

Grades: 8-12th grade

Issue or Problem: Poachers kill, on average, an African elephant every 15 minutes. From 2010 to 2012 over 10,000 elephants died from poaching. African elephants are being killed primarily for their ivory tusks, but some elephants are also killed for bush meat (meat from non-domesticated animals). Ivory is often used to make jewelry, chopsticks, trinkets, ornaments, and many other items. Ivory is also used for questionable medicinal purposes in places such as Asia. The two largest consumers of ivory are China and the United States. The poaching of elephants has a direct impact not only on the elephants themselves but on the ecosystems, culture and people of Africa.

Objectives: By the end of the lesson, students will:

- Create a concept map
- Be able to explain why there is an ivory trade
- Contemplate multiple views on a controversial issue
- Develop oral speaking skills and impromptu responses in a group discussion
- Develop skills in supporting one's opinion with facts and examples
- Create PSAs to help educate others on poaching and the ivory trade

Materials:

- ✓ Flip chart paper and markers, and tape to hang the completed maps
- ✓ Concept Maps PDF (available at <https://elephantics.org/education/intermediate-lessons/>)
- ✓ A Brief History of the Ivory Trade information from Elephantics.org website found at <https://elephantics.org/african-elephants/conservation/> (also attached at the end of this lesson)
- ✓ Video "Battle for the Elephants: The History of the Ivory Trade" Produced by National Geographic Television 2013 found at <https://www.nationalgeographic.org/media/history-ivory-trade/>
- ✓ Copies of the article "Does Destroying Ivory Save Elephants? Experts Weigh In" found at <http://news.nationalgeographic.com/2017/08/wildlife-watch-ivory-crush-elephant-poaching/> (also attached at the end of this lesson)
- ✓ Copies of the Why Burn Ivory guide from Hands Off Our Elephants by Paulau Kahumbu, CEO, WildlifeDirect found at the end of the lesson plan or from <https://elephanticsdotorg.files.wordpress.com/2015/02/april-2016-e28093-credit-e28093-hands-off-our-elephants.docx>

Background Information:

There are two different species of African elephants, forest and bush (also known as the savannah elephant). The African bush elephant is mainly found in central and southern Africa in nomadic herds that wander the plains and grasslands of Africa grazing for food and searching for waterholes. Unlike the slightly smaller African Forest elephant, the African bush elephant inhabits the grassy savanna plains and shrub-land of the African continent in groups that contain mothers and their calves. The African Forest

elephant mainly lives in central and southern Africa in nomadic herds that wander through the forests and grasslands of Africa grazing for food and searching for waterholes. They are most commonly found in the tropical dense jungles, where their smaller size allows them to move through the thick vegetation more easily than the larger African Bush elephant.

Paul G. Allen, who led the Great Elephant Census (an effort to learn how many Savannah (or bush) elephants remained in Africa and where) estimates that in the 19th century Africa had around 12 million elephants. As of 2016, that number dropped by 97% and continues to drop at an alarming rate with an African elephant being poached approximately every 15 minutes.

When ivory is confiscated it is often held in “stockpiles”. There is a debate about just what should happen to these stockpiles. One option is to destroy the stockpiles. This is done either by crushing or burning the ivory. These techniques are often used by governments and conservation groups to destroy ivory stockpiles while sending a message that ivory sales won’t be tolerated. At the same time these events are used to foster support for ivory trade bans and protection for elephants. Critics of stockpile destruction contend that the sale of these stockpiles could provide money for conservation and/or that by flooding the market with this ivory, it would bring the price down reducing the incentive for poachers, thereby reducing elephant poaching.

Activities:

Activity 1: Elephant Concept Map

1. Communicate to your students that they will be working in groups to capture what they know about African elephants and the dangers they face using a concept map. *If your students haven’t done concept maps before you may wish to use the Concept Map PDF mentioned in the materials.*
2. Pass out a piece of flip chart paper and markers to each group. Give them at least 15 minutes to work on an African elephant concept map. Have them share their maps with the class.
3. Have them put their concept maps aside (they will come back to them in the final activity).

