

Teacher's notes:



Bushmeat is the name given to wildlife that is hunted by people for food. It applies to all wildlife species used for meat including: elephant; gorilla; chimpanzee and other primates; forest antelope (duikers); crocodile; porcupine; bush pig; cane rat; pangolin; monitor lizard; guinea fowl.

This package explores issues surrounding the bushmeat trade and focuses on the Great Apes. We suggest that you read through the package prior to conducting your lesson. The article below is a fictional news article which should be read aloud to your Kindness Club members. Activities relating to this article are printed on page 2.4.

Hunter arrested for killing gorilla!

After an intensive manhunt deep in the Central African forest of Cameroon, Habi a 34 year old Baka Pygmy was arrested and charged with killing a fully grown silverback gorilla. Close informants in the region revealed his whereabouts after which local authorities sent in a team of rangers to arrest him. The chase lasted for over four hours before the hunter surrendered. He was armed with a large knife, a shotgun and several rounds of ammunition.

After questioning, the hunter revealed that the gun did not belong to him. He claimed to have hired it in exchange for part of his kill. He said he had no alternative form of income as the logging companies working in the area had now taken over his ancestral homeland and refused to give him a job.

Although hunting apes is illegal, a person can earn up to \$180 for a large gorilla. "I used to hunt only for food but life became very difficult. I had no money. There were no jobs. It's hard to say how many gorillas I killed, maybe more than 150 each year. We knew it was illegal, but we had to do it because we had nothing to survive on. We would like to stop but how would we survive?"

Forest people (such as the Baka Pygmies) have

traditionally depended on forest animal species (from caterpillars to elephants) but used spears, nets and snares and only killed for their own consumption. With the advent of firearms and a growing demand for bushmeat, hunting is now done on a commercial basis. Furthermore, poverty in urban areas is forcing more townspeople to get involved in the trade and commercial logging has led to new roads and trade routes being opened up in the forests.

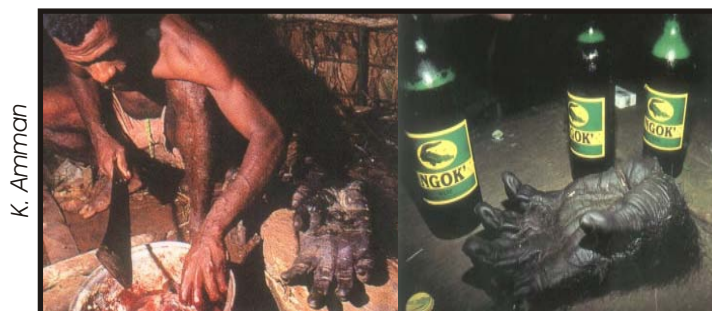
Currently, the commercialisation of the bushmeat trade is the most significant threat to the future of Africa's apes. In one district in Cameroon, an estimated 800 gorillas are killed annually. The meat is usually transported to urban areas where it is sold on the black-market. Other parts of the body such as the hands, feet and skull are sold as ornaments or used in traditional medicine. When adult apes are shot, the young are captured and kept as pets or taken to the market for sale (orphans are sold for approximately \$100). Infant gorillas have a very high mortality rate when separated from their mothers and will usually die within the first month of captivity.

The opening up of forests by logging companies is significantly enhancing the bushmeat trade.

New roads and settlements are being constructed, creating an ever increasing demand for bushmeat both locally and in urban areas. Gorillas are considered easy prey as they are slow animals who live in groups and are primarily terrestrial. Furthermore, the ratio of meat to bullet is very high in comparison to other smaller species, thus making them a popular target.

After visiting several logging sites our team found that the bushmeat trade was prevalent throughout the region. In addition to a high consumption of various species at the camps, there was open trading and transporting of bushmeat to various urban areas.

Several conservation organisations are working in the area to try and change people's attitude towards eating apes and other endangered species, but the problem goes deeper than that. As one spokesman said, "Hunting and habitat destruction is taking place globally. The problem in Africa is there are so many politically unstable nations. The political unrest, illegal logging and rampant poverty are driving these apes to extinction".



K. Amman

Hands are used to make ashtrays and other souvenirs

BUSHMEAT: THE ISSUES

What is it?

Bushmeat is the name given to wildlife that is hunted by people for food. It applies to all wildlife species used for meat, including: elephant; gorilla; chimpanzee and other primates; forest antelope (duikers); crocodile; porcupine; bush pig; cane rat; pangolin; monitor lizard; guinea fowl.



Some Facts on Bushmeat

- In Central and West Africa 3-5 million tonnes of bushmeat is harvested each year.
- Several thousand apes are killed for their meat each year within this region.
- In one district in Cameroon an estimated 800 gorillas are killed annually (1995).
- In Congo the carcass of an adult male gorilla is sold in the market for \$15 and a hand sold for less than \$1.
- When adult apes are shot, young are captured and kept as pets or taken to the market for sale (orphans are sold in the cities for approximately 100\$).
- The reproductive rate of apes is too slow to support sustainable hunting.
- Closeness to humans makes them vectors (carriers) for diseases.



