



CENTRAL



AFRICAN



REPUBLIC



BIODIVERSITY



What is a

- **biodiversity?** Biodiversity is the variety and differences among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part. Thus, in essence, biodiversity represents all life.

Why is biodiversity

important?

Biodiversity boosts ecosystem productivity where each species, no matter how small, all have an important role to play.

For example,

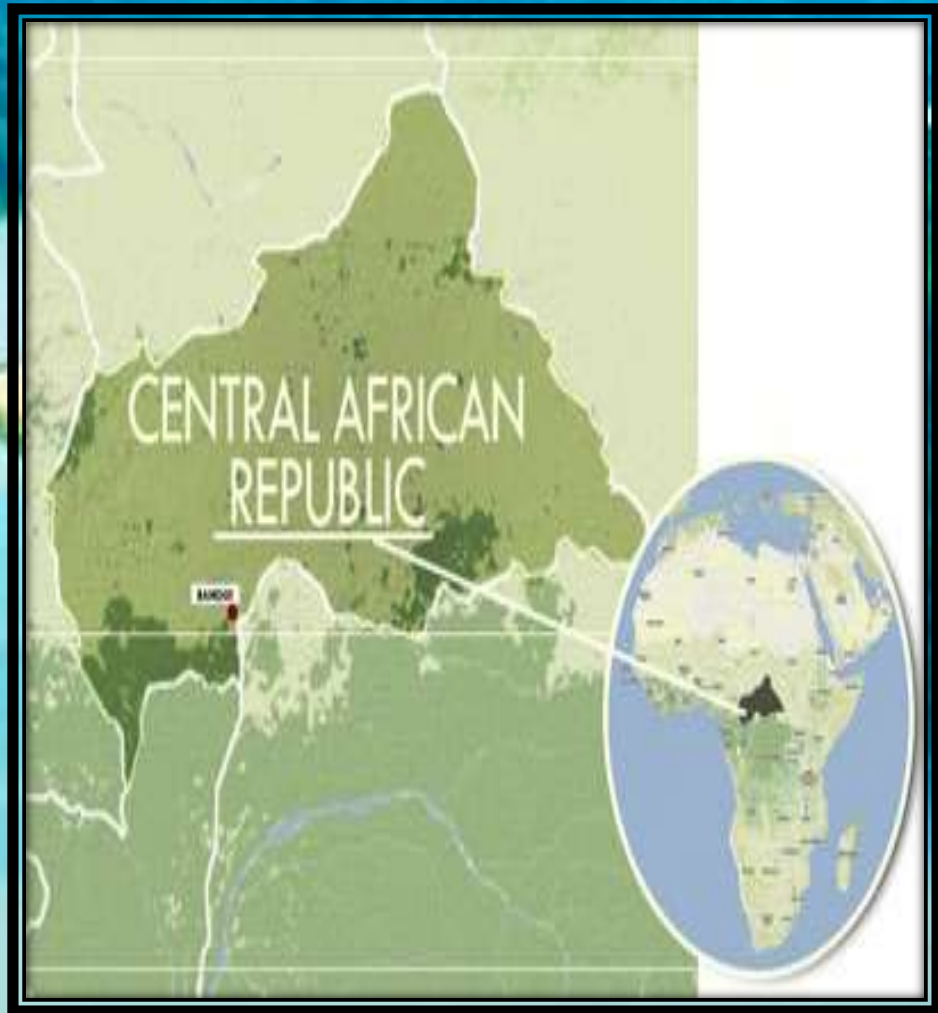
- A larger number of plant species means a greater variety of crops.
- Greater species diversity ensures natural sustainability for all life forms

- **Healthy ecosystems can better withstand and recover from a variety of disasters.**
- **And so, while we dominate this planet, we still need to preserve the diversity in wildlife.**



Central African Republic (CAR)





- The **Central African Republic (CAR)** is a landlocked country in Central Africa. It borders Chad in the north, Sudan in the northeast, South Sudan in the east, the Democratic Republic of the Congo and Congo in the south, and Cameroon in the west. The CAR covers a land area of about 240,000 square miles (620,000 km²), and has an estimated population of about 4.4 million as of 2008. Bangui is the capital city.

