Planning a Park

in favour of Biodiversity and regulating ecosystem services

Monsanto Forest Park - Lisbon

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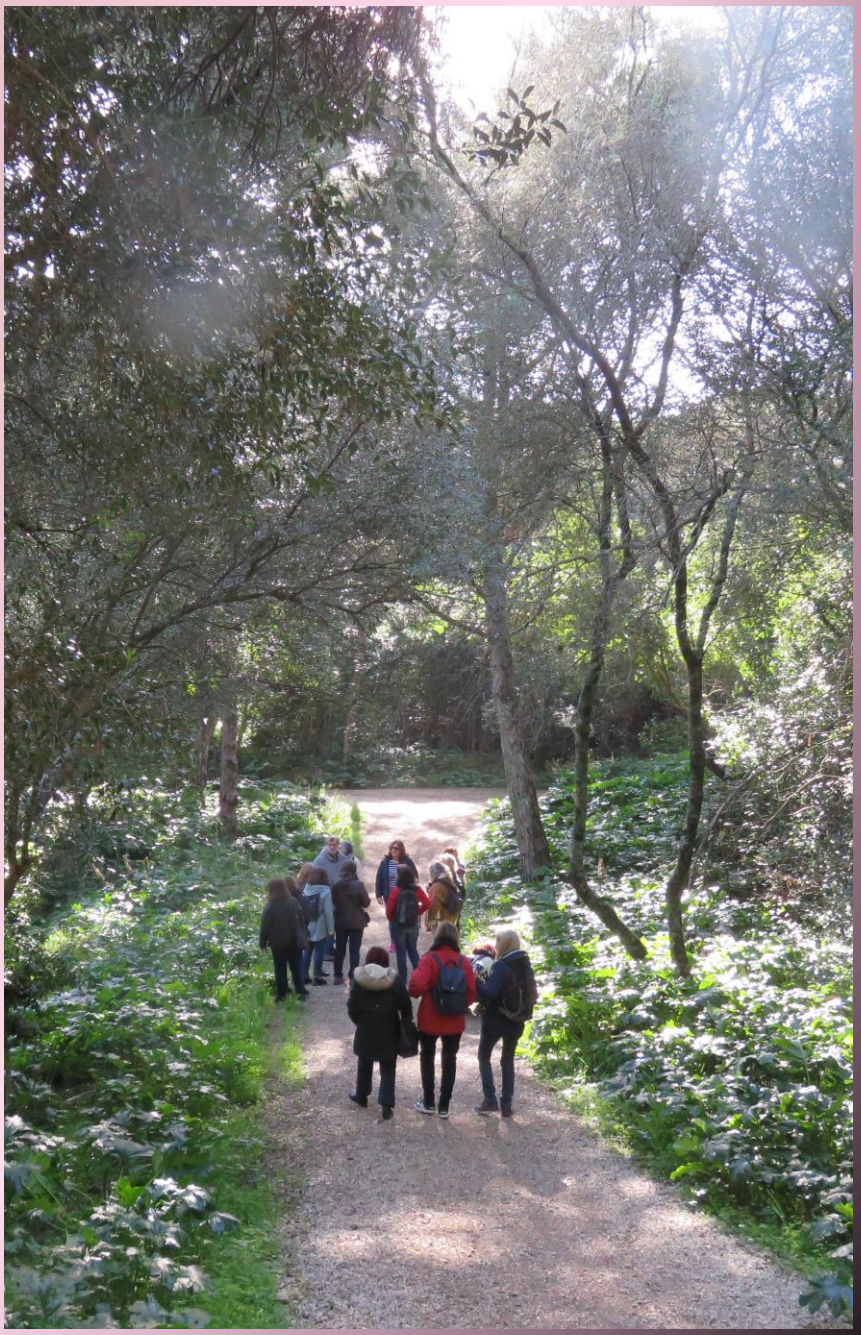
Context

1. Parks (Peri-urban or not) attract more and more users, looking for a better quality of life, (also mental health) and fighting the Nature Deficit Disorder.
2. In Peri-urban parks the Human pressure is even bigger in accordance with the proximity to urban centers although sometimes they don't shelter so high conservancy values.
3. The general urban population seeks ecosystem services from these parks.

