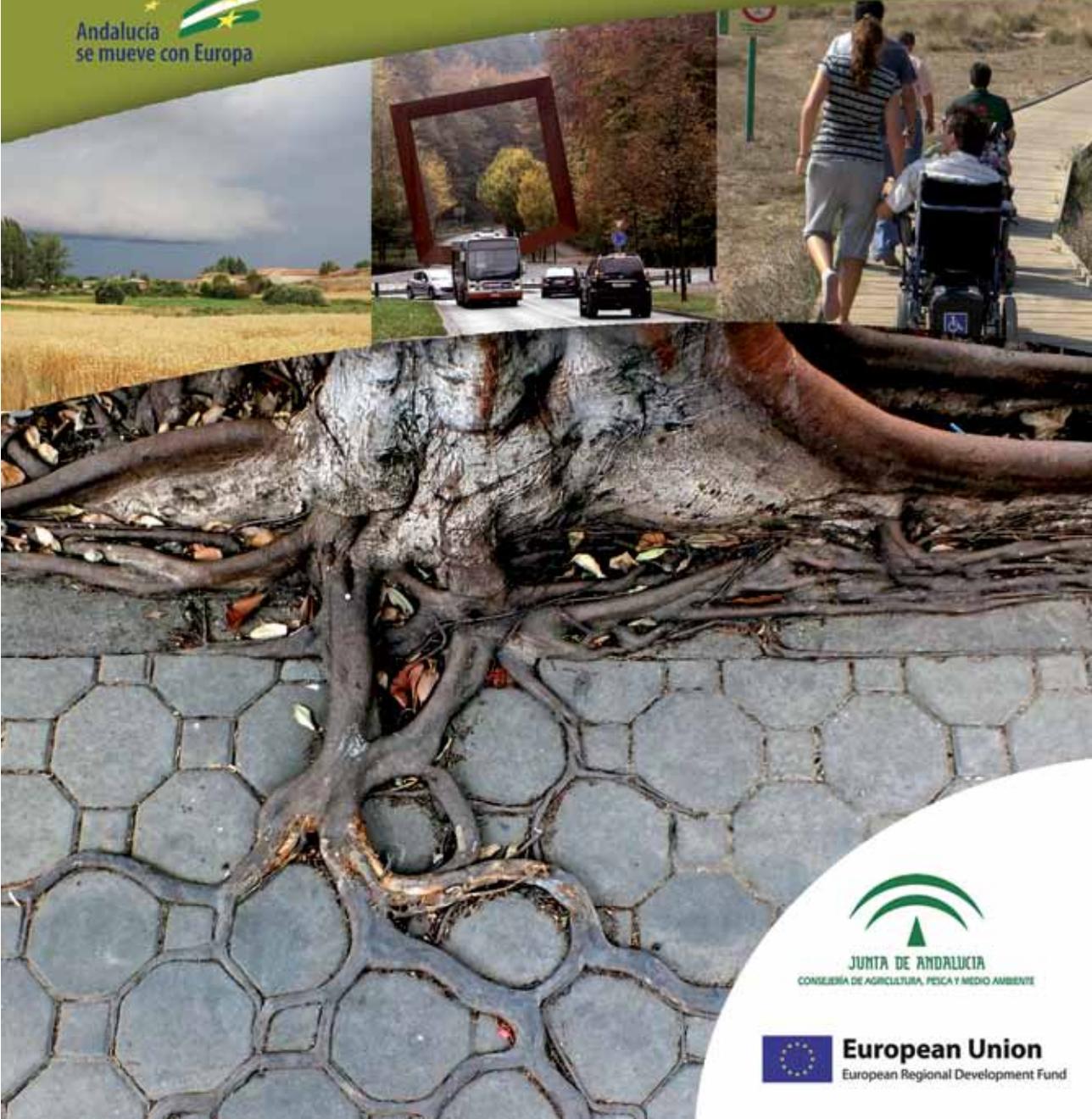


Nature and Countryside within the Urban Fringe

European Periurban areas:
characterization and management recommendations

Andalucía
se mueve con Europa




JUNTA DE ANDALUCÍA
CONSEJERÍA DE AGRICULTURA, PESCA Y MEDIO AMBIENTE



European Union
European Regional Development Fund

Nature and Countryside within the Urban Fringe

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Presentation

The Andalusian society's interest for environmental quality and its desire to preserve it as an essential basis for social development called for the enactment of a law, back in 1989, which established, according to the before mentioned principles, the Network of Protected Natural Areas of Andalusia. Considering the amount of time passed, it must be noted that this legal text proposed a strategy for treating the complexity that exist between the limits of urban and natural environments. With this in mind the figure of Periurban parks was created in order to preserve highly threatened natural values from the expansion of cities and offer citizens of major urban areas for their personal enjoyment. To this date, 21 Periurban parks have been declared in Andalusia.

Since then, the Andalusian government has maintained an active role in promoting policies to preserve and improve the quality of life offered by Periurban areas. Andalusia has actively contributed with its efforts as a member of the European Federation of Metropolitan and Periurban Natural and Rural Spaces (Fedenatur), resulting in the celebration in Seville, during 2010, of the International Technical Seminar "The Role of Periurban Natural Areas in New Urban Planning Models", occasion at which the "Declaration of Seville" was signed. This same drive has resulted in the study concerning the characterization of natural Periurban areas in Europe and with Andalusia's participation, along with thirteen other European partners, in the project Periurban Parks - Improving Environmental Conditions in Suburban Areas.

The Andalusian government's commitment to Periurban development is carried out on various institutional levels. These areas require complex governance and it is essential that there be connection and dialogue between regional and local policies. Our next challenge is to properly articulate the procedures concerning the management of Periurban parks since the responsibility of these areas now belongs to the Andalusian municipalities. We aim to achieve a management model which will converge with regional and European policies.

With the present publication we seek to provide a reference that may serve both technical managers and professionals who work in promoting European Periurban park policies. This document contains unpublished findings and conclusions of the above mentioned projects and studies, ranging from the characterization of these spaces to management recommendations and a compilation of policy recommendations. Our aim is for this contribution to be useful in terms of defining strategies as well as specifying and strengthening the European agenda regarding Periurban natural areas.

Luis Planas
Regional Minister for Agriculture, Fisheries and Environment
Junta de Andalucía

Introduction

FEDENATUR is a federation of 31 European organizations whose purpose is the protection and management of natural and rural areas located on the outskirts of cities or metropolitan conurbations.

FEDENATUR was created after the "2nd Symposium: Natural spaces in metropolitan and suburban areas" which was held in Barcelona in October 1995. One of the main conclusions from this meeting was the need to establish a network for the exchange of experiences on a European level, focusing on the management and protection of nature and biodiversity on a metropolitan level, within the framework of achieving the Local Agenda XXI sustainable city objective, adopted during the Earth Summit in Rio de Janeiro in 1992.

However, we quickly realized that it would not be possible to guarantee the protection of biodiversity in isolated natural and rural areas located in metropolitan zones and the high pressure these are confronted with, as long as these Periurban areas, as we call them, weren't part of a whole system.

With this concept in mind our association has taken the following steps.

In 2003 we organized the 3rd Symposium on natural spaces in metropolitan and Periurban areas where the debate was already focused on the role of Periurban natural areas in new urban planning models.

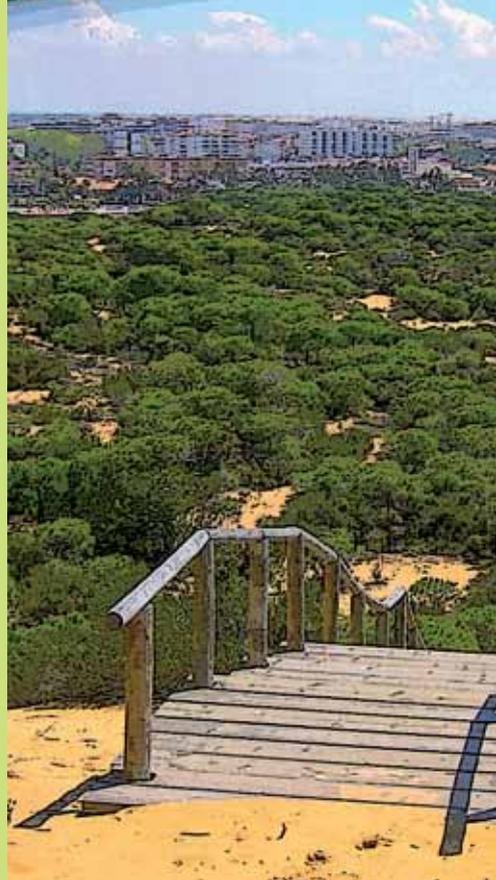
Five years later we promoted the IUCN recommendation "Establish networks of Periurban and natural protected areas" as you will see in Section 5.3

Aiming to share our concerns for Periurban areas outside of our network, mainly aiming at countries from former Eastern Europe, in 2010 we promoted a European cooperation project called Periurban Parks, being one of the more tangible results the book you now have in your hands, in which you will find the characterization of over sixty Periurban areas in Europe.

In 2010, during the celebration of the International Technical Seminar "The Role of Periurban Natural Areas in New Urban Planning Models", was approved the "Declaration of Seville" (5.2). The Declaration, which has been extensively distributed, especially to Euro parliament candidates, manifests the need to recognize Periurban natural and rural areas as key elements of green infrastructure within cities which can work as essential elements for citizens and the quality of life cities can offer. This approach fits in perfectly to the Green Infrastructure Strategy promoted by the European Commission, to which we have strongly contributed and which should be approved in late 2012.

Finally, we do not want to complete this project without addressing Policy Recommendations to all relevant authorities (on a local, regional, national and European level) in order to take specific steps to integrate rural and natural areas in our cities, which you will find in section 5.1.

Slimane Tir
President of FEDENATUR
President of l'Espace Naturel Lille Métropole (France)



1

Approach to periurban spaces



Parque periurbano Dunas de San Antón. Andalusia (Spain)

1.1. The context of natural periurban areas

Migration from rural areas to the city, which has played a major role in urban growth in Europe, has been particularly intense since the Second World War. As a result, today almost 80% of the European population live in urban and metropolitan areas. While affluence to the cities has been high, the enlargement in the surface areas and peripheral zones of the cities has been even greater, increasing by between 40 and 300% during this period. This extraordinary expansion has led to a major change in land use, ten times more than the next on the list.

In these population concentration areas, the increase in periurban areas in Europe is four times that of the urban areas. Forecasts for future years indicate that the increase in periurban areas will be greater than that in urban or rural zones, both in terms of surface area and of population. There is therefore an increase in the per capita consumption of land and a complex and relatively new phenomenon of periurbanisation, bringing with it hazards and opportunities of an economic, social and environmental nature.

A large portion of periurban areas are the result of development resulting from independent initiatives for which no global vision or planning giving them coherence has been established. Naturally, there are different models of urbanisation of the urban



Periurban project. Pilot Action. Tuscany (Italy)

periphery, in which the greater or lesser integration of the different territorial scales is a significant differentiating element. Nevertheless, certain negative consequences are common and typical. These include the use of agricultural land, traffic congestion, social integration problems, landscape fragmentation, loss of habitats and biodiversity, and more generally, the loss of ecological capacities and the increase of the ecological footprint. To sum up, the services of the ecosystems and the nature of the landscape in periurban areas may be highly negatively affected to a significant extent as a result of urban growth, depending on how the expansion develops. This may affect the quality of life of the population, both due to the conditions of life of those living in these periurban zones, and due to the need to use these spaces as an expansion zone for the population living in the city.

Therefore, conservation of the values of the ecosystems and maintenance of their continuity and connectivity must become a challenge for periurban zones. In addition, these areas play different roles in the fight against climate change, including providing water storage, acting as an air filter, preventing erosion or counteracting the increase of temperatures. For the economic activity, periurban areas may also provide support for alternative activities, including for example, offering places for local food production, giving an opportunity to innovative farmers, as well as helping to reduce CO₂ levels as a result of the reduction in the transportation of food products. The social role of periurban areas is equally important, offering areas for expansion for citizens escaping from

the pressures of urban life. These uses include leisure, health, tourism, education and human relations. All these challenges are on the European political agenda but need to be promoted and specified.

The challenge must be specified in terms of management and payment for the services provided by the ecosystems in a context in which the periurban change is taking place at high speed. This involves the development of coordination and cooperation in a multifunctional (multiplicity and relation among the uses), multisectorial (consideration of varied subject areas) and multi-institutional (administrations of territorial scale at different levels) territory. This is an exceptional space requiring integrated management to achieve periurban territorial cohesion, which seeks to link the different fields of action which, all too often, are considered independently: the environment, links between urban and rural planning, landscape, infrastructures, transport, leisure, health, etc. Periurban planning requires spatial, economic, social, environmental and managerial planning. Thus, periurban problems and opportunities need to be managed in their context and at the extensive level of urban-rural interface; this territory, independently and with the peculiar features of the different systems of territorial government existing in Europe (federal, regionalised, centralised, unitary states, etc.) is the appropriate unit for the strategic management and planning of integrated development in periurban areas, requiring special attention to ensure dialogue with local initiatives and collaboration among the city administrations and those of the neighbouring towns.

In this respect, metropolitan parks (or any of the different types of similar space existing in Europe under different names) must contribute to the organisation of periurban growth and form part of the so-called "green infrastructures", as part of a network of natural or semi-natural areas aimed at improving the health and resilience of the ecosystems, at contributing to the conservation of biodiversity and at benefiting human populations with the maintenance and improvement of the services provided by the ecosystem.



Aree Protette nel Comune di Roma (Italy)

There are many of these green spaces in Europe and this paper aims to contribute to their characterisation, to examine the strategies for their management and to encourage their promotion by European institutions. Therefore the conclusions from the different projects and studies have been grouped together in four different subject areas: first, definitions permitting the unified application of concepts (chapter 2, which includes the definition and typology established in the Periurban project); second, the characterisation of the spaces (chapter 3, offering the study for the characterisation of the natural periurban areas in Europe); third, a set of tools of technical interest (chapter 4, which includes the conclusions of the Periurban project); and lastly, in fourth place, a selection of the most significant political recommendations extracted from different manifests from recent years (chapter 5, listing the recommendations for the IUCN and the Seville Declaration, under the auspices of Fedenatur and the political recommendations of Periurban).

1.2. Fedenatur: a European organisation for the technical and political promotion of periurban spaces

European Federation of Metropolitan and Periurban and Rural Spaces (FEDENATUR) (www.fedenatur.org) is a European association gathering regional and local entities, which hold direct authority in the management of natural and rural spaces located in periurban and metropolitan areas. FEDENATUR was created in 1997, with the aim of promoting exchanges of expertise among its members on a variety of topics linked with the fact of proximity to urban areas. Today FEDENATUR brings together 34 members from six EU Member states and it is still growing.

FEDENATUR plays a permanent role in the identification and development of projects (Periurban, Métropole Nature, etc.), the organisation of seminars (Natura 2000 in the Arco latino (2006), III symposium international (2003): The system of open spaces in the articulation of metropolitan areas, etc.), participation in the preparation of studies and reports (Rapport to the DG ENV (2004): The Place of Periurban Natural Spaces for a Sustainable City, etc.), declarations and manifestos (FEDENATUR'S manifesto for their participation in the IUCN World Conservation Congress, Seville Declaration, Position paper on the European Union "Green Infrastructure" policy development, etc.) and distribution among the different European institutions.

1.3. Considerations on the study for the characterisation of natural periurban areas in Europe

If there is anything that characterises the natural and rural periurban areas throughout Europe, considered as a whole, this must be their varied typologies. The different definitions of "periurban park" cover very different realities when comparing the surface areas, land uses or management methods, which are just some of the many variables for which the characteristics differ. Similarly, the names and legal scopes of the protection entities also differ. These differences are a reason in itself, but also the start of difficulties, for carrying out a study of these areas based on common and compared variables.



Espace Nature Lille Métropole (France).

Now is the right time to analyse periurban spaces if we consider the special features of urban peripheral growth, the problems and opportunities associated with this phenomenon and the European and national policies appearing in these areas; in addition, it is clear from the little information generally available on this subject of social, territorial and environmental interest. In this respect, the Study of the characterisation of natural periurban areas in Europe, the conclusions of which are included in this paper, is justified for the above reasons and is unprecedented as, to date, there has been no available background information for analysis with respect to the different situations of the European periurban parks. The paper aims to provide a comparative characterisation, with special attention given to the social functions in the different natural and rural periurban spaces in Europe.

The study was made by the Department of Agriculture, Fisheries and the Environment for the Andalusian Regional Government, who carried out the methodology, analysis of information and drawing of conclusions, in collaboration with Fedenatur for the task of communicating with the areas responsible for the different participating spaces around Europe and in the collection of the questionnaires.

Data from 63 natural periurban spaces in Europe, belonging to the 13 countries that answered the questionnaires, has been analysed and compared. This information was collected and analysed between 2008 and 2012. During this period, the number

of spaces included gradually increased until the receipt of information was closed to permit publication. This gives an idea of the evolutionary nature of the analysis and the fact that more spaces may be included at a future date.

This publication lists the conclusions from the study divided into four subject areas with some prior notes on the methodology.

1.4. Periurban 2010-2012: an opportunity for awareness and the exchange of experiences

Periurban Parks - Improving Environmental Conditions in Suburban Areas (Periurban Project) is funded by the Interreg IVC Programme, implemented under the European Community's territorial cooperation objective and financed through the European Regional Development Fund (ERDF). Interreg IVC provides funding for interregional cooperation and promotes exchange, transfer of knowledge and best practices across Europe. The Periurban Project uses interregional exchange of experiences to improve policies on management of natural periurban areas. It focuses specifically on policy and management solutions to mitigate pressures on biodiversity. Focus on the creation and management of parks in natural periurban areas, in line with European environment policy and redevelopment in periurban areas, can impact positively on the environment and on halting biodiversity loss.

The project addresses the important and current subject of interconnections between natural, semi-natural and urban areas.

Facing intensifying urban sprawl and other contemporary pressures on the environment, the protection of periurban area becomes an important element of local and regional development policies. To this end, public authorities need to identify new and effective management measures in these areas that lie between the urban and rural ecosystems. Periurban parks, environmentally important transition spaces between the city and the countryside, are considered as an effective solution.

