different mode of delivery
 - Increase one-to-one time
 - Working contract between you and student at risk
 - Prioritize tasks
 - Think in concrete terms and provide hands-on-tasks
 - Position student near helping peer or have quick access to teacher
 - Anticipate where needs will be
 - Break tests down in smaller increments
- Content specific modifications may include:
 - Choice of animal, country
 - One-on-one assistance with research

Differentiation for ELL's:

- General modifications may include:
 - Strategy groups
 - Teacher conferences
 - Graphic organizers
 - Modification plan
 - Collaboration with ELL Teacher
- Content specific vocabulary important for ELL students to understand include:
 - endangered, vulnerable, invasive, ecosystem, biodiversity, captive breeding, poaching

Differentiation to extend learning for gifted students may include:

- Choice of animal, country; leadership in group/class work/discussions; supplementary reading on history of species extinction

Integrated/Cross-Disciplinary Instruction

Science: endangered species, biodiversity

Social Studies: international organizations, public policy

Resources

- New Jersey endangered and threatened species: <http://www.state.nj.us/dep/fgw/tandespp.htm>
- WWF efforts: <https://www.worldwildlife.org/initiatives/wildlife-conservation>

- International Union for Conservation of Nature Red List Website: <http://www.iucnredlist.org/>

21st Century Skills

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.