

## Savannah junior

The savannah is a type of grassland made up of grass and small shrubs that grow very quickly, but also of big trees.

Savannahs separate the tropical forest from the arid desert zones and can be divided into “humid savannah” with more than 1200 mm of annual rainfall, “arid savannah” with 500-1100 mm per year and lastly “spiny savannah” with even less rainfall. Savannahs occupy more than 10% of the land surface: they can be found in a part of Brazil, in equatorial Africa, in Madagascar and in a part of India and Australia.

In the savannah mainly plants that have adapted to the shortage of water can be found. Among these are grasses, bushes and trees of different species. Their adaptations help to reduce the loss of water through evaporation in different ways: shedding leaves in the dry season (e.g. acacia) or reducing the size of their leaves. The euphorbia has very hard leaves to protect it from herbivores. Another adaptation to water shortage is represented by the presence of very deep root systems to tap into all the available moisture (e.g. Cactaceae) or by the storage of water in their fleshy stems (e.g. Cactaceae, Euphorbiaceae, Liliaceae or Leguminosae) or in the roots. The typical trees of this biome are acacias, with their characteristic umbrella-shaped canopy, but even other leguminous plants armed with spines are abundant. These spines protect the plants against herbivores and avoid water loss through transpiration.

Great quantities of large herbivores inhabit the savannah (gnus, zebras, antelopes, giraffes, rhinoceroses and elephants in Africa; deer, elephants and gaurs in India). During the dry season they migrate for hundreds of kilometres in search of more humid areas. At times herds made up of different species are formed. Nearly all the newborns of the herbivores of the savannah, just a few minutes after their birth, are already able to walk. In this way they can remain safe within the herd without lagging behind.

Lions, African wild dogs, hyenas and jackals hunt in packs following particular strategies. Among the inhabitants of the savannah there are also large birds, the Ratites (ostrich, rhea) and other terricolous birds (bustard, guinea-fowl, marabou).

However, the most numerous inhabitants of the savannah are insects, which include ants, termites and grasshoppers that carry out long migrations during the dry season. These enormous swarms of insects feed in these areas and strip them bare of all vegetation.