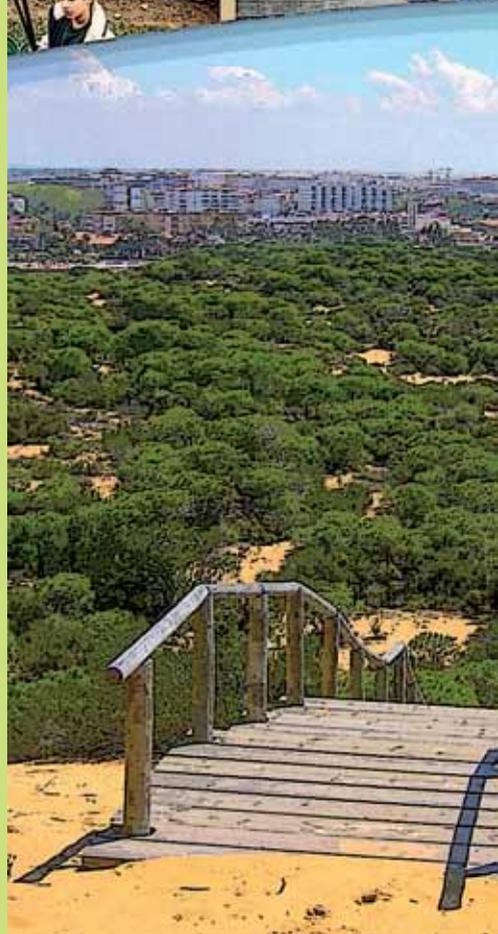
The project refers to topics such as ecosystem services and green infrastructures, which are currently being debated at EU and international level.

PERIURBAN brings together 14 partners from 11 EU countries. Partners all have experience in and competencies to manage periurban areas, but are at different stages in terms of developing periurban parks. While some have long promoted such parks, and currently face management and sustainability concerns, others plan for their implementation and build on different periurban management experiences. Thus, this group of partners representing regional authorities, local authorities, periurban parks and associations of parks, learn from each others' experiences in a continuous process of exchange.

The Periurban Project is an international voice emphasising the importance of periurban parks for sustainable development and quality of life in the European cities.



Periurban Project. Study visit in Vitosha (Bulgary).



2

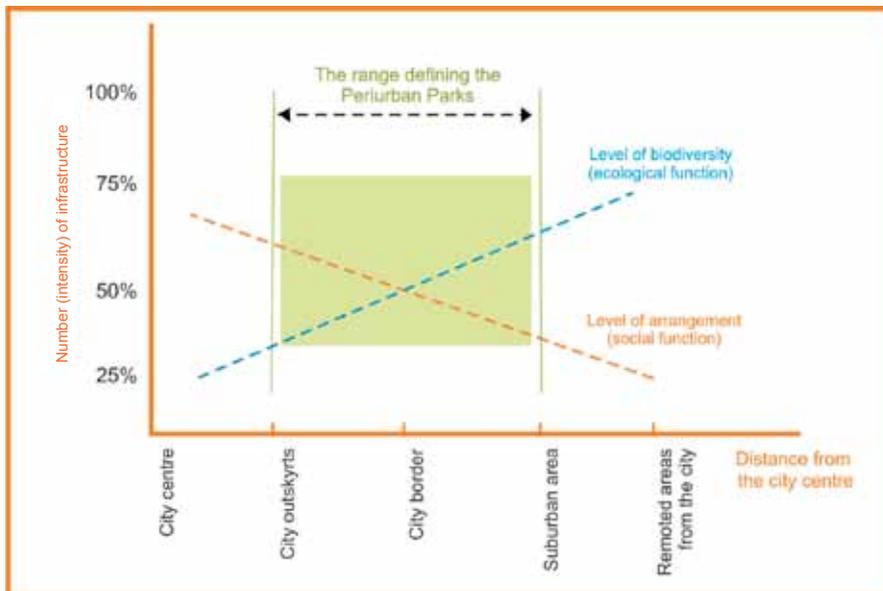
Concept and role of periurban parks

2.1. Definition and typology

Periurban spaces are transition spaces between the city and the countryside - located in the suburbs of urban areas or in spaces surrounded by urbanised areas with a high concentration of man-made constructions. Parks created in such areas have specific features and roles that distinguish them from other green/natural areas. These include:

- ▶ Distance from the urbanised area (the core part of the city);
- ▶ The density of open green spaces - natural and semi natural - as opposed to the level of urban arrangement and social function (settlement density, number of infrastructure, equipment for urban services and facilities for recreation, etc);
- ▶ The level of biodiversity (ecological value, the status of legal protection).

This is highlighted in figure, which presents a representation of this measurement:



Characteristics of periurban parks. Reference: Periurban Project.

On the basis of the above analysis, a periurban park can be defined as:

Periurban parks are the areas of ecological, landscape and cultural interest located on the outskirts of or in close proximity to urban settlements, but inherently interwoven with the urban environment, where environmental protection, recreational, cultural, educational, economic and development related functions can coexist, with the support of public policies, plans and actions and with full citizen involvement.

They are a key element of the green infrastructures system associated with urban areas and play a key role in the provision of ecosystem services.



Košice Forest Park (Slovakia)

On the basis of the parks involved the Periurban Project, 4 typologies have been identified and will be referred to throughout the Common Methodology. It should be noted that these are conceptual structures, while in reality they often co-exist within the same park area.

a. Protected Nature Park

This type of park consists of areas with a high natural, biological and landscape or cultural related values. Generally these parks are characterised by a high level of plant and animal biodiversity.



Parco Agricolo Sud Milano (Italy)

Regulations and restrictions for the use of this type of territory exist at European level (NATURA 2000), at national level and / or at regional and local level. Legislation on nature protection often provides direct rules and frameworks for activities. The prohibition of certain uses can have significant impact on the development process.

b. Semi-Natural Agro-Ecological Park

This type of park is composed of a mixture of natural and artificially created lands, which may include ecological areas, such as green corridors, or agricultural lands, such as crop fields, woods and wetlands.



Parque Florestal Monsanto (Portugal)

This type of park is not subject to particular European regulation (though it has been taken into consideration at EU level, particularly in the 2004 EESC commentary on Agriculture in Periurban Areas), but is subject to a range of legislations and policies at national and local level.

c. Green City Park

This type of park represents a green area located in very close proximity to or within the urban area, with a series of functions related to local use and addressed to local residents.



Parc de L'île-Saint-Denis (France),
Autor: Nicolas Borel

Given that it can express various forms of environmental features and values, it is subject to a range of legislations and policies at national and local level (e.g. Forest Management Plans, Local Plans on Green Spaces, Urban Development Plans).

d. Re-naturalised Park

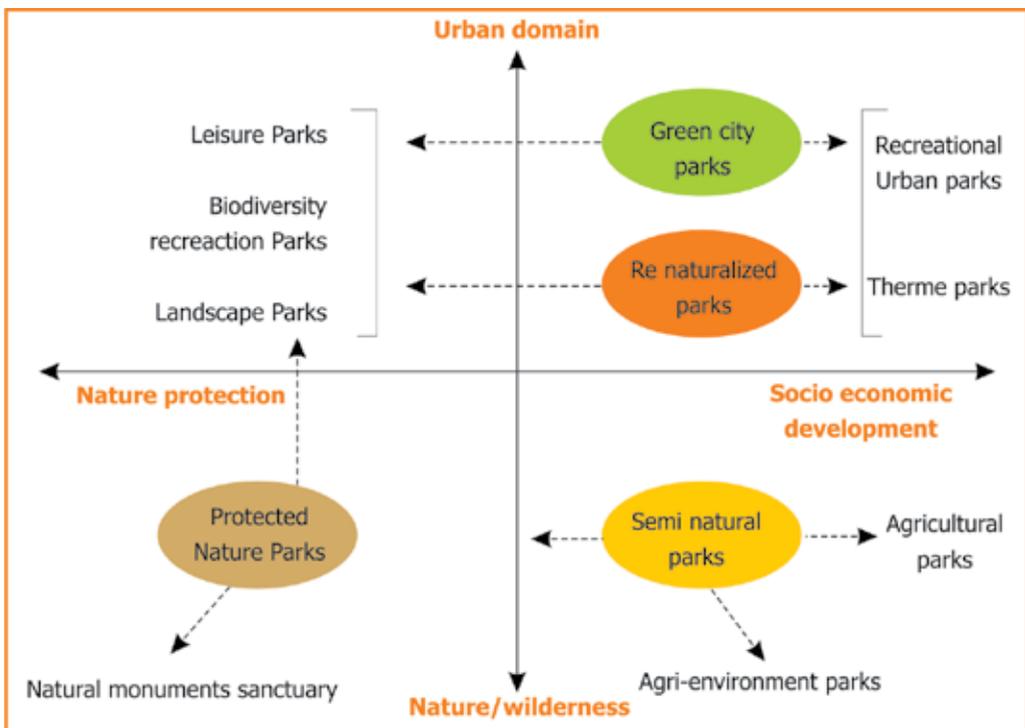
This type of park represents a landscape, which had previously been artificially denatured or deteriorated to some extent, including

ex-industrial areas, or dumping grounds, but has now been partly or fully recovered. The exact nature of the recovery varies, but will deliver new man-made landscape and archaeological elements, often building on the area's natural qualities.

Policies at local level may provide specific recommendations and regulations on the environment in this type of the park. This may include local policies or Master Plans for the reclamation of damaged or degenerated land.

These typologies are illustrated in figure, in order to illustrate the nature-culture and protection-development appraisal axes. The graphic illustrates:

- ▶ how these typologies are related to influences exerted on the periurban areas by the urban or natural domain (mainly related to the physical location of the park) and to the type of activities carried out in the park;
- ▶ how these typologies can assist in creating parks in response to specific territorial features and management aims.



Concept map of periurban park typologies according to the 4 identified typologies. Reference: Periurban Project.

2.2. The multi-functional role of the periurban park

Concerning the role of the periurban park, its added value results from the ability to address some or all of the following issues:

▶ Environmental Protection and provision of Ecosystem Services

The periurban park can improve local environmental conditions in many ways, for example by contributing to improving air quality (carbon sink function and mitigation of other GHG emissions), to preserving water resources, to preventing flooding risk (storm water run-off control; groundwater filtering) and to protecting or reintroducing plants, animal and soil biodiversity.

This role could be related to the provision of Ecosystem Services for inhabitants of surrounding urban areas. An ecosystem service can be defined as "...flow of materials, energy and information from natural capital stocks which combine with manufactured and human capital services to produce human welfare"¹. Moreover, the Millennium Ecosystem Assessment of U.N. (U.N. 2005), classifies ecosystem services into those:

1. Providing services (e.g. water, food, energy supply)
2. Regulating services (e.g. carbon sink, climate control, storm water drainage, filtering and decomposition processes);
3. Supporting services (e.g. biomass production, soil and humus production);
4. Cultural services (e.g. science services, educational activities, recreational spaces)²

Periurban parks can provide such services, both when the park is created to protect an important environmental or natural site and resources and when it is the result of recovery of areas previously allocated to different functions.

▶ Creation of Environmental Green Infrastructure

Closely related to the above function, the park may be considered as a vital part of a much larger territorial area for which it creates and reproduces environmental stability and sustainability for human settlement. This goes beyond the idea of a park as an island of nature conservation detached from the rest of the territory, proposing it as a part of a wider metropolitan or local green infrastructure.

Green infrastructure can be defined as: "strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering a wide range of benefits and services. Green Infrastructure includes natural and semi-natural areas, features and green spaces in rural and urban, terrestrial, freshwater, coastal and marine areas."³

In this context, some key features of the park include:

¹Costanza R. (1992), Ecological economics, Columbia University Press, NY

² Millennium Ecosystem Assessment (MEA) (2005), Ecosystem and human well being: synthesis, Island Press, Washington

³ http://ec.europa.eu/environment/nature/ecosystems/index_en.htm, June 2012

- the park as the backbone of a system of ecological networks, enhancing and grouping elements that would otherwise be developed separately. This system may include slow-mobility networks (e.g. cycle and walking paths, horse trails) or energy corridors. This concerns both areas that fall strictly within the perimeter of the park, but also territorial and urban policies concerning spaces located outside the park, close to or within the urban settlement.

- the park as an instrument to govern territorial expansion, especially concerning land take and urban sprawl containment. Considering that urban sprawl requires better and more rational land take control and a co-evolutive urban-rural relationship (EEA 2006), the park can be utilised in the planning of newer urban settlements, otherwise characterised by a lack of identity and high fragmentation. It can also contribute, on the basis of the eco-territorial structure and the characteristics of its open spaces, to restoring and maintaining the physical distinction between settlements and to defining rules for a more sustainable urban design.

▶ Local Economic Development

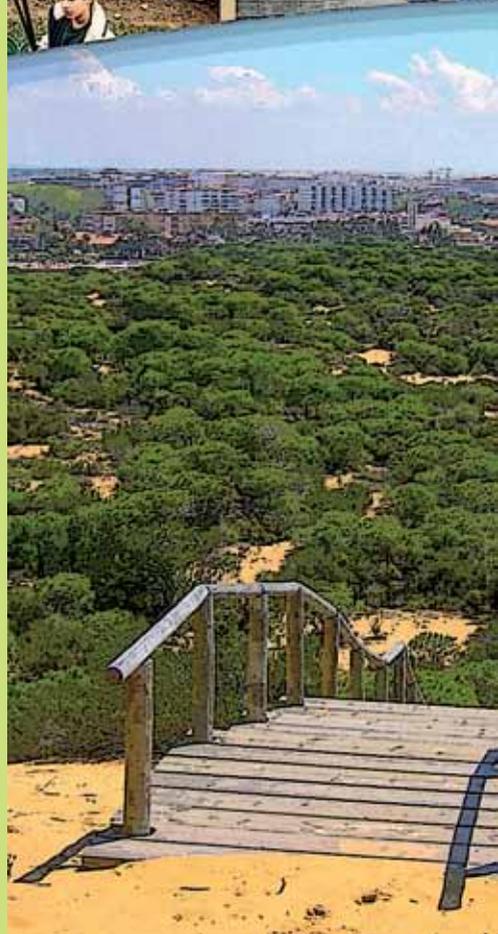
The periurban park can go beyond a predominantly protection or compensative role, towards one that defines and supports new models of local economic development. In this case, ecosystem functions are a prerequisite for a model that links park functions with local income generation. Examples include:

- new tourism and leisure networks and circuits, which generally relate to natural and cultural values present in the park. In this context, the majority of visitors may be local, but some areas may also attract visitors from further afield. Tourism encouraged by periurban parks is one of quality and sustainability, based on the region's assets and heritage (environment, culture, architecture, traditions, history, etc).

- environmental and rural development, including forestry and agri-environmental measures designed to regenerate and develop sustainable farming areas, can provide for sustainable income generation. These include the production of biomass for energy, to the sale of timber as a source of income for the park, and other sustainable forms of forestry products. It also covers local agricultural systems, based on an organic production and on short supply and distribution chains, which not only provide income to agricultural workers themselves, but also benefit the wider community through the promotion of healthy, local produce.

▶ Quality of Life and Social Promotion

The periurban park can impact the quality of life of inhabitants and promote social inclusion. It offers a green, healthy space for residents of the area a welcome change from the rush and smog that often characterises these areas. Benefits to health from regular exercise and clean air can be highlighted, along with educational and cultural advantages depending on services offered. Moreover, the social economy has assumed growing importance in recent years by meeting social demands that are not covered by the traditional market economy. Parks provide education for schools and childcare, services for people with disabilities and disadvantaged groups and, opportunities for volunteerism and socialising, to name but a few.



3

Characterisation of the periurban parks in Europe

presence in Fedenatur. This implies certain limitations as regards the conclusions of the study. Therefore, given the evolutionary nature of the study, it would be desirable to extend and diversify participation in forthcoming invitations to the project to countries which have little or no representation at present in order to increase the representativeness of the survey, so that the results obtained are better adjusted to the global nature and diversity of Europe.

The contents of the questionnaire (Appendix 6.3) cover the most characteristic subject areas of periurban parks, with special emphasis on social functions. It includes data on the location and physical characterisation, the legal and management framework, planning, operating regime and regulation, areas of influence and frequentation, services and equipment, functions and activities, promotion and stimulation, problems associated with the social functions and monitoring. The individual results of each questionnaire can be seen at <http://www.fedenatur.org/docs.aspx?lng=es&iddoc=60>

The analysis of the answers has a marked tendency to be merely quantitative and is presented in five blocks:

1. Location, size and ownership of the area
2. Planning and management
3. Accessibility, frequentation and visitor profile
4. Equipment and social functions provided
5. Problems related to the social uses

Finally, it should be noted that in some sections, especially those related to Block three, the characterisation is based more on the qualitative assessments provided by the managers of the spaces than on quantitative values, due to the evident lack of direct field data.

