

THE IVORY STORY
OPTIONAL SCENARIO
“A FRIEND”
TEACHER GUIDE

HOW CAN BIOTECHNOLOGY HELP TO CONSERVE A SPECIES?

or

“Who Dung It?”

As the noise of the airport surrounds you, you can't believe that your friend and his/her parents are already back from their trip. They have been gone for three months traveling around the world. They visited all sorts of exotic places in Europe, Africa, and Asia.

You keep your eyes focused on the door to customs hoping to spot them so that you can help them get home as soon as possible. You wonder what amazing tales your friend will spin, and what wonderful treasures might be contained in his/her bags. And more importantly, what cool stuff he/she brought back for you! Weary travelers roll their suitcases through the narrow doors of customs. You notice that one of the customs agents is talking to your friend's parents and then the three of them walk through a door marked "Restricted."

You wait for a while, watching the door that your friend walked through, when you see a serious-looking woman approach you. She quickly identifies herself as a U.S. Customs agent stationed at Sea-Tac airport. The two of you walk together through the door marked "Restricted," where you find your friend and his/her parents who are all visibly upset. They are sitting near a table upon which lies their opened luggage, with all of their contents strewn about. A chunk of elephant tusk eight inches long (about the size and shape of a two liter bottle of pop) is sitting on the table, away from the luggage and their contents. Your friend's Mom is crying and repeating the phrase "We didn't know. We just didn't know!" The Customs agent quickly explains that the tusk is most likely from an African elephant and that it would be immediately confiscated. She explains that there is a CITES ban on the sale and international transport of ivory from certain African countries. Your friend's Dad angrily explains that they bought the tusk from a street vendor in Hong Kong, and they had no idea that there would be a problem with bringing it into the U.S.! Your friend was planning to have the tusk carved into a statuette of his/her favorite athlete. The Customs agent says that your friend and his/her parents are free to go, and that they would be contacted later about what legal actions the U.S. government might take. She also says that your friend and his/her parents should not leave the country again any time soon.

Customs Agent Lisa Luebner felt anxious. She just confiscated her first piece of ivory, but it was from a family coming back to Seattle from a trip around the world. They seemed like such nice folks. She wasn't sure what to do next so she called her supervisor. Her supervisor told her that she should send the ivory to the U.S. Fish and Wildlife Service Forensic Laboratory in Ashland, Oregon. She sent the ivory the next day with a courier to the lab in Ashland.

STOP – Brainstorm: What is the issue? What do students know about the issue (i.e. geography of Africa, current laws, etc.)? What do the scientists at the Lab in Ashland need to know in order to identify the ivory?

Later that week she received the ivory back, with a report from the lab stating that the ivory was indeed from an African elephant. The next step was to find out where in Africa the ivory originated. The researchers in Ashland suggested that Ms. Luebner contact Dr. Kenine Comstock in Seattle. Ms. Luebner read in the report that Dr. Comstock is currently conducting research to characterize populations of African elephants by their DNA. Ms. Luebner contacted Dr. Comstock and sent the confiscated ivory to her right away. She called the couple of travelers to let them know the status of the investigation.

STOP – Brainstorm: What would Dr. Comstock need to know to determine the origin of the ivory?

Tasks for the Unit:

1. Students will “add new data” to the current knowledge base concerning African elephants.
2. Students will apply their knowledge of biotechnology to determine the source of the confiscated ivory.
3. Students will determine how biotechnology can help to conserve a species.

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