



PORTUGUESE PILOT FACTSHEET

NATURAL AREAS FOR HEALTHY AND ACTIVE AGEING

The European population is rapidly aging and concentrating in the urban environment. The Portuguese population is no exception to this trend. Living in cities is advantageous for the older adults, providing better access to public transport and offering a greater variety of housing options, public and commercial services. However, life in cities leads to reduced contact with nature.



Natural areas function as restorative environments capable of providing physical and mental wellbeing to the populations that enjoys them. The existence of these natural areas near home within cities, provides the older adults stimulus to leave home, improving their mobility, promoting social interaction, reducing stress and offering a diverse and pleasant environment that counteracts the impairment of sensory functions experienced by older adults.

NATURAL AREAS IN CITIES: URBAN STREAMS

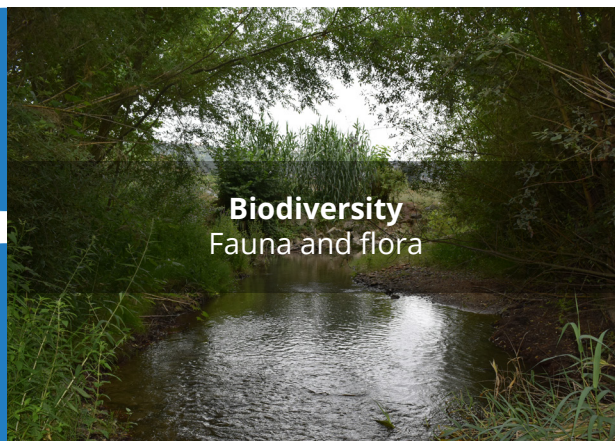
Urban streams, if well preserved, have the potential to increase natural areas within cities, contributing with **Blue** (water) and **Green** (riverside vegetation) areas. These ecosystems can be important biodiversity reservoirs, providing important services to the population such as better air quality, temperature extremes and floods mitigation, offering leisure and social areas, as well as outdoor laboratories for environmental education.

Ecosystem functions and Habitat

Primary production, nutrients cycle, and decomposition.

Provisioning services

Water and food supply for people, animals, and plants.



Biodiversity
Fauna and flora

Cultural/ social services

Recreation, leisure, and aesthetics. Educational and spiritual.

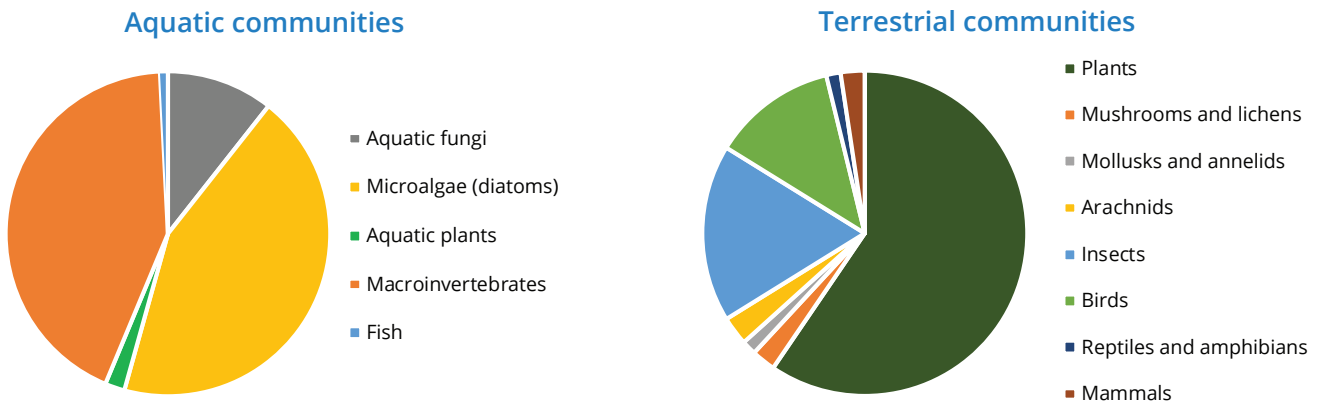
Regulating services

Flow, cycle, and purification of water. Recycling soil sediments.