Problem

1. The Conservation of Nature is always influenced by the presence of Man (There are no perfect users).
2. It is expected that visiting a natural site is a positive experience for the visitor and generates a positive impact in its environmental education and its future behaviour.
3. In certain parks it is possible to avoid visitation to certain areas during a period. In peri-urban parks this is generally impossible to avoid.
4. Some users feel they have the right to do whatever they want whenever they want because a public area is a place without any restritions to freedom.



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Solutions

1. Planning
2. Management
3. Monitoring
4. Regulations

Solutions

Why Planning ?

The Landscape reflects the behaviour of their inhabitants but it also induces certain kinds of behaviours: organization, aesthetic harmony, respect, non-littering…

A well planned Landscape is the cheapest way to regulate the correct use in a Park.

Solutions

Why Planning ?

1. To enhance the quality of the offer both to active and to indirect users (important ecosystem services)
2. To guarantee that both regulating, supporting and cultural services can be delivered in their best forms.

Planning

How to ?

1. **Zoning** divides the park into a **recognised set of areas**, each with **specific characteristics and regulations**.

- It allows to have different norms, regimes and recommendations in different areas: **different solutions in different areas** on the basis of the objectives (protection, maintenance and development of periurban areas with high biological, aesthetic, ecological and cultural values.
- It identifies the **potencialities** and the **vulnerabilities**, and sets the type of **buffers** that are needed.

Planning

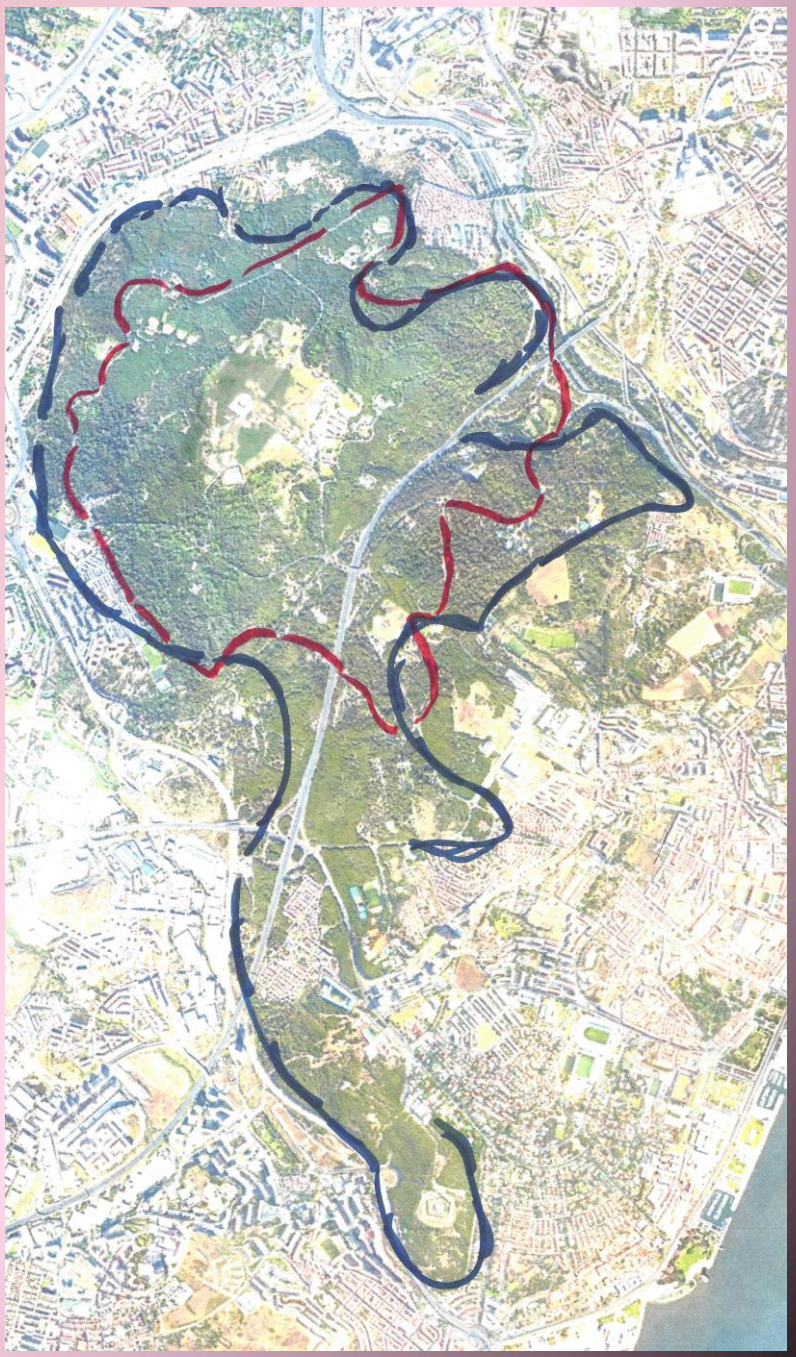
How to ?

2. Types of Use

- Recreation and leisure
- Outdoor sports
- Environmental Education (Nature Conservation)

3. Types of Landscape

- Convex (trails and belvederes = circulation)
- Concave (stay and profit)
- Borders and Forest Edges



Planning

How to ?

4. Concerns

- Viewpoints
- Mosaic
- Natural Organization of the Landscape (River gallery, Urban sites, Urban alotments / agriculture)
- Planning for the beauty of the landscape
- Planning for the beauty and the interest of the traffic (**<u>working on the detail</u>**)

Planning

How to ?

5. Hosting

- **Basic facilities**: car parks, public toilets and reception & visitor centres.
- **Educational facilities:** nature classrooms, educational farms, school allotments, learning workshops, guided educational paths, etc.
- **Recreational facilities:** horse-riding centres, bike hire centres, small amusement parks, and picnic and barbecues areas. (The use of **barbecues** in some parks enjoys a long tradition, but it involves a high risk of fire during the summer. Strong regulations on use of barbecues need to be put into place.)
- **Sports facilites** such as pitches and courts for outdoor sports, gymnastics circuits and water sports centres.
- Some of these recreation facilities can generate a **significant environmental impact** (noise, soil erosion). To solve this problem, **buffer zones** should be created around each of these infrastructures to mitigate the possible impacts.

Planning

How to ?

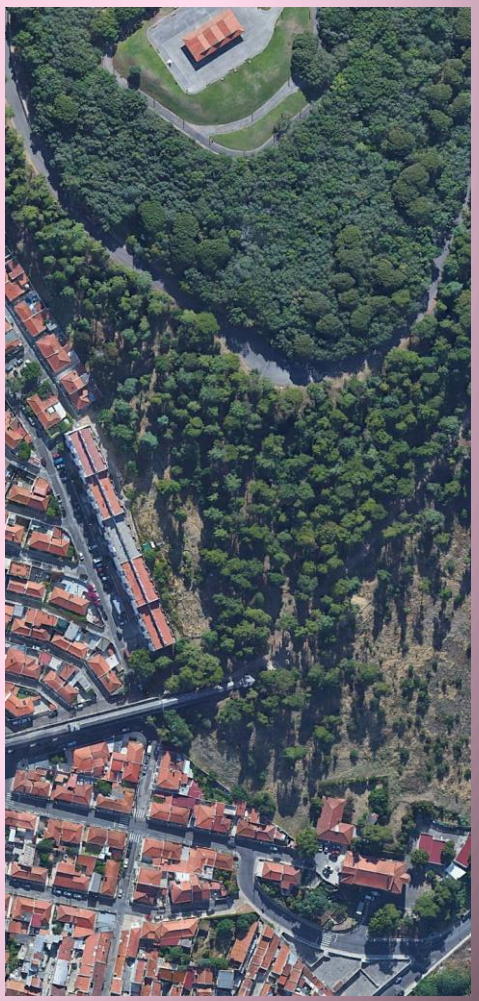
6. Access to the Park

- promote **accessibility** to the Periurban Park
- *special care* the interface between the Periurban Park and the limiting urban area (**Transition area**).
- **Connectivity** with the city (greenroofs, green walls and autochthonous plants gardens).
- **Trails** network.
- Events and celebrations are important

7. **Mobility inside the park**

- **Internal road** network.
- **Soft mobility** – foot or bicycle.
- Rapid access and **escape** roads.

8. **Social Inclusion**.



Planning

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Managemen

Holistic ecosystemic approach.

1. The limiting factors to be compensated
2. The imbalances in the food chain
3. The potential use of seeds
4. The nature-based solutions needed to enhance biodiversity
5. The restrictions to access to sensitive zones
6. The need to offer visitors a richer experience

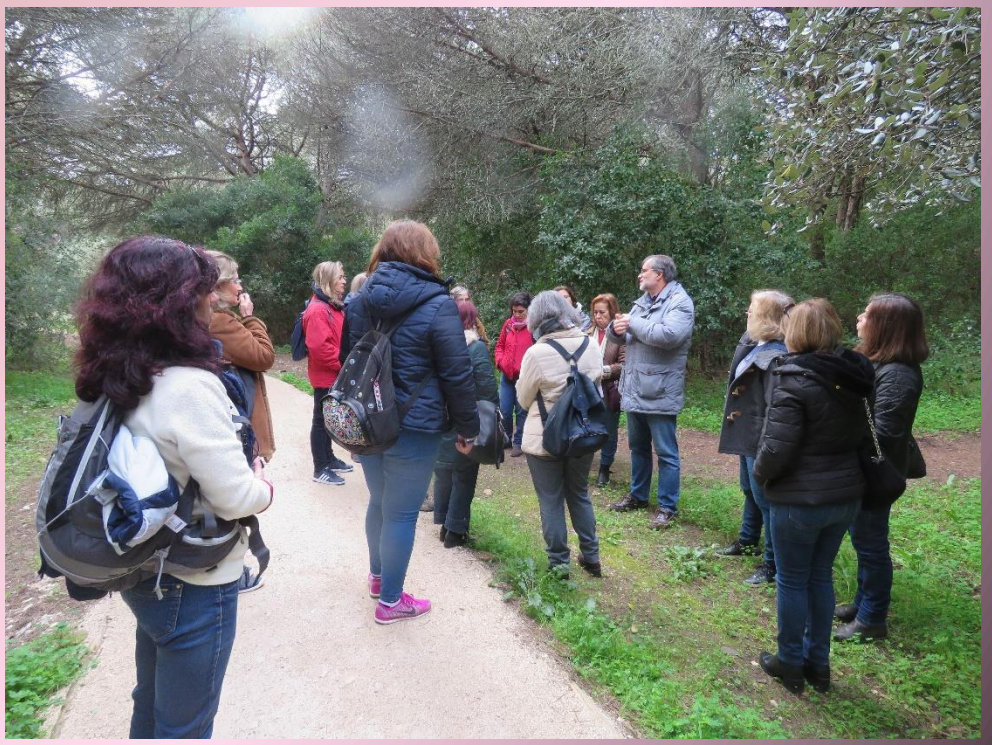
Management

Forest management

1. efficiency of the buffer effect
2. The creation of horizontal and vertical discontinuities of fuel biomass regarding forest fire protection
3. Ensure the ecological niches necessary for the maintenance of high biodiversity standards.

Planning and Management

Towards the enhancement of Biodiversity…



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