

THE ECOSYSTEMS



What's an ecosystem?

An ecosystem is a biological system made up of a community of living organisms (biocenosis) and the physical environment in which they interact (biotope).

Types of beings that make up ecosystems:

- **Primary producers:** able to produce organic materials from non-organic compounds.
- **Consumers:** feed on materials and energy made by other living beings.
- **Decomposers:** feed on dead organic materials.

Types of ecosystems

There are several types of ecosystems, which are distinguished according to their nature and physical properties. These types of ecosystems can therefore be divided into very different subtypes according to their nature and the organisms that inhabit them.



Terrestrial ecosystem

Depending on the substrate on which it is found, one type of ecosystem is the terrestrial ecosystem. Its characteristics are given by the land on which all the activity of plant organisms and their fauna takes place. We can distinguish several types of terrestrial ecosystems, each defined by the soil and climate in which they are found.

Desert ecosystem

It's characterized by extremely inhospitable terrain where there's almost no vegetation or fauna, as only the hardiest species can survive in this hostile environment.



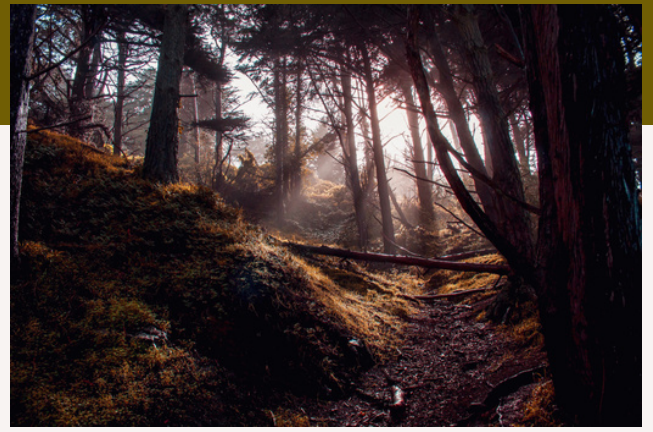
Mountain ecosystem

This type of ecosystem is characterized by high relief and significant topographic variation, with steep slopes. Mountain systems are found around the world and contain 80% of the world's freshwater reserves.

They play an essential role in the water cycle, as cloud masses collide with them and are converted into precipitation, constantly nourishing river water.

The landscape is made up predominantly of rocks, however, there are numerous types of vegetation and species depending on altitude and location.





Forest ecosystem

The predominant vegetation consists of trees and flora in general and represents 25% of the planet's land surface.

There are several types of forest ecosystems depending on their temperature, leafiness and humidity, and a generic distinction can be made between:

Hardwood forest: these have broad-leaved vegetation and are dominated by angiosperms. They're very rich in species and fauna. Jungles are an example of these.

Coniferous forest: these forests are dominated by gymnosperms, i.e. They don't bear fruit. They have acicular evergreen leaves. An example of these are taigas.

Mixed forest: these have a balance between the two types mentioned above.





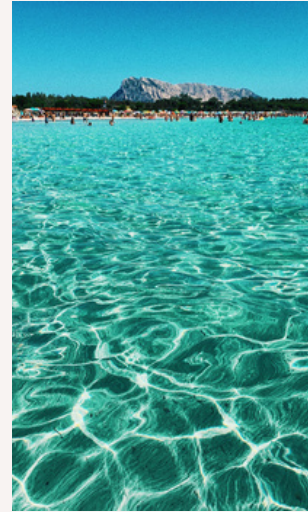
Aquatic ecosystem

This type of ecosystem is characterized by comprising of bodies of water. We can distinguish between the two types of aquatic ecosystems:

Marine ecosystem

These are made up of seas, oceans and tidal marshes and are predominantly characterized by the salt content of the water. The level of salt content will depend on the intensity of the evaporation and the freshwater input from rivers and, the higher the salt content of the body of water, the greater the buoyancy.

This ecosystem has a huge variety of species depending on the temperature and depth of the water.



Freshwater ecosystem

They're characterized by their lack of salt content. They mainly consist of rivers, lakes, ponds, marshes, among others. The flow and regularity of the waters are key aspects in terms of determining the type of vegetation and fauna that will inhabit them. There are various types of freshwater ecosystems:



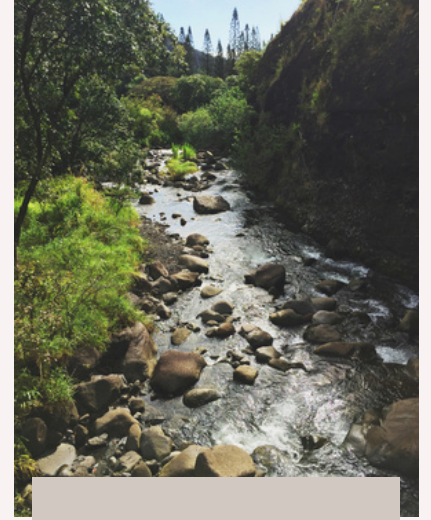
Lake ecosystem: those with still bodies of water, such as ponds.

River ecosystem: those with water in constant movement, such as rivers.

Activities



1. Classify the following ecosystems:



2. True or False?

- A river ecosystem is characterized by its still water.
- The freshwater ecosystem is characterized by the salt content of the water.
- Gymnosperms are those that produce fruits.
- Jungles are classified as hardwood forests.
- Coniferous forests are those dominated by gymnosperms.