Participants in the characterisation study of periurban parks

SPAIN (30 SPACES)	Managing body
Name of Space	
The Vitoria-Gasteiz Green Belt	City Council of Vitoria-Gasteiz
Collserola Park	Collserola Park Consortium
Devesa-Albufera Park	City Council of Valencia. Devesa-Albufera Service
Gallecs	Gallecs Area of Natural Interest Consortium
El Valle and Carrascoy Regional Park	Ministry of Agriculture and Water for the Region of Murcia
Parc Agrari de Sabadell	City Council of Sabadell
Parc Fluvial del Ripoll	City Council of Sabadell
Parc Natural del Montseny	Barcelona County Council. Network of Nature Parks
Natural Area of Guillerics-Savassona	Barcelona County Council. Network of Nature Parks
Parc del Castell de Montesquiu	Barcelona County Council. Network of Nature Parks
Parc de la Serralada de Marina	Barcelona County Council. Network of Nature Parks
Parc del Montnegre i el Corredor	Barcelona County Council. Network of Nature Parks
Parc del Garraf	Barcelona County Council. Network of Nature Parks
Parc d'Olèrdola	Barcelona County Council. Network of Nature Parks
Parc del Foix	Barcelona County Council. Network of Nature Parks
Parc N. de Sant Llorenç del Munt i L'Obac	Barcelona County Council. Network of Nature Parks
La Suara Periurban Park	Regional Government of Andalusia. RENPA

<p>La Corchuela Periurban Park Dehesa del Generalife Periurban Park Los Villares Periurban Park Natural Park of Montes de Málaga Monte La Sierra Periurban Park Anella Verda Natural Park of Serra Gelada Natural Park of Serra Calderona Monte El Viejo</p> <p>Monte de Miranda</p> <p>Natural Park of Turia Pinar de Antequera</p> <p>Parc de la Serralada Litoral</p>	<p>Regional Government of Andalusia. RENPA Regional Government of Andalusia. RENPA City Council of Manresa Valencia Autonomous Region. Department for the Environment Valencia Autonomous Region. Department for the Environment Regional Government of Castille and Leon. Department for the Environment Regional Government of Castille and Leon. Department for the Environment Valencia Autonomous Region. Department for the Environment Regional Government of Castille and Leon. Department for the Environment Serralada Litoral Park Consortium</p>
<p>FRANCE (14 SPACES) Name of Space Arche de la Nature Grand Parc Miribel Jonage Espaces Nature de Tours Parc de la Courneuve Parc du Sausset Parc Jean-Moulin - Les Guilands Parc de la Courneuve Parc de L'Ile-Saint-Denis Parc de la Fosse Maussoin Parc de la Haute-Ile Canal Roubaix Parc de la Deûle - Espace de Périsseaux Val de lys et Basse Deûle Parc du Val de Marque</p>	<p>Managing body Le Mans Métropole SEGAPAL Ville de Tours Conseil Général de la Seine-Saint-Denis Espace Naturel Lille Métropole Espace Naturel Lille Métropole Espace Naturel Lille Métropole Espace Naturel Lille Métropole</p>
<p>ITALY (8 SPACES) Name of Space Parco Agricolo Sud Milano Parco Nord Milano Parco di Montemarcello-Magra Parco Regionale di Portofino Aree Protette nel Comune di Roma Parco Regionale Colli Euganei Parco Regionale Migliarino San Rossore M. Parco Della Piana di Sesto Fiorentino</p>	<p>Managing body Provincia di Milano Consorzio Parco Nord Milano Ente Parco di Montemarcello-Magra Ente Parco di Portofino Roma Natura Ente Parco Regionale Colli Euganei Ente Parco Regionale Migliarino San Rossore M. Comune di Sesto Fiorentino</p>
<p>HUNGARY (2 SPACES) Name of Space Budai Hills Landscape Protection Area Sas Hill Nature Reserve</p>	<p>Managing body Danube-Ipoly National Park Directorate Danube-Ipoly National Park Directorate</p>
<p>PORTUGAL (1 SPACE) Name of Space Parque Florestal de Monsanto</p>	<p>Managing body Câmara Municipal de Lisboa</p>
<p>BULGARIA (1 SPACE) Name of Space Vitosha Nature Park</p>	<p>Managing body Vitosha Nature Park Directorate</p>

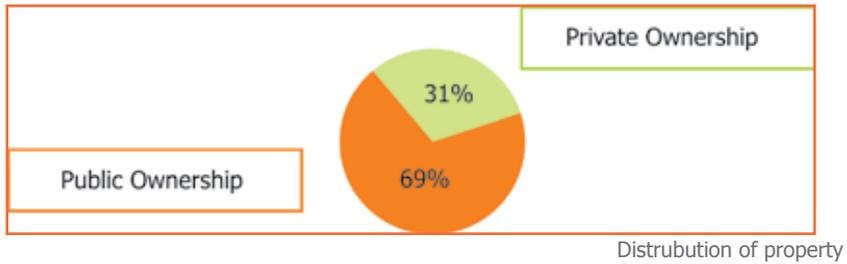
<p>GREECE (1 SPACE) Name of Space Mount Hymettus Aesthetic Forest</p>	<p>Managing body Philodassiki Enosis Athinon</p>
<p>POLAND (1 SPACE) Name of Space Inter-municipal southern forest complex</p>	<p>Managing body Metropolitan Association of Upper Silesia</p>
<p>THE UNITED KINGDOM (1 SPACE) Name of Space Colne Valley Park</p>	<p>Managing body GROUNDWORK</p>
<p>SWEDEN (1 SPACE) Name of Space Royal National City Park</p>	<p>Managing body Alliance of The Ecopark. WWF Sweden</p>
<p>BELGIUM (1 SPACE) Name of Space Fôret de Soignes</p>	<p>Managing body Bruxelles Environnement</p>
<p>THE CZECH REPUBLIC (1 SPACE) Name of Space Nature park Drahaň, Praha Troja</p>	<p>Managing body Municipal District Prague-Troja</p>
<p>SLOVAKIA (1 SPACE) Name of Space Forest Park Košice</p>	<p>Managing body Municipal Forests of Košice</p>

3.2. Analysis by subject area

a. Location, size and ownership of the area

One of the most striking features of the periurban spaces surveyed is the great variation in size (a characteristic that has been highlighted in other studies conducted by FEDENATUR). The size ratio between the smallest space (Sas Hill Nature Reserve, in Budapest, measuring 30 ha) and the largest (Parco Agricolo Sud Milano, measuring 47,033 ha), is 1:1567. This disparity explains why the mean value is relatively high: 4025 ha. On the other hand if we take the area which is the intermediate value in the distribution (median), the Riserva Naturale dell'Aniene (Rome), the figure is significantly lower, at 620 ha.

As regards ownership of the spaces, there is a clear supremacy of public ownership with a 68.9% of the total area over the 31.1% of private ownership. In addition, the areas in which public ownership is greater than private ownership are more common, and the majority of this property belongs to the town councils, and to a lesser extent to supramunicipal levels of government (association of local authorities, province or region or the State). Only in 17 of the 63 spaces surveyed is private ownership greater than public ownership.



Distribucion of property

As regards the geographical location of the periurban spaces surveyed, there is a predominance of green spaces located in a diffuse urban structure which extends seamlessly as an urban agglomeration (43.2% of the total). Next in importance are two groups of spaces: those that are located on the perimeter of the city (20.5%) followed by those which are clearly outside the city but not far from it (19.3%). 11.4% is made up of fully urban green spaces in the city and in only three cases are there arrays of small areas that form a green belt around the urban structure and which are managed as a single area by the same organisation.

In terms of their level of nature or conservation of their natural characteristics, the predominant green spaces are those with high or very high ecological value as they are formed by natural original ecosystems, retaining traces of the natural formations that have gradually disappeared over the years from around the cities. The ecological importance of these periurban green spaces is confirmed by their inclusion, in the majority of cases, in the different national or international protection systems or networks which includes 74.5% of the spaces surveyed. The most usual protection categories include the Sites of Community Importance (SCI) part of the Natura 2000 Network, and the Natural Park/Regional Park entities. To a lesser extent, other legal entities include the Natural Reserve, spaces protected by forestry legislation or protected landscapes, and of particular note in Andalusia the creation of a specific figure called the Periurban Park.

The second most important group (17.5%) corresponds to spaces in which well-conserved natural areas are mixed with other areas subject to a variable degree of transformation. A third group (12.7%) is made up of quite degraded areas which have subsequently undergone regeneration to enhance their value as green lungs and recreational spaces. The prime example is that of the Parco Nord Milano, which is built on former abandoned industrial zones which have been naturalised. Four of the areas studied belong to a specific category corresponding to periurban agricultural zones. The aim of these is, on the one hand, to encourage their maintenance as natural agricultural open spaces, as identifiable landscapes inherited from traditional agriculture and from a rural architectural heritage which is becoming more and more unusual in the vicinity of the big cities, thus protecting them from urban pressures and occupation and, at the same time, providing a location for leisure and recreational activities for the adjacent urban population in the form of itineraries, facilities or participation in the traditional activities carried out by the country folk. Along with the agricultural parks of Cataluña, of more modest size, another park of note in this category thanks to its

size is the Parco Agricolo Sud Milano, with more than 47,000 ha given to protecting the traditional cereal and rice crops which extend along the broad plains to the south of the urban agglomeration of Milan. Lastly, the Parco della Piana to the northwest of Florence, still at project stage, by means of urban planning aims to preserve the traditional agricultural space with an area of almost 5000 ha, of huge environmental, productive and landscape value, by preventing urban spread to the country and improving the environmental quality and habitability of the nearby cities by creating a new relation between the country and the city.

One of the most important objectives put forward through this survey was to get closer to the concept of interlinked space; that is, to determine the spread of the area of influence of periurban green spaces, understood as the territory in which the users who frequently visit these spaces live. Given the lack of data taken directly from users we have merely given the estimations obtained from the personal experience of managers and people responsible for these spaces in terms of distance and maximum travel time of the visitors. The average global values for the spaces surveyed gives a maximum distance of 25 km and 31 minutes travel time. It is certainly pleasing to confirm that these average values are quite close to the values estimated hypothetically prior to the survey based on data obtained from the periurban parks in Andalusia. Another point of interest is to determine the total population linked to or living within the theoretical zone of influence. This ranges between 45,000 inhabitants in the smallest and four million inhabitants, logically depending on the size of the urban agglomeration in which the space is located, giving an average of approximately 1,100,000 inhabitants, where the main city of the agglomeration is the city which provides the largest number of visitors to these spaces, as 62% of the total users come from the main city according to these estimates.

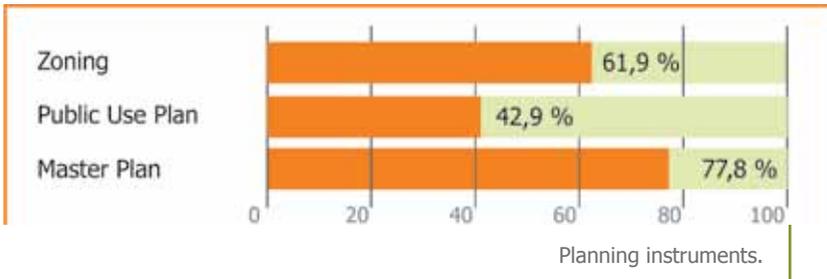
b. Planning and management

With respect to the legal measures affording protection to the periurban green spaces, although the overlapping of instruments from the sphere of territorial, urban and environmental planning is usual, there is a clear predominance of spaces covered by national or regional legislation concerning protected natural spaces, equivalent to 74.5% of the spaces surveyed. The most common entities are the Natural/Regional Parks or spaces included in the Natura 2000 Network. These are followed in importance by those spaces which are protected by municipal town planning regulations, equivalent to 21.2% of cases, while the rest of the spaces are distributed in similar percentages with cover by a supramunicipal or metropolitan measure, by territorial planning instruments or by agreements signed between different administrations. With respect to the level of effectiveness of the legal protection afforded to these spaces, the majority of the managers consider the level of protection is on the whole adequate or satisfactory. The main problem appears in those spaces not covered by legislation on protected spaces, as these are subject to the decisions of planning instruments of a reviewable nature, implying a significant level of uncertainty given possible variations in the regulation of uses, the level of protection or reduction in the scope of protection or because they are exposed to possible political changes in the local authority to which they belong.



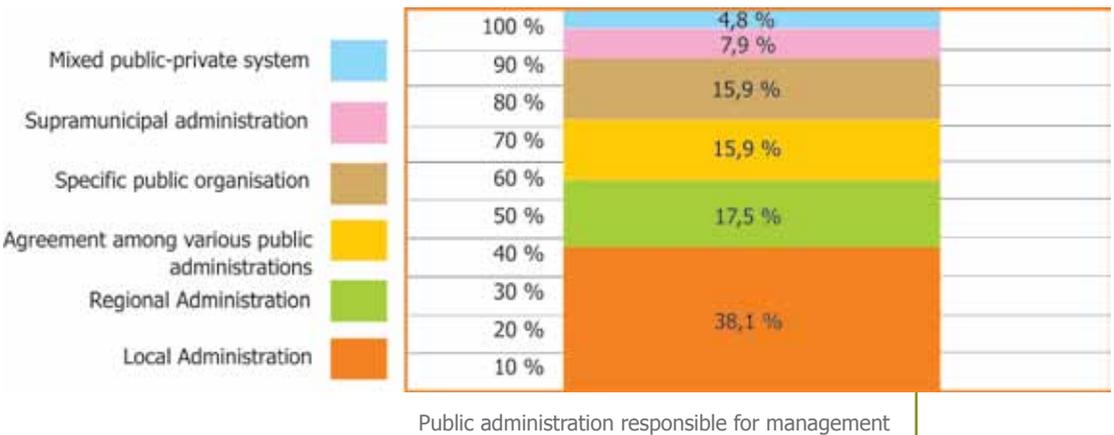
Parque Periurbano Dehesa del Generalife.
Author: Regional Government of Andalusia (Spain)

Periurban green spaces are the result of territorial planning processes which usually have internal planning schemes or instruments. The majority have a Master Plan in which the regulations for planning and use are established, reaching 77.8% of the total. This planning is more complete for 43% of the spaces surveyed that, in addition, have a specific instrument for the regulation of recreational activities and in 62% of the cases these instruments include the zoning of the space into areas differentiated by capacities of use or levels of protection.

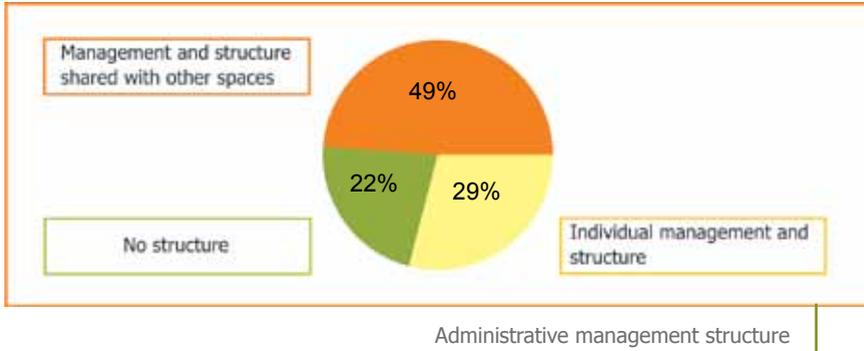


As regards the possibility of adopting a load limit in the event of possible saturation, none of the spaces has considered this measure, preferring other preventive measures such as the establishment of complementary and alternative spaces in the vicinity or the regulation of visits to the more sensitive zones by issuing passes.

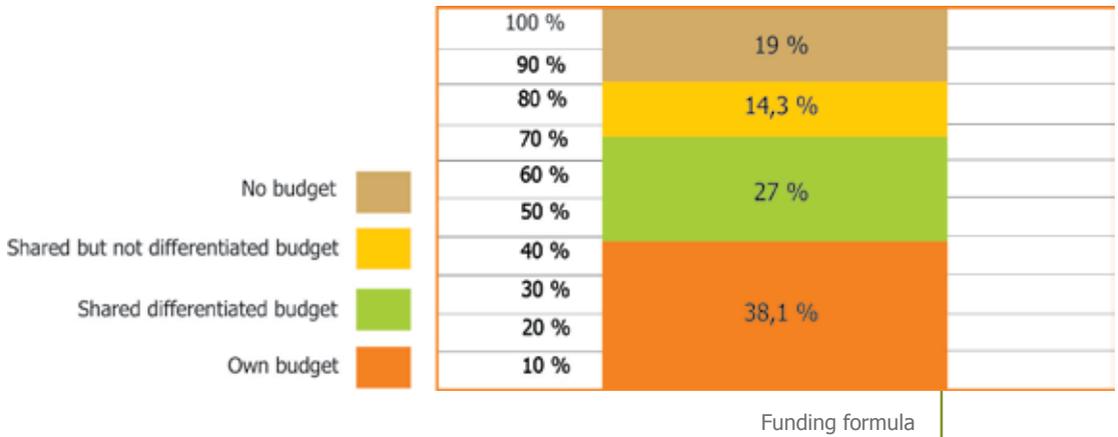
With respect to the management systems of the periurban spaces surveyed, there are four models which are of note. In order of importance, the most frequently occurring model is that of direct management by a local administration (38% of spaces). The other three models have very similar percentages: direct management by a regional administration (17.5%); management delegated to a specific public body (16%) and management by a consortium of different administrations (16%). The remaining percentage is divided in low percentages among other forms of management such as mixed public/private management systems or through supramunicipal organisations.



As regards the administrative structure or form adopted by the bodies or organisations responsible for their management, the majority of spaces are managed through common or shared structures for different spaces (49.2%); 28.6% of the spaces analysed have individual management systems as they have their own administrative structure and, lastly, 22.2% of these do not have a specific administrative system for their management.

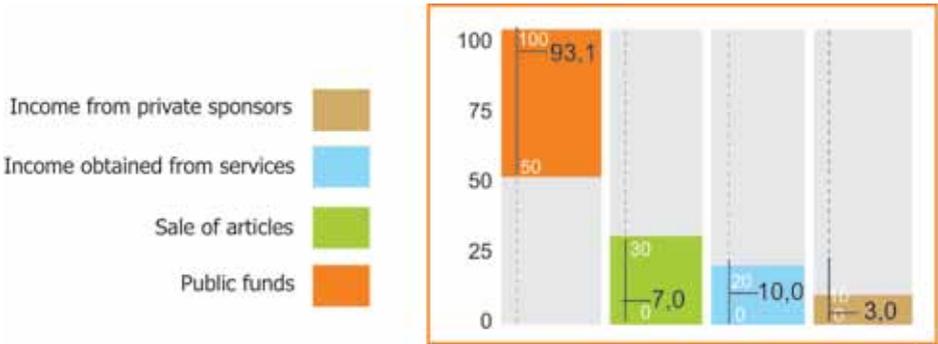


Funding is particularly significant in determining how these spaces operate, the source of funds and the distribution of the main expenditure. A broad majority (65.1%) have an annual budget, with those which have their own budget being more numerous than those which have a shared budget in which specific items are defined. Although the budgetary differences of some spaces compared to others is high, an indicative figure for available funds per unit area has been calculated. This amounts to an average annual budget of 316€ per ha.



