

# PUBLIC USE OF METROPOLITAN AND PERIURBAN NATURAL SPACES



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Fédération Européenne  
des Espaces Naturels et Ruraux  
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## Report draft

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## FOREWORD

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From the environmental, cultural, territorial, recreational, educational and social perspectives, metropolitan and periurban parks, because of their multiple uses, play a strategic role which goes far beyond the simple conservation of biodiversity. They are the confluence of a large number of public actions on different scales. Their intimate relationship with aspects such as welfare and the quality of life of the general public, the protection of the landscape and natural resources, urban, municipal and metropolitan planning, the reduction of environmental hazards and urban sustainability are just some of the relevant aspects.

Their proximity to urban areas, where the majority of the population of Europe live, means that they have a common feature which sets them apart from other spaces, and that is the fact that they perform a series of important environmental services and functions. Foremost among these are, undoubtedly, the social functions and the satisfaction of the need for contact with nature of a large number of citizens. Another important role of these spaces is their function as local instruments which facilitate public involvement and public perception of the importance of biodiversity conservation policies.

This paper has been prepared in response to the declaration of intent made by the Andalusian Regional Government's Regional Ministry of the Environment at the last General Assembly, held in Milan in June 2008, to establish a working group within FEDENATUR to study the subject of the Public Use<sup>1</sup> of natural and rural metropolitan and periurban spaces. Given the importance of the social functions of these spaces, it was also proposed that this should be the thematic focus of the next technical meeting.

The sole purpose of this document is to introduce the subject and open the debate by means of a series of questions and initial considerations which must then be reviewed, expanded and validated by the FEDENATUR members, contributors and experts who wish to take part in the debate. This is the reason why this document, above all, aims to set out a series of questions upon which to reflect and to invite practical information, opinions and experiences related to the subject.

The working process considered involves a survey, which will be sent to the FEDENATUR secretariat, to gather precise information about the most relevant questions concerning the social functions of these spaces. The conclusions drawn from this stage will be published and will form the basis of the Technical Meeting to be held in 2009. This Technical Meeting is intended to be an opportunity for reflection and debate and its results should enable us to progress towards the production of a manual containing guidelines and recommendations to improve the management of these areas, in line with the objective of forming a common base contained in the Letter of Intent for the governance of periurban natural spaces (Metropole Nature 2004).

Ramón Pardo  
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<sup>1</sup> On the basis of the studies and analyses carried out by FEDENATUR regarding the functions performed by these spaces, we believe that it is appropriate to use the words in the widest sense of the term "social functions".

## INTRODUCTION

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José M<sup>a</sup> Arenas, Joaquín Hernández, Ramón Pardo

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Identity and social functions of metropolitan and periurban natural and rural spaces:

Before entering into the process of debate, the first question which we face is how to interpret the identity of these spaces and to see whether the social functions which they perform differ from those of other protected areas and from those of urban green spaces. As regards the first aspect, we should mention the widespread confusion which currently exists (not just among the general public, but also among academics and technicians) about concepts such as *periurban parks* and *metropolitan parks*, which are often used synonymously without distinction, or together with similar terms such as *suburban parks*, *forest parks*, *central parks*, *natural recreation areas*, etc. This confusion is exacerbated when the analysis focuses on social functions, which are found in all of these different spaces. An important objective of this work, therefore, must be to clarify these concepts and to classify them by type, depending on the size of the population served, the type of use, the diversity of the functions, predominant activities and other criteria.

Periurban natural and rural spaces are generally characterised by having very little landscaped gardening, which is more appropriate to urban green areas and which consists mainly of ornamental species, generally with a geometric layout. In periurban natural and rural spaces, however, (with the exception of agricultural parks), natural vegetation predominates (forests, wetlands, etc.). These are elements which have been inherited from landscapes which in bygone times covered a much wider area.

In certain cases, we find newly-created periurban green spaces, that is, areas which are the result of environmental restoration or the landscaping of degraded spaces which have been recovered for leisure and recreational use by the local population (abandoned agricultural or industrial areas, riverbank parks, etc.) by means of actions which lead to the naturalisation or even the recuperation of old, pre-existing landscapes.

The term periurban is a geographical concept related to the physical location. It refers to a situation in which the space is influenced by the urban area because of its proximity (it is located around or next to the town or city). The unfettered expansion of cities, though, has converted some spaces which were, previously, strictly periurban spaces into redoubts of nature, "islands" within the new urban fabric. Proximity or periurbanity, though, is a relative term, since the accessibility afforded by modern infrastructure has extended the urban influence to spaces which are relatively distant from the cities, and so, as well as the physical distance, the travelling time should also be taken into account when attempting to determine the scope of that urban influence.