Activity 2: Introducing the Ivory Trade

1. Ask your students *what are the main threats to African elephants?* (Habitat loss, poaching, human elephant conflict). Ask your students why elephants are being poached? (Primarily for their ivory)
2. Communicate to your students that you will be discussing the ivory trade and they are going to read *A Brief History of the Ivory Trade* from <https://elephantics.org/african-elephants/conservation/> and then watch a short video on “The History of the Ivory Trade” (2:25 min.) <https://www.nationalgeographic.org/media/history-ivory-trade/>

Activity 4: An Ivory Discussion

1. Have your students read the article *“Does Destroying Ivory Save Elephants? Experts Weigh In”*, which has a variety of opinions on pros and cons of destroying ivory. (You may choose to use this as homework the night before you do this activity).
2. Explain to your students that they will be participating in an inner/outer circle discussion
3. Divide your students into 2 groups and decide which group will be the inner circle and which will be the outer circle (students should be facing each other).
4. Put the following question on the board (or on a piece of flip chart paper)- In your opinion does destroying ivory from stockpiles help elephants? Give them a few minutes to think about their opinion before beginning.
5. Once you begin the activity, students in the inside circle should share their response with the classmate facing them in the outside circle. When they have done this, ask them to say “pass,” at which point their partners in the outside circle will share their responses. You may set a time limit say of 2 minutes and give a signal when the first minute is up so that each student has equal time to share their thoughts.
6. On your signal, have the outside circle move one step to the left or right and discuss the same question with their new partner.
7. When you have rotated your students (depending on class size) through a certain number of partners or the entire circle.
8. Discuss the issue as a class. Some possible questions you may wish to ask:
 - How many of you when we started this activity, had the opinion that destroying ivory stockpiles would reduce poaching? How many had the opinion that maybe it wouldn’t?
 - Did anyone change their opinion of the issue in talking with your partners?
 - What other ways might be effective in dealing with ivory stockpiles?
 - What other thoughts or ideas came up during your inner/outer circle discussions?
9. **Teacher’s note:** At Elephantics we are pro ivory destruction. Dr. Paula Kahumbu the CEO of Kenyan Conservation NGO WildlifeDirect. At the end of this activity, share with your students the bulleted guide Dr. Kahumbu put together (found at the end of this lesson plan or at <https://elephanticsdotorg.files.wordpress.com/2015/02/april-2016-e28093-credit-e28093-hands-off-our-elephants.docx> If you have your students do additional resource you can provide this guide as an additional resource. Currently, research is showing that the idea of “flooding the market” with ivory has not produced the hoped drop in price or demand. Currently the destruction of ivory (by burning or crushing) and sending the clear message that ivory sales are not acceptable appears to be most productive. However the debate continues and new elements like the creation of a fake 3D produced ivory and horn is also being discussed.

Activity 5: Revisiting the Concept Map

1. Have your students pull their concept maps back out.
2. Using different colored markers than previously (makes assessment easier) have them add what they have learned to their concept maps.
3. When they have finished, hang the maps up around the room and do a Concept Map walk allowing the students to view each groups concept maps.

Activity 6: To Action!

1. Now that your students have learned about the ivory trade, it's time to take action by making PSA's on the issue of poaching and the ivory trade.
2. Divide your students into groups. In groups, students will:
 - a. Identify the topic of their PSA
 - b. Do research and craft their PSA message
 - c. Draft a storyboard and script for their PSA (you may wish to have them turn in their drafts for teacher review)
 - d. Film and edit the PSA
 - e. Present the PSA to their peers
 - f. Have students share their PSAs with Elephantics. They may be featured on the website!

