

Africa: Physical geography

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African elephants roam the savannas, which cover almost half of the African continent. Photo by: Pixabay/Public Domain.

Africa is the second-largest continent after Asia. The continent is bounded by the Mediterranean Sea, the Red Sea, the Indian Ocean and the Atlantic Ocean. It is divided in half almost equally by the equator.

Africa has eight major physical regions: the Sahara, the Sahel, the Ethiopian Highlands, the savanna, the Swahili Coast, the rain forest, the African Great Lakes and Southern Africa. Each of these regions has unique animal and plant communities.

Sahara

The Sahara is the world's largest hot desert, covering 3.3 million square miles. That is about the size of the South American country of Brazil. The Sahara is in North Africa and makes up 25 percent of the continent.

The Sahara has a number of distinct physical features. These include ergs, regs, hamadas and oases. Ergs cover 20 percent of the Sahara. They are sand dunes that stretch for hundreds of kilometers at heights of more than 1,000 feet.

Regs are plains of sand and gravel that make up 70 percent of the Sahara. The gravel can be black, red or white. Regs are the remains of ancient seabeds and riverbeds, but are now nearly waterless.

Hamadas are giant shelves of rock and stone that reach heights of 11,000 feet. They include three mountain ranges: the Atlas Mountains, the Tibesti Mountains and the Ahaggar Mountains.

An oasis is a place in the desert with water. Oases are often created by springs, wells or irrigation systems. About 75 percent of the Sahara's population lives in oases. While most of the people in the Sahara live near an oasis, oases make up only 800 square miles of the desert, a tiny portion of the entire Sahara.

The Sahara's animal and plant life have adapted to dry conditions. A dromedary camel conserves water by changing its body temperature. That keeps it from sweating as the day gets hotter. Saharan plants survive thanks to root systems that plunge as far as 24 meters (80 feet) underground. In parts of the Sahara, plants cannot take root at all.

Sahel

The Sahel is a narrow band of semi-arid land that forms a transition zone between the Sahara to the north and the savannas to the south. The Sahel is made up of flat, barren plains and stretches roughly 3,300 miles across Africa, from Senegal to Sudan.

Unfortunately, the Sahel's fertile land is rapidly becoming desert. This is happening because of drought, deforestation and agriculture. It is a process called desertification.

The Sahel's animals constantly hunt for scarce water and vegetation. The region's green vegetation only emerges during the rainy season, but is often harvested quickly by farmers or eaten by animals.

Ethiopian Highlands

The Ethiopian Highlands began to rise 75 million years ago when magma from Earth's mantle uplifted a broad dome of ancient rock. The Ethiopian Highlands are home to 80 percent of Africa's tallest mountains.

The highland's craggy areas are perfect for nimble animal species. They include native species such as the walia ibex, an endangered wild goat. They also include the gelada baboon. The region's plants include the Ethiopian rose, Africa's only native rose.

Savanna

Savannas, or grasslands, cover almost half of Africa. These grasslands make up most of central Africa.



The Serengeti is a vast plain that stretches 11,583 square



miles. The Serengeti is home to one of the continent's highest concentrations of large mammal species, including lions, hyenas, zebras, giraffes and elephants.

Swahili Coast

The Swahili Coast stretches about 1,000 miles along the



Indian Ocean. It runs from Somalia to Mozambique. The nearby coral reefs and barrier islands protect the coast from severe weather.

There is not a lot of animal life on the sandy Swahili Coast. A small species of primate known as the bush baby lives in some green areas. Bush babies have enormous eyes for hunting at night, and they feed on insects, fruit and leaves.

Heavy cultivation has diminished the number of plant species in this region. Mangrove forests are the most common vegetation. Mangroves have exposed root systems that allow the trees to absorb oxygen directly from the air, as well as from the nutrient-poor soil.

Rain Forest

Most of Africa's native rain forest has been destroyed by building, farming and logging. What is left of the rain forest is in central Africa. It is along the Congo River basin.

Africa's rain forests have a rich variety of animal life. A 4-mile patch could contain up to 400 bird species, 150 butterfly species and 60 species of amphibians. Important mammals include African forest elephants and gorillas.

The African rain forest plants include an estimated 8,000 known plant species. More than 1,100 of these species are endemic, which means they're found nowhere else on Earth.

African Great Lakes



The Great Lakes spread over nine countries. There are seven major African Great Lakes: Lake Albert, Lake Edward, Lake Kivu, Lake Malawi, Lake Tanganyika, Lake Turkana and Lake Victoria. Lake Victoria is the largest lake in Africa. It is the southern source of the Nile River, the longest river in the world.

The African Great Lakes region has many different types of animals. Fish include 100-pound Nile perch and the 1-inch cichlid. Hippos and crocodiles call the region home. There are also many different kinds of plants.

Southern Africa

The Kaapvaal craton, a 2.6-billion-year-old shelf of bedrock, shapes much of southern Africa.

Southern Africa is the center of Africa's well-known game reserves that protect animal species. Those species include lions, elephants, baboons, white rhinos and Burchell's zebras.

Southern Africa's Cape Floral Region is one of the world's richest areas for plants. It covers less than 0.5 percent of Africa, but it is home to nearly 20 percent of the continent's plants. Many amazing flowers are found there and nowhere else on earth.



Quiz

- 1 How effective is the introduction [paragraphs 1-2] at introducing the topic of Africa's geography?
- (A) Very effective, because it clearly conveys that Africa is a very large continent.
 - (B) Very effective, because it clearly identifies the major physical regions of Africa.
 - (C) Somewhat effective, because it describes the water boundaries of Africa, but not the boundaries of the different regions in Africa.
 - (D) Somewhat effective, because it identifies the major physical regions of Africa, but does not describe the land in each region.
- 2 Read the section "Sahara."
- What does this section describe that other sections do NOT?
- (A) the size of the region
 - (B) the physical features of the region
 - (C) the part of Africa in which the region is located
 - (D) the area in the region where people live
- 3 Look at the image at the beginning of the article.
- Which answer choice BEST explains how the image helps the reader to have a better understanding of the savanna region of Africa?
- (A) It shows that there are more elephants in the savanna region than any other region.
 - (B) It shows that savannas cover a large part of Africa.
 - (C) It shows how drought conditions affect the savanna region.
 - (D) It shows how both the land and an animal species of the savanna look.
- 4 Based on the section "Southern Africa," why does the image that is part of the section focus on a plant?
- (A) because southern Africa has many plants that have existed for billions of years
 - (B) because the plant is found everywhere in the Cape Floral Region of southern Africa
 - (C) because although the southern African region is small, 20 percent of Africa's plants live there
 - (D) because the plant is a rare flower that is found on southern Africa's game reserves