In the income section, the largest item, by far, is from public funds. The percentage weight ranges between 50% at its minimum and 100% at maximum, obtaining an average value for the group of spaces surveyed of 93%. As regards the source of these funds, first in order of importance are the municipal funds, followed by regional funds, national funds and lastly European funds. Funding from private sponsors and collaborators is only present in 28.6% of the spaces surveyed, although it barely comes to an

average of 3% of the total funding and its maximum value does not exceed 10%. More important is the income obtained from the sale of articles, which ranges between 0 and 30%, reaching an average value of 7% together with the income obtained from the provision of services, with a maximum value of 20% and an average value of 10%. In the expenditure section, it should be noted that the distribution is much more uniform among those spaces surveyed and is distributed among various groups of main items. Expenditure on personnel is usually the highest and amounts to almost half of total expenditure. Next in order of importance with similar values are the items for maintenance of the installations and supplies, payments for external services (surveillance, forestry services, cleaning, etc.) and the promotion of public use, and the smallest amount is allocated to investment.



Distribution of income in % (maximum, minimum and average values)

The usual formula for the management of public use services and facilities in the spaces surveyed is a combination of facilities managed directly together with other services or facilities managed by private concessions. This model covers 60.3% of the spaces, and the average number of concession operators is 2 companies/space, although in many cases only one company may manage different services. The facilities and services awarded for use by private companies are very varied although they mainly include the services of guides, restaurants, drinks kiosks, points of sale of articles, riding schools, environmental education centres, camp sites and other forms of accommodation, etc. The other most frequent formula, present in 33.3% of the spaces, consists in the management of all the services and facilities directly by the public management body without the intervention of private companies.

The application of environmental quality and management systems is not widespread as it only exists in 31.7% of the spaces analysed. The main problem cited by space managers is the excessive rigidity of the majority of certification systems. As a result, some of the managers are working with specific models that are better tailored to the specific characteristics of the space.

c. Accessibility, frequentation and visitor profile

Access to most of the periurban spaces surveyed (more than 80%) is free. A fraction of this percentage, 19%, have specific areas to which access is limited in order to



Fôret de Soignes (Brussels)

protect the environment and special authorisation is required. In 20.6% of the cases, entrance to the space is free except for access to certain installations or facilities which require payment. In only two of the areas surveyed in France (Grand Parc Miribel Jonage in Lyon and Val de Marque, in Lille) access is subject to users paying an entry fee.

As regards the control of access, the opening hours are limited in only 22% of the spaces surveyed. This figure rises to 35% if the operating hours of some of the facilities in the green spaces are considered. Therefore, the majority of periurban green spaces surveyed operate as natural spaces with freedom of access at any time of the day.

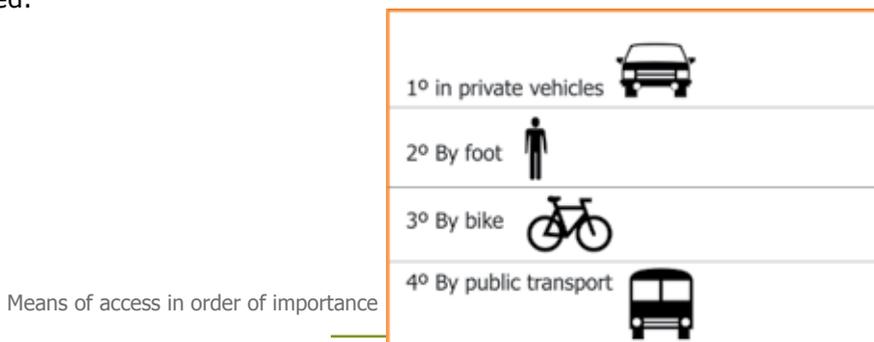
Periurban green spaces must be easily accessible in order to comply with the social functions for which they were designed. The location and connection to routes of communication are therefore fundamental aspects in the planning of these spaces. This principle is fulfilled in the majority of Andalusian spaces, as the conditions of access are optimum for motorised access and for other means, given the good links with fast communication routes and with the public transport system. Thus, 84.1% of the spaces are connected by motorway, allowing users from relatively distant residential zones to enjoy the spaces. Connection in 79.4% of the cases to the public transport system is another significant factor, as this makes access easier for a large number and varied selection of users from urban zones. On the negative side is the poor accessibility by non-motorised means of transport, as only 41.3% of the spaces are accessible along cycle paths. The supply of spaces for bicycle parking and for people with impaired mo-

bility can also be improved, as more than 58.7% of the green spaces do not have areas reserved for the former and almost half of the spaces are deficient in the latter.



Connection of periurban spaces to the transport network

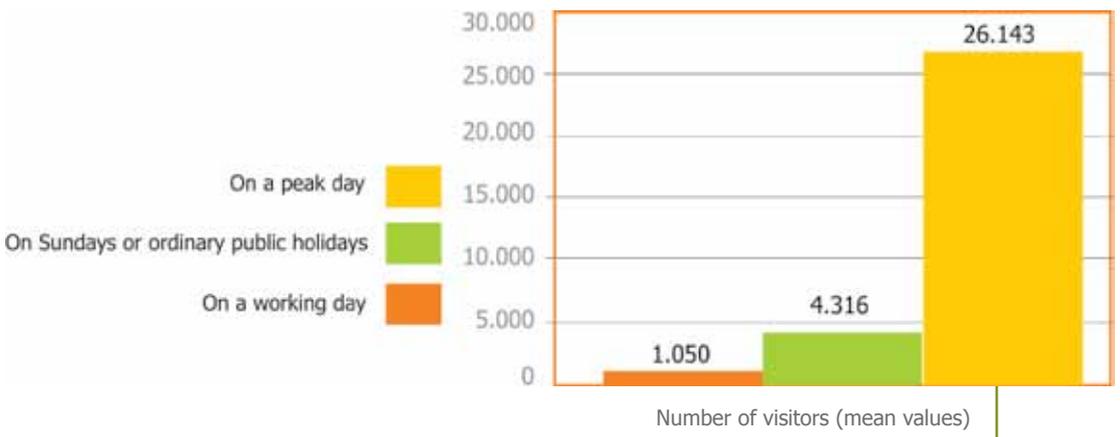
Conditioned by the above-mentioned means of access and by the travelling habits of residents of built-up areas, the means of access to periurban green spaces most widely used are as follows: first, private vehicles, by far the most used in almost all the spaces, followed by those who visit the space by foot. In third place access is by bike and in fourth place by public transport. Access by non-motorised means (by foot or by bike) in preference to the use of a vehicle only occurs in seven of the 63 spaces surveyed, and a determining factor is the position of the green space within or on the perimeter of the city. In all other spaces, the private vehicle is the principal means of access used.



Means of access in order of importance

The data given in the surveys indicates that periurban green spaces are spaces which offer a service to a large number of citizens. Nevertheless, the largest numbers of visitors are recorded at weekends and on holidays, giving mean values of 4316 visitors on Sundays and holidays and more than 26,000 on certain special days. One of the problems arising from the high concentration of visitors is how to make certain services profitable when they are really only in high demand for a few days in the year. To differentiate between those spaces which have a relatively significant number of daily visitors in addition to in holiday periods, two criteria have been established: those spaces with numbers of daily visitors in excess of the daily mean for the group of spaces (daily visits >1050) and those spaces in which the number of daily visitors exceeds 25% of the visitors to the same space on a public holiday (daily visits > 25% of visitors on public holiday). Based on the first criteria, we obtain a group of only five spaces:

Grand Parc Miribel Jonage, Seine Saint Denis (France), Devesa-Albufera Park (Spain), Parco Nord Milano (Italy), and Southern Forest Complex –Silesia- (Poland). The second criterion encompasses a larger group, consisting of eight spaces: Grand Parc Miribel Jonage, Val de Lys (France), Parc Agrari de Sabadell, Parc Fluvial del Ripoll, Parc Serra Gelada, Turia Natural Park (Spain), Parque Florestal Monsanto (Portugal) and Southern Forest Complex –Silesia- (Poland). As with the spaces mostly visited by foot, in order to achieve a significant daily number of visitors, the location of the space close to the built-up areas is a key factor. The above spaces have the dual role of functioning as leisure spaces at the weekend and at the same time as green spaces similar to the urban parks as regards their objective of a large number of daily visits from local residents. The average number of visitors in one year is estimated at 1,042,879. The most visited group of spaces among those surveyed and which easily exceed this figure is made up of ten spaces: Grand Parc Miribel Jonage, Seine Saint Denis, Val de Marque (France), Parc de Collserola, Parque Devesa-Albufera, Serra Calderona Natural Park (Spain), Parco Nord Milano (Italy), Vitosha N. P. (Bulgaria), Forêt de Soignes (Belgium) and Budai Hills (Hungary). In any case, it should be noted that except in a limited number of cases which continuously control visitors, for the majority of spaces, only approximate numerical estimates of visitors are available and these are provided by the managers themselves.



As regards the frequency with which users visit the spaces, the most frequent answer, although only slightly higher than the other options, is that citizens make several visits during the year in a random manner; that is, without any specific rate of visits. The second group in importance is made up of those users who visit the space one or more times per week. Further away, but with similar values, are another two options: visitors to the spaces every fortnight or those who visit once a month.

In terms of the different types of group in which visitors come to the periurban green spaces, small family groups predominate above the others. Secondly, with very similar values, are groups of friends and those visitors who come alone. These are followed, in order of importance, by school visits and lastly by other groups. One special characteristic of school groups, unlike the other groups who tend mainly to visit on holidays, is that they usually visit on a school day.

1 ^o	In family groups
2 ^o	Individual visits
3 ^o	In groups of friends
4 ^o	In school groups
5 ^o	Other groups

Types of visit in order of importance

To conclude the section on the characterisation of the different types of visitor or users of the periurban green spaces, we must underline that, with a few exceptions, there is a significant gap in the data required to provide certain knowledge about the visitor profile: the frequency and length of visits, their socio-cultural profile, their expectations and demands, their level of satisfaction, etc. Consequently, to improve management and be able to meet user requirements, there is a need to extend and expand the survey work and follow-up studies which are conducted in a very limited number of the spaces surveyed.

d. Facilities and social functions provided

A total of 664 facilities and services have been counted as available in the 63 periurban spaces surveyed (including parking areas, toilets and reception centres), equivalent to an average of 10.5 facilities/services per space. The number of publicly operated facilities/services (63.4%) is far high than those run privately (33.4%). Regardless of the ownership, more than half (53.3%) of the facilities/services require payment before use.

As regards the type or nature of the facilities/services, within the five groups mentioned in the survey: recreational, sports, educational, socio-cultural, tourism, mixed and social services, two groups stand out above the others: educational activities or those related to environmental education linked to the nature of the spaces and tourism activities essentially represented by small establishments serving food and drink (bars, restaurants), gift shops and small rural accommodation establishments.

The three most common recreational facilities are horse-riding centres (present in 22 spaces), bike hire services (in 15 spaces) and wild game parks for observing local fauna (in 11 spaces). There are two types of sporting facilities/services that stand out: facilities intended to encourage the practice of open-air sport (present in 29 spaces) and gymnastic circuits (present in 14 spaces), followed by other less frequent installations with similar values, including facilities for water sports, recreational fishing, adventure sports circuits, etc.



Parc Collserola. Barcelona (Spain)

The most common environmental educational services are those linked to learning about the natural values of the space, including the services offered by nature guides, the organisation of courses and workshops in specific subject areas (in both cases present in more than 30 spaces). Installations to support the environmental education activities are also common. These include Nature Classrooms (found in 29 spaces), kitchen gardens and plant nurseries for schools (in 27 spaces) and farm-schools (in 15 spaces).

Socio-cultural services are common in the periurban green spaces especially in three modes: holding family or school festivals (in 31 spaces), the organisation of cultural activities, such as exhibitions, theatres, concerts, etc. (in 30 spaces) and visits and activities in museums, exhibitions and environmental or cultural theme centres (in 21 spaces).

Tourist facilities and services include small drinks kiosks (in 30 spaces), followed by restaurants (in 28 spaces), accommodation centres and hostels (in 19 spaces), campsites-camping zones (in 15 spaces) and gift shops (in 14 spaces).

Finally, mixed basic facilities include car parks (in 56 spaces), public toilets (in 45 spaces) and visitor reception centres (in 36 spaces).



Vitosha Nature Park (Bulgaria)

Although, in both questions: the facilities available and the activities carried out in these spaces are closely linked, perhaps the second question is more significant when trying to identify and determine the true role of periurban green spaces. Whereas the facilities present are the answer to the question "what services are available in these spaces", the preferred activities of users are the answer to the question "how do citizens use these spaces". Although this is a key question to ensure better management, unfortunately there is a general lack of quantitative data from fieldwork in this respect. Only five spaces conduct continuous studies in adequate detail whereas in the remaining spaces the information is more qualitative than quantitative and is based on the knowledge inferred by the managers of these spaces.

Based on the available indirect knowledge, the data indicates that the most widespread activity in the periurban green spaces surveyed is taking short walks, found in 60 of the 63 spaces surveyed and is moreover, an activity performed frequently in almost all cases. In second place, an activity which is fairly widespread, in 59 of the 63 spaces, is having picnics although the frequency is lower as it is very frequent in only half of the spaces. A similar activity to the first is cross-country hiking or trekking following defined or improvised paths (activity found in 82.5% of the spaces). After these there are a series of activities which could be described as therapeutic or related to the wellbeing of the users such as close contact with nature, enjoying the scenery as a place to relax. This is more of a passive use of the space as a setting for looking at the scenery or as a place that offers the user a source of comfort, wellbeing and relaxation. in contrast to this

indirect function is the still not very widespread, but increasingly more frequent, active use of the green and forest spaces as a therapeutic resource. Over recent years there has been a progressive rise in periurban green spaces of programmes of visits providing treatment and recreation for groups with mental and sensory disorders, etc. Indeed, some spaces now feature therapy centres which use the space for therapeutic purposes. This type of activity also includes the specific observation of certain natural values such as flora and fauna. This group of functions has a significant frequency, found in more than 50 of the 63 spaces surveyed, ranging in frequency between frequent and very frequent, except for the observation of flora and fauna which tends to be more occasional.

A more detailed analysis by groups of function shows that the three most important activities in each of them are:

Most important activities according to activity typologies in Periurban Parks

Recreational functions:	% of spaces	Frequency
1 Taking short walks	95.2	Very frequent
2 Picnics	93.6	Very frequent - Frequent
3 Bike rides	76.2	Very frequent - Frequent
Sports activities:		
1 Cross-country hiking or trekking	82.5	Very frequent - Frequent
2 Mountain-biking	68.2	Very frequent - Frequent
3 Use of sports courts and pitches (tennis, basketball, football)	50.8	Frequent-occasional
Educational functions:		
1 Running environmental awareness campaigns and activities	68.2	Occasional-Frequent
2 Organisation of seminars, courses, nature workshops, etc.	65.0	Occasional-Frequent
3 Guided walks	63.5	Frequent-occasional
Socio-cultural activities:		
1 Voluntary work and associations	66.6	Frequent-occasional
2 Organising sports competitions	60.3	Occasional
3 Holding festive events linked to the environment or history of the city	58.7	Occasional-Frequent
Wellbeing and therapy functions:		
1 Observation of values relating to flora and fauna	82.5	Frequent-occasional
2 Seeking direct contact with nature	81.0	Very frequent - Frequent
3 Enjoying the scenery as a place to relax and source of a healthy lifestyle	81.0	Frequent – Very frequent

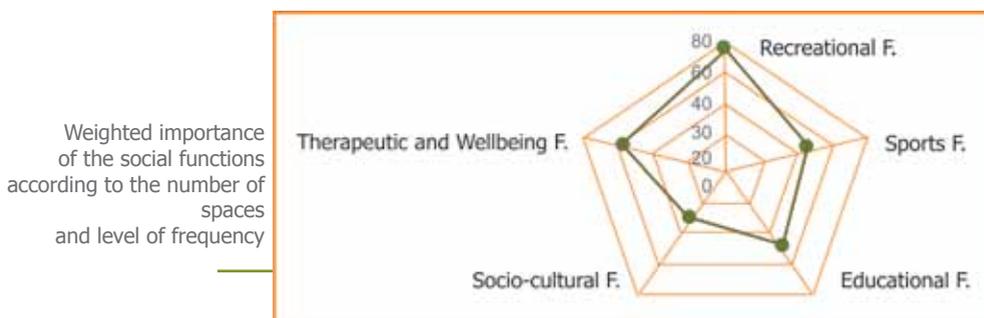
In order to assess the relative importance of the above groups of functions, the average number in % of the spaces which are in each of these groups has been calculated. In addition to the number of spaces in which an activity is conducted, its relative value has been calculated as a function of the frequency with which it is carried out, reducing the value if it is an occasional activity and increasing the value if it is a very frequent activity. Thus the number of spaces in which an activity takes place occasionally is given a value of 0.5; those with a frequently performed activity have the value 1 and those with a very frequent activity have the value 2. Lastly, the value of the sum of the spaces with the correction factor according to its frequency is expressed as a percentage using the following formula:

$$\frac{\text{SUM (No O} \times 0.5 + \text{No F} + \text{No VF} \times 2)}{\text{Total No of spaces} \times 100}$$

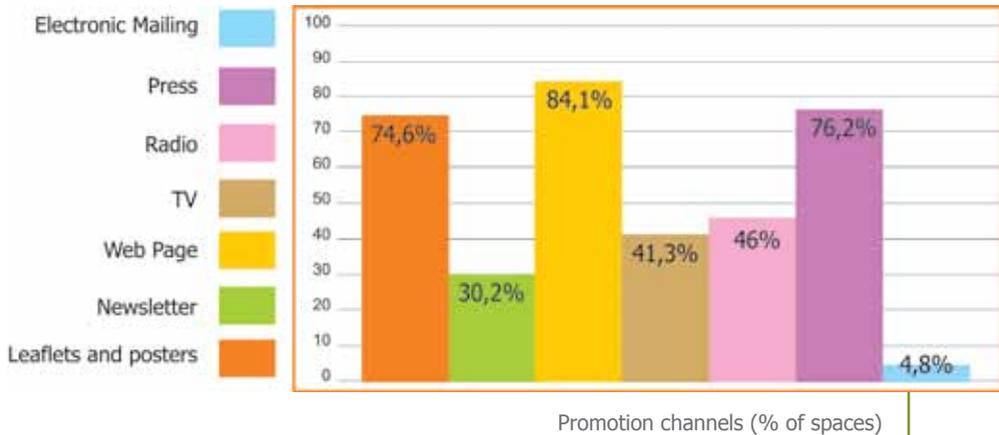
From the results obtained and shown in the following table, the group of recreational activities stands out among the most significant functions, with the maximum value obtained, followed in importance by the activities linked to therapy and wellbeing. In third place is the group of educational activities followed by sports and lastly socio-cultural activities.

