



What is it?

The term **biodiversity**, from "biological diversity", refers to the **variety of life on Earth at all levels**, from genes to ecosystems, and can encompass the evolutionary, ecological and cultural processes that sustain life. Biodiversity includes not only threatened or endangered species, but **all living things**, threatened or not, from humans to organisms about which we know little, such as microbes, fungi, and invertebrates.

This diversity of living beings on Earth, and the relationship between them and with the environment that surrounds them, is the result of **billions of years of evolution**.

The biodiversity we observe is the **manifestation of a series of dynamic (time-varying) and complex processes and relationships**.

The term biodiversity is a copy of the English "biodiversity". This term, at the same time, is the **contraction of the expression "biological diversity" which was first used in October 1986** as the title of a conference on the subject, the **National Forum on BioDiversity**, convened by **Walter G. Rosen**, who is credited with the idea of the word.

Knowing biodiversity

It is important to know biodiversity.

➤ **By scientists:** Scientific studies help us to better **understand our ecosystems and our biodiversity**. This knowledge is also critical for **guiding biodiversity management**.

Biodiversity can be analyzed in different places: as a **specific area**, an **ecosystem**, or the **entire planet**.

But we can also analyze it at **different levels**. For example we can note:

- In the **different species** we find and how many **individuals** we find of each species.
- We can also consider the **genetic differences** between individuals of the same species and assess the **degree of differentiation**.
- In relation to the **functions they perform and the relationships they have with each other**. Not all species play the same role in an ecosystem, for example in relation to their position in the food chain, nor do they have the same number of connections with other species.

In relation to the study of Biodiversity, another interesting term is that of **"Hidden Biodiversity"**. When we refer to biodiversity almost everyone thinks of the organisms visible to the human eye, and we must be aware that there are also thousands of microorganisms, which we cannot see with the naked eye, the so-called **protists**. It is a difficult group to detect because of their micro-size and because they can be found **inside other larger species**. We find them living associated with fish, invertebrates, protozoa and algae, and although the vast majority are unknown they are necessary for the survival of these species and also for the functioning of the ecosystem. Currently, science continues to advance in the knowledge of biodiversity thanks to the improvement of **observation** and **data analysis techniques**.



- **On our part.** It is important to know more about our biodiversity, that of the entire planet, but especially that around us, because **this is the way we can value it more**. Sometimes **we don't value or feel the need to preserve and protect what's around us because we don't know it**. We would be amazed if we knew the number of species and things that happen around us.

An example of what knowing or not knowing a species can do when it comes to valuing it and getting involved in its conservation is that of the **polar bear** *Ursus maritimus* and the **Balearic shearwater** *Puffinus mauretanicus*. We all find the situation of the polar bear very important and worrying. However, probably none of you will have heard of the Balearic shearwater, a seabird that only breeds in the Balearic Islands. The **IUCN (International Union for Conservation of Nature)** oversees generating lists of all species with some degree of threat. Well, according to the IUCN, the virot is much more threatened "Critically endangered" than the polar bear, which is listed as "Vulnerable". Curiously, we think it is more important to save the polar bear, which we have heard a lot about and seen in documentaries and books, than the virot, because we have hardly heard about the latter.

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Polar Bear

Ursus maritimus

ABSTRACT

Polar Bear *Ursus maritimus* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2015. *Ursus maritimus* is listed as Vulnerable under criteria A3c.

THE RED LIST ASSESSMENT

Wieg, Ø., Amstrup, S., Atwood, T., Laidre, K., Lunn, N., Obbard, M., Regehr, E. & Thiemann, G. 2015. *Ursus maritimus*. *The I...*

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEARLY THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX

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Balearic Shearwater

Puffinus mauretanicus

ABSTRACT

Balearic Shearwater *Puffinus mauretanicus* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2018. *Puffinus mauretanicus* is listed as Critically Endangered under criteria A4bcde.

THE RED LIST ASSESSMENT

BirdLife International. 2018. *Puffinus mauretanicus*. *The IUCN Red List of Threatened Species* 2018: e.T22728432A132...

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEARLY THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX



Why is it important?

There are many reasons why we are interested in valuing and maintaining biodiversity. **Biodiversity is the main, and in many cases the only, source of things as basic as our food, the fuel we use or the medicines we take.**

Biodiversity is also important for **everything that is to be discovered**. New **medical treatments and applications and uses** based on products of animal or vegetable origin are constantly being discovered. Therefore, both for its intrinsic value and for our own interests, **it is better to conserve all biodiversity**.

The value of biodiversity is also linked to the **sensations or feelings** it generates for us, to the **relationships we form in relation to it**, or how it **shapes who we are**, among many examples.

Other sources of information

- [What is biodiversity ? : A publication to understand importance , its value and the benefits it brings us](#)
- [Observatory of natural heritage and biodiversity](#)
- [Teachers for futures España](#)
- [Resources for Learning. American Museum of Natural History](#)
- [What is biodiversity and why does its loss matter? The Natural History Museum, London.](#)



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