

## Lesson Plan

### Intermediate Level

#### **ABSTRACT:**

##### **Effects of Poaching on Elephant population:**

This lesson will help students understand the connection between the changing environment and ecology of Africa due to the widespread poaching of elephants. They will participate in a collaborative basis to create original and effective ways to spread awareness and assist in the effort to halt the poaching of elephants for their ivory. They will learn the importance of the elephant as a keystone species in relation to the environment. If poaching continues at the current rate, the elephant faces extinction in certain areas of Africa. Students will learn that this is not only an environmental crisis but also an ecological, economic and global / local crisis.

#### **VOCABULARY/DEFINITIONS**

- **Poaching:** Poaching is the illegal taking of wild plants and animals or their parts.
- **Keystone species:** A species on which other species in an ecosystem largely depend, such that if it were removed the ecosystem would change drastically.
  - The elephant is a keystone species in that it is responsible for maintaining the balance of all other species within the region they live.
- **Ivory:** The material of elephant tusks

## **MATERIALS**

What you will require:

- Computers as a resource to many links in reference to the elephant,

AND/OR:

- Books, such as The National Geographic.
- Art paper to construct a poster with the statement - “Ivory Belongs to Elephants” - on it, or an equally effective statement emphasizing anti- poaching.
- Pencils, coloring pencils, markers, scissors, glue.

## **METHOD**

Have students partner up in groups of two. Present the word “poaching” and have them discuss together what they think the word means. Have one of the kids within the group stand up and voice their thoughts. Discussion builds teamwork and communication. As the teacher, you discover what their base knowledge is of the new concept being presented.

### **Introduce the importance of the African elephant in relevance to the ecology and environment of Africa:**

Elephants are considered a keystone species in the African landscape. That means elephants play a key role in maintaining the balance of all other species in the community. They pull down trees and break up thorny bushes, which help to create grasslands in which other animals survive. They create salt licks by digging up earth that contains many minerals thereby providing a food source for other animals. They dig waterholes in dry riverbeds that other animals can use as a water source, and their footprints create deep holes that water can collect in. They create trails that act as fire breakers and water run offs. Other animals, including humans, depend on the openings elephants create in

the forest and in the waterholes they dig. Elephant dung (droppings) is important to the environment as well. Baboons and birds pick through dung for undigested seeds and nuts, and dung beetles reproduce in these deposits. The nutrient-rich manure replenishes depleted soils so that humans can have a nutrient rich soil to plant crops in. Elephant droppings are also a vehicle for seed dispersal. Some seeds will not germinate unless they have passed through an elephant's digestive system.

### **Describe the Poaching Crisis:**

Poaching is the illegal taking of wild plants and animals or parts of the plants or animals. It is estimated that 30,000 to 38,000 elephants are poached every year for their ivory. With statistics like this the African elephant is doomed for extinction in 15-20 years, unless we can put a stop to these illegal activities through education and alternative recourses for income in communities that assist in the ivory trade. Ivory has become more valuable than gold. In fact, ivory has been called "white gold". The tusks of one elephant bring in the same amount of money that 12 or more years of farming or herding does. Scientists estimate that approximately one elephant is killed every 15 minutes for their ivory. In Tanzania, scientists predict with the rate of poaching, elephants won't be found in their country in seven years.

- Have each student do his or her own research on the ivory trade and the elephant in relation to ecology/environment researching topics such as:
  - Why is the price of ivory so high?
  - Who is buying most of the ivory?
  - What parts of Africa are elephants being poached? Are some areas affected more than others?
  - Are Asian elephants facing the same crisis?
  - What is driving the demand for ivory?
  - What will happen to the grasslands of Africa if all the elephants disappear?
  - How will the environment/ecology be affected by the possible extinction of the elephant in Africa or Asia or the world?
  - How are we affected locally by poaching?
  - How could climate change be related to poaching of elephants?

- Have each student draw a graph showing the number of elephants illegally killed from 2002 – 2012
- Have students make a poster with their personal statement of - “Ivory Belongs to Elephants” - written on it.
- Have them write a short report in their own words about what they discovered on the poaching crisis and have them attach their report to their poster.

## **FOLLOW UP POSSIBILITIES**

After they have done their research, report and poster, have them brainstorm, in groups of four, possible ideas they might have thought of as they were building their projects to help stop the poaching crisis.

Some ideas could include:

- Writing a petition
- Coordinating a run for elephants to bring awareness to the community
- Adopting an elephant from a wildlife organization
- Contacting other schools in their vicinity to spread the word
- Have a scavenger hunt including questions about elephants – i.e.: How much do elephants weigh? What is an elephant’s skin like?
- Ask your local library, or community centre, or business institution to hang their work so that others in the community can learn from them and help spread awareness about this global crisis
- Follow up with businesses or community centers at a later date to see if others have taken the initiative to support anti-poaching.

## **SOME INTERNET RESOURCES**

<http://savetheelephants.org/>

<http://www.sheldrickwildlifetrust.org>

<http://ecosysaction.org/celia's-corner/>

<http://www.elephantvoices.org/features-guide.html>

<http://www.elephanatics.org>

<http://bit.ly/1QHiLCO>

## **REQUIRED TIME TO TEACH LESSON PLAN: 4 CLASS PERIODS (ONE HOUR PER PERIOD)**

1<sup>st</sup> Day – Introduce the ecological and environmental importance of the elephant as a keystone species and describe the poaching crisis and how it is affecting the balance of each.

10 Minutes

Provide the students with the questions outlined in the lesson plan in regards to the ivory trade and poaching in relation to the environment. If students have computers or iPads in the room, have them do some research on the questions.

This should take the remainder of class time.

2<sup>nd</sup> Day - Review and discuss some of the answers the students came up with from their own research on the ivory trade and have them build a poster. Have them put the statement “Ivory Belongs to Elephants’ on their poster, or an equally effective statement in regards to anti-poaching. Have them put pictures or drawings on and include the graph they drew showing the number of elephants poached from 2002-2012.

Full class time

3<sup>rd</sup> Day – Have students write a short report on their research findings and attach to the completed poster.

Should take half of class time

Spend the rest of the class period having them brainstorm in groups of four on other possible ideas they may have thought of to help prevent poaching. If they are having trouble thinking of ideas, introduce some from the lesson plan.

4<sup>th</sup> Day – Take a field trip to one of the local libraries or community centers or business institutions to promote their work. Have them talk directly to one of the directors of the organization to ask, if they too, will help spread the word about the crisis facing the African elephant.

This may take more than one hour but if there is a business or library or community centre near your school, an hour may be feasible.