Additional Activities:

- Have your students write an editorial, position paper, or opinion essay focused on how to deal with ivory stockpiles. Submit to the high school newspaper or local newspapers.
- Visit National Geographic's website Battle for the Elephants at <https://www.nationalgeographic.org/education/battle-for-elephants/> and watch additional videos:
 - A Natural History of the African Elephant
 - The Economics of the Illicit Ivory Trade
 - Trafficking Poached Ivory
 - Craft or Species
 - Tanzania's Ivory Stockpiles
 - Altered Elephant Behavior
 - Partners in Elephant Conservation

Resources: If you want to learn more on the issue of poaching or learn how you can help, the following organizations help combat elephant poaching.

WildlifeDirect: <http://wildlifedirect.org>

IFAW: <http://www.ifaw.org/united-states>

The David Sheldrick Wildlife Trust: <http://www.sheldrickwildlifetrust.org/>

The Northern Rangeland Trust: <http://www.nrt-kenya.org/>

Tsavo Trust: <http://tsavotrust.org/>

Save the Elephants: <http://www.savetheelephants.org/>

Elephant Voices: <https://www.elephantvoices.org/>

Sources used in the creation of this lesson plan include: <http://www.greatelephantcensus.com>, www.soselephants.org, www.elephantics.org, <https://www.nationalgeographic.org/education/battle-for-elephants/>

A Brief History of the Ivory Trade by Elephantics.org. Retrieved September 10, 2017 at <https://elephantics.org/african-elephants/conservation/>

A brief history of the ivory trade:

Ivory trade goes back to the 14th century with the colonization of Africa. Ivory hunters were responsible for wiping out elephants in North Africa perhaps about 1,000 years ago. At the peak of the ivory trade, pre 20th century, during the colonization of Africa, Europeans were the largest consumers of ivory.

World wars and subsequent depression caused a lull in the commodity but it increased in prosperity in the 70's when a renewed resurgence came about. This put great pressure on the forest elephants of Asia and Africa. By the 1970s, Japan consumed about 40% of the global trade; another 40% was consumed by Europe and North America. China, yet to become the economic force of today, consumed small amounts of ivory to keep its skilled carvers in business.

In 1979, the African elephant population was estimated to be around 1.3 million, but by 1989 only 600,000 remained. Although many ivory traders repeatedly claimed that the problem was habitat loss, it became glaringly clear that the threat was primarily the international ivory trade. Throughout this decade, around 75,000 African elephants were killed for the ivory trade annually, worth around 1 billion dollars. About 80% of this was estimated to come from illegally killed elephants.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) attempted control of the trade but after numerous failings of regulation, a ban on ivory trade was instituted in 1989. At this time, the African elephant was declared endangered. It is widely accepted that the ivory ban worked. The poaching epidemic that had hit so much of the African elephants' range was greatly reduced. Ivory prices plummeted and ivory markets around the world closed, almost all of which were in Europe and the USA.

But, in 1997, after much controversy and debate, CITES took the African elephant off the endangered list in some countries which allowed international trade in elephant parts. China and Japan, in 2008, bought 108 tonnes of ivory in a "one-off" sale from southern African countries. At the time the idea was that these legal ivory sales may depress the price, thereby removing poaching pressure, an idea supported by several environmental groups. Contrary to the advice of CITES that prices may be depressed, and those that supported the sale of stockpiles in 2008, the price of ivory has greatly increased mainly due to China's demand and new found affluence.

Why do the Chinese continue to consume ivory? Perhaps it is because they are ignorant about how ivory is sourced.

A survey done in 2007 in Beijing by IFAW, discovered that 70% of Chinese polled did not know that ivory came from dead elephants. This led to the organization's first ad campaign — a simple poster explaining the actual origins of ivory. A campaign done in 2013 found that the ad had been seen by 75% by China's urban population, and heavily impacted their view on ivory. Among people classified as "high risk" — that is, those likeliest to buy ivory — the proportion who would actually do so after seeing the ad was almost slashed by half. With these statistics you would think that ivory demand would have gone down. But, it has not.

