Title: Lions, Tigers and Bears: The Dilemma of Ecotourism

Author: Pam Merrill
psmerrill2011@gmail.com

Overview: The objective of the lesson is to investigate the role and effectiveness of wildlife preserves, utilizing a micro-case study from Kenya and making connections to a variety of ecosystems through an online global tour of significant wildlife preserves. Using the essential and supporting questions, students will analyze the advantages and disadvantages of current environmental protection efforts in order to make recommendations regarding a proposed wildlife preserve in Antarctica.

Essential Question: How can the Earth be shared among competing interests?
Supporting Questions:
1. What are the positive and negative consequences of tourism on the environment?
2. Should opportunities of ecotourism be expanded into future wildlife and nature preserves?

Grade Level: 6th or 7th grade Geography; adaptable for High School World Geography

National Geographic Standards:

1. How to Use Maps and Other Geographic Representations, Tools, and Technologies to Acquire, Process, and Report Information from a Spatial Perspective.
3. How to analyze the spatial organization of people, places, and environments on Earth's surface.
14. How Human Actions Modify the Physical Environment.
17. How to apply geography to interpret the past.
18. How to apply geography to interpret the present and plan for the future.

2012 Oklahoma Academic Standards	**2019 Oklahoma Academic Standards**
Literacy Skills Standard 1: The student will develop and demonstrate Social Studies reading literacy skills.	Social Studies Practices Standard 4. Read Critically and Interpret Informational Sources - Students will engage in critical, active reading of grade-level appropriate primary and secondary sources related to key social studies concepts, including frequent analysis and interpretation of informational sources.
A. 1. Cite specific textual evidence to support analysis of primary and secondary sources.	4.A. Students will comprehend, evaluate, and synthesize textual sources to acquire and refine knowledge in the social studies.
Content Standard 1: The student will analyze data from a geographic perspective using the skills and tools of geography.	6.1 The student will analyze data from a geographic perspective using the skills and tools of geography.
1 Cite specific geographic information to support analysis from primary and secondary sources located in texts, documents, newspapers, magazines, journals, political cartoons, and online news sources.	6.1.1 Apply geographic information to support analysis from primary and secondary sources located in a variety of texts.
2 Integrate visual information, draw conclusions, and make predictions from geographic data and	6.1.3 Integrate visual information, draw conclusions, and make predictions from

analyze spatial distribution and patterns by interpreting that data as displayed on globes, graphs, charts, satellite and other forms of visual imagery.	geographic data and analyze spatial distribution and patterns by interpreting that data as displayed on geographic tools.
5 Conduct short research projects by investigating contemporary events and issues from political, economic, social, and geographic perspectives.	6.1.5 Describe and analyze the role of geographic factors on current events and issues.
Content Standard 2: The student will examine the cultural and physical characteristics of major regions.	6.2/7.2 The student will analyze the physical systemsof the major regions of the [Western Hemisphere/Eastern Hemisphere]. 6.3/7.3 The student will identify the characteristics, distribution, and demographic patterns of humanpopulations and systems of the [Western Hemisphere/Eastern Hemisphere].
1 Define the concept of region and identify major political, physical, and economic regions.	6.1.4 Integrate visual information and develop the skill of mental mapping of the political and physical features of Earth's surface in order to organize information about people, places, and environments. 6.2.1 Use visual information to identify and describe on a physical map the landforms, bodies of water, climate and vegetation zones that are important to each region.
5 Cite specific textual and visual evidence in order to analyze reasons for conflict and cooperation among groups, societies, countries, and regions.	6.5.2 Explain how cultural diffusion, both voluntary and forced, impacts societies of a region. 6.5.5 Analyze reasons for conflict and cooperation among and between groups, societies, nations, and regions.
Content Standard 5. The student will analyze the interactions of humans and their environment.	6.4/7.4 The student will analyze the interactions ofhumans and their environment in the [Western Hemisphere/Eastern Hemisphere].
2 Evaluate the effects of human modification of and adaptation to the natural environment.	6.4.1 Describe the commercial agriculture and industrial regions that support human development.
4 Analyze regional problems having spatial dimensions.	6.4.2 Evaluate the effects of human modification on the natural environment through transformation caused by subsistence and commercial agriculture, industry, demand for energy, and urbanization. 2.B.6-8.1 Draw upon gathered information to analyze how a specific problem can manifest itself in local, regional, and global levels over time, evaluating options for individual and collective solutions.
5 Summarize the role of citizens as responsible stewards of natural resources and the environment	6.4.6 Describe the role of citizens as responsible stewards of natural resources and the environment.

