

# Biodiversity

Learning more about Biodiversity  
using Citizen Science  
(Bioblitzes)



**LISBOA**

CÂMARA MUNICIPAL

Environment, Green Structure, Climate and Energy



More information at:  
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The survival of the human species has always been connected with the knowledge of the surrounding biodiversity.

Today, as in the past, this knowledge led to the finding of new foods, antibiotics with different effects and even poisons used to fight cancer..

Rare deer at less than 500 meters from the city centre in Scotland...



Biodiversity is a parameter for evaluating the richness of the ecosystems, but it is also an indicator of the quality of life for human beings.

Biodiversity does not exist exclusively in wild landscapes. It is often promoted by the presence of man whenever his intervention in the territory enhances soil fertility and its productivity.

But more and more animals are approaching urban centers...

The biodiversity that takes refuge in the Monsanto Park reaches the heart of the city of Lisbon along several green



Cities need to be planned, built and maintained in order to guarantee quality of life for its inhabitants as a whole. A city where wild animals are able to live offers environment quality both for themselves and for mankind.

A city with high levels of biodiversity depends on how it is managed. It must be provided with green corridors, refuges, available surface water and food,...

To learn what to do, one must know as much as possible about its biodiversity.



Every city must have a local action plan to promote biodiversity.

Either by foot, by public transport or even by bicycle or by car along its parkway, it is possible to walk a route in the Monsanto Park.



A journey in the field can teach us a lot about living beings both their biology or their behavior (ethology). This knowledge can be useful for a better management of the ecosystem or to improve our own attitudes in relation to others.



In order to take more appropriate measures, we will have to know more about each ecosystem, namely:

- Which species are present (list and highlightment of the rarities)
- The number of individuals of each species (number pyramid)

The information obtained must be uploaded to databases available to the general public. But this information needs to be validated in order to be useful.



A journey in the countryside allows us to rest, to taste, to feel, but also to learn, to improve and share our knowledge about biodiversity.

If in a given moment, we all make similar assessments in an articulated way, the bias introduced by the mobility of the animals can be reduced almost to zero. It is then possible to obtain a "photograph" of the ecosystem at that moment: these are snapshots of biodiversity, also known as bioblitzes. The comparison between the results of several bioblitzes scheduled in a certain area allows us to know the biodiversity of that area and to assess its evolution.

## In Lisbon How to participate?

Lisbon's Environment Services, in co-operation with the association Biodiversity4all, organizes two bioblitzes per year, guided by specialists in each group of living beings.

Participation is free and, in parallel to the acquisition of a deeper knowledge on biodiversity, it is possible to experience pleasant moments of leisure. The data thus obtained is uploaded to the Biodiversity4all database, which is linked to the iNaturalist Network, after validation by different specialists. Data can be consulted at [www.biodiversity4all.org](http://www.biodiversity4all.org)



A bioblitz on the river Tagus banks, Lisbon, nov. 2022

## Where to take observation tours of wild living beings?

Parque Florestal de Monsanto is Lisbon's wildlife refuge. It has more than a dozen different routes... The riverside allows us to observe the fauna of estuarine ecosystems...

Quinta das Conchas e dos Lilazes have a very rich avifauna.

Finding a pair of raptors in a natural slope, next to a consolidated city, can be a pleasant and rewarding surprise. Portugal, 2015



## Citizen science

This process of empowering ordinary citizens to learn more about and from nature, share this knowledge, cooperating for a better understanding of the world around us, is a way of promoting Citizen Science.

Citizens that are more aware of ecological issues are better citizens, also when it comes to nature conservation.

Some species are more difficult to identify. The presence and help of wildlife experts is essential to the successful outcome of a bioblitz.



A bioblitz in Monsanto Park, march 2023

## Act to promote Biodiversity

Without trying to "domesticate" forest species, we learn how important it is to enjoy highly biodiverse ecosystems. In order to promote an increase in numbers and in the survival of wild species, we must act according to nature-based solutions. Our interventions must be such, that they are unnoticeable even to the most attentive eye.