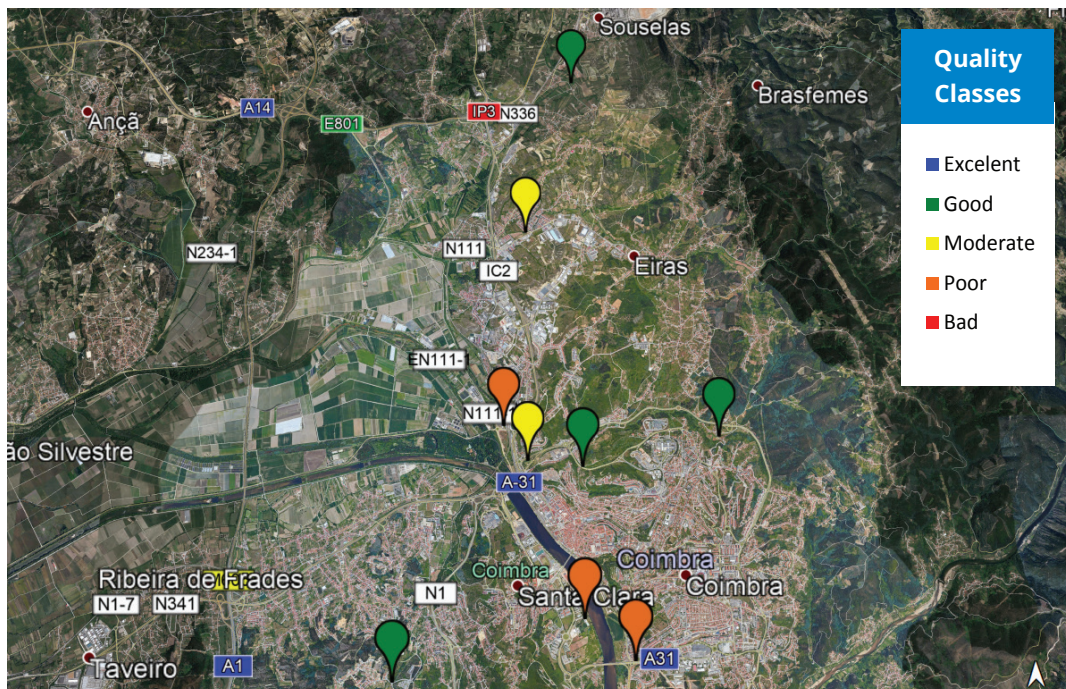
Ecosystem services of urban streams.

CASE STUDY: ANALYSIS OF URBAN STREAMS IN THE CITY OF COIMBRA (PORTUGAL) AND THEIR POTENTIAL CONTRIBUTION TO THE HEALTH AND WELL-BEING OF CITIZENS

The urban streams of Coimbra revealed an important biodiversity that can be observed by citizens and needs to be preserved.



Current ecological quality of the city's urban streams varies between **Good** and **Poor**, with well-preserved areas and others that need to be restored.



THE PHARAON PROPOSAL: ACTIVE CITIZENS WHO ENJOY URBAN STREAMS AND CONTRIBUTE TO THEIR SCIENTIFIC KNOWLEDGE AND RECOVERY

The Pharaon project aims to lead the older adults, but also all citizens, to:

- Know, enjoy and have fun in the natural **Blue** and **Green** areas in the cities near their homes;
- Being an active part in building scientific knowledge about these aquatic ecosystems, contributing with information on biodiversity, at the same time stimulating their cognitive capacities;
- Contribute with information regarding natural areas relevant to other citizens (for example, accessibility and security of the areas, aspects of greatest interest, degradation).



In order to achieve these goals, the Pharaon project is developing a digital application for smartphones/tablets and computers, that can be used to assess information about **Blue** and **Green** areas of the cities (including cultural and leisure activities, biodiversity, accessibility etc) and that at the same time allows citizens to register new relevant information. This application will be attractive, playful, and easy to use to guarantee the involvement of a wide population in the preservation and management of these areas, supporting the needs of the aging population. It can also be used for educational purposes or organized citizen science activities.

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