Resources Needed:

Ecotourism Dilemma Livebinder http://www.livebinders.com/play/play?id=2502743
Lions, Tigers, and Bears reading (one copy per student)
Kenya Preserve Map (digital version for whole class viewing)
World Nature Reserves Tour
(mobile devices for each pair of students or utilize whole-class viewing from instructor's computer)
https://tourbuilder.withgoogle.com/builder#play/ahJzfmd3ZWItdG91cmJ1aWxkZXJyEQsSBFRvdXIYgICg_uCYhQgM
Eco-Tour Journal: Western Hemisphere (one copy per pair of students)
Eco-Tour Journal: Eastern Hemisphere (one copy per pair of students)
Eco-Tourism Pro/Con Chart (one copy per student)
Chart paper and marker (one per class period)
Environmental Allies reading (one copy per student)
Worlds Biggest Wildlife Preserve reading (one copy per student)
Campaign Infographic template (one copy per student or digital PDF form)
Ad Campaign Rubric (one per student)
Antarctica Anthem video (optional)
A New Ocean Powerpoint presentation (optional)

Time Frame: 2-3 class periods

Procedures:

1. Inform students to "pack up" their imaginary suitcases- they are going on a wildlife expedition of their choice! With unlimited time and funds, ask students to jot down on a notecard or scrap paper one location in the world where they would like to visit in order to view the unique wildlife of that environment. What wildlife would they expect to see? What special clothing or equipment will they need to take? Allow time for students to silently consider their options and preferences prior to sharing with the class.
2. Inform students that one of the most popular wildlife-viewing destinations are found in the nations of Kenya and Tanzania. Were these locations on any students' lists? Why would so many of the world's tourist prefer this destination? What pressures and challenges would such frequent tourism create for the people and the wildlife of this environment? Distribute to each student a copy of the reading entitled *Lions, Tigers, and Bears.* Read together, pausing to point out similar ideas brainstormed by students and note additional challenges to this popular destination. View the location of Kenya's reserves on the map provided in this lesson. Based on this map, what conclusions can be made regarding the preservation of natural environments by Kenya's government or its people?
3. Ask students what the term "eco-tourism" might mean? Brainstorm a possible definition for the term. Why might governments support the idea of eco-tourism in their nations? What might be the benefits of developing such an industry? How important is the preservation of unique wildlife when governments and people make decisions to develop eco-tourist opportunities? Inform students that they will be taking an online tour of some of the most popular and significant wildlife preserves in the world. (Note: The Tourbuilder link will offer four locations in the western hemisphere and four locations in the eastern hemisphere. Use the specific "Eco-Tourist" Journal appropriate for grade 6 or grade 7.) Divide students into pairs and allow class time to explore the online tour, noting discoveries and responding to the specific questions at each stop on their copies of the Eco-Tourist Journal. Conduct a brief follow-up discussion, highlighting the common goals of wildlife preserves and the common approaches to assuring the future of these preserves.

4. Using chart paper and marker, conduct a class brainstorming activity. Ask students to offer advantages and disadvantages to eco-tourism. Encourage students to use evidence and examples from the online tour for ideas. Divide the chart paper into two columns, “Advantages/Pros” and “Disadvantages/Cons” and note each student’s contribution. Handout a copy of the Pros and Cons chart. Do these summarize effectively the same ideas brainstormed by the class? Why or why not? Give each student a copy of the reading entitled *Environmental Allies*. Read together, pausing to discuss how the tourist industry is working collaboratively with conservationists to serve the needs of both humans and wildlife. Return to the brainstormed list. Note additional advantages or disadvantages be added, based on information from this reading?

Assessment:

1. Inform students that they will be exploring the possibility of a new wildlife preserve, which, if created, will be the largest in the world! Where do they think this preserve will be located? Inform students who guessed Antarctica that they are correct! Distribute a copy of the reading entitled *World Biggest Wildlife Preserve.* Allow time for students to investigate future plans for this preserve.
2. Instruct students that they have been hired to create an infographic to serve as a campaign poster in support of this preserve. Provide each student with a print copy of the campaign infographic template or the digital version provided in the livebinder. Each infographic must include an original campaign slogan, to be found at the top of the infographic. In the three squares of the template, students must summarize three advantages or benefits to the development of an Antarctica preserve. In the three ovals of the template, student must provide a visual to support this campaign. The visuals may be student-created artwork, photographs, or maps. Encourage students to male their infographics eye-appealing, attentiongrabbing, and logically sound in support for this new preserve. Use the Ad Campaign Rubric in this lesson for evaluation, which includes the opportunity for students to evaluate their own work, as well. Optional: Watch the videoclip, *Antarctica Anthem,* to motivate students to have fun with this assessment, as well as assure its accuracy of geographic information.