Antique shops continue to pretend that the only ivory they hold is from the pre-1989 world ivory trade ban. This way, it is legal to sell. Much of the purchasing is done on the internet. It is easy, cheap and anonymous. According to the International Fund for Animal Welfare, at least 18,590 animal-related items were for sale online in the country at the beginning of last year. Nearly 79 percent involved ivory.

Ivory is a very prestigious commodity and fits the cultural status quo. It is unfortunate that some that do know about the violent trade continue to support it by buying ivory.

Questions:

Why can't poachers just anesthetize the animal and saw off the exposed ivory and sell it instead of killing the elephant? Because 20% of the tusk is in the head.

Why would Africans want to partake in slaughtering this iconic species? There are three main factors involved in ivory poaching:

Demand – is increasing because of the monetary value and status associated with ivory in China, as discussed above.

Weak governance – allows the flow of illegal poaching to go unnoticed.

Poverty – is rampant in Africa and the lure to poach is extremely desirable when factoring in the amount of money received for one tusk alone. The tusks of one elephant bring in the same amount of money that 12 or more years of farming or herding does.

Elephant numbers went from 10 million 50 years ago, to 500,000 today. Currently at this rate, they will be extinct in 10-12 years. One decade. Right now, the trade is the worst since before the 1989 world ivory trade ban.

Poachers within the last few years have gotten extremely high-tech due to the monetary incentive. They now use AK-47's, grenade launchers, night vision goggles, GPS, and low-flying aircraft to target the innocent giants. They have become militarized and many of the poachers are connected to organized crime syndicates.

Terrorist groups like the Lord's Resistance Army, Al Shabab, Darfurs Janjaweed and Boko Haram are using the sale of poached ivory to carry out their illicit activities. Poaching threatens peace and security in a number of countries where organized crime, and terrorism are closely linked. For example, the Westgate Mall attack in Nairobi, Kenya, was partially funded by ivory poaching. The terrorists kill the elephant, sell the ivory (mostly to China) for an enormous monetary exchange, and proceed to fund their terrorist activities.

Does Destroying Ivory Save Elephants? Experts Weigh In (August 2, 2017), from National Geographic's Wildlife Watch by Jani Actman. Retrieved September 18, 2017 from <http://news.nationalgeographic.com/2017/08/wildlife-watch-ivory-crush-elephant-poaching/>

Does Destroying Ivory Save Elephants? Experts Weigh In

Nearly two tons of ivory will be crushed in New York on Thursday [Aug. 3, 2017]—but the practice is controversial.

The owners of an antiques shop in Manhattan, New York, pleaded guilty on July 26 for trying to sell \$4.5 million worth of illegal elephant ivory from a back room.

On Thursday, some of that confiscated Manhattan ivory and more will be crushed in Central Park as part of a public event organized by the New York State Department of Environmental Conservation and various wildlife groups. They hope that the crushing of nearly two tons of ivory tusks, jewelry, and trinkets will deter people from buying “white gold” and lead to the eventual shut down of the illegal trade.

At least 140,000 elephants have been lost to the ivory trade and habitat loss in less than a decade, a survey conducted in 2016 showed. International commercial sales of elephant ivory have been banned since 1990, and some countries have begun closing down domestic sales of legal ivory as well. China, the main market for ivory, announced plans to phase out domestic sales by 2018, and the U.S., another big ivory hub, limited sales of the material last year. Some U.S. states—notably California and New York—have banned sales too

This latest ivory destruction follows the crushing of roughly a ton of ivory 2015 in Manhattan's Times Square and six tons in Denver in 2013. More than a dozen nations, including China, France, and Kenya, which burned 105 tons last year, have also destroyed their confiscated ivory.

While organizers tout the events as a powerful way to show that the material should have no worth, opinions regarding the value of destroying ivory are varied and nuanced. So Wildlife Watch asked people who are authorities on elephants, the ivory trade, or conservation to write up to a hundred words giving their thoughts about this.