The relationship between periurban spaces and the remainders of natural ecosystems altered to differing degrees by human activity, made up of predominantly natural vegetation, allows us to distinguish them from urban or landscaped green spaces. The former have a more intense ecological interrelationship with the territory, which makes it possible to classify them by type, depending on their geographical location: mountainous areas, gentle hills, alluvial plains, riversides, coastal areas, etc. This is in contrast to the artificial nature of urban parks and their disconnection from the physical surroundings where they are located.

The concept of metropolitan space is more functional in that it refers to the location of the space within the metropolitan area which it serves. Within this relational or functional space, the analysis of the relationships has focussed mainly on the centre and moved out to the periphery, or from the urban to the rural, but we increasingly hear of the need to take a two-way approach which also looks at relationships from the outside inwards.

On many occasions, we find spaces where both aspects (metropolitan and periurban) coincide, though not always: periurban spaces which are not metropolitan and vice-versa.

*Do periurban and metropolitan spaces have different characteristics as regards their social functions?*

Of all the functions performed by periurban and metropolitan spaces the social functions are by far the most common. These are the functions that do most to establish the identity of a particular space and distinguish it from other protected areas. And although, in this respect, they share some characteristics with urban green spaces, they do have their own particular characteristics which clearly differentiate them. These differentiating characteristics are the result of their distinct origin, their geographical location, the type of use made of them, the existence of other, different functions, etc.

While urban green spaces are planned spaces which have been created almost exclusively to perform environmental and social functions and which also require intensive plant management, periurban green spaces require a different kind of management, since they need less plant maintenance and there is a need to make social functions compatible with other functions, which may be economic (traditional production and exploitation) or the conservation of nature. The need for a different kind of management in green spaces was addressed in the forum of Parks and Gardens managers from European cities held in Strasbourg in 1994.

Periurban natural and rural spaces have conditions and types of social use which differentiate them from other protected spaces and from urban green spaces. The former are the first link in the chain of recreational activities in nature within the regional and national systems of protected areas. In this sense, they act as important reception centres which reduce the pressure on other, more fragile, natural spaces (a filtering or buffer function). Secondly, their proximity to urban areas means that they have very significant social use. The more intense cultural, social and emotional links with the local population gives them a function as a space for socialising and bringing people together. This also the case in most urban green spaces, but it is difficult to detect this phenomenon in other protected spaces whose prime function is the conservation of nature. Many authors have defended, from an anthropological standpoint, the fundamental role of some green spaces as generators of social cohesion and integration, since they help individuals to recognise the symbols of their own identity in an increasingly globalised world.

With respect to urban green spaces, which are usually located within compact cities and have a small area of influence, another characteristic which differentiates periurban spaces is the fact that they have a territorial range which goes far beyond the local administrative area where they are located, and they usually cater for the entire population of an urban conglomeration or a group of nearby towns. In this case, the concept of "metropolitan", which refers to their strategic location in an urban region or to the fact that they provide services to that region, is the term which best describes the supra-local coverage characteristic of this type of space. However, unlike other, better-known protected spaces, these spaces do not generally form part of the tourist routes and are more oriented towards enjoyment by the population of nearby towns within a variable radius depending on factors such as: the size and characteristics of the space itself, the size of the surrounding towns and accessibility by road. It is calculated that the area of influence of these spaces can be from a few dozen kilometres up to a maximum travelling time of one hour. In the study of periurban spaces in Andalusia, a maximum distance, which varies with the population, has been calculated. This can be up to 25-30 km in the cases of those closest to the larger cities in the region. One of the objectives of this work is to try to establish more accurate reference values about the area of influence of these spaces.

As regards the type of visit, unlike urban green spaces, which receive almost daily visits, increasing on public holidays, periurban natural spaces and metropolitan parks act as leisure areas where the use is highly concentrated on weekends and public holidays but with low day-to-day use. With the exception of some cases which may have a dual role as periurban and urban green spaces, they are, in general, spaces with a lower frequency of visits (fortnightly or more). The type of visit is basically linked to different factors, of which the most important, undoubtedly, is the distance from built-up areas and their greater size, which makes them less appropriate for short visits in free time after work, in comparison with the advantages of proximity and smaller size offered by urban green spaces. One of the questions which must be addressed is how the location of these spaces and their accessibility affect the type of activities carried out in them and the frequency of use, which differs widely between one space and another.

Significant differences can also be expected between the seasonality of visits to some periurban spaces and others, depending on factors such as the climate: areas with a Mediterranean climate see few visits during the hot summer period, while visits in inland, continental spaces are lower during the cold, winter months. Another important factor affecting inland spaces could be the existence of bathing areas, since this will increase the number of visits during the hotter months, especially as this period coincides with the year's main holiday period.