Biodiversity of CAR

- The tropical rain forest in the southwest contains luxuriant plant growth, with some trees reaching a height of 46 m (150 ft). Toward the north, the forest gradually becomes less dense, with wider patches of grassland, and eventually gives way to the rolling hills of the savanna, interrupted by taller growths along riverbeds.



Almost every animal of the tropics is found, including the elephant; its ivory was once a major source of wealth but has declined in economic importance. The southwest has a colorful variety of butterflies.



Flora

The flora of the Central African Republic has not been very well studied at all, although at least 3600 species are known. However there are likely to be as many as 5000 species. The country is mainly dominated by Sudanian woodland, although a small area of Acacia dominates the Sahelian woodland in the extreme north. Many of the species which are endemic to the country are located in the hills of northeast.

- In the southwest is lowland forest and secondary grassland interspersed with forest .Lowland forest exists in the southwest in the Dzangha-Sangha areas. Shrubs and bush vegetation is mostly confined in the extreme northern region.



Tropical forests cover 3.5 million hectare. The tropical forests contain luxuriant plant growth with hundreds of plant species.

Woodland savannah mainly consists of Vittelaria

paradoxa, Combretum spp., Acacia spp., Anogeissus leiocarpa, Azelia africana, Burkea africana, Isoberlinia doka, Terminalia spp., Khaya senegalensis, Rafia sudanica and Borassus spp. along the rivers.