Some Facts on Commercial Logging

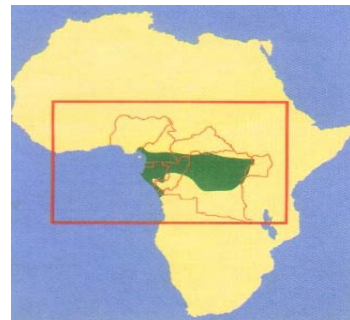
- Africa is the world's third most important producer of tropical timber, producing around 11 million cubic metres of wood per year.
- Major producing countries are Ivory Coast, Ghana, Liberia, Cameroon, Gabon, Congo and the Democratic Republic of Congo.
- The European Union is the most important market for tropical timber.
- Logging concessions have been the sole reason for the construction of roads in much of Central Africa. These roads provide the means to get hunters into remote areas of forests and to export meat back to major urban areas.
- New settlements along forest stretches have created a huge demand for bushmeat.

The problem

"The failure of conservation in great ape range countries is due primarily to human crises - poverty, illness, war, commercial greed, political corruption, lawlessness."
(Anthony L. Rose)

Some of the major threats to forest species include:

- Improved transport systems leading to large urban bushmeat markets.
- Accessibility to modern hunting weapons such as guns.
- In some parts of Africa, bushmeat is 75% cheaper than beef, pork or poultry, making it an extremely popular source of protein.
- Thousands of hunters earn their living from bushmeat.
- Poverty in urban areas is also forcing more townspeople to get involved in the trade.
- There is a growing demand outside Africa where bushmeat is considered a delicacy.



Key areas of surviving rainforests

The solution

Many local and international organisations and government bodies are trying to address the problem.

Solutions to the bushmeat trade include:

- Wildlife management and protection schemes.
- Effective legislation to protect diminishing forests.
- Halting illegal logging in the region.
- Alternative food sources must be found through better farming methods.
- Income generating activities such as eco-tourism, beekeeping, seed collection, etc.
- Alternative employment must be found for hunters such as converting "poachers to protectors."
- To reduce the demand for bushmeat through education.

FACT FILE: THE GREAT APES (PONGIDAE)

Chimpanzee: (STATUS: VULNERABLE)

Size: 1-1.7 m

Weight: 35-60 kgs

Life expectancy: 50 years

Diet: fruits, berries, leaves, seeds, termites, ants. Occasionally kill young baboons and bush pigs.



Behaviour - Diurnal; mainly terrestrial, but will spend time in trees or build new nests in them each night.

Social Habits - Lively animals which live in "communities" of 15-80 members. They regularly groom one another to remove external parasites, and also hunt in groups.

Communication - Facial expressions, gestures, a variety of vocalizations, including screams, hoots, grunts, and roars. Males display excitement by standing upright, stamping or swaying, and letting out a chorus of screams.

Intelligence - DNA is 98% the same as humans. Highly intelligent. Use objects such as twigs and grass to remove termites and ants from their nests. Have also been observed using leaves to soak up drinking water or to clean themselves. Have been taught to use sign language or languages based on the display of tokens or pictorial symbols.

Pressure - Destruction of habitats, commercial exploitation including trade in bushmeat.

Population - Approximately 100,000-150,000 left in the wild (1999).

Bonobo (STATUS: ENDANGERED)

Size: 1-1.7 m

Weight: 30-50 kgs

Life expectancy: 50 years

Diet: fruits, leaves, seeds, grass, caterpillars, rodents, and even young duiker antelopes.



Behaviour - Diurnal; feed mostly in trees and build sleeping nests at night.

Social Habits - Peaceful and egalitarian. Live in large groups where females carry the highest rank, and the sons of ranking females are the leaders among males.

Communication - Facial expressions and hand gestures. Bonobos will beg for food by stretching out an open hand (or, sometimes, a foot) and will pout their lips and make whimpering sounds if the effort is unsuccessful.

Intelligence - DNA is 98.4% the same as humans, making them our closest living relative. Bonobos look more like humans than other apes, and display many behavioural similarities.

Pressure - Habitat destruction and illegal hunting.

Population - Approximately 10,000-25,000 left in the wild (1999).

Gorilla (STATUS: ENDANGERED)

Size: 1.7 m.

Weight: 90-275 kgs

Life expectancy: 30 years

Diet: leaves, stalks, and shoots.



Behaviour - Diurnal; primarily terrestrial. New nest constructed either on the ground or in the trees.

Social Habits - Live in stable family groups of 6-20, that are led by one or two silverback males.

Communication - Have a variety of calls including grunts, hoots, and the roar given by an aggressive male. The well-known chest-beating of the gorilla is performed by both males and females. When performed by males, it is part of a warning ritual that may also include running about, tearing at vegetation, and slapping the ground.