In summary, the analysis so far indicates that periurban and metropolitan spaces are in a half-way position between protected spaces and urban green areas, sharing some of their functions with each system. This is not to suggest that these spaces should be specifically analysed or planned in isolation; just the opposite, in fact. It is precisely this half-way position that should be exploited in order to study exactly how they operate and to establish proposals for integration and points of connection with other natural spaces and green spaces within the same system: the territory as a whole, by means of environmental and territorial planning policies at different scales.

## Questions to be addressed in this study

### *What uses and activities make up the social functions of periurban and metropolitan spaces?*

The social functions of these spaces can be defined as the set of functions (leisure, recreation, rest, relaxation, learning in contact with nature, socialising, open-air sport, etc.) which contribute to the improvement of physical, mental and social well-being (or, in short, the quality of life) of the local population and, especially, of the users. The analysis of the diversity of these social functions will be one of the main sources of information used to establish a possible classification of types of these spaces in combination with other criteria such as the management model.

The social functions are carried out through a wide number of activities which reflect the desires or demands of visitors. The breakdown of these activities by type of motivation is not easy, since visits to these spaces do not usually reflect a single motivation, but could satisfy several different expectations at the same time: contact with nature, leisure, sport, learning, etc. Therefore, taking part in open-air sporting activity allows users, at the same time, to enjoy a landscape which transmits peace, quiet and contact with nature; the organisation of a sporting event could be, at the same time, a festive event, bringing people together and enjoying nature. It would be difficult, for example, to separate the sporting from the recreational aspects of an amateur fishing competition. Nevertheless, in order to facilitate understanding, we have divided the activities into broad categories defined by different criteria such as the main purpose, type of activity involved, the degree of interaction with the environment and the resources used for the activity. In the final table the following five groups have been established:

- Recreational functions
- Sporting functions
- Educational functions in contact with nature
- Social and cultural functions
- Therapeutic functions

The social demand for open-air recreation is a phenomenon related to the more highly-developed industrial societies and it has seen a significant increase since the 1960's as it represents a means of escape from the falling quality of life in the cities and progressive alienation from nature. This has made periurban natural spaces, thanks to their proximity and convenience, the preferred destination of the urban population for this type of leisure activity.

The recreational function is the use of the space for enjoyment and relaxation: games, rest, walks, bathing, picnics, etc. These are generally spontaneous activities carried out in specially-prepared areas without the need for significant infrastructure: picnic areas, bathing areas, children's playgrounds, footpaths, etc. This is a mainly passive way of using the space, which is simply the recipient of the activity without the need for strenuous physical effort. Among the most common recreational activities are walking and, to a lesser extent, cycling and horse-riding, though at times there could be motorcycling on pre-established circuits.

In recent years, there has been a socialisation of sporting activity and it has become an increasingly important part of urban life. This quantitative increase and the advantages of practicing or learning sports in more agreeable natural surroundings, instead of conventional sports facilities, has made open-air sport one of the fastest growing social functions of periurban spaces. For this reason, sporting infrastructure is increasingly being provided in these spaces (open-air running tracks, areas with gym apparatus, sports schools, adventure sport parks, mountain bike circuits, areas for specific sports, etc.). Sporting activities are differentiated from recreational activities by the greater physical effort required of the user and the different types of user.

Educational functions are the use of the space in order to learn about different subjects through the interpretation of the surroundings or as the appropriate place to inculcate behaviour or awareness in the visitor as regards environmental problems (environmental education). This can be done either directly in the natural surroundings or by means of specialised support infrastructure: interpretation centres, nature classrooms, school farms, school nurseries, etc., or both. These functions are aimed mainly at schoolchildren, although they should be offered, in different programmes, to all of the citizens who visit these spaces.

The social and cultural functions are related to the fact that many of these spaces have social and historical links which bond the groups of the local population and as spaces for socialising. Although in some cases they may be spontaneous, most of the activities in this group are organised. They are promoted by the institutions or by associations and groups of citizens, and in many cases make up the local community's programme of public festivities. Due to their collective organisation and mass attendance, they are activities which facilitate socialising and collective enjoyment of the space: open-air cultural events, open sporting events and competitions,



anthropological/religious festivities, etc. On occasions, collective participation means direct involvement in the conservation and maintenance of the space itself through the action of volunteers, the participation of specific reintegration groups in maintenance work, etc. Among the new emerging uses for these spaces, meetings to promote socialisation among immigrant groups are becoming more common. In other cases, as a result of their location outside the city, they function as a refuge for certain illicit activities: prostitution, drug-related activities, binge-drinking, etc.