Extension for Enrichment:

The continent of Antarctica is surrounded by ocean waters that have been designated by some authorities as a “new” ocean, given a new name and boundary delineations. Provide students with access to the livebinder or conduct a whole-class mini-lesson about this decision to designate a new ocean, using the Powerpoint presentation entitled *A New Ocean*. Why was such a designation required? How can it be helpful to scientists and the public in the future?

Sources:

Science News
World Database on Protected Areas
Yellowstone National Park Service
Banff National Park Service
Papahanaumokuakea Marine Reserve and National Park Service
World Wildlife Federation
UNESCO World Heritage News
Sciencing.com
LiveScience.com
United Nations map collection
World Neighbors in the Classroom student magazine
International Hydrographic Organization
National Geographic Society

Lions, Tigers, and Bears, Oh My!

The mere mention of the continent if Africa conjures up images of wild animals, exotic cultures, and adventure. Nations such as Kenya and Tanzania are the world's top tourist destinations points- and deservedly so. Where else can you visit and hand-feed monkeys, stumble upon the families of baboons crossing the road, or see lions napping under the shade of trees?

Eco-tourism brings millions of dollars into the national economy every year. Tourists spend small fortunes in Kenya on hotels, safari packages, and guides. The government actively promotes tourism to help it emerge from its status as a developing nation.

However, tourism also comes with a cost. With the increasing number of people visiting Kenya and Tanzania, the countries are struggling to maintain their infrastructure. Buses for safaris are tearing up roads, tourists litter the reserve parks, trample animal habitats, eventually driving animals deeper into the park or leaving the park entirely.

Tourism has an even greater impact on the villagers living near reserves. As animals flee the park looking for food, water or isolation, family gardens and livestock, which are key to human survival, are welcome sights to hungry wildlife. As animals enter villagers, the people are helpless because animals are protected by law. A single elephant can devastate a small village as villagers watch in silence.

The question that Kenya is facing is a difficult one, "What is the true cost of tourism and can we afford it?"

Source: Lions, Tigers, and Bears, World Neighbors in the Classroom magazine

MopNo.4117 - Jniory2004 1 II<IITB)IWIONS

Ilopo.-..alPaocoloNFlngClplnlllono Clrtogral)tio-

Eco Tour Journal

Yellowstone, USA

Banff, Canada

Hawaii, USA

Galapagos, Ecuador

https://goo.gl/2Y5Lkk

Eco Tour Journal

https://goo.gl/2Y5Lkk

Australia

Madagascar

1J'IDJIjIJ [Ij!JIJij[Ij

Poland

Greenland

Ecot urism?	
Pros: (Advantages/ Benefits)	**Cons: (Disadvantages/ Costs)**

Ecotourism?	
Pros:	**Cons:**
Employment- The ecotourism industry can create new jobs, bringing in substantial sources of revenue that can be used to help lift entire communities out of poverty.	**Habitat Destruction-** Too many people may come into a particular ecosystem, disturb the organisms that live there, and cause destruction to their habitat.
Respect for Nature- Ecotourism gives people an opportunity to have a new experience with nature and learn more about environmental problems. Ecotourists may gain a greater respect for nature once they have experienced it up close and person.	**Harmful Encounters**- As humans encroach more and more on a habitat, there may be an increase in human-wildlife conflict. Animals may be hit by automobiles in developed areas. Also, when animals become accustomed to people, they may become more vulnerable to poaching or become dependent on humans for food.
Research and Knowledge- Ecotourism may lead to further research opportunities and better management practices as more people experience nature up close and become passionate about protecting it.	**Loss of Cultural Identity**- increased contact between tourists and indigenous people may negatively impact native ways of life, language, and traditional employment.

The Bottom Line?

With ecotourism, no matter the intentions, there will always be some sort of impact on ecosystems and local people. It takes wise planning, proper scientific study, constant management, and democratic involvement of the local people to make ecotourism activities truly sustainable.

It is also important to remember, as potential ecotourists ourselves, we must be responsible to do whatever we can to have a positive impact on the environments and peoples wherever we travel. This requires consideration of all aspect of our travel.

