

School Name: Melrose Middle School

Area of Science: Ecology

Project Title: Blood Ivory

Problem Definition:

Ivory, although a pretty thing to have, comes at a huge cost to the African elephant population. In some countries of Africa including Senegal, Somalia, and Sudan, elephants have already been driven to localized extinction.

Elephants share the same emotions and cognitive behavior as humans. They grieve for their losses, they feel fear, joy, and empathy. Elephants are a keystone species other animals, plants, and ecosystem depend on their survival. If ivory trade does not stop or at least slow then elephants will face mass extinction.

Problem solution:

We will help with the problem by promoting awareness for elephant extinction. We will help others understand that it is not just elephants that will go, but along with them entire ecosystems, tree species, and small animals.

We would like to build a model about elephant ecology. In our model we will show the rate elephants are going extinct, different variables as to how it can change and will change as elephant poaching speeds up and slows down.

Some variables we can show are the rate of reproduction, death by disease and poaching, the way the ecosystems change, and how people can slow down their extinction by decreasing the ivory demand.

We will need to show these things because those are the main causes of elephant extinction. Elephant death rate will have to change tremendously for the elephant species to be conserved.

Progress to date:

We have researched how Ivory trade has increased in the 1970s. Demand of ivory rocketed with 80% of Ivory coming from poached elephants.

We have learned how international Ivory trade was prohibited in an attempt to fight this illegal trade. Since records began, 2011 saw the largest recorded black market ivory trade increase.

We read that 38 elephant range states were set with the main objective to stop poaching of the elephants but it did not work.

Expected results:

We expect to raise awareness of the problem by modeling what can happen. We believe that if people are aware that if the elephants go they will take entire ecosystems with them. They will help in the fight against ivory trade

The usefulness of this is to show people that elephants are a keystone species in large ecosystems and many different species depend on their survival. This model will show the importance of their survival.

Citations:

Iworry.com - a web site that gives info about ivory trade

National geographic - Blood ivory Issued October 2012

Wwf.com - web site that gives info about elephants

I dreamed I was in Africa - book by kuki gullmann

Ivory ghosts by Caitlin O'Connell - book about ivory trade