Therapeutic functions are implicit, to differing degrees, in the recreational, sporting, social, cultural and educational functions mentioned above through their contribution to prevention and their promotion of healthy habits. The relationship of green spaces with the health and well-being of the public is unquestionable, to such an extent that, in recent years, this has become an emerging field for research where the contributions of medical, environmental and social sciences all converge. The beneficial effect of gardens in the convalescence of hospitalised patients has already been studied (Ulrich 1984) and in recent years therapeutic gardens and allotments have been established either independently or as part of hospital facilities. For this reason, it was considered appropriate to include a specific group of activities which are closely linked to the motivation or demands related to sensorial enjoyment, the consumption of nature, the quest for mental well-being and the active use of these spaces as a therapeutic resource aimed at improving the health of the population in general or of certain sectors of the population affected by specific illnesses.

Within these five broad groups of activities, it is useful to distinguish between those which are free and those which must be paid for and between those which are enjoyed spontaneously by personal initiative depending on the resources and equipment available and those events and activities organised and promoted by public institutions, social organisations, neighbours' associations or other groups. Another basic matter is the issue of conservation problems or the most frequent impact produced by these social activities when the space is overloaded or when the activities are not sufficiently controlled.

Apart from motivation, another important aspect of the type of visit is the means of transport normally used to access these spaces and the way in which they are visited: individually, in family groups, accompanied by children, groups of friends, etc. By studying these aspects, conclusions can be drawn about very important factors such as the different user profiles, the most popular activities, the frequency of the visits, the most common means of transport, etc.

While it is important to ensure the physical and ecological connectivity between natural periurban areas, it is also useful to work on the idea of reinforcing the links between them and with the cities, using greenways as an alternative means of non-motorised access to these spaces. We therefore suggest the analysis of the relationship between periurban and metropolitan green spaces and greenway programmes at different levels (regional, national and European) aimed at the recuperation of riverbanks, abandoned railway lines, traditional footpaths, etc.

*What administrations or institutions have taken the initiative in the protection/declaration of these spaces?*

The diversity and fragmentation of the administrative structures responsible for the management of these spaces is one of the main problems when addressing the matter of sustainable, coordinated management and territorial cohesion. As well as the spatial fragmentation of these natural areas, there is also the problem of the fragmentation of knowledge and of territorial management. (3<sup>rd</sup> International Symposium on Metropolitan and Periurban Natural and Rural Spaces, Barcelona 2003 / 2<sup>nd</sup> Urban Landscape Forum, Vitoria 2007). This is why it is important to establish more coherent, cohesive administrative networks as well as networks for collaboration, management and the exchange of experiences, such as FEDENATUR.

Prior studies have established four types of origin of these spaces:

- Those which have been valorised as a result of urban planning in a large city as part of a wider programme of planning and the provision of open spaces.
- Spaces which are the result of proposals contained in urban or territorial planning instruments promoted by a supra-municipal body: planning of large urban or metropolitan areas or by associations of local councils.
- Spaces which have been created under planning instruments as a result of collaboration or policy coordination between different administrations (local, regional, national, etc.).
- Spaces which are the result of the application of protection measures as part of the process of configuring networks of protected natural spaces at regional level.

The information obtained will make it possible to detail and complete these types and detect their main limitations in order to propose more efficient management and organisation guidelines.



### *How are activities regulated in these spaces?*

The aim is to ascertain the planning and regulation instruments applicable to the uses made of the spaces, whether there is an overall Master Plan and if there is also a specific Sectoral Plan to regulate activities and the zoning of the space for different uses.

### *What are the most common management methods and the source of funding?*

One of the objectives of this study is to define the administrative structures responsible for the management, maintenance, policing, waste management, etc.; private sector participation in the provision of some services and the main sources of funding.

### *What percentage of the total costs is covered by privatised services?*

Since most of these spaces are free to enter and are designed for the benefit of the public, it is to be expected that most of the funding will be covered by public spending, although it is increasingly necessary to seek alternative sources of external revenue or income from commercial services. In this field, it is useful to know the formulae used to capture resources and the income received from privatised services: sales, activities subject to charges, royalties paid by concessionaires, etc., in relation to the total budget.

### *Proposal for a Monitoring Plan*

The main pools of information generated by the working process and those aspects considered vital to our knowledge of how these spaces work will be the basis of a proposal for the indicators of a Monitoring Plan for these spaces.

## RESULTS OF THE QUESTIONNAIRES

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The sample of 41 questionnaires received may be organised thus: 37 individual questionnaires and 4 group questionnaires (Anillo Verde de Vitoria-Gasteiz, RomaNatura, Espaces Nature de Tours and Espace Naturel Lille Métropole).