It should be noted that this valuation of the level of importance according to the average number of spaces taking part in the different activities is merely an indirect approximation which must be supplemented by further surveys to provide a more in-depth and nuanced view of this importance based on other factors such as the percentage of users in each group of activities, the length and frequency over time, etc.

Groups of functions or activities	Relative importance according to No of spaces and level of frequency (%)
Recreational activities	76.3
Therapy and wellbeing activities	60.2
Educational activities	50.2
Sporting activities	46.5
Socio-cultural activities	31.2



A brief part of this study describes the activities to promote social and leisure uses by the managing bodies of the periurban green spaces. It must be noted that the development of stimulus tools remains limited, as only 22% of the spaces surveyed have a plan of this type. Nevertheless, high use is made of promotional tools with the most common including setting up websites (84.1% of spaces); advertisements in the press are also common (76.2%), use of leaflets (74.6%), radio advertisements (46%) and 30% even have their own newsletter or magazine which is published regularly.

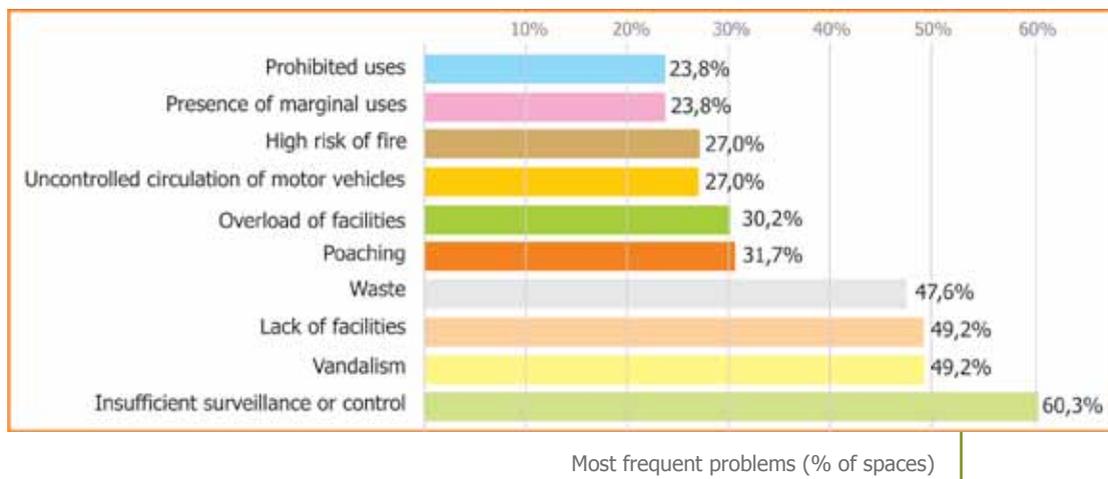


Most of the spaces run programmes designed to promote visits by the general public and by schools, and they host gatherings and special events relating to particular dates or celebrations of local interest (theme festivals connected with the seasons of the year, with the school calendar or with certain natural processes such as bird migration, meteor showers, etc.) resulting in an average of 4.6 events per year per space. The involvement of local associations and groups is also an important feature in the functioning of the periurban spaces with an average of three participants per space, and almost half of these spaces have a facility which can be used to foster the operation and participation of these groups.

e. Problems detected and monitoring of uses and activities in the periurban green spaces

The answers given by managers in the section of the survey about the problems and limitations associated with the social uses of the periurban spaces reflect the presence of a series of common problems that affect the majority of these spaces, with the consequent need to study possible solutions. One of these recurrent problems stands out significantly: lack of surveillance, which is mentioned in 60% of the spaces surveyed. This is followed by two groups of problems which are mentioned with the same frequency (affecting almost half of the spaces) and corresponding to having insufficient facilities to meet demand and the problems of vandalism or badly behaved visitors, which is reflected in problems for the conservation of the installations and the increase in maintenance costs. The fourth group of problems in order of relevance corresponds to the large quantities of litter and waste. Other frequently mentioned problems include

poaching (31.7%) and the lack or overuse of facilities at certain peak times (30.2%); high risk of fire, and the presence of marginal uses (prostitution, drinking sessions involving groups of young people, etc.) and other prohibited activities which interfere with the normal use of these spaces.

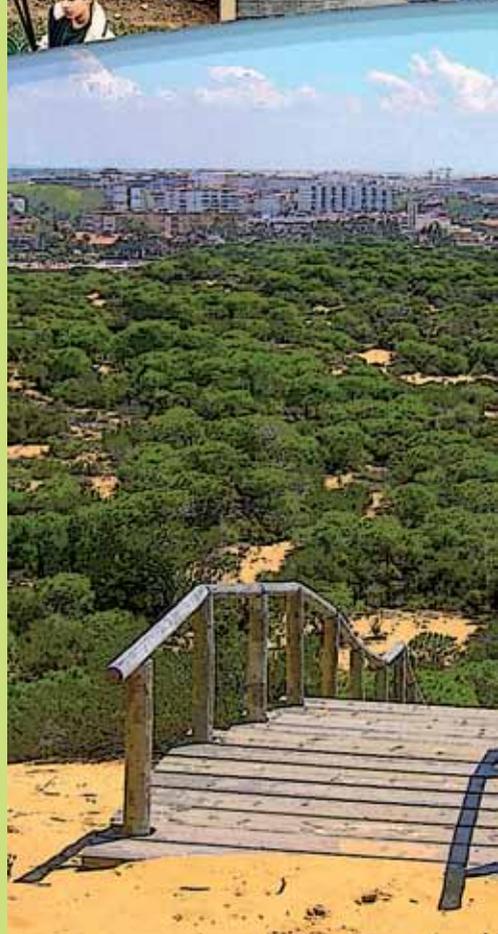


The study and monitoring of the social uses in the periurban green spaces, as has been seen throughout this paper, is one of the main areas where improvements can be made to provide more appropriate management, given the general lack of monitoring studies available. The most frequent control and monitoring activities are those relating to the condition of facilities, since this is an extremely sensitive issue affecting the safety of users and, in the event of an accident, could lead to conflict with the government administration responsible for these spaces. These checks are carried out continuously in 81% of the spaces and, on the whole, with a frequency ranging from every month to every six months.

Surveys designed to ascertain the opinion of visitors and how they use the space have been conducted in 57% of the spaces, but only occasionally, and only three spaces run them at least once a year. The lack of data thus hinders analysis of the degree of overall satisfaction of the users of these spaces. Other studies or controls, such as the number of visitors or the number of cars entering and their impact on the environment, are found in fewer than 40% of the spaces surveyed. Those which keep track of visitor numbers normally do so every day, while vehicle counts are usually taken on a weekly basis. As regards the impact of users on the natural values of the space, studies are usually only very occasional.



Vitosha Nature Park (Bulgaria)
Author: Filip Helbig



4

Recommendations for management

4.1. Key points for management

a. Policy and regulatory aspects

- ▶ Legal acknowledgment of periurban parks is an important step towards simplifying the process of policy and regulatory development of these areas.

Even when the national and local structures do not currently allow for this legislation development, the bodies creating and managing periurban parks should keep this concept in mind and should continuously search for opportunities to influence policy development. They should take a pro-active role in demanding that the periurban park is recognised as a legal entity and requires its own specific legislation.

The regional level appears to be the most suitable level to begin this process.

- ▶ It is essential to integrate policies and planning tools for periurban parks into mainstream planning practices and policies for local development.

These policies should go beyond the traditional urban-rural planning divide, which has been unable to stop the loss of green areas for development in urbanising Europe, and instead focus on this area as an interface. Strategic spatial planning in periurban areas can interconnect plan-making, decision-making and implementation, resulting in a more coherent and coordinated long-term spatial logic for land use, based on a more process-oriented, socially-inclusive, multi-level and multi-sector approach.

- ▶ Land use planning is a basic tool of creation or protection of periurban parks.

The ultimate aim must be to integrate periurban parks into strategic planning documents. In this case, the issues of natural areas and periurban parks are considered in a broader context of local socio-economic development and promotion of the territory.

Land use planning allocates ground for periurban parks through a number of techniques that include: zoning, regulating urban development and green structure planning (including urban forests). It also enables the creation or development of a wider ecological network, encompassing both green areas inside and outside the city (see also: environmental aspects).

One means of planning the park is zoning, which divides the park into a recognised set of areas, each with specific characteristics and regulations. Zoning defines spatially the opportunities for the physical implementation of norms, regimes and recommendations. This instrument reflects the need for different solutions in different areas on the basis of objectives for protection, maintenance and development of periurban areas with high biological, aesthetic, ecological and cultural values.

- ▶ Effective inter-institutional governance can be assured by the creation of voluntary management partnerships.

Such partnerships, grouping all necessary public and private stakeholders, perform a strategic role in setting out and implementing the goals and activities of the periurban park on the basis of relative policy and regulations. The institutional partnership can help to overcome institutional bottlenecks caused by lack of effective communication and coordination, and resultant slowing down of the decision making and management process.

The institutional partnership could be: a specific structure, including a public/private agency, a public structure in charge of inter-sector park policies or sector based agency.

▶ See also references to the sections: Management Aspects and Environmental aspects.

b. Management aspects

▶ An independent management structure is the most effective at coordinating and implementation issues related to the periurban park.

An independent management structure would not only to be in charge of daily activities of park maintenance, but also of long term planning coordination and implementation.

Such a structure:

- would ensure effective interaction between plans, policies, projects and action in the field of park's creation, maintenance and management;
- should also define inter-institutional agreements with all related stakeholders, specifying reciprocal duties, commitments and a system of land use;
- would focus on integrating the park into local development strategies and enhancing social awareness about the values and heritage of the park and its role as tool for sustainable local development.

▶ A long term, jointly agreed management strategy is a pre-requisite for successful park management.

A management strategy can take many forms, either building on existing tools (e.g. Environmental Management Plans) or being developed ad-hoc. In all cases, it must be integrated with a clear and shared analysis of the issues and functions of the park and the main goals and actions to pursue.

Moreover, the plan must be developed in coordination with all interested actors (public and private), to ensure that they are aware of the proposal being made and can influence them at the design stage. Though this takes time, it helps to avoid conflicts further down the line. Management strategies should include a system for monitoring and evaluating park management structures, in the context of continuous learning and improvement.

Insertion of the park into local (metropolitan or regional) planning documents is essential, as this is the only way to guarantee a comprehensive and general strategic vision for local development and to communicate it to social actors.

Moreover, problem setting (the definition of a hierarchy of problems and goals) and decision making must be supported by a social inclusive and deliberative approach.

- ▶ See also references to the section: Policy and Regulatory Aspects.

c. Environmental aspects

- ▶ Periurban parks – because of their connection with the urbanised areas - determine living conditions of residents, performing both ecological and social (recreational, economic, etc) roles.

Periurban parks play a fundamental and innovative role as an instrument to promote environmental and eco-system stability in the territory. Thus parks' strategies and actions must be capable of recovering and maintaining environmental goods (e.g. water, air, soil) and ecological networks and resources (e.g. habitats, sites of natural interest) through active protection.

While planning, creating and managing periurban parks, there is a continuous need to balance the social expectations about these areas with environmental aspects. A hierarchical organisation of ecological, social and economic factors allows managers to prioritise and integrate actions and funding and to define rules for human activities and their presence in the parks, as well as to preserve natural habitats from damage caused by human pressure.

Environmental protection in periurban parks is often carried out by teams of voluntary workers. Their presence can allow park staff to plan the programmes of maintenance necessary for high quality green spaces and equipment.

- ▶ The periurban park must be part of a wider ecological network.

The periurban park's role in terms of environmental protection can only be successful if it is part of an ecological network crossing the city and its surrounding areas. Such a network consists of the geo-complexes (patches, stepping stones, buffer zones) and ecological corridors encompassing both protected areas and other territorial elements with natural and/or environmental value (e.g.: water networks, pathways, agricultural, planted or forested areas) and that often connect (or cross) other open spaces inside the urban area. The precondition of this system is its spatial continuity - assuring the flow of life, materials and energy.

In a broader sense - the concept of a network of green (and blue) infrastructure is also developed. It is a means of reconnecting existing nature areas and improving the ecological quality of particular territory. It also helps to maintain healthy ecosystems which are the source of ecosystem services (provisioning, regulating, cultural,



Espace Nature Lille Métropole (France)

supporting). Development of green (and blue) infrastructure can be achieved through an integrated approach to land management and effective spatial planning at all levels.

- Knowledge of the environmental conditions of the park and its surroundings is a prerequisite for park protection.

In order to protect the environmental values of the park, its management structure must recognise a range of conditions of the park's territory and its surroundings. This knowledge can be gained through studies, analysis and / or stakeholder involvement. It can be supported by cartographic tools (e.g. ecological interests areas map, sports activities map, visitor numbers map), which can be superimposed to identify areas where ecological and social interests overlap. This can assist in resolving possible usage conflicts (e.g. creation of protected areas, location of infrastructure, information required by the public).

Such information should be gathered before the park is created and at regular intervals from then onwards. On the basis of this knowledge, managers can make decisions on: the environmental priorities and environmental restoration within the park itself, as well as setting various levels of nature protection.

- Various ecological and land use features of the periurban park should be seen as an added value.

Periurban Parks can encompass various levels of natural, environmental and landscape protection. They also perform multifunctional use, integrating social and ecological functions on the same area. This is an added value, not a limitation. However, it requires significant work in ensuring that activities are orientated towards overall sustainable use and improvement of the environmental and landscape resources (e.g. organic agriculture, hedges reconstruction, planting, breeding and protection of indigenous species, volunteering).

▶ See also references to the sections: Policy and Regulatory Aspects and the Management Systems.

d. Social and communication aspects

▶ Involvement of stakeholders is a key part of park's creation and management.

The periurban park is not only an instrument for conservation and protection of natural and cultural characteristics but is a tool for social and community development, involving local societies (groups or individual inhabitants) and raising social responsibility for the public space. This approach requires a high level of awareness and involvement of local actors and inhabitants in the process of park's creation and management. An active involvement of stakeholder groups can be achieved through establishment of consultative councils, user committees or similar structures.

▶ Periurban park constitutes a new model of relationship between citizens and their surrounding environment.

The park strengthens the concept of public space open for social and recreational activities. However, stakeholders may use the park for different purposes- environmental, social, economic - which are not always compatible one with another. Rules, regulations and activities, must be designed in order to reflect and address this complicated reality. They must promote and maintain the park's natural assets and a widespread culture of appropriate and sustainable use.

Therefore, the park management structure should first take time to identify and analyse these needs (using a variety of methods – from surveys to planning events and open consultations) and then work with groups to define how to combine the different demands.

▶ Level of public involvement in park activities can vary as should the means to involve them.

Continuous information campaigns - using user friendly instruments - are an essential element of all park management activities . However, this alone is insufficient to ensure active social/public involvement). Park management structures must encourage active participation of key stakeholders, in order to share decision making about park development. Activities range from social and leisure activities to volunteering and training and to participation in management committees. The

park management must prepare the most suitable strategy for their specific context.

► Monitoring of park visitors is essential, but should be taken further to gather wider feedback.

Periodic monitoring of park visitors is important, in order to gain feedback on their levels of satisfaction and on their demands and concerns. This should be extended to encourage a wider consultation with the surrounding areas and to ensure a structured means of addressing the concerns raised with concrete actions.

It is worth noting that information does not only flow from the park to the users. More advanced information systems also collect feedback from users about park services.

► See also references to the sections: Policy and Regulatory Aspects, Management Systems, Environmental Aspects, Infrastructure and Accessibility.



Parco Regionale di Portofino (Italy)

e. Cultural aspects

► Cultural heritage should be considered a key factor in the decision making process of park creation and development.

Cultural heritage located in the park is an important factor to consider when creating the periurban parks of the future. It performs an educational role for next generation and could also be a factor attracting visitors and building the park's identity. Choosing to create new periurban parks in places that contain culturally and historically significant features will help to guarantee their preservation and protection and provide an opportunity to engage people in understanding and appreciating this heritage. .

► Communication and involvement is key to preserving and promoting the cultural heritage of periurban parks.

External communication is essential to arouse interest among inhabitants about the park's cultural heritage. In particular, public events, such as festivals, exhibitions and shows, are important to enhance the park's cultural, architectural, landscape and natural elements.

The role of training and of promoting cultural activities at various levels (schools, wider public, specialist courses, research) is fundamental, not just to raise awareness and responsible use of environmental and cultural resources, but also because such activities can be organised within cultural buildings in the park, thus supporting their restoration and reuse.

► The scarcity of financial resources for park's creation and management should be addressed by an integrated programme of diverse activities.

The scarcity of financial resources for the upkeep and development of cultural heritage calls for focused programmes to involve inhabitants, stakeholders and owners, in order to develop coordinated and integrated activities to manage interventions, earn income for the park and its workers and to maintain the vitality of the park itself.

Moreover, park management should ensure that the park is inserted into the local development context, in order to protect the area and also to open up new doors for innovative means of using and gaining income from the cultural heritage.

f. Economic aspects

► Periurban parks should highlight their unique ability to add social, environmental and economic value to the surrounding area.

Periurban parks need greater financial independence as a precondition for growth, especially in the current situation of limited public funds. However, economic aspects are strictly related to the role of the park in socio-economic local development. .

Periurban parks should use their unique added value as a selling point. A periurban park can be considered to be a competitiveness and attractiveness factor of the area. The park improves urban living conditions and influences aesthetic and landscape values, thus making the location more financially profitable. The value of periurban parks must be an equivalent to similar areas under transformation in the city into green areas. Such comparison shows that the cost of periurban park in comparison to the primary services of the city is not high.

► Most periurban parks have the potential to generate income through a variety of public and private sources.

In addition to local, regional, national and EU funding, periurban parks can generate income through a wide variety of sources, such as: partnerships, tourism, forestry and agriculture, provision of leisure services and of ecological services.

Some potential solutions of parks financing include:

- Strategic-level finance models requiring varying degrees of legislative support:
 1. Public-private partnership (PPP) and Corporate Social Responsibility (CSR);
 2. Ecosystem services (services based in biodiversity);
 3. CO₂ trade revenues share;
 4. Subsidies from EU (if the status of "periurban parks" is recognized in the EU legislation).