Ross Harvey, economist and senior researcher with the South African Institute of International Affairs

To most economists, destroying something of market value is anathema. But ethically, elephant ivory *should* have no material value, and elephant tusks *should* only be regarded as valuable on living elephants. Back to the economics, crushing a stockpile of confiscated ivory sends a signal to the world that ivory is not for sale. Countries tend to keep ivory in anticipation of being able to

sell it in the future. This undermines the credibility of demand-reduction efforts; if the trade is likely to be legalized in the future, any current stigma associated with ivory consumption will be eroded, further fueling poaching.

Lucy Vigne, wildlife trade researcher who has studied the ivory business

In some corrupt countries, ivory burns and crushes can act as a way to steal ivory because it is not all carefully recorded in its destruction. Although initially these acts made a statement as a cry for help, such as with the first Kenya burn in 1989 that helped put ivory out of fashion in the U.S. and Europe, many in Asia find destruction to be against their culture and think the ivory could be used for making an artistic monument as a long-term statement instead. It is the Asians, especially the Chinese, whose viewpoints on this issue count the most, as they are the main consumers of ivory. Ivory crushes can detract from what is really needed to save elephants: much greater efforts on law enforcement and improving ways to protect elephants in their natural habitat.

Li Zhang, professor of ecology at Beijing Normal University, who has studied ways for China to shut down its legal ivory trade

Crushing confiscated ivory is such a strong signal to the world that the U.S. takes solid action to combat ivory smuggling and elephant poaching. New York is one of the leading states in the U.S. to legislate to ban its commercial ivory trade. Up to now both China and the U.S. had announced their master plans to close domestic ivory markets. I would be happy to see more governments around the world, especially the EU and Southeast Asian states to crush ivory confiscations and take solid steps to shut down their domestic ivory markets. That will be the day we can say elephants on Earth are surviving poaching for ivory.

Michael 't Sas-Rolfes, South Africa-based independent conservation economist

I'm skeptical. It's a PR stunt and reduces storage costs for governments. But after many previous public stockpile destructions, how can yet another one end the poaching that feeds the persistent demand for illegal ivory? By now surely the conservation message is out? Ongoing destructions could backfire, reinforcing perceptions of ivory's scarcity and supporting high black market prices. And doing this doesn't generate sustainable financing for African parks, where it is desperately needed: It simply entrenches elephants as aid-dependent liabilities on a continent where they are losing ground to rapidly growing human populations, in relentless competition for space and resources.

Paula Kahumbu, a National Geographic Emerging Explorer and CEO of WildlifeDirect, an international conservation group based in Kenya

Africans thank the U.S. government for the ivory crush in New York. It is another important demonstration of success in the war against poachers. It will help maintain the unapologetic message that it is shameful to buy or use ivory. Elephants keep us in a state of perpetual awe with their intelligence and compassion. We must send a message that there will be no ivory trade now, nor ever again in the future. Only when buyers understand that there is only shame in owning ivory, will the perceived value of ivory evaporate. Traders will stop hoarding it, and killers will stop the slaughter. Only then will elephants be safe.

Matthew Lewis, director of conservation for Safari Club International Foundation, the nonprofit arm of the hunting organization Safari Club International

Ivory crushes have long been viewed as bold displays of defiance against the trafficking of wildlife products, but many fail to realize the negative consequences of these events. Crushes lead to the loss of priceless forensic data that could be used to prosecute poachers around the globe, and they also often lead to increased demand for ivory around the world—leading to more poaching. If activists really want to stop poaching, they should work to increase the effectiveness of anti-poaching operations, improve law enforcement in demand countries, and reduce demand among consumers.