By countries the sample is divided thus:

Spain: 22 sites  
France: 11 sites  
Italy: 5 sites  
Portugal: 1 site  
Bulgaria: 1 site  
Greece: 1 site



### BLOCK 1: LOCATION, SIZE AND OWNERSHIP OF THE AREA

One of the most striking features of the peri-urban areas surveyed is their great variation in size, a characteristic that has been highlighted in other previous studies conducted by FEDENATUR. Although the resulting average size for the areas analysed is 3232 ha, the size ratio between the smallest, La Corchuela in Andalusia at 84 ha, and the largest, Parco Agricola Sud Milano at 47,033 ha, is 1:560. This disparity explains why the mean value is too high. The area which is the intermediate value in the distribution (the median) gives a significantly lower figure: the Anillo Verde (Green Belt) in Vitoria at 585 ha.

The study of ownership of the areas shows that public ownership, at 69.4%, is much more common than private ownership and generally corresponds to places belonging to town councils and, to a lesser extent, to supramunicipal levels of government (associations of town councils, provinces or regions).

As for physical location with respect to the urban system, more than half (52.2%) are areas located in a diffuse urban structure which extends seamlessly as an urban agglomeration. Next in importance are two groups of areas: those that are located outside the city, though not far from it (17.4%), closely followed by those which

are attached to the city as they are on its perimeter (15.2 %). Another 10.9% is made up of areas actually within the city itself, and in only two cases are there arrays of small areas that form a green belt around a city and are managed as a single area.

In terms of their level of nature, the predominant areas are ones made up of formations with high or very high ecological value (60%), which retain traces of ecosystems that once covered a larger area of the countryside around the cities. The second most important group (17%) is areas with a diverse internal composition of well-preserved natural spaces along with others that are artificial to a varying degree. A third group (14.6%) is made up of quite degraded areas which have subsequently undergone regeneration to enhance their value as recreational spaces. Finally, three of the areas studied are agricultural peri-urban zones.

The maximum extent of their catchment areas, defined as where the people who regularly visit the areas live and based on estimates made by managers of the areas, averages 30 km (18.6 miles) and 33 minutes travel time. To be sure, this average figure is very close to the figure we estimated as a hypothesis before doing the survey work based on the behaviour observed in Andalusia's peri-urban parks. The number of people living in this estimated catchment area comes to an average of around a million inhabitants, with the main city in the agglomeration producing the majority of visitors to the areas at 62% of the total.

## BLOCK 2: PLANNING AND MANAGEMENT

As for the legal measures that afford protected status to these areas, although there are usually a number of them in each case, there is nonetheless a clear predominance of areas covered by national or regional legislation concerning protected natural areas, often as National/Regional Parks or areas forming part of the Natura 2000 Network. Next in order of importance come areas which are protected by municipal town planning regulations and, in third place, those covered by some form of planning and coordination at the metropolitan level.

The availability of tools for planning and managing these areas is high: 80.5% have a general Master Plan, 58.5% have a Sector Plan to regulate recreational use, and in 65.8% of cases these instruments provide for the zoning of the area for different uses and levels of protection. None of the areas have set visitor reception capacity limits to deal with potential overcrowding but rather have adopted other preventive measures, such as the establishment of complementary and alternative areas in the vicinity or regulation of influxes through permits.

Most managers positively rated the effectiveness of the legal protection afforded to these areas, albeit with qualifications in some areas that do not come under protected areas legislation, such as the risk of changes in use regulation or the scope of protection that may result from urban planning review processes or political change in the local government authority to which they belong.

There are four different management models in the peri-urban areas analysed, in order of importance:

- 1<sup>st</sup> Direct management by local government (17 areas)
- 2<sup>nd</sup> Direct management by regional government (8 areas)
- 3<sup>rd</sup> Partnerships between different levels of government (7 areas)
- 4<sup>th</sup> Management delegated to a public or public/private organisation (6 areas)

The majority of areas feature common or shared management structures (51%), 11 have individualised administrative and management structures, while 9 of them lack a specific administrative structure for their management.

As for funding, which is particularly significant in terms of understanding the operation of these areas, the vast majority (73.17%) have an annual budget, with those which have their own budget being more numerous in this group than those which have a shared budget, even though their specific items are defined. In spite of there being great budgetary differences between areas, an indicative figure for available funds per area unit averaging €2,744/ha/year has been calculated. The major part of income by far is money from government (on average over 95%). Financial contributions from sponsors and private partners only exist in 34% of areas and barely make up 3% of total funding on average, while income from services and the sale of goods accounts for only 8% on average. One of the areas with the highest share of private income generation gets 11% of its total budget from this source, made up of 9% in ticket sales and 2% in payments by service concession operators. On the expenditure side there is a more balanced distribution for most of the areas, although personnel costs are usually the biggest item slightly above maintenance and supplies, payment for external services, investment and others.