- Supplementary sources: other – existing or potential - sources of self-financing and self maintenance of the park, usually depending on the local and place-specific situation:
 1. Establishment of self-governing company responsible for the park;
 2. Lease of land for various economic activities (agriculture, recreation or sports centres) when the land is public owned
 3. Use of natural resources for commercial purposes, e.g.: timber production, hunting, straw, hay and herbs harvesting/sales, apiculture, forest fruit and mushrooms collecting, food market and branding, leisure & sport (biking, horse riding, skiing, diving, Nordic walking, climbing, competitions etc.)
 4. Energy production by the park (production of biomass, water mills, wind mills, green energy production and green certificates' market);
 5. Incomes and restorations coming from compensations (service barter – where applicable);
 6. Tax reliefs for industry in case of providing support (sponsoring) to the given periurban park (in local taxes or in eco-charges);
 7. Lotteries and other collections; fund raising campaign;
 8. Optional and controversial solution: charging for entry or additional, associated services (e.g. visiting cultural heritage objects, leisure activities, using sports facilities, events etc.); however, such tools induce a risk of public ostracism and requires strong attempt at social dialogue.

► Economic activities should not compromise the internal mission or park's role, particularly in terms of environmental protection.

Periurban park management structures have the complicated task of ensuring that the need to generate income does not compromise the park's essential role and character. Periurban parks should not be turned into just economic enterprises but remain socially and environmentally oriented. It is worth remembering that the periurban park performs important functions that cannot be easily financially quantified, such as the fundamental ecological aspect and ecosystem services and a number of other social and health benefits, influencing human psycho-physical conditions both in the individual and population scale. Therefore, fund raising should be supported both by Cost Benefit Analysis and Multi-criteria Analysis, before decisions on a certain source are made.

g. Infrastructure and accessibility aspects

► Periurban parks must participate in the design phase for urban infrastructure, in order to ensure maximum benefit and minimum disruption to the park.

The existence and purpose of the park must be taken into consideration during the planning and design of urban infrastructure, in particular in terms of the transport network. Indeed, such infrastructure can either cause huge amounts of damage to some characteristics of periurban parks or, on the contrary, can help to support their enhancement and use through a suitable system of inter-modal exchange.

► Periurban parks must be part of an integrated infrastructure network, within and around the park area.

Periurban parks require continuity, particularly in terms of cycle and pedestrian paths, between the urban and rural areas surrounding the park and the park itself. In addition to facilitating accessibility, this also encourages awareness and use of the park by the population and greater surveillance of the park itself.

It is clear that there must be an appropriate distribution of equipment in order to provide for organised management of the resources the periurban parks offer. Park management structures must be aware of the equipment required, according to the functions identified for different areas of the park (e.g. car parks, toilet facilities, picnic areas).

► Periurban parks should make the most of existing park characteristics in order to reduce costs of infrastructure and add unique value

Park management structures can make use of existing infrastructure, including the reinstatement and integration of existing access networks (e.g. disused tracks and bridges). Moreover, cultural heritage fallen into disuse can be renovated and used as an information point, a leisure / recreation venue or another park facility.



Kosice Forest Park (Slovakia)

Not only does this reduce costs of building new facilities, it also builds on the park's unique heritage and can encourage the presence of volunteers and not for profit associations that can be involved in the care and upkeep of park infrastructure.

► The concept of universal accessibility should be at the basis of infrastructure development within the periurban park

In term accessibility, there is a distinction between the concept of connectivity to parks (accessing them from the cities) and the concept of universal accessibility of all services and facilities in parks (it involves overcoming physical and sensory disabilities as well as cognitive problems to allow full accessibility for various groups, such as elderly people, families with young children and people with physical, mental or sensory impairments).

A multi-dimensional approach to design of the internal mobility network must be used to ensure that:

- It meets the needs of all users, in particular those with physical or mental disabilities (high levels of accessibility are essential for citizens to appreciate the natural and cultural values that periurban parks offer)
- Thematic routes are developed to enhance the parks resources and to ensure that these are not damaged.

4.2. Conclusions

Periurban parks should be an innovative and strategic instrument to address the continuous, and generally badly regulated, growth of urban settlements. This urban sprawl places increasing pressure on the green, natural and agricultural areas surrounding our cities; areas of high environmental, social and potentially economic value.

Indeed, periurban parks provide one, integrated solution to the three main objectives for public administrations managing the outskirts of urban areas, it is:

- ▶ to protect environmental values and biodiversity;
- ▶ to maintain a healthy environment for citizens, in terms of well being and preventing environmental risks;
- ▶ to promote forms of social and economic development, which are intrinsically linked to the urban environment and to the unique characteristics of the territory.

These interconnected needs can only be fulfilled by periurban parks if their creation and management go beyond a sector based vision that limits the policies and instruments traditionally used to create and manage parks. Instead, the approach should be integrated, socially inclusive, multi-sector and based on institutional collaboration that can involve all the levels of government needed to address the various obstacles that are sure to arise.

The information presented in this document has aimed to highlight the multi-dimensional nature of periurban parks and identify the best solutions - based on the analysis of different partners' experiences - which could be useful for technicians and policy makers involved in the parks' maintenance and management.

In particular, the following indications have emerged from this analysis and should be highlighted as overall recommendations for the creation and management of periurban parks:

- ▶ the need to design and develop a shared project with local residents, institutions and stakeholders. The majority of periurban parks are not regulated by a specific legislation, which defines characteristics, management roles and responsibilities. Instead, they tend to be managed by a range of instruments connected to town planning and a range of sector policies. For this reason, periurban parks, more than other protected areas, require both strong social legitimisation and the activation of institutional collaboration mechanisms, backed up by participative and collaborative processes.

- ▶ the need for an independent management structure formed, without heavy political and bureaucratic burdens. This structure should be:

- capable of coordinating different sectors of the various levels of public administrative;

- interacting effectively with stakeholders and with the public;
- moving quickly and efficiently when presented with funding opportunities;
- coordinating and integrating all the different initiatives and actions that affect the park territory into one coherent project.

▶ the need to interpret natural and environmental areas differently, recognising not only their exceptional natural beauty or diversity that can be important. Instead, added value comes from a wider network of areas, spreading across the territory and containing sites with different values and characteristics, which represents a unique green/blue infrastructure in which the park role is of key importance. Accepting this infrastructure as a key territorial element has subsequent influence on the principles and rules that govern both urban development and the active protection of environmental values.

▶ the need to reconstruct new alliances between nature and culture; between citizens and environment. Through periurban parks, nature comes to play a key role not only in creating a sustainable urban environment, but also in developing a new sense of civic responsibility, focused on a sustainable and informed use of resources and of periurban territories in general. In this new form of citizenship, the periurban park represents a public space, in which residents are called on to respect their environment and their fellow users. This strengthens public solidarity, a sense of belonging to the local territory and a sense of local identity.

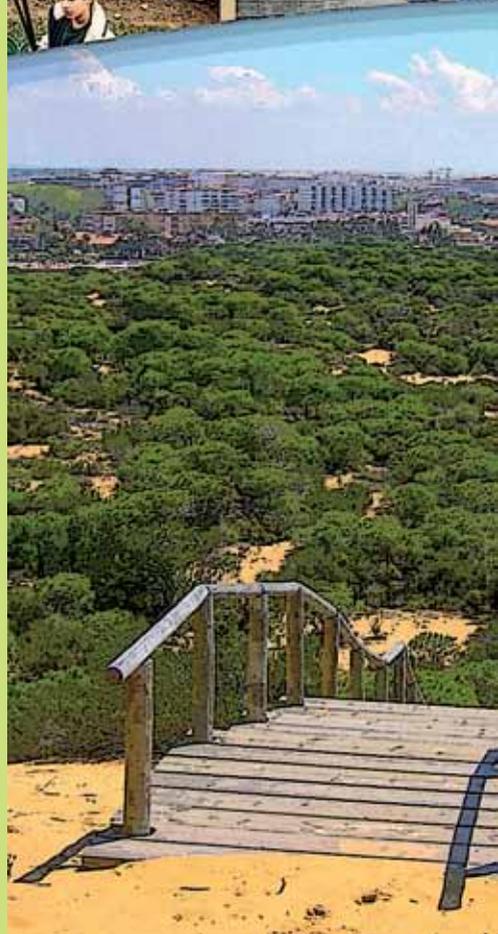
▶ the importance, from an economic point of view, to go beyond the view of the park as a totally subsidised facility which can only survive thanks to public funding. Instead, it is fundamental to integrate public funding with forms of self-financing, which can derive from:

- Economic and productive activities undertaken by private actors and based on a suitable use of the park's natural resources (e.g. organic and nature based agriculture, food miles, forestry, controlled hunting, fishing, etc);
- Services of social, educational or recreational character;
- Payment for ecosystem services that the park, through good management of the territory and its natural resources, provides to the local area and to the city in general.

All these recommendations mean that the periurban park should not be considered as a cost but rather as an added value for the territory, being capable of utilising local environmental resources in a sustainable manner and of providing important ecosystem services to the city and its inhabitants. In this way, the park can become a factor of attractiveness and excellence for the neighbouring areas, in a perspective of their endogenous local development.



Arche de la Nature. Le Mans. (France)



5

Policy Recommendations

5.1. Recommendations of the Periurban Project (2012)

Partners from an INTERREG IVC Project, together with two EU networks focused on periurban areas have, through technical exchange and shared experience, drawn some common conclusions. These are presented together here as policy recommendations to local, regional, national and European authorities.

PERIURBAN Parks – Improving Environmental Conditions in Suburban Areas.

FEDENATUR - network of exchanges between periurban site managers on a European scale.

PURPLE - a network of regions raising awareness and understanding of Europe's complex and crowded peri-urban areas, their features and assets as well as their potential..

In order to:

- ▶ improve socio-economic conditions in often degraded suburban areas of European cities and contain urban sprawl
- ▶ Promote societal well-being, especially in an urban context, where environmental conditions tend to correlate directly to public health
- ▶ Reduce environmental risks, including floods and the impact of the urban heat island effect, being made worse by climate change
- ▶ Enhance biodiversity, often strongly reduced in urban and peri-urban areas
- ▶ Offer free recreational alternatives for leisure and new job opportunities in the current difficult economic context

Considering that:

Natural and rural spaces located in peri-urban areas, with the right support and management, can fulfill the above mentioned objectives as they are essential elements of LANDSCAPE and GREEN INFRASTRUCTURE.

And that:

they can provide basic services for the city and its residents', such as:

- ▶ regulatory services (carbon sequestration, mitigating urban heat island effect, cleaner air, storing floodwater and flood risk prevention),
- ▶ health and well-being services (cleaner air, space for practicing open air sports on a daily basis, quiet spaces for relaxation)
- ▶ nature and biodiversity services (habitats for fauna and flora, cultivation and breeding of local and traditional species)
- ▶ provision of goods and services (direct food and fibre production, agriculture, community food production , soil development for necessary urban functions, drinking water protection and provision),

- ▶ cultural services (cultural heritage protection and promotion, leisure activities, enhanced awareness about local history and nature, tourism...)
- ▶ socio-economic services (enhancement of identity and sense of belonging, agriculture, local food markets , forestry, sports, restaurants and activities related to eco-tourism)
- ▶ as well as offering an attractive recreational place for city dwellers and contributing to a positive and vibrant global image of the settlement context.

It is deemed that the following recommendations should be taken into consideration by local, regional, national and European authorities:

1. Preserve natural and rural periurban areas as essential elements of the sustainable concept of a city and/or region and/or a metropolitan area
2. Integrate peri-urban spaces into spatial planning
3. Put in place management structures, including constitution of a managing partnership or body and set up financial and legislative tools
4. Promote the creation of multifunctional peri-urban parks, capable of achieving ecological, social and economic objectives. Support and enhance existing peri-urban parks, and restore degraded ones
5. Put in place management structures, including constitution of a managing partnership or body and set up financial and legislative tools
6. Connect Periurban spaces with surrounding areas as a key part of a network of green infrastructure, to ensure that they are not islands in the metropolitan environment
7. Connect the Periurban park /space with urban areas to ensure accessibility for all members of the population

Promote a European periurban label that acknowledges the social, environmental and economic role of these Periurban parks/spaces in urban and metropolitan contexts.

5.2. Seville Declaration (2010)

The European periurban park managers meeting from 5 to 7 May 2010 under the auspices of FEDENATUR in Seville, the capital of Andalusia, a pioneering region in Europe for the protection of periurban and metropolitan natural areas, state:

In Europe, over 80% of people live in urban areas. This demographic concentration and the resulting urban expansion have been carried out at the expense of the environment, nature, farming and the richness of landscapes, flora and fauna, causing serious loss of biodiversity. These losses are often irreversible but more sustainable town planning could slow or even halt the erosion of biodiversity.

Aware that the fight against biodiversity loss and the consequences of climate change will be decided in urban areas, in recent years several European cities and local governments have undertaken to develop active policies for the preservation, restoration and improvement of extensive natural areas located on their immediate outskirts.

Furthermore, some European regions have made significant progress. The Regional Government of Andalusia has driven an unprecedented and fruitful strategic planning partnership between its Ministry of the Environment and Ministry of Public Works and Housing in order to develop a network of natural spaces near cities.

The European Federation of Metropolitan and Periurban Natural and Rural Spaces (FEDENATUR) brings together organizations managing periurban natural areas run by local or regional authorities.

Our association promotes technical exchanges between experts to foster the protection of natural and rural areas close to large cities, driving their ecological connection and improving their management in response to the pressure exerted by the public in search of areas for recreation.

The degree of knowledge built up since 1997, the year when our association was founded, results in the publication of numerous reports and participation in European projects whose aim is to encourage the transfer of knowledge between European regions. FEDENATUR is currently involved in the PERIURBAN project in the INTERREG IV C programme whose goal is to extend these exchanges to periurban natural areas in Eastern Europe.

On the basis of this experience, we believe that periurban nature parks, going beyond their legitimate vocation to be leisure spaces for the public, should be recognized as essential components of a green infrastructure in the form of an ecological network which is indispensable for the establishment of sustainable town planning that is committed to the fight against climate change and to preserving biodiversity.

So far periurban nature parks have not been sufficiently valued or adequately recognized by European environmental policies. The battle for the preservation of biodiversity will also be won at the gates of towns and large cities.

It is for this reason that in 2008 FEDENATUR submitted a motion demanding recognition for periurban natural areas to the IUCN World Congress in Barcelona, which was passed.

By means of the Seville Declaration, FEDENATUR is now addressing the Spanish and Belgian authorities who will hold the Presidency of the European Union in 2010.

FEDENATUR believes that an ambitious European policy must take steps to:

1. Accelerate the protection of natural and rural spaces located near cities.
2. Promote an integrated approach to spatial planning in metropolitan areas in which periurban natural and rural areas are valued and appreciated as essential for biodiversity and the quality of urban life.
3. View periurban nature parks as places with great ecological, social and cultural challenges and include these spaces in public spatial planning policy as a means of containing urban sprawl.

4. Promote the creation of a green infrastructure, consisting of a network of interconnected physical spaces that nurture the welfare of the public and biodiversity, and view these spaces as essential facilities on a par with educational, health, cultural, transport and communication facilities.

5. Encourage the maintenance and diversification of sustainable local agriculture, seen as an important facet of the management of periurban spaces.

6. Promote the means for the preservation of the biodiversity of ecosystems and associated landscapes.

Mr. Slimane Tir

European President of FEDENATUR

President of l'Espace Naturel Lille Métropole

Vice President of Lille Métropole Communauté Urbaine

5.3. Recommendation 4128 of the IUCN (2008)

Setting up networks of protected urban and periurban natural areas

CONSIDERING that over half the world's population lives in urban areas, and that it is predicted that by 2050 over 70% of the world's population will be concentrated in cities;

NOTING that, over the last few decades, uncontrolled urban sprawl has developed around cities, which has led to the phenomenon known as metropolization; that this has caused a loss of the land's functionality with regard to the environment, social issues, agriculture, fauna, flora, landscapes, etc; and that this in turn has affected the city inhabitants' quality of life and biodiversity in general;

ALSO NOTING that, despite this urban growth, there are still natural urban and periurban areas that contain a considerable level of biodiversity and others that have the potential for ecological restoration and the recovery of nature;

BEARING IN MIND that some metropolises have already undertaken active policies to conserve and enhance the natural areas in their territories, which are located on the outskirts of cities, because they play an important role in improving the inhabitants' quality of life and in biodiversity conservation (e.g. activities of the European Federation of Metropolitan and Periurban Natural and Rural Areas – Fedenatur, Local Governments for Sustainability – ICLEI, RED, Arco Latino, World Association of the Major Metropolises – Metropolis, etc.);

RECALLING that the inhabitants of cities have the right to enjoy the environmental, social, and economic benefits provided by natural areas located on the outskirts of cities, (e.g. biodiversity, clean air, climate stabilization, pollution sink, social integration and integration of vulnerable groups, decrease in violence, access to leisure, sports, health, environmental education, drinking water, landscape, community-supported agriculture), as well as the protection these areas provide against environmental risks (e.g.

floods, landslides, building collapses), as summarized in the 2004 Fedenatur report to the European Commission: The Place of Periurban Natural Areas for a Sustainable City;

HIGHLIGHTING the important benefits that metropolitan natural parks provide for the physical and mental health of society;

CONSIDERING that there is currently a legislative vacuum with regard to the creation, protection, management and running of these areas; and

RECALLING the work carried out by IUCN, its members and Commissions, in accordance with Recommendation V.14 Cities and Protected Areas of the Vth IUCN World Parks Congress (Durban, 2003) and Resolution 3.063 Cities and conservation adopted by the 3rd IUCN World Conservation Congress (Bangkok 2004);

The World Conservation Congress at its 4th Session in Barcelona, Spain, 5–14 October 2008:

URGENTLY REQUESTS the relevant administrations at all levels (municipal, supra municipal, regional, national and supra-national) to:

1. integrate, enhance and conserve natural, agricultural and forestry areas, as part of the urban infrastructure, giving them the same importance as other infrastructures, and no longer to consider them merely as empty spaces or areas set aside for urbanization;

2. include these areas in public land-use policies, as a tool for containing urban sprawl, setting up systems of periurban green areas (ecological belts, corridors or rings) around and inside cities;

3. consider that these natural, agricultural and forestry areas help create a social, environmental, economic and cultural identity for the city;

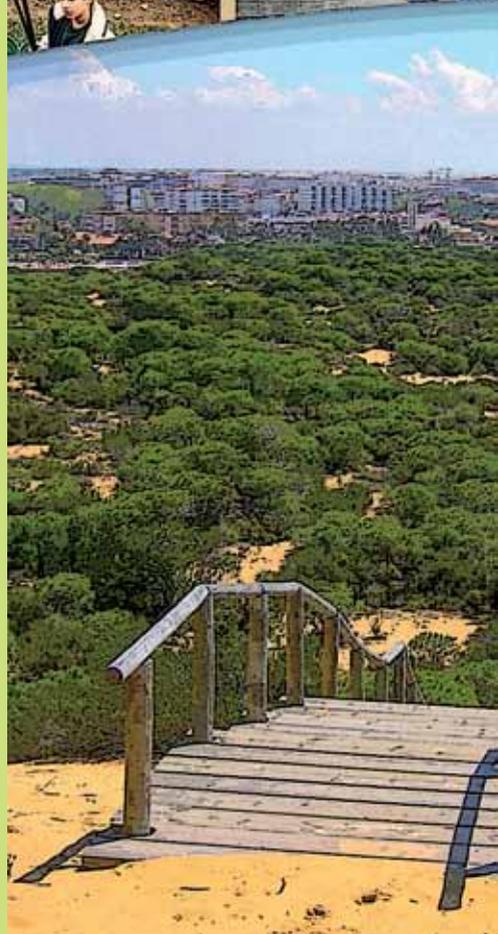
4. focus public land-use policies on plans for metropolitan natural areas, considering the system of natural areas as an element that structures the metropolis, and allocating the required budgets for this purpose;

5. adopt an overarching policy different from the metropolitan area's environmental plan, which recognizes the exemplary role played by the different types of green spaces in terms of management, enhancement, protection and experimentation;

6. accelerate the protection, environmental control and management of natural and rural areas located near to cities and defend and enrich the diversity of metropolitan ecosystems and landscapes, to encourage the maintenance and diversification of sustainable agriculture, considered as an important facet of the management of periurban areas, based on a mosaic of complementary environments: biological reserves, agricultural and recreational areas, corridors, etc; and

7. respond to the city inhabitants' needs for leisure, allowing them to access recreational activities, in natural surroundings, raising their awareness about environmental challenges and teaching them respect for the environment, promoting the participation of all stakeholders.

