



# Central Congo Basin Moist Forest

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# Welcome To The Congo Rainforest

- ▶ This is the second largest rainforest in the world after the Amazon
- ▶ More than 600 tree species and 10,000 animal species live there
- ▶ Receives between 78-119 inches of rainfall a year
- ▶ Is home to many endangered species including the forest elephants and lowland gorillas
- ▶ Is home to 75 million people who are dependent on the forest for what they need to survive



# Major Ecoregions

- ▶ **Central African Mangroves**
  - ▶ Located on the Atlantic Coastline in suitable low energy marine environments
  - ▶ Most extensive area this ecoregion is found in the Nigeria River Delta
  - ▶ No endemic species (which basically means there's no native species here)
- ▶ **Atlantic Equatorial Coastal Forests**
  - ▶ High levels of species richness and endemism
  - ▶ One of the lowest human populations in Africa
  - ▶ Extends from the Sanaga River in west-central Cameroon
- ▶ **Angolan Miombo Woodlands**
  - ▶ Covers all of Central Angola
  - ▶ Extends into the Democratic Republic of the Congo
  - ▶ Termites are very important in this region

# Food Web



Crocodile (Eats the hippo)



Lion (Also eats the hippo)



Leopard (Eats Okapi and chimp)



Frog (eats the insects)



Hippo (Eats the grass)



Okapi (Eats the grass and fruit)



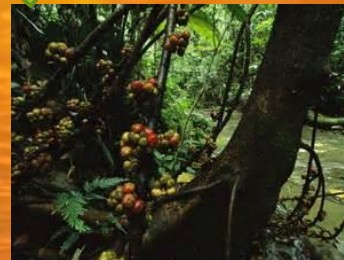
Chimp (Eats grass)



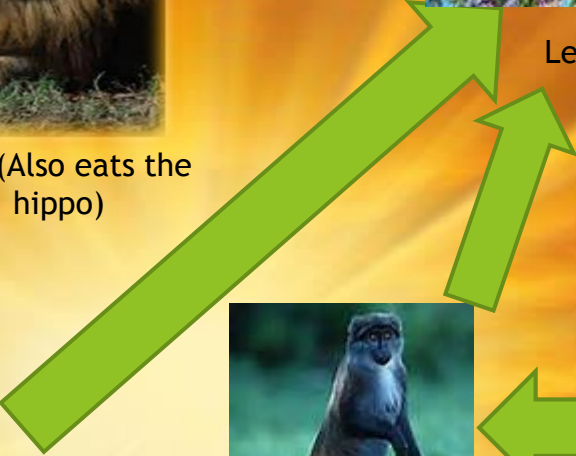
Insects (eat the fruit trees)



Producer (Grass and Trees)