The usual formula for managing public use services and facilities in these areas is a combination of direct public management and indirect management through service concession operators. This model is to be found in 73.1% of areas and the average number of concession operators was 2.44 companies per area. In 24.4% of the areas direct public management is used exclusively.

Only 39% of the areas have quality and environmental management systems in place. The main problem cited by managers is the excessive rigidity of the majority of certification systems, which is why some areas are working with specific models that are better tailored to their individual characteristics.

### BLOCK 3: ACCESSIBILITY, FREQUENTATION AND SOCIAL FUNCTIONS

Access to most of the peri-urban areas surveyed (61%) is free, with the rest combining free entry with payment for access to certain areas or services. In only two of the areas is access subject to users paying for entry tickets. Opening hours are regulated in 24% of the areas.

Infrastructure and access conditions available to users are in general optimal for pedestrian and motorised access, given the location of these areas near cities and/or their connections with highways: 85.4% of spaces are accessible by dual-carriageway and 73.2% are connected to their city by public transportation systems. The main infrastructural weaknesses lie in their poor accessibility by non-motorized means of transport, since only 36.5% of the areas are connected by bike tracks. Also improvable is the supply of spaces for bicycle parking and for people with impaired mobility, since over 56% of the areas lack the former and more than 51% are deficient in the latter.

Highly conditioned by the abovementioned infrastructures and by travel habits in built-up areas, the means of access most widely used by visitors are, in order of importance:

- 1<sup>st</sup> Private vehicle
- 2<sup>nd</sup> On foot
- 3<sup>rd</sup> Bike (with similar figures to the previous group)
- 4<sup>th</sup> Public transport

As for the type of frequentation by users, and with a few exceptions, visits to peri-urban areas take place mostly at weekends and on holidays during several months of the year. Most users tend to make multiple visits throughout the year without a regular schedule. The second largest group is users who go there at least once per week. For the rest there is a fairly even distribution of visitors who go fortnightly, monthly and on various days of the week. One of the problems with this form of frequentation is trying to reconcile these time factors with service profitability.

In terms of groups, users' visits to these peri-urban areas are distributed as follows in order of their importance:

- 1<sup>st</sup> Family
- 2<sup>nd</sup> Group of friends
- 3<sup>rd</sup> Individual visitors
- 4<sup>th</sup> School party
- 5<sup>th</sup> Other groups

The surveys received indicate a lack of data on the number of visitors in different periods, with many of the areas merely giving an estimate of the total visitors they receive in the course of an entire year. Another significant gap is the lack of knowledge about visitor profiles – how they frequent the area, their socio-cultural profile, their expectations and demands and so on – which highlights the need to extend and expand the frequency of survey work and follow-up studies. Above all there is very little data on the educational level of visitors, which is only available for a very few areas.

A total of 417 facilities and services available in the 41 areas surveyed have been counted. The vast majority are publically operated with private ones accounting for only around 25% of the total, even though pay facilities and services make up 41%. 21.5% of them are adapted for use by disabled people.

The three most common recreational facilities and services are horse-riding centres (available in 11 areas), bike hire services (8 areas) and small amusement parks (in 6 areas).

As for sports, common facilities include pitches and courts for outdoor sports (present in 17 areas), gymnastics circuits (present in 14 areas) and water sports centres and schools (present in 6 areas).

Widespread educational services include nature courses and workshops (25 areas), nature classrooms (22 areas), guided tours (in 17 areas), school kitchen gardens (in 15 areas) and farm schools (11 areas).

The most common socio-cultural services are holding family or school festivals (in 21 areas), visits to museums or theme centres (18 areas) and running cultural activities such as exhibitions, theatres, concerts, etc. (17 areas).

Tourist facilities and services include large numbers of small beverage kiosks (in 18 areas), restaurants (16 areas), accommodation establishments and hostels (10 areas), campsites and camping areas (8 areas) and shops (also in 8 areas).

Finally, mixed basic facilities include car parks (38 areas), public toilets (in 31 areas) and reception and visitor centres (29 areas).

In addition to examining the facilities and services available, it is also useful to find out what the favourite activities of peri-urban area visitors are in order to identify more precisely the functions of the areas and what people like most about them. Unfortunately, there is a general lack of quantitative data from fieldwork and user activity surveys in this respect. Only five areas provide adequate monitoring and numerical data, while in all other cases there is only indirect and qualitative information based on the knowledge inferred by the managers of these areas.