Vitelaria
paradox



Burkea
Africana

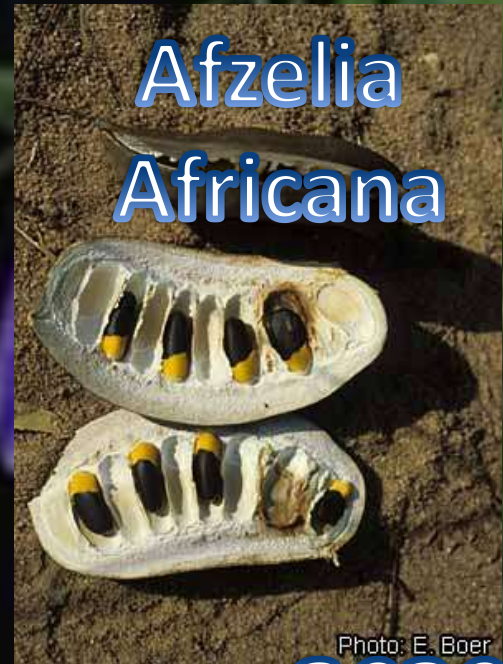


combretum



anogeissus

© TopTropicals.com



Afzelia
Africana

Photo: E. Boer



terminalia



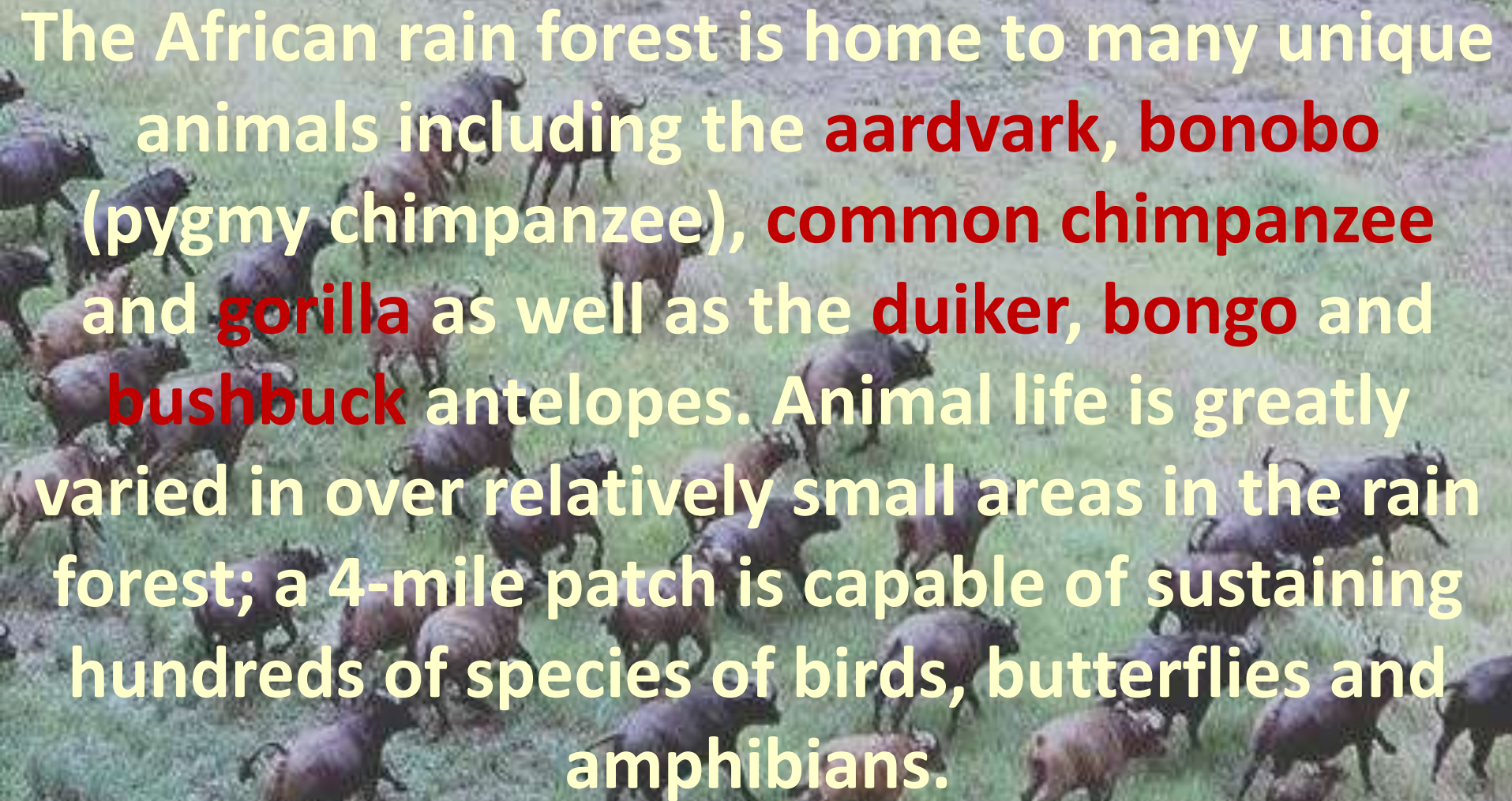
isoberlinia



acacia

Fauna

The African rain forest is home to many unique animals including the **aardvark**, **bonobo** (pygmy chimpanzee), **common chimpanzee** and **gorilla** as well as the **duiker**, **bongo** and **bushbuck** antelopes. Animal life is greatly varied in over relatively small areas in the rain forest; a 4-mile patch is capable of sustaining hundreds of species of birds, butterflies and amphibians.

A large herd of antelopes, likely bushbucks, is captured in a dynamic scene of running across a grassy savanna. The animals are in various stages of movement, with some leading the pack and others following. The background shows a vast, open landscape with scattered trees and a clear sky, typical of an African savanna environment.

aardvark



chimpanzee



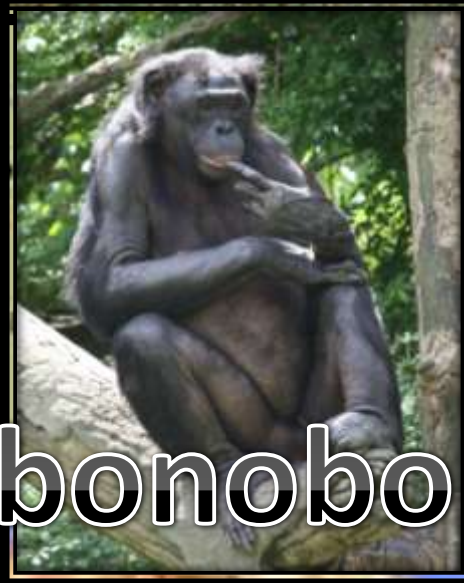
gorilla



bongo



bonobo



duiker



bushbuck



Many of these cannot be found anywhere else, making the African rain forest an extremely important conservation environment. The **pygmy hippopotamus**, which makes its home solely in Sierra Leone and the Côte d'Ivoire's Bandama River, is classified as endangered by the International Union for Conservation of Nature, which estimates the remaining number at 3,000 individuals.