Fruit tree



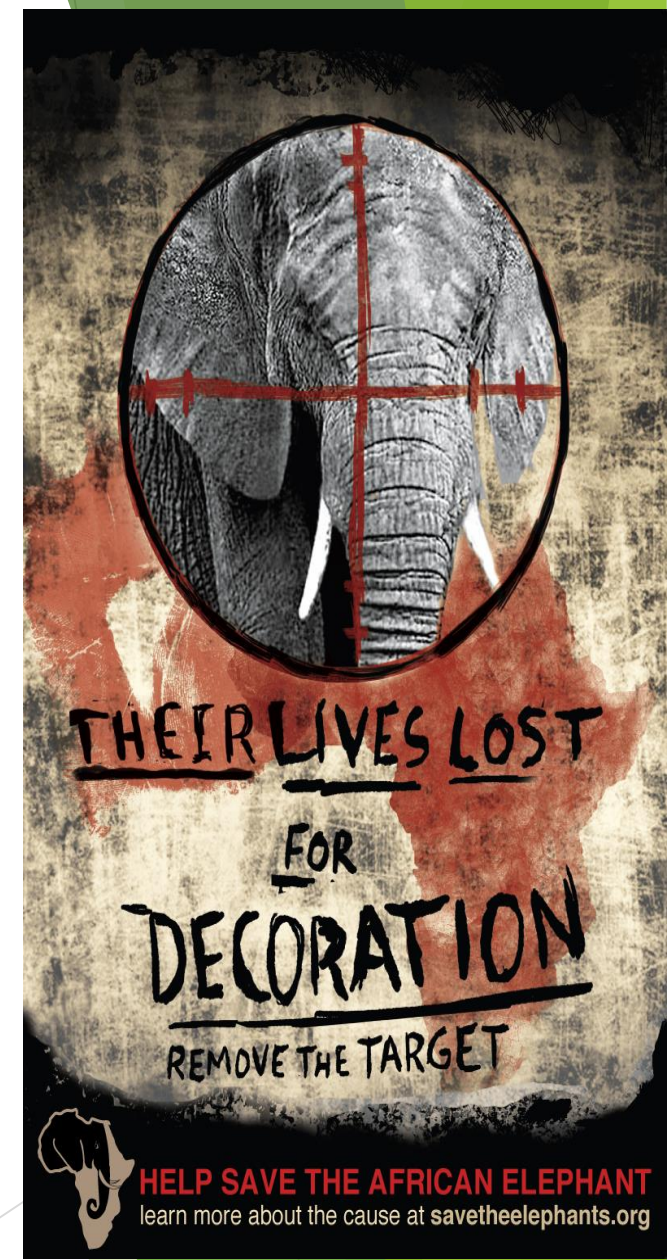
# Introducing the Congo Moist Forests

- ▶ This ecoregion is located in Central Africa, northeast of Angola
- ▶ This area generates between 75% to 95% of their own rainfall
- ▶ Home to the Giant Pangolin
- ▶ 500 million acres
- ▶ Larger than the state of Alaska
- ▶ The human population in this area is fairly low



# Issue Slide

- ▶ In 2004, forced by the World Bank, logging in the Congo increased. Making it easier for poachers to attack elephants resulting in a 60% drop in the region's elephant population. The people are losing resources that they need to survive.



# Cause Slide

- ▶ The cause to all of this deforestation is the world bank and the timber industry. Illegal deforestation is also occurring on top of all the legal logging happening



# The Solution

- ▶ Raising awareness to stop logging is the main solution.
- ▶ Many pro nature companies are trying to raise awareness (Greenpeace, Forest Stewardship Council, Kimberly-Clark, Kraft and Burger King.)



# Additional Issues

- ▶ Mining in the Congo is usually unmonitored and money is more important than safety in these situations
- ▶ The Bushmeat Trade is also another big issue in the Congo. You can get practically any animal meat from this trade resulting in poaching and population decreases
- ▶ Civil Strife is one of the other major problems in this region. There has been a lot of violence in this area the mid-90s. Animals and wildlife in the area get slaughtered and looted frequently.

# Endangered Keystone Species; *Pan paniscus*

- ▶ Given the common name “Bonobo.”
- ▶ Smaller than chimpanzees
- ▶ Black fur covering body and parting at the head
- ▶ Long skinny legs
- ▶ Has opposable thumbs like other primates



# “Gardener of the Congo Forest”

## Role of Bonobos

- Bonobos foster biodiversity
- Spreads seeds around the forest
- Trees depend on Bonobos

## Position in the food web

- Secondary consumer
- Eats fruits, plants, and flowers
- Eats mammals; insects, eggs, and earth-worms
- Main predator is crocodiles and humans

## KEYstone species

- Whole forests could go extinct
- Forest depends on Bonobo seed dispersal
- If Bonobos went extinct 18 plant species would go extinct.

# Blame the Humans!!!

- ▶ Humans hunt bonobos (poaching)
- ▶ Habitat destruction
- ▶ Illegal pet trade

Bonobos  
could be  
extinct in  
10 years or  
less





50,000 to 10,000

- ▶ Population has decreased by 40,000 in the past 7 years
- ▶ 40 years is the average life span
- ▶ Reproduce more than any other primate
- ▶ Very few mothers tend to give birth



VOLUNTEER

# Save the Bonobos



DONATE

- ▶ The Bonobo Conservation Initiative
- ▶ Controversy of Sankuru Nature Reserve
- ▶ Enforcing that it is illegal to hunt bonobos
- ▶ BCI has started a rescue crew to save bonobos

# Water Hyacinth Invasive Species

- ▶ Common name: Water Hyacinth
- ▶ Scientific name: *Eichhornia crassipes*
- ▶ Grows to about .5 meters and sometimes to almost 1 meter
- ▶ Has large purple and violet flowers
- ▶ Flowers have 6 petals
- ▶ Leaves are thick, round, glossy, and waxed
- ▶ Free floating aquatic plant



# Food Web



Jaguar (tertiary consumer)



Anaconda (tertiary consumer)



Crocodile (tertiary consumer)



Bonobo (secondary consumer)



Toucan (secondary consumer)



Okapi (primary consumer)



Turtles (primary consumer)