John Calvelli, executive vice president of public affairs for the U.S.-based Wildlife Conservation Society, which helped organize the ivory crush in New York

Ivory crushes and burns are incredibly valuable. These are physical reminders of the commitment by governments, organizations, and the public to save elephants. The confiscated items that we're destroying could have massive dollar value if sold on the market, but the crushes make clear that ivory should only be found on elephants. By crushing a ton of ivory in the middle of the world's most famous public park, New Yorkers are sending a loud message to poachers, traffickers, and dealers who set up shop right here on our streets: We won't stand for the slaughter of elephants.

Why Burn Ivory “Quick Guide” April 2016 –

By Paulau Kahumbu, CEO, WildlifeDirect

A hands-on guide to why burning ivory is the right proponent to help seize the illegal trade. An excerpt from “**Hands Off Our Elephants**” on why it is important to burn ivory:

Today Najib Balala said “Kenya is burning ivory because it's the best we know how to get rid of the stuff.” Many people have been asking why, and making other suggestions about what to do with the ivory stockpile. Here are some reasons from discussions with Kenya Wildlife Service (KWS) about why we are doing what we are doing;

Why Burn Ivory and Rhino Horn?

- Remove it from possibility of theft
- Message to all buyers it is not ok
- It can never be sold anyway (Kenya’s elephants are on Appendix 1 CITES)
- Securing stockpile is very expensive
- Removes risk of leakage into illegal markets (corruption)
- It is our policy/tradition to destroy contraband

Why burn and not crush?

- Because we choose to.
- It is the internationally recommended disposal method
- It sends a vivid message
- It has worked before (this is Kenya’s third burn)

Why not store ivory?

- Too expensive to store ivory
- Risk of theft/leakage (corruption)

Why not sell ivory?

- It would trigger new demand by whetting appetite of buyers leading to more poaching
- This would stimulate new markets (eg. young people in China, fashion industry, Thailand, Philippines etc.) as happened in 2009 sale to China
- Sends a contradictory message – we do not support ivory sales
- Our elephants are on CITES appendix 1 therefore no legal sale is possible anyway
- Contradicts our message of [#WorthMoreAlive](#)
- The money generated from ivory sales has not had much benefit to elephants in Southern Africa... and would not compare to the tourism revenues In Kenya which we get from living elephants

Why now?

- Because President Uhuru Kenyatta promised to do this last year and we are in a crisis and need the world to wake up now and to help.

If NOT Now, when?

- We’ve achieved extraordinary success and we need to [#LightAFire](#) for renewed commitment.
- To send a message to the world that Kenya is taking the lead in protecting our endangered species.

Why not save some of the tusks?

- To send a consistent message
 - As an opportunity to make new promises and new commitments
- (We are keep a few pieces for educational purposes)

Do the tusks burn completely?

- Yes, under special conditions (we incinerate them under high temperatures using fuel).

Won't it cause the price of ivory to rise?

- No, the burn sends a strong message and causes a stigma that will cause people to not buy; demand and poaching will go down.

What's being done about the demand?

- Kenya through various international conventions and forums such as CITES, UNEP, FOCAC, AU, EACC is engaging demand driven countries in diplomatic dialogue.
- Our embassies are active in all countries
- Our Minister of Foreign Affairs is in diplomatic dialogue globally
- NGOs like African Wildlife Federation (AWF), WildlifeDirect, International Fund for Animal Welfare (IFAW), Save the Elephants (STE), Wildlife Conservation Society (WCS), are all working actively on this."

***Dr. Paula Kahumbu** is the CEO of Kenyan Conservation NGO [WildlifeDirect](#) and is leading the hard-hitting [Hands Off Our Elephants Campaign](#) with Kenya's First Lady Margaret Kenyatta. Hands Off Our Elephants is a campaign to restore Kenyan leadership in elephant conservation through behaviour change at all levels of society, from rural communities, to business leaders and political decision makers.*

She is a Kenyan conservationist with a PhD from Princeton University where she studied Ecology and Evolutionary Biology and conducted her field research on elephants in Kenya.