World's biggest wildlife Reserve planned for Antarctica in Global Campaign

A global campaign is being launched to turn a huge tract of the seas around the Antarctic into the world's biggest sanctuary, protecting wildlife and helping the fight against climate change. The huge 1.8m sq km reserve – five times the size of Germany – would ban all fishing in a vast area of the Weddell Sea and around the Antarctic Peninsula, safeguarding species including penguins, killer whales, leopard seals and blue whales.

The idea was originally put forward by the EU and is being backed by a new Greenpeace campaign. The proposal already has the support of several countries. Will McCallum of Greenpeace said, "The next few years are absolutely essential for the future of our oceans and we are in desperate need for governments to come together and do what is best for these ecosystems."

"Now we want to go one better and create the world's largest protected area. We want to create that momentum that says this is not just possible, it is inevitable if we are to protect the wildlife that call the ocean home and crucially help mitigate the effects of climate change."

The sanctuary would stop industrial-scale krill fishing in the area, which scientists say is decimating key food that many larger animals – from penguins to whales – rely on. Norway, China, South Korea and Russia are big players in the krill fishing industry and campaigners say the success of the proposal will depend on persuading those countries to back it. McCallum said, "World leaders shouldn't allow an ocean wilderness to be exploited by a handful of companies."

The seas around Antarctica are some of the most important in the world with a huge diversity of species. If successful, campaigners hope the sanctuary will build momentum toward a network of marine protected areas covering international waters. The ocean sanctuary would provide global benefits, recovering fish populations around the world, encouraging vital biodiversity, and providing food security for billions of people. The new sanctuary would be an important step to preserving a sustainable global oceans system.

Source: Matthew Taylor, The Guardian, January 13, 2018

Ecotourists and Conservationists Allies

If environmentalists want to protect fragile ecosytems from landing in the hands of developers, they should team up with ecotourists, according to a study. Environmentalists often fear that tourists will trample sensitive natural resource areas, but tourism may bring the needed and only economic incentives to help drive conservation.

Tourism is a $8 trillion global industry, provides 300 million jobs and is a primary income source for half of the world's least-developed countries, according to the World Travel and Tourism Council. It also subsidizes environmental protection and helps protect and conserve cultural resources that might otherwise be undervalued by the host community.

In a new study, researchers claim that despite past tension between the tourism industry and environmentalists, the two should team up as allies to fight off increasing conversion of land away from its natural state. Ecotourists not only provide a boost to the economy in such places, they can also motivate landowners into keeping the environment in its natural state instead of converting it into something unsustainable.

Too often the unique natural resource areas are converted into urban and agricultural developments without considering their ecotourism potential. In addition to the lost ecotourism revenue, there are a host of negative environmental consequences such as biodiversity loss, water and food shortages.

Tourists have historically been seen as having a negative impact on the environment. Critics complain that they violate fragile and threatened natural environments while contributing to greenhouse gases from the increased number of flights to these exotic and often remote locales.

While these criticisms are justified, responsible programs promote education about conservation and sustainability, fostering a greater understanding and appreciation of these exotic areas. Although ecotourism has its downfalls, environmentalists may have no other choice but to work with the tourism industry to protect key ecosystems.

The success of this relationship between ecotourism and natural resource conservation hinges on the ability to strike a balance between tourism development and resource protection, including the ability for those in control to take a long-term view of the ecosystem’s health over short-term economic gains.

Source: Sandi Martin, *Science News*, July, 2016

Campaign for the Antarctica Preserve

INFOGRAPHIC RUBRIC:

AD CAMPAIGN

Student Name(s): _____

Slogan: _____

	Satisfactory 0-15 points	Excellent: 16-20 Points	Superior 21-25 points	Self Evaluation	Teacher Evaluation
Basic Requirements	Follows most of the directions.	All directions are followed and the presentation is complete.	Follows all directions; original ideas and creative		
Content: Visuals	Includes few visuals; or disorganized presentation	Includes at least two visuals that support the facts; neatly presented	Includes outstanding use of visuals that support the facts; visually appealing		
Content: Slogan	Unclear; not understandable	Appropriate and clearly understandable	Interesting; understandable; memorable		
Overall Presentation	Some difficulty communicating ideas; or incomplete work.	Overall, a good and accurate presentation.	Overall excellent presentation; Communicates accurate ideas effectively in text and visuals.		
Total Points:					