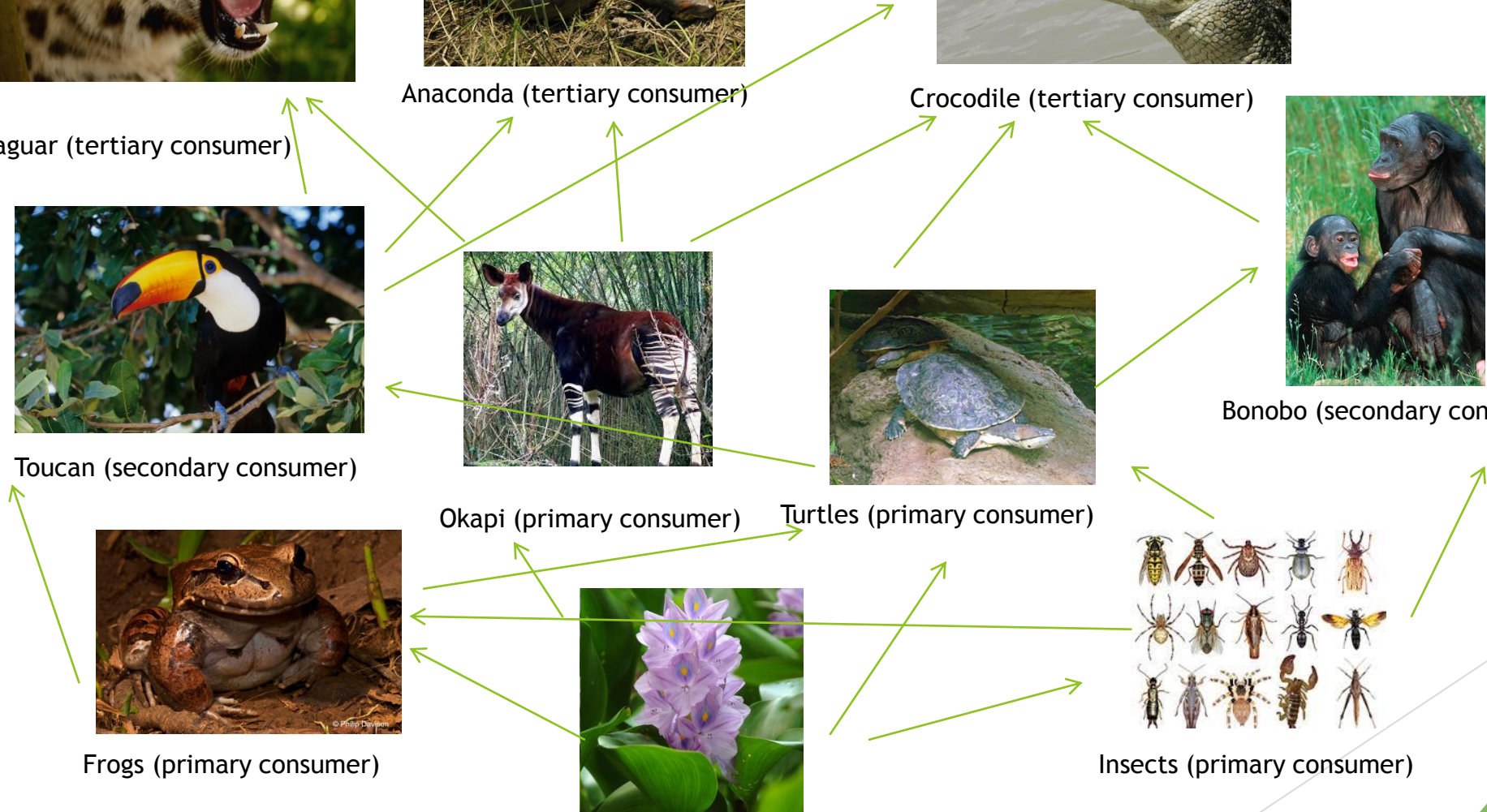
Frogs (primary consumer)



Water Hyacinth (producer)



Insects (primary consumer)





# Problem

- ▶ Waterways are blocked
- ▶ Fishing is almost impossible because you can't get to the fish
- ▶ Will take nutrients from native aquatic plants
- ▶ Changes the oxidation of the water
- ▶ Consider worst aquatic weed in the world



# Transport

- ▶ Native to South America
- ▶ Seeds can be transported by birds
- ▶ The plants can travel through water to new locations
- ▶ They can be taken as ornamental plants by people



# Solution

- ▶ Machines can be used for mechanical harvesting
- ▶ Pitchforks were used in the beginning
- ▶ Herbicides can be used to combat the weeds
- ▶ Certain South American insects will eat the weeds and can be used



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