State and agency members of the United States abstained during the vote on this motion.



6

Appendix

6.1. Glossary

Agro-environment/agro-ecological: This concept refers to the role performed by agriculture in preserving and fostering biodiversity, ecological functionalities and landscape values often recovering traditional farming cultivation methods and especially adopting nature based farming practices (e.g. organic or bio dynamic agriculture, multi productive cultivations, low impact cultivations techniques, etc.).

Biodiversity: Biodiversity embraces the variety of genes, species and ecosystems that constitute life on Earth. We are currently witnessing a steady loss of biodiversity, with profound consequences for the natural world and for human well-being. The main causes are changes in natural habitats. These are due to intensive agricultural production systems, construction, quarrying, overexploitation of forests, oceans, rivers, lakes and soils, alien species invasions, pollution and — increasingly — global climate change. Humankind is itself a part of biodiversity, and our existence would be impossible without it. Quality of life, economic competitiveness, employment and security all rely on this natural capital. Biodiversity is crucial to 'ecosystem services' (see below) (...). It is essential for maintaining the long-term viability of agriculture and fisheries, and is the basis of many industrial processes and the production of new medicines⁴.

Brownfield: A site previously affected by mainly productive/industrial human activities that generated pollution and loss of environmental and natural values and that sometimes constitutes a threat for human health. Usually placed in urban and periurban areas these sites are of strategic interest in process of urban regeneration

Consultative council: Formally established and recognised group of citizens or stakeholders qualified by public authorities to express advice on matters and decisions of public interest.

Ecosystem: An ecosystem encompasses a set of abiotic and biotic components (such as microorganism, plants, animals and human populations) interacting among them that form complexes identifiable with their own structure, functioning and evolution in the time. In the environment system we recognise more or less complex systems composed by ecosystem unities (Erba V., Agostini S., Di Marino M., 2010:61).

Ecosystem Service: An ecosystem service can be defined as "...flow of materials, energy and information from natural capital stocks which combine with manufactured and human capital services to produce human welfare" (Costanza, 1992). Moreover, the Millennium Ecosystem Assessment of U.N. (U.N. 2005), classifies ecosystem services into those:

1. Providing services (e.g. water, food, energy supply)
2. Regulating services (e.g. carbon sink, climate control, storm water drainage, filtering and decomposition processes);

⁴In <<http://www.eea.europa.eu/themes/biodiversity/intro>>, (07/12)

3. Supporting services (e.g. biomass production, soil and humus production);
4. Cultural services (e.g. science services, educational activities, recreational spaces).

Periurban parks can provide such services, both when the park is created to protect an important environmental or natural site and resources and when it is the result of recovery of areas previously allocated to different functions.

Ecological Network: The concept of ecological network grows during the 80th of the last century in the context of the "landscape ecology" approach –aimed to integrate nature protection with land use planning- that conceive landscape as result of a complex networked structure in which animal, energy and material flows take place accordingly with a system of patches, buffer zones, stepping stones and corridors connecting them (Forman, Godron 1986). The role of the ecological network is mainly related to its capacity to allow for biodiversity protection and enhancement. Starting from this general conception various different interpretation of the concept were developed by researcher and practitioners depending especially on the importance given to the ecological network in order to interact with human presence, activities and socio economic development with a multi-purpose role and in a design prospect as well (Mc Harg 1989, Malcevski, 2010)

Environment restoration: The recovery of original environmental values and ecological functions performed by natural elements and previously damaged by anthropogenic actions (e.g. ecosystems functioning, single areas of natural interest, brown field pollution reduction, etc)

Financing/funding of the park: Financing/funding activities of the periurban parks encompass a range of economic management models especially related to the consideration of the park as an active subject in delivering public services, "public goods" and economic activities for the visitors and for the local society. In such a prospect the park could be appreciated either as a tool for environment and cultural values protection and as a local development agent too. Starting from this point of view we can summarise some main activities that the park can perform in order to achieve financial viability:

▶ New services delivering / charges for existing services: The implementation of the new services can be used as a tool to overcome budget difficulties. Charging might be introduced for entry to facilities (e.g. cultural heritage buildings) or additional, associated services (e.g. leisure activities, using sports facilities, events etc). In addition to cultural and recreations facilities, parks could begin charging for environmental services (see above);

▶ Cooperation and partnership: Cooperation with various stakeholders (public agencies, farmers, companies, donators, Public/private partnership, etc.) operating or related to the park is a key means of reducing costs and of accessing potential new sources of income. This approach in park managing leaves local direction to the public body but allows private people to include criteria of business, creativity and attention to the 'credit balance' of management can be a realistic solution to the problems of limited resources and dependence on public funding.

► Creation of park income generation business: The periurban park as huge potential for the creation of income generation activities in cooperation with local entrepreneurs and stakeholders. This could include the lease of land for various economic activities (agriculture, recreation or sports centres) when the land is public owned. It could also concern the use of natural resources for commercial or similar purposes, such as: forestry, including raw wood production, shaving, cork; plant, seedlings and flower production, apiculture; energy production; local food production through sustainable agriculture; CO₂ emission trading schemes.

► Active fund raising: Active fund raising encompasses use of various external financing sources, such as EU funding programs, international funds, regional and local funding programs, etc. is an important tool for park financing, especially in the case of mainly natural areas and public owned parks

GHG Emissions: The process, mainly produced by anthropogenic activities, of emission of greenhouse gases. "A greenhouse gas (sometimes abbreviated GHG) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone"⁵.

Green Belt: The concept of "green belt" raised in the first half of the XIXth century in the context of the Great Britain physical planning system. The aim and function attributed to the green as planning tool was to contain the urban expansion and dimension in the countryside and to contribute to the enhancement of urban environment quality and an offer of green areas for the citizen recreation and leisure activity. During the year and recently as well the concept was quite questioned especially in relation to its power to really hamper urban expansion without relevant "side effect" such as: growing of commuting due to the "frog leaps" way of residential developments, poor quality of the green areas with many abandoned spaces, uncertain economic role of farming activities encompassed by the green belt (Hall et al.1973, Hague, Jenkins 2005).

Green and Blue Infrastructure: Green infrastructure can be defined as: "strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering a wide range of benefits and services. Green Infrastructure includes natural and semi-natural areas, features and green spaces in rural and urban, terrestrial, freshwater, coastal and marine areas."⁶ Blue infrastructure could be fully considered as part of this environment structure considering the connectivity and ecological role played by river basins, streams and secondary channels riparian bands as well.

In such a meaning the concept of green (and blue) infrastructure is very close to the multi-purpose ecological network concept (see above).

Infrastructure and accessibility of the parks: Considering Protected Natural Areas in general, and periurban parks in particular, the concept of infrastructure should

⁵ http://en.wikipedia.org/wiki/Greenhouse_gas (07/12)

⁶ http://ec.europa.eu/environment/nature/ecosystems/index_en.htm, June 2012

encompass equipment which is made available to the public accessing these areas, allowing them to enjoy the wide variety of natural and cultural resources they offer.

Analysis of the periurban parks in question led to a categorisation of equipment types, as follows:

- ▶ **Leisure Equipment:** Equipment that provide the basic means for enjoying nature and park areas (e.g. observation points, playgrounds, recreational areas, etc).
- ▶ **Linear Equipment inside the parks (paths, trails and viewpoints):** These are used to bring citizens closer to nature. This will allow for a recreational, sports, interpretive and/or educational approach.
- ▶ **Infrastructure (e.g. car park, public transport access, water supply, sewage systems, etc):** these cover the basic needs for citizens. They are essential and without them the minimum conditions for the enjoyment of natural areas aren't met.
- ▶ **Reception Equipment:** These are the most expensive in terms of investment and maintenance but also the most versatile concerning the types of services they can provide.
- ▶ **Functional Signposting:** minimal practical information in order to allow visitors visit the park.
- ▶ **Interpretation Signposting:** They indicate the functionality and purpose of equipment. They can be either informative, educational and so on.

Land Take: The process of natural, semi natural, forest and agricultural land consumption due to the expansion of human activities mainly related to urban and productive functions, services and infrastructures. In the western world during the last decades the process of land take was often paired with a diffusive mode of expansion of artificial surfaces and settlements, named urban sprawl, characterised by low density and fragmented built areas.

Land Use Planning: Land-use planning is the term used for a branch of public policy encompassing various disciplines which seek to order and regulate land use in an efficient and ethical way, thus preventing land use conflicts. Governments use land-use planning to manage the development of land within their jurisdictions. In doing so, the governmental unit can plan for the needs of the community while safeguarding natural resources. To this end, it is the systematic assessment of land and water potential, alternatives for land use, and economic and social conditions in order to select and adopt the best land-use options (Young A et Al., 1993).

Master plan: Born in the USA between the 40's and 50t's in the field of the corporate management, the concept of Master Plan has been acquired within the urban planning, particularly in the field of the scholastic (the campuses) services. In the transfer toward a different circle, the concept of Master Plan has initially lost the value of document resulted by a complex trial, and has been understood as a tool in itself, a graphic scheme of a forecast of building development or land use, often few flexible and dynamic. In Europe as well, the terms maintains this twofold meanings either of process oriented tools and of binding functional land use control. In the field and sector plans definition and management it is mainly applied in the first sense as in the urban planning domain sometimes these two approach merge.

Minor Ecological network: Parts of countryside with mainly natural features such as little woods, hedges, little ponds or streams, riparian vegetation, or not cultivated land that are inside farmlands and that, sometimes, are part of the cultivation asset itself (e.g. nature based, traditional or organic agriculture). They not only develop a fundamental role in the maintenance and reproduction of the biodiversity but also in the maintenance of the quality and difference of the landscape.

Multifunctional (multi productive) agriculture: "The multi-functionality of agriculture can be defined as the joint production of commodities and non commodities by the agricultural sector. Finding the right balance between the produced goods is a matter not only of agricultural policy, but also of changes at farm and territorial level" (Durand G., Van Huylembroeck G, 2005;1).

Multi-sector approach/multilevel governance: Usually opposed to a mono-sector oriented approach, this approach claims for the necessity to integrate many policies fields and more administrative entity of different competence and territorial level that naturally interact in the reality of the territory governance and functioning. That in order to achieve a better effectiveness in the policies implementation and results (e.g. town planning/infrastructure/ environment; rural development/landscape and spatial planning, etc)

Natura 2000 network/Sites of community interest (EU Directives): In May 1992 EU governments adopted legislation designed to protect the most seriously threatened habitats and species across Europe. The Habitats Directive 42/93 complements the 1979 Birds Directive 79/409. At the heart of both Directives is the creation of a network of sites called Natura 2000. The Directive is built around two pillars: the ecological network Nature 2000, constituted by sites aimed to the maintenance of habitats and species respectively listed in the Annexes IV and V. The directive protects over 1.000 animals and plant species and over 200 so called "habitat types" (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance. The Directive establishes norms for the management of the sites Nature 2000 and the evaluation of incidence (art 6), the financing (art 8), the monitoring and the elaboration of national reports on the implementation of the dispositions of the Directive (articles 11 and 17), and the release of possible dispensations (art. 16). It recognises the importance of the elements of the landscape that perform a role of ecological connection for wild flora and fauna (art. 10).

Periurban Area: At the outset this term was used to define the areas surrounding, in a limited distance, the more dense part of the cities that, although not characterised by clear urban or rural features, were concerned by development of urban function and services and with a low level of settlement density interwoven with wide parcels of open, natural, and semi-natural spaces. Afterwards –starting from this "negative" and sometime "metric" definition (neither urban neither rural placed an a certain distance from the city centre) more and many recent approach and researches try to propose and investigate the peculiar nature and features of these areas as a "third space" (Vanier, 2003), of opportunity for the sustainable development of

the settlements and aimed to achieve the best of synergies between urban and rural domain, between nature and culture (Espon-EDORA, 2010, PLUREL 2011).

Process/decision oriented approach: In public policies domain this approach expresses the goals on behalf of public administration bodies to design, especially via participation and social inclusive/deliberative practices, an effective and steady decision making process preventing possible conflicts and decisional bottlenecks. This kind of approach is mainly appreciated in strategic planning practices and it stresses in a lesser way the contents of the decision in respect to the fluidity of the decisional process.

Public Private Partnership: "Agreement between government and the private sector regarding the provision of public services or infrastructure. Purportedly a means of bringing together social priorities with the managerial skills of the private sector, relieving government of the burden of large capital expenditure, and transferring the risk of cost overruns to the private sector. Rather than completely transferring public assets to the private sector, as with privatisation, government and business work together to provide services"⁷.

Public space: The concept of space public as not controlled spatial domain characterised by the free co-presence and relationship "between and among strangers and between and among categorally know"(Lofland, 1999: 51) social subjects and groups, finds in the open periurban spaces, and therefore also within the periurban parks areas, a new form of expression, formerly related exclusively to the urban space. Here the concept of space public expands him but also shows sometimes itself as space of conflicts among subjects, practices and different activities. Such a conflict situations must be anticipates and managed through preventive inclusive, dialogue and even bargaining practices of governance promoted and leaded by the public authorities (Delbaere 2010).

Sector planning: The activity of design, decision making and implementation process referred to an unique sector of public policies activities (e.g. infrastructure, economic development, environment, education, etc) carried on by an administrative body.

Social farming: Social farming is a whole of experiences of people with different forms of disadvantages or distress involved in agricultural activities, in order to give their life and their abilities a meaning. Thanks to social farming, social and work inclusion, educational, working, therapeutic and rehabilitating services are promoted. The paths of social farming develop through social services or the recruitment, in already existing farms, of disadvantaged individuals or disadvantaged workers, or the creation of new agricultural structures employing disadvantaged or distressed people. Social farming represents the form of solidarity and values of mutual aid of the rural areas. The combination of productive dimension and the relational dimension with plants and animals, as well as the familiar and communitarian one, gives agriculture a social function. The new element, today, is that these activities are undertaken in full awareness in structures that use agricultural productive processes and operate through relational networks: social farms. The characteristic of a social farm is the combination of social service and the agricultural activity.⁸

⁷ Oxford dictionary of Politics, < <http://www.answers.com/topic/public-private-partnership>> (07/12)

⁸ < http://www.segretariatosociale.rai.it/INGLESE/codici/Social_farming/farmingE.html> (07/12)

Stakeholder: A subject, or a societal group, that for the kind of activity and the role performed in the society is directly affected by public policies and that, for this reason, calls for, and is needed to take part in decision making process.

Strategic Spatial Planning: "Strategic spatial planning is a transformative and integrative, (preferably) public-sector-led (Kunzmann, 2000) socio-spatial ...process through which a vision, coherent actions, and means for implementation are produced that shape and frame what a place is and what it might become." (Albrechts, 2006: 1491).

"Strategic (spatial) planning is not a single concept, procedure or tool. It is a set of concepts, procedures and tools that must be tailored to whatever situation is at hand if desirable outcomes are to be achieved. Strategic plan making is as much about the process, institutional design and mobilisation as about development of substantial theories. This broad area is reflected in the place and the role of planners in strategic spatial planning. The role of planners could be handled with reference to different sets of criteria. In 'Changing roles and position of planners', Urban Studies (vol. 28, 1, 1991) three main roles for planners are defined: political role, the technical expertise and the managerial role. Another distinction could be made through an emphasis on the content or the process."(Albrechts, 2001; 1)⁹

Syndicat mixte (Join Syndicate): The syndicat mixte is a public institution (article L721-1 of the Code des Collectivités territoriales) which gives to communities the capacity to join among them or with the other public institutions. Mostly, this structure gathers municipalities, inter-council associations, departments and regions which give themselves large-scale missions as: the management of natural spaces, the exploitation and functioning of networks, the waste management, tourist development.¹⁰ The syndicat mixte is so similar to the other forms of municipal grouping, but does not share necessarily the administrative nature and can cover the nature of industrial and commercial public institution if several conditions are concurrently performed (industrial or commercial object, origin of the resources, the operating procedures getting closer to the private enterprise)¹¹. For that reason, the role of syndicat mixte in promoting actions and projects with private stakeholders in order to manage and achieve the public interest goods stated in a public and accountable debate is worth noting.

