

Elephant Ivory

Teacher Resource

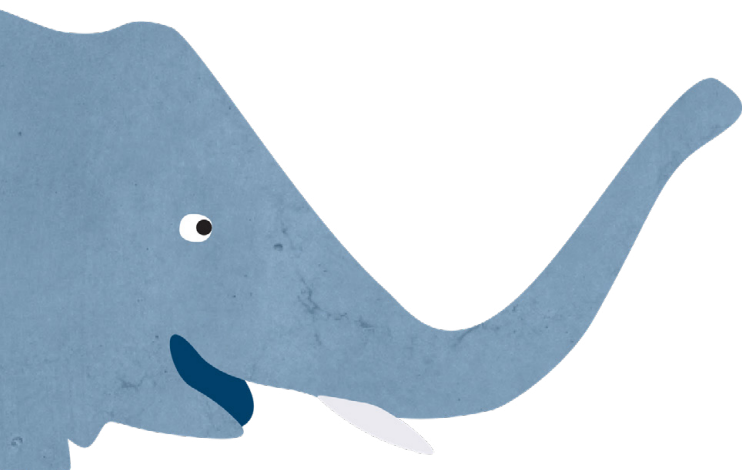
Key Stage 2

These notes are designed to support teachers whose classes follow the self-guided Elephant Ivory Trail around the Pitt Rivers Museum. It gives more information about elephants and their tusks, with suggested further activities.

Only in 2010 did scientists confirm with genetic evidence that African elephants are 2 distinct species: **African savannah** and **African forest**. Because of this, they are now treated as 2 different species for their protection, with African savannah elephants being Endangered and African forest elephants being Critically Endangered. African elephants live in 37 different countries in sub-Saharan Africa.



Above: African savannah elephants



Elephant Species

Did you know there are 3 species of elephants alive on the planet?



African savannah elephant
(*Loxodonta africana*)



African forest elephant
(*Loxodonta cyclotis*)



Asian elephant
(*Elephas maximus*)

Elephant Tusks

Elephant ivory, or tusks, are actually special teeth that come out of the jaw of the elephant. Ivory is made of dentine, which is the same material in your teeth!

As you write with your left or right hand, **elephants also use either their left or right tusk to do most things**, and the tusk they use most gets worn down from regular use. They use their tusks for fighting, stripping bark off trees, knocking down trees, and digging for roots or fruit to eat.

African elephants are now being born tuskless, due to the many years of humans hunting them for their tusks. In order to survive, their genes adapted ways of staying alive by getting rid of the one thing that was causing them to be killed by humans: their tusks. Asian elephants have not been as heavily hunted for their tusks, due to the fact that only male Asian elephants have tusks that you can see, they are smaller tusks than African elephants due to body size and evolution, and that Asian elephants have been traditionally used as working animals, for example in timber plantations and in ritual ceremonies.

Elephant Behaviour

Elephants talk to one another with various sounds, such as screams, trumpets, snorts, and some really low rumbles and bellows that are actually below the range of human hearing! These low frequency sounds means that elephants can talk to each other over long distances, up to 10 kilometres.

African forest elephants **eat up to 230 different types of trees, fruits, and shrubs.**

Elephants live together in family units, with the leader of the family being an older female elephant, with as many as 2-30 individuals living, eating, and sleeping together. Male elephants, once they are about 14 years of age, leave the family units to live with other adult males in social groups.

Relationship between humans and elephants

A natural relationship between humans and elephants

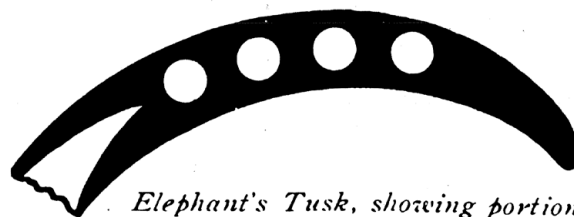
For millions of years, humans have used ivory as a natural material to make things, as it is durable and smooth and was easily sourced from natural habitats. People have lived with elephants for hundreds of thousands of years and utilised elephants for many purposes, not just ivory. People living in Botswana used elephant tail hair to make brooms and brushes, as it is thick and coarse and good for this purpose. People living in Myanmar used elephant toenails as a pendant for wearing for protection from disease. People in Uganda used elephant skin for making objects such as baskets, and elephant meat for food. Many of these communities living in elephant habitats in the past did not hunt elephants, but found naturally deceased elephants and used the elephant skin, hair, and ivory to make things. Before plastics and other materials were invented, many people around the world used natural materials and products to make objects, as raw materials from the natural world were what was available, and people were (and still are!) intimately connected with animals and plants for different uses.