Bearing in mind the above limitations, the only information available shows that the most widespread activity in these areas is *taking short walks*, found in 39 of the 41 areas analysed and which is also a very high frequency activity. In second place with equal frequency (37 out of 41 areas) are *close contact with nature* and *having picnics*. Both of these activities take place a lot as they are described as between very frequent and frequent in these areas. Finally, in third place and also with equal frequency are *enjoying the scenery as a place to relax and for a healthy life* and *visits to observe specific flora or fauna*, which can be found in 36 of the 41 areas analysed. In this case, however, the former takes place more often, being recorded as a very frequent activity in 13 areas as opposed to in 3 for the latter.

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

-	Recreational:	No. of areas	How often done
	1 Taking short walks	39	Very frequent
	2 Picnics	37	Very frequent-frequent
	3 Bike rides	26	Very frequent-frequent
-	Sports:		
	1 Hiking/trekking	33	Very frequent-frequent
	2 Mountain biking	25	Very frequent-frequent
	3 Using sports courts and pitches (tennis, basketball, football)	18	Frequent
-	Educational:		
	1 Holding seminars, courses, nature workshops, etc.	31	Frequent-occasional
	2 Running environmental awareness campaigns and activities	29	Occasional
	3 Visits to interpretation centres, nature classrooms/school workshops, farm schools or similar	28	Frequent-very frequent
-	Socio-cultural:		
	1 Voluntary work and associations	26	Frequent-occasional
	2 Organising sports competitions	25	Occasional
	3 Holding festive events connected with the environment or history of the city	22	Frequent-occasional
-	Wellbeing and therapy:		
	1 Seeking direct contact with nature	37	Very frequent-frequent
	2 Enjoying the scenery as a place to relax/ observation of flora and fauna	36	Frequent
	3 Use in therapy programmes	6	Occasional

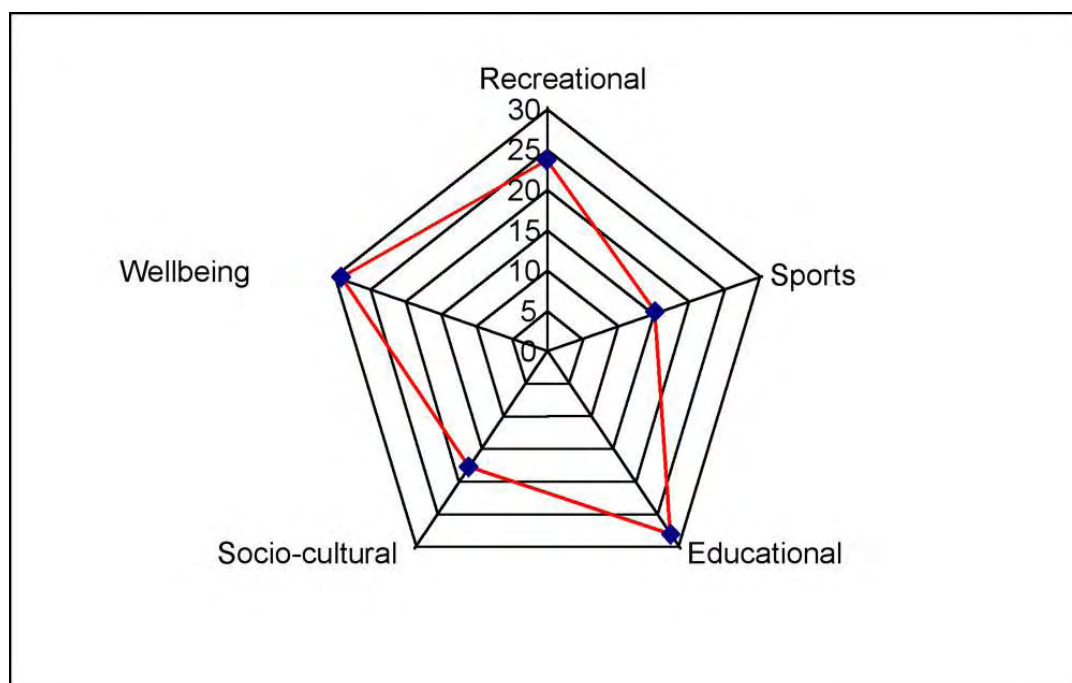


In order to assess the relative importance of these functions in peri-urban areas, the average number of the areas which are in each of these groups of functions has been calculated. As can be seen in the table and chart, the most important function performed by the peri-urban areas studied is carrying out therapeutic and wellness functions. It should be stressed that this is essentially a passive use of the areas as a setting for looking at the scenery or as places that offer people a source of comfort, wellness and relaxation. In contrast to this indirect function is the still not widespread but increasingly frequent active use of the areas as a therapeutic resource. Thus over recent years there has been a progressive rise in peri-urban green spaces of programmes of visits providing treatment and recreation for groups with mental and sensory disorders, etc. Indeed, six areas now feature therapy centres which use their respective areas for therapy purposes.