Urban allotment: Subdivision of urban open green spaces in residential areas made available for individual, non-commercial gardening. Such plots are formed by subdividing a piece of land into a few or up to several hundreds of land parcels that are assigned to individuals or families. In allotment gardens, the parcels are cultivated individually, contrary to other community garden types where the entire area is tended collectively by a group of people.

⁹ <http://www.espid.org/keyphrases%5C16.pdf>

¹⁰ < <http://smbva.fr/definition-syndicat-mixte.html>> (07/12)

¹¹ <http://www.dgcl.interieur.gouv.fr/sections/les_collectivites_te/intercommunalite/presentation_general/les_syndicats_mixtes6966/view> (07/12)

Urban Sprawl: Urban sprawl is commonly used to describe physically expanding urban areas. The European Environment Agency (EEA) has described sprawl as the physical pattern of low-density expansion of large urban areas, under market conditions, mainly into the surrounding agricultural areas. Sprawl is the leading edge of urban growth and implies little planning control of land subdivision. Development is patchy, scattered and strung out, with a tendency for discontinuity. It leap-frogs over areas, leaving agricultural enclaves. Sprawling cities are the opposite of compact cities — full of empty spaces that indicate the inefficiencies in development and highlight the consequences of uncontrolled growth. (EEA 2006: 6).

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6.2. Partners in the Periurban project

- ▶ Regione Toscana (IT) – Project Coordinator
- ▶ FEDENATUR: European Federation of Natural & Rural Metropolitan & Periurban spaces (ES)
- ▶ Common Profit Enterprise of Municipality of Zografou (EL) / Larnaca Development Agency (CY)
- ▶ Aberdeen City Council (UK)
- ▶ Vitosha Nature Park (BU)
- ▶ The City of Košice (SK)
- ▶ Regional Government of Lombardy (IT)
- ▶ Danube-Ipoly National Park Directorate (HU)
- ▶ Lille Metropolitan Natural Space Office (FR)
- ▶ Regional Government of Andalusia, Regional Ministry for Environment (ES)
- ▶ Czech University of Life Sciences (CZ)
- ▶ General Council of Seine-Saint-Denis (FR)
- ▶ Lisbon Municipality (PT)
- ▶ Metropolitan Association of Upper Silesia (PL)



Locating Periurban project partners

6.3. Model of the questionnaire used in the characterisation study

SURVEY OF SOCIAL FUNCTIONS IN PERIURBAN NATURAL SPACES

Purpose of the survey

Given the importance of periurban natural spaces, the purpose of this survey is to gather information about their social functions, in order to improve our knowledge of them and establish possible criteria for classification, depending on the type and intensity of use.

We are, therefore, interested in everything which might inform this reflection:

- literature (technical studies or information documents)
- zoning plans and maps
- proposed indicators for the definition of a Monitoring Programme of these functions

The Questionnaire

You may complete one questionnaire for all of the spaces you manage or one for each site.

Name, post
Organisation
Spaces managed (name, surface area) Postal address
e-mail

Note: when completing the form, you may enlarge the cells as much as necessary. If you wish to add extra information about any of the subjects raised, do not hesitate to attach files with complementary documents: plans, tables, balance sheets, spreadsheets, final results of surveys, etc.

Please return the questionnaire by ___ March 2009 to:
Consejería de Medio Ambiente de la Junta de Andalucía
Tel: +34
e-mail:

LOCATION AND PHYSICAL CHARACTERISTICS

LOCATION OF THE SPACE	Located within the city	Peripheral, on the edge of the city	Within a diffuse urban fabric	External, at a certain distance from the built-up area <i>(Give the distance to the most important town in the urban conglomeration)</i>	Group of spaces making up a "green ring"	Other location or configuration
HOW NATURAL IS THE SPACE?	Area of natural origin of high ecological value	Area of natural origin of medium-low ecological value	Agricultural periurban space	The space is the result of the recuperation of the environment / landscape in a degraded or abandoned area previously with other uses		Other options

LEGAL FRAMEWORK AND MANAGEMENT OF THE SPACE

OWNERSHIP	Approximate % of public ownership	Approximate % of private ownership	Which administration owns the public part?		What is the origin of the public ownership?	
	%	%	(Give the % owned by different bodies)	Supramunicipal territorial planning instrument	Instrument and agreement adopted by several administrations	(Common land, inheritance, voluntary purchase, compulsory purchase, etc.)
LEGAL INSTRUMENT OR FIGURE WHICH PROVIDES PROTECTED STATUS	Municipal urban planning	Metropolitan coordination instrument			Legislation on Protected Natural Spaces	Other
	(Indicate the instrument and date of approval)	(Indicate the instrument and date of approval)	(Indicate the instrument and date of approval)		(Indicate the figure or % of the surface area covered by said figure and date of protection)	
(Detail possible limitations, if any)						
MANAGEMENT BODY RESPONSIBLE FOR THE SPACE	Direct management by a local administration	Management by supramunicipal administration	Management by a consortium of administrations	Management delegated to a specific public body	Mixed public / private management system	Other
	No structure of its own	Own structure with individual management	Management and structure shared with other green spaces in a single management organisation			Is the Management Office located within space itself?
ORGANISATIONAL STRUCTURE	(Indicate the organisation on which it depends)	(N° of persons and professional category)	(N° of persons and professional category)	(If differentiated, n° of persons dedicated to this space)		(Yes/No)
	No specific budget	It has a shared but not differentiated budget	It has a shared, differentiated budget	It has its own budget		Who are the public funding bodies?
BUDGET AND SOURCES OF FUNDING		(€/year)	(€/year)	(€/year)		(If there are several, give the approximate percentage contributed by each)
	Give the approximate distribution of annual income as a % broken down into large general items					Give the approximate distribution of annual expenditure as a % broken down into large general items
	% contributed by the administration % sale of goods % income from payment for services % payment from concessionaires, % private sponsorship, etc.					% personnel costs % general maintenance % energy, water, etc. % provisions % payments to private service companies, etc.
MAINTENANCE SERVICES	What maintenance is covered by in-house services or by the administration?			What maintenance is provided by contract with private companies?		
	(Security, cleaning, forestry, supplies, etc.)			(Security, cleaning, forestry, supplies, etc.)		

PRIVATE SPONSORS OR COLLABORATING COMPANIES	<p>If there is any type of collaboration other than financial contribution, what kind of commitment is involved? (Performance of work, provision of services, donation of materials, promotion campaigns, etc.)</p>
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PLANNING, REGULATION AND THE OPERATING REGIME OF THE SPACE

PLANNING INSTRUMENTS	<table border="1"> <tr> <td>Is there an overall Master Plan? (Yes/No)</td> <td>What is its duration?</td> <td>Is there also a Sectoral Plan governing public use? (Yes/No)</td> <td>What is its duration?</td> <td rowspan="2">Other rules or legal regulations (Territorial Plan, Special Plan, municipal or regional Orders, etc.)</td> </tr> <tr> <td colspan="4">Is there individual planning for each space or collective planning for several spaces?</td> </tr> </table>	Is there an overall Master Plan? (Yes/No)	What is its duration?	Is there also a Sectoral Plan governing public use? (Yes/No)	What is its duration?	Other rules or legal regulations (Territorial Plan, Special Plan, municipal or regional Orders, etc.)	Is there individual planning for each space or collective planning for several spaces?			
	Is there an overall Master Plan? (Yes/No)	What is its duration?	Is there also a Sectoral Plan governing public use? (Yes/No)	What is its duration?	Other rules or legal regulations (Territorial Plan, Special Plan, municipal or regional Orders, etc.)					
Is there individual planning for each space or collective planning for several spaces?										
WHAT USES AND ACTIVITIES ARE ALLOWED?	Is there a zoning plan for different uses within the space? (Yes/No) (If so, specify the different zones)									
WHAT USES AND ACTIVITIES ARE PROHIBITED?										
ARE THERE OPENING HOURS?										
IS THERE ANY SPECIFIC FACILITY FOR VISITOR RECEPTION AND INFORMATION?	(Yes/No)	Summer opening hours: from to hrs. Winter opening hours: from to hrs.	Integrated in another facility: (Specify)							
	(Yes/No)	Area (m ²): Free, unrestricted entry with restricted access in certain zones (prior authorisation necessary)	Opening hours: Free entry, but payment required for certain optional services or areas	Entry by payment of entry charge or season ticket (Table of charges)						
WHAT IS THE GENERAL MEANS OF ACCESS TO THE SPACE?	Free, unrestricted entry in general	Combination of direct/indirect public management	Mixed public/private management company	Combination of the foregoing						
	100% direct public management									
IS THERE ANY ENVIRONMENTAL MANAGEMENT AND QUALITY SYSTEM?	(If so, or if one is planned, indicate which system)									

	<p>(N° of companies and type of collaboration: concessions, private activity, agreements or contracts, etc.)</p>
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AREA OF INFLUENCE AND VISITS TO THE SPACE

AREA OF INFLUENCE	What is the approximate maximum distance of the residence of users?		What is the total population of the area of influence?		From what town or city do most of the visitors come?	
	(km)	(travelling time)	(inhabitants)	By other rural highways, forest roads, etc.	Town/city:	(approximate %)
ACCESSIBILITY OF THE SPACE <i>(Indicate all of the possible options)</i>	By motorway or dual-carriageway	By a single lane major road	By a minor road	By other rural highways, forest roads, etc.	Is it accessible by public transport?	Is it accessible by non-motorised greenways?
	(Name of the road)	(Name of the road)	(Name of the road)	(Name of the road)	(Specify the public transport systems available)	(Name of the road)
MEANS OF ACCESS TO THE SPACE	Is there parking space for buses?	Is there parking space for cars?	Is there parking space for bicycles?	Is there parking space reserved for persons with mobility problems?	Other means of access	Is there a maximum number of users?
	(Yes/No) N° of spaces	(Yes/No) N° of spaces	(Yes/No) N° of spaces	(Yes/No) N° of spaces		
APPROXIMATE N° OF VISITORS	Access in private vehicles	Access on foot	Access by bicycle	Access by public transport		(Yes/No) (Maximum number)
	*	*	*	*	When is the high season?	Estimated total n° of visitors per year
FREQUENCY OF VISITS	Average on a working day	Average on a Sunday or ordinary public holiday	On a peak day	When is the high season?	When is the low season?	Irregular
	**	**	**	(Give months or specific periods)	(Give months or specific periods)	
TYPE OF VISITS TO THE SPACE	Several times a week	At least once a week	At least once a fortnight	At least once a month	Several times a year with no clear regularity	*
	*	*	*	*	*	*
SOCIAL/CULTURAL LEVEL	In family groups	Groups of friends	School groups	Other groups	Individual visits	No pattern
	*	*	*	*	*	*
SOCIAL/CULTURAL LEVEL	Unqualified	Primary education	Basic secondary education	Higher secondary education	Other education	University education
	*	*	*	*	*	*

* If data is available, give the approximate % for each option. Otherwise, order by importance (1st, 2nd, 3rd, 4th, etc.)

** If attendance is too variable, give ranges (e.g., 500-1000 visitors/day). If quantitative data is not available, indicate the scale of visits qualitatively: high (level close to the maximum capacity); Medium (level close to half capacity) or low (level significantly lower than capacity).

SERVICES AND EQUIPMENT AVAILABLE IN THE SPACE

SERVICES AND EQUIPMENT AVAILABLE IN THE SPACE		Available	Payment	Management	Access
RECREATION	Bicycle hire				
	Stables/horse-riding				
	Small funfair				
	Wildlife park or zoo				
	Bathing areas/water park or similar facilities				
	Sports facilities (tennis, basketball, football, etc.)				
	Adventure sport circuits				
	Water sport instruction centre				
	Provision of boats for water sports				
	Fishing equipment				
SPORT	Other				
	Nature guide service (guided walks with monitors)				
	Nature classroom				
	School farm				
	School nursery				
	School or recreational allotments				
	Courses, seminars, nature workshops, etc.				
	Other				
	Organisation of family, school or social festivities				
	Organisation of cultural activities: exhibitions, theatre, concerts, competitions, workshops, etc.				
SOCIAL / CULTURAL	Thematic centres or specific museums:				
	Other				
	Small drinks stalls				
	Restaurants				
	Shops				
	Camping areas/campsites				
	Accommodation in other tourist establishments				
	Golf course				
	Tourist river trips				
	Overland tourist trips (small trains, etc.)				
MIXED	Other				
	Parking				
	Toilets				
	Visitor Information Centre/Reception or Interpretation Centre				
	Botanical Garden				
SOCIAL SERVICES	Centre for minors, the elderly, persons with disabilities, etc.				

Available: Mark the services or equipment offered with an X.

Payment: Mark with an X if payment is required for the service or equipment.

Management: Indicate the management system for each service or equipment: Direct Public Management (DP); Indirect Public Management (IP); Private Management (PR)

Access: Mark with an X if the equipment is adapted for persons with mobility problems.

FUNCTIONS AND ACTIVITIES IN THE SPACE BROKEN DOWN BY MOTIVE

FUNCTIONS	ACTIVITIES	1	2	3	
RECREATION	Short walks	X	80%	VI	
	Short bicycle rides				
	Horse-riding				
	Picnicking				
	Use of children's playgrounds				
	Bathing				
	Others				
	Rambling/Cross-country walking				
	Sport on open-air tracks or fields				
	Use of gym apparatus				
SPORT	Use of adventure sport circuits: rock-climbing walls, zip-lines, tree-borne rope bridges ...				
	Water sports (canoeing, sailing, rowing, etc.)				
	Mountain sports: mountaineering, climbing				
	Mountain biking				
	Fishing				
	Others				
	Educational walks				
	Guided visits with monitors				
	Visits to Interpretation Centres, Nature Classrooms, School-Workshops, School Farms or similar facilities				
	Organisation of seminars, courses, nature workshops, etc.				
EDUCATION	Environmental awareness-raising activities and campaigns				
	Environmental knowledge and training, in general				
	Others				
	Festive events related to the environment or the history of the city				
	Conservation of the inherited landscape as an expression of identity of scenic or cultural value				
	Cultural activities: exhibitions, theatre, concerts, competitions, workshops, etc.				
	Conservation of elements related to the historical, cultural, ethnological or religious heritage, etc.				
	Organisation of regulated sporting competitions and events				
	Promotion of activities by volunteers and associations related to the protection of the space				
	Place for meeting and socialising between different groups (young, old) or minorities				
SOCIAL / CULTURAL	Refuge for activities of marginalised groups				
	Integration of groups at risk of social exclusion (e.g., prison inmates, problematic children, etc.)				
	Others				
	Source of direct contact with nature (as it is a natural space)				
	Enjoyment of the landscape as a place of relaxation and a source of healthy living (clean air, no noise, etc)				
	Visits for the specific observation of the fauna, flora or other elements				
	Therapeutic use for the improvement of health; existence of therapeutic centres or itineraries				
	Others				
	THERAPEUTIC: SOURCE OF HEALTH AND WELL-BEING				

1 Mark the functions and activities offered in the space with an X.
 2 Indicate in this cell the approximate percentage of users visiting the space for this purpose, if data is available.
 3 If quantitative data is not available, indicate the frequency as follows: occasionally (O), frequently (F) very frequently (VF)

PROMOTION AND DYNAMISATION OF THE SPACE

	<p>Is there a Dynamisation Plan or promotion of activities in the space? Even if there is no specific Plan, who is responsible for the promotion of activities and programmes?</p>	<p>What media and promotion channels are used? (Leaflets, press, radio, TV, websites, etc.)</p>
<p>PROMOTION</p>	<p>(Managers, administrations, concessionaires, joint action, etc.)</p> <p>What programmes are offered regularly and who are the targets?</p> <p>Name of the programme</p> <p>Target</p>	<p>(Leaflets, press, radio, TV, websites, etc.)</p>
	<p>Name of the event and approximate date</p>	<p>Organisers/promoters</p>
<p>ORGANISATION OF SPECIAL EVENTS * (holidays, contests, competitions, cultural events, etc.)</p>		
	<p>Name of the group</p>	<p>Type of activities undertaken</p>
<p>ASSOCIATIONS AND GROUPS INVOLVED IN CONSERVATION AND THE ENCOURAGEMENT OF PUBLIC PARTICIPATION</p>	<p>Does the space have a building or premises available to facilitate the work and contact between these groups? (Describe the building and give its location)</p>	

PUBLICITY OF THE SPACE	(Describe the material used to publicise and disseminate knowledge of the space: guides, leaflets, maps, etc., and who produced them)
	Is there any centre providing information about the space open to the public? (Describe it and give its location)

* Unlike Programmes, which have a longer duration and are aimed at a specific target group, these are festive, sporting or cultural activities, etc., of short duration (only a few days) whose basic objective is collective enjoyment, encouraging social contact and public participation.

PROBLEMS ASSOCIATED WITH SOCIAL USES

WHAT ARE THE MAIN LIMITATIONS OR DEFICIENT ASPECTS OF THE SPACE WITH RESPECT TO THE SATISFACTION OF THE ABOVE SOCIAL FUNCTIONS?	(Insufficient equipment, congestion of the car parks, problems of accessibility, etc.)
WHAT ARE THE MAIN PROBLEMS CAUSED BY THE PERFORMANCE OF THOSE FUNCTIONS?	(Pressure of visitor numbers which overload the space because of its size or the fragility of the environment, either occasionally or regularly; problems of vandalism; generation of waste; fire hazards; uncontrolled or prohibited uses, etc.)
WITH WHAT OTHER USES, ACTIVITIES OR FACTORS DO THEY CONFLICT?	(Authorised hunting or poaching, existence of areas of private property, nearby sources of contamination or noise, proliferation of mosquitoes, use of certain zones for illicit or marginal activities: prostitution, drug-related activities, binge drinking, lack of policing and security at night, etc.)

MONITORING

	Yes/No	Frequency	Performed by
VISITOR CONTROL			
IMPACT ON THE ENVIRONMENT AND EQUIPMENT			
EVALUATION BY VISITORS			
OTHER MONITORING ACTIVITIES			



With the collaboration of