Intelligence - Captive gorillas have shown a capacity for problem solving and have demonstrated that they possess a degree of insight as well as memory and anticipation of experience. They appear to be more adept than chimpanzees at learning sign language from humans.

Pressure - Habitat destruction, illegal hunting (especially heads, hands, and skins) and for meat.

Population - Approximately 40,000-65,000 left in the wild (1999).



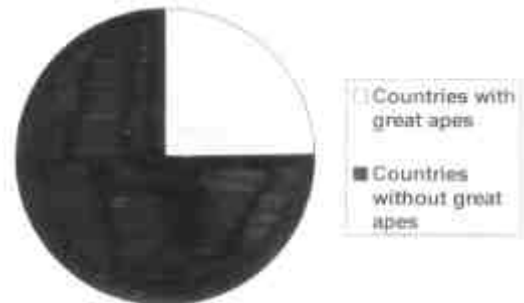
Activity Sheet



- Based on the newspaper article on the first page, ask your Kindness Club members to discuss the following issues:
 - Do you think the hunter should have been arrested?
 - What do you think about the owner of the gun?
 - What do you think about what the logging companies are doing around Africa?
 - Is it wrong to hunt wildlife for meat? Why?
 - Do you think that hunting apes should be stopped altogether? How could this be achieved?
- Look at the page with the photos of three hands. They are very similar. The members should try to identify them, so write the following options on the board:
 Baboon Gorilla Human Bonobo Orang Utan Chimpanzee
 Answer: 1st = Chimpanzee 2nd = Gorilla 3rd = Human
 Ask them what they think about the similarities and stress how alike all primates are.
- Pin the map of Africa on the board and ask your members to count the number of countries where Great Apes can be found (shaded in grey). Answer: 13 countries.
- There are 54 countries in Africa, so work out the number where apes are found as a percentage of the total countries found in Africa. Answer: $13/54 \times 100\% = 24\%$

- Draw a pie chart which shows the number of countries in which great apes are found as opposed to those where they do not occur.

Answer:



- The numbers of Gorillas, Bonobos and Chimpanzees has been declining rapidly as a result of the bushmeat trade. An estimate of numbers still existing in the wild from 1980-1999 are shown in the following table:

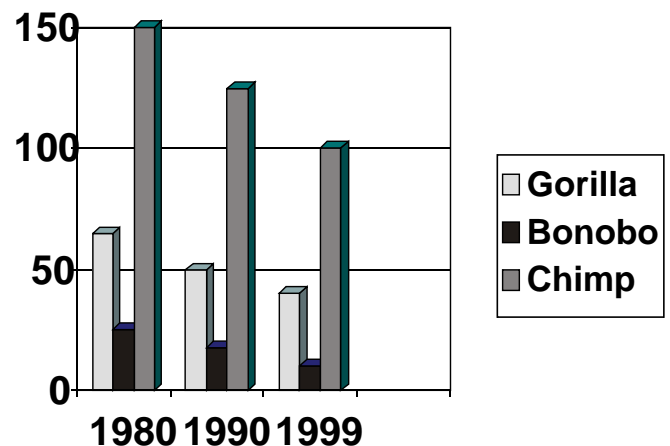
Answer:

Table to show population of Apes
(Population in 100,000)

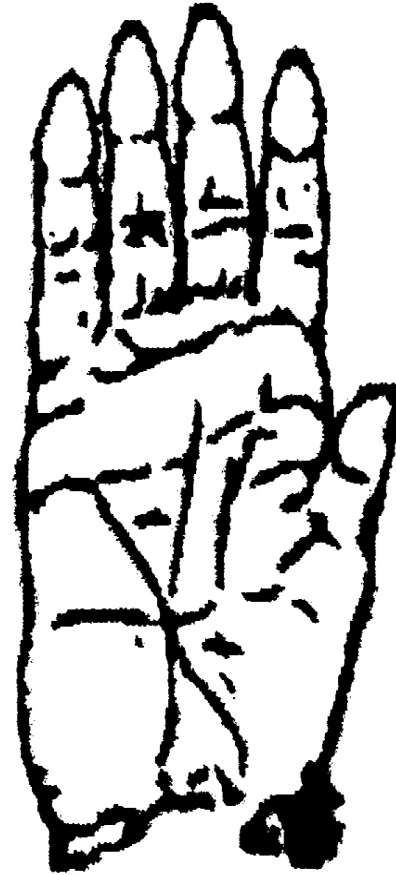
Year	Bonobos	Chimps	Gorillas
1980	25	150	65
1990	18	125	50
1999	10	100	40

Draw this table on the board and then ask the members to plot a bar graph comparing the populations of the 3 species.

Bar Chart to show population of Apes
(Population in 100,000)



Which hand belongs to who??



98% of our DNA is
the same as yours