Functions or groups of activities	Average number and (%) of areas they are found in
Recreational activities	23.5 (57.3%)
Sports activities	15.1 (38.8%)
Educational activities	28.0 (68.3%)
Socio-cultural activities	17.8 (43.4%)
Therapy and wellbeing activities	28.8 (70.2%)

Secondly, it is noteworthy that educational functions are present in more areas than merely recreational ones, which are in third place. Next in importance are socio-cultural activities and, finally, sports which are the least widespread.

It should be noted that this approach to importance based on the number of areas needs to be supplemented by survey work to provide a more in-depth and nuanced view of this importance based on other factors, such as the percentage of total users accounted for by the people doing each of these activity groups: schools, sports enthusiasts, individual walkers/hikers, families who come primarily to have a picnic or do other recreational activities, etc.



As for the promotion of social and leisure uses in peri-urban areas, the implementation of stimulus plans is still limited as only seven out of the 41 (15% of analysed areas) has a plan of this type in place. However, high use is made of promotional tools with the most common including setting up websites (87.8% of the areas), print ads (80.5%), leaflets (68.3%) and radio advertising (51.2%), while 44% of the areas even have their own newsletter or magazine which is brought out regularly.

Most of the areas run programmes designed to promote visits by the general public and 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, the school calendar or with natural processes such as bird migrations,

meteor showers, etc.) resulting in an average of 4.7 events per area throughout the year. The involvement of local associations and groups is also an important feature in the functioning of the peri-urban areas with an average of 4.3 per area, and nearly half of the areas have a facility which can be used to foster the operation and participation of these groups.

#### BLOCK 4: PROBLEMS OF PUBLIC USE AND ITS MONITORING

The study and monitoring of social uses in peri-urban areas is, as has been seen throughout this paper, one of the areas where improvements can be made given the general lack of monitoring studies. Most control activities are concerned with the condition of facilities, since this is an extremely sensitive issue that affects the safety of users and, in the event of accident, could lead to conflict with the level of government responsible for the area. Such checks are regularly carried out in 85.4% of the areas with a frequency ranging from every month to every six months.

Surveys designed to ascertain the opinion of visitors and how they use the area have been run on an occasional basis in 63.4% of the areas, but very sporadically and only three areas run them at least once a year. The manifest lack of data thus hinders analysis of the degree of overall satisfaction of users of these areas. Other studies or controls, such as the number of visitors or the number of vehicles entering and their impact on the environment, are found in fewer than 50% of the areas studied. Those which keep track of visitor numbers normally do so every day, while vehicle counts are more commonly taken on a weekly basis. There are only very occasional studies made of the impact of users on the environment.

The answers given by managers in the section of the survey about the problems associated with social uses of the peri-urban areas reflect the presence of a series of problems that affect most of these areas, with the consequent need to study possible solutions. The main one of these recurring problems is the lack of supervision, which affects 56% of the areas surveyed. The second most important (affecting 46.3% of areas) is having insufficient facilities to meet demand. In third place there are three problems with the same frequency (36.6%): two of them, overcrowding of facilities at times of peak use and vandalism, are connected to the lack of facilities and their upkeep, while the other is illegal hunting. They are followed in order of importance by litter and other waste, the uncontrolled circulation of motor vehicles, the presence in these areas or in their vicinity of marginal uses (prostitution, open-air binge drinking sessions involving groups of young people, etc.), the risk of fire and the presence of other prohibited activities.

**SURVEY FORM:**

**Nº OF SPACES CONSIDERED 41, BELONGING TO SIX COUNTRIES: BULGARIA (1), SPAIN (22), ITALY (5), FRANCE (11), GREECE (1) AND PORTUGAL (1)**

For the analysis of the physical variables, such as extension, propriety and physical location we have taken into consideration all data given for individual spaces even if some of them belonged to a group of spaces managed collectively. On the contrary, for the other sections of the survey, we have maintained the data grouped by the 41 managing entities.

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	Group of spaces making up a "green ring"
TOTAL	7	12	36	13	2

OWNERSHIP	% of public ownership	% of private ownership
AVERAGE	69,29	30,64

AVERAGE AREA
3.232 ha

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	Other options
TOTAL	24	1	3	6	7

AREA OF INFLUENCE	Kms	Travelling time	Total population of the area of influence	% of visitors from the main cityl
AVERAGE	30	33	1.063.400	62

LEGAL FIGURE OF PROTECTION						
LEGAL INSTRUMENT	Municipal urban planning	Metropolitan coordination instrument	Territorial planning instrument	Instrument and agreement adopted by several administrations	Legislation on Protected Natural Spaces	Other
TOTAL	11	5	1	2	25	1

IS THE PROTECTION ESTATUS SUFFICIENT?		
Yes	33	No 