Relationship between humans and elephants

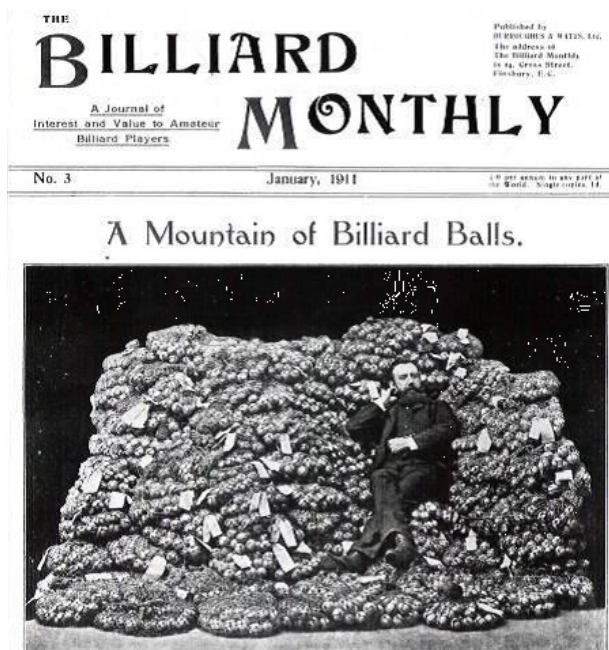
An exploitative relationship between humans and elephants emerges in the 19th Century

In the 19th century, elephant ivory from Asian and African elephants was brought into places such as Europe and the United States to make objects like cutlery handles, piano keys, and billiard balls. It was used both as a plastic of its day but also to make luxury items such as fans and carved figures.

Ivory markets in London sold raw ivory to manufacturers, such as cutlery makers in Sheffield and billiard ball makers in Liverpool. **Between 1840 and 1875, British demand for ivory went from 200,000 kg to over 800,000 kg per annum.** This could have meant that between 4,000 and 17,000 elephants were killed for the trade.



Elephant's Tusk, showing portion used for Billiard Balls.



Use of firearms and global ban on trade of ivory

This surge in demand and use of ivory meant that elephants were being killed at alarming rates. The invention and use of the firearm was a huge part of this decline. In the past, communities living with elephants either rarely killed them, or they used intimate knowledge of the animal and natural poisons and weapons to kill an elephant. The killing of an elephant often took considerable skill and years of training. However, with the invention and use of firearms and Europeans bringing these firearms to places such as East Africa, meant that elephants could be killed much easier and made ivory available in huge quantities for world trade. The killing of elephants for their ivory combined with loss of habitat due to increasing human populations is why elephants are endangered today. Since 1990 there has been a global ban on the international trade of ivory and plastic and other synthetic materials have replaced the manufacturing use of ivory. But elephants are still dying faster than they are reproducing. Around 20,000 African elephants are being killed illegally every year for their ivory – that’s around 55 everyday or one every 25 minutes.

Possible classroom follow up activities

- 1 Research conservation projects to protect elephants and identify the most successful strategies employed to keep these animals safe. Analyse the campaigning material, looking at how persuasive techniques are used. Design campaign materials for a wildlife cause of choice. **(English)**
- 2 Find out about other endangered animal species which are hunted for their body parts - how are they being protected?
- 3 Research how elephants have adapted to their environment **(Science – evolution and inheritance)**
- 4 Consider whether Museums should display objects made from ivory, identifying arguments for and against. Organise a conscience alley or debate the issue as a class. **(English)**



Suggested further information

<https://www.nationalgeographic.org/media/history-ivory-trade> - Video and teacher resources on history of ivory trade

<https://africa.si.edu/collection/conservation/protect-ivory/> - **Smithsonian Museum of African Art.** Looks at history of ivory and how it was used in many African countries as a status marker

<https://soundcloud.com/elephantvoices> - Audio recordings of African elephant sounds recorded in the wild

https://www.awf.org/sites/default/files/Ivory_Bush_to_Market.jpg - Diagram from African Wildlife Foundation showing illegal trade routes of ivory tusks

<https://www.youtube.com/watch?v=P3XxEefvpr8> - Film of Negbanzi (ivory trumpets) being played

<https://www.youtube.com/watch?v=B4Xla-e5Wrs> - Film of Saw Sam Sai (three-stringed fiddle and bow) from Thailand being played

(If the links for these don't work when clicked, try copying the url text into a browser. If this still doesn't work, it may be that the content has been removed as these are resources external to the museum - but you might be able to find similar resources searching online.)