fauna



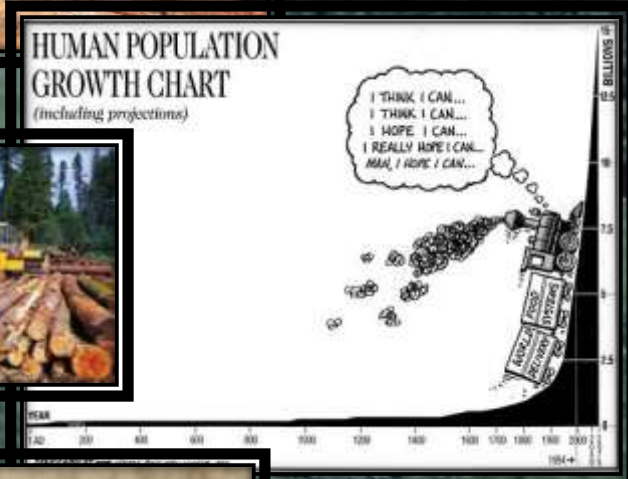
Threat to biodiversity in central African region

The most serious immediate threat to the region's biodiversity is the commercial hunting of wildlife for the bush meat trade and the illegal ivory trade. Longer-term threats include the destruction of forest habitats by timber companies, and the increase in the numbers of people clearing forests for agricultural land. :



- In all, threats include:-

- Unsustainable and illegal logging operations
- Population growth and poverty
- Poor environmental governance and policy framework
- Disincentives for sustainable forest management
- Weak protected areas network
- Weak scientific understanding of environmental issues
- Political instability and war





**EXTINCTION IS
FOREVER**

- *These threats lead to:*
 - **Dwindling population of animal species**
 - **Reduced diversity of the forest genetic pool**
 - **Soil erosion and loss of fertility of the soil**
 - **Increased sedimentation downstream**
 - **Human conflicts over forest resources**
 - **Threat to indigenous communities**
 - **Principal seed dispersers (e.g. elephants, duikers) eliminated with consequential change in forest patterns and regeneration**
 - **Loss of local and national economies**

Conservation of CAR

biodiversity

There was a time when Central African Republic was given the epithet "an animal paradise". However, over the centuries, this situation changed. To conserve the rich wild life resources of the Central African Republic has therefore been a major issue of concern.

A dramatic landscape with a bright horizon and a large planet in the sky. The scene is set against a dark, starry sky with a large, glowing planet or moon in the upper right. The foreground shows a rugged, rocky terrain with a prominent rock formation. The overall color palette is dominated by deep blues, oranges, and reds, creating a sense of vastness and natural beauty.

As the world's largest funder of projects to improve the environment and preserve biodiversity, the GEF plays an active role in helping to conserve and protect biodiversity in Africa. The GEF's unique and critical work has a life-saving, game-changing impact on communities worldwide.

An aerial photograph of a river winding through a dense, lush green forest. The river is the central focus, flowing from the top center towards the bottom center. The forest is thick with various types of trees, creating a rich, textured green canopy. The lighting is bright, suggesting a sunny day, and the overall scene is one of a healthy, natural environment.

The GEF projects discussed in this publication help Africa preserve natural resources that deliver multiple environmental and economic benefits both for local populations and for the world.

Conclusion

Sustainable and equitable natural resource management is the key not just to the maintenance of biodiversity but equally to human development and well-being. Biodiversity conservation in Central Africa presents a difficult challenge. Habitat destruction, overexploitation of natural resources, invasive species and pollution all directly threaten the ecosystems on which these populations depend.

. Yet, conserving the unique and rich biodiversity of West and Central Africa is vital not just for the lives and futures of the people of this region but also for the global environment and the global community. At the global level, current rates of extinction have never been so high: the nature have done its bit; and now its our duty to do our bit .

An underwater scene featuring a vibrant coral reef. The water is a deep blue, and the reef is covered in various colorful corals and sponges. Numerous fish, including several prominent blue tangs, are swimming around the reef. The overall atmosphere is bright and lively.

Presented by:-

Medha Singh Tanwar

K.V SVP NPA

SHIVRAMPALLY

HYDERABAD

INDIA