Carrying Capacity in Periurban Parks

The need to develop an appropriate methodology for Periurban Parks

Recommendations from EUROPARC's Periurban Park Commission

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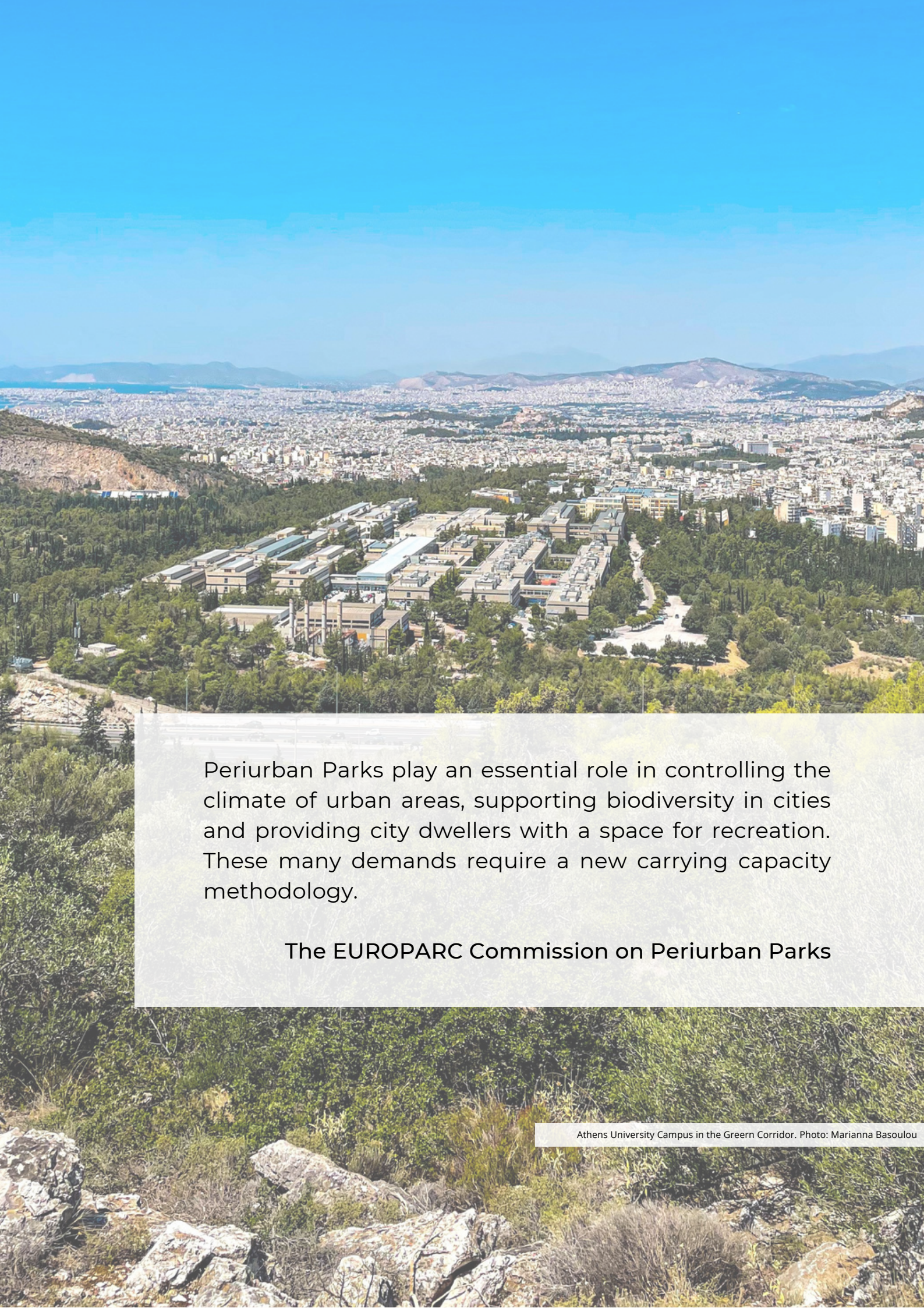

Periurban Parks play an essential role in controlling the climate of urban areas, supporting biodiversity in cities and providing city dwellers with a space for recreation. These many demands require a new carrying capacity methodology.

The EUROPARC Commission on Periurban Parks

Athens University Campus in the Greern Corridor. Photo: Marianna Basoulou

Adapting carrying capacity methodologies to Periurban particularities

Periurban Parks play a strategic role beyond biodiversity conservation. They deliver important ecosystem services to the nearby cities – such as mitigation and adaptation to climate change, pollution reduction, water provision, and more.

At the same time, and most importantly, Periurban Parks attract large numbers of users who visit them for recreational purposes - to practice outdoor sports and activities and to be in contact with nature.

Periurban Parks have experienced a **high increase of visitors** in the last decades, especially during, and in the aftermath, of the COVID-19 pandemic. This complicates even more the already difficult task of balancing visitors management while also ensuring biodiversity conservation. Not only has there been a rise in visitors' numbers but also of new recreational forms. This rise in visitor numbers and activities takes a toll not only on the natural environment but also on the local communities and visitors' own experience.

The EUROPARC Periurban Parks Commission has for a long time been tackling the difficult issue of visitor management. In this context, it produced the **Toolkit: Parks for Nature & People, Planning and Managing Periurban Parks** in which guidance and tips are given to better plan and manage parks through inspiring case studies.

As indicated in the Toolkit, good visitor monitoring systems and tools, – both in terms of quality and quantity – are essential for making sound decisions on visitor management. Of special interest are studies on **carrying capacity**. They provide an interesting approach to face the question: Is my Park crowded? And if yes, how crowded is it?

Currently, most of the studies available on carrying capacity have been carried out in Protected Areas, far away from cities. This is why the Periurban Parks Commission decided to organise a workshop to further discuss the special factors that should be taken into account when it comes to estimating the carrying capacity of a Periurban Park. The outcomes are detailed in this document.

Workshop on Carrying Capacity – Athens, January 25th 2023

In the framework of the LIFE UrbanGreeningPlans project, the EUROPARC Periurban Parks Commission took the opportunity to explore the carrying capacity concept and to discuss the distinctive factors that should be taken into account when it comes to estimate of the carrying capacity of a Periurban Park, as opposed to other types of Protected Areas.

In their presentation on Carrying Capacity methodology, Ricardo Nogueira Mendes (CICS.NOVA- NOVA FSCH) and Estela I. Farías Torbidoni (INEFC-UdL) introduced the Carrying Capacity concept and described the most common factors usually taken into account to calculate the Carrying Capacity in Protected Areas.

Download the presentation.

In the open session that followed the workshop, it appeared that given the increasing demand and diversity of uses within European Periurban Parks, there is an urgent need to develop and take into account the carrying capacity concept for the better management of these areas. In doing so, the following advantages were identified:

- Contribute to the increasingly valuable green areas for residents, visitors, and regular users;
- Make the different demands and behaviours from diverse users as compatible as possible;
- Improve well-being and general satisfaction for Parks' visitors and regular users;
- Enhance biodiversity and ecosystem services;
- Contribute to the establishment of quiet areas within the city's outskirts;
- Identify their specific problems and possible common solutions;
- Improve the overall management of these areas.

Event at Collserola Natural Park

During the discussion, several key aspects were identified related to the specific context of Periurban Parks. Regardless of their differences regarding typologies and management schemes, they all suffer from high pressure due to their location – among millions of residents and potential daily and regular users. The main issues described were:

- Pets-related issues (dogs on and off leash, dog waste);
- Large events (sport and music festivals, etc.);
- Night use (increased by technological gadgets and gear such as led lights that have changed the traditional schedules for runners and bikers for example);
- Cumulative effect of different activities (with increased effects among environmental impacts, soil loss, erosion, etc.);
- Challenges of coexistence of users (diversity of requirements according to different recreational and outdoor uses).

During the discussion, the challenge and complexity of managing these Parks were highlighted: they require the development of new and innovative approaches, regarding:

- Easy access. Compared with other parks or Protected Areas, Periurban Parks are more easily accessible and parking places cannot be used to limit access since visitors and users can just arrive on foot or get there by public transport, short runs or rides, etc.
- Multilevel governance. Management decisions in these areas are covered by different administration bodies or agencies, either at local, regional or even state level. This makes it often difficult to align decisions.
- Multilevel competence. The implementation of management decisions in these areas is often the responsibility of different competent administration bodies or agencies making it difficult to put it in practice rules and regulations.

In conclusion, EUROPARC Periurban Parks Commission recommends the follow-up of these findings under a joint action, which could explore and advance existing current models of carrying capacity and compare results in different contexts that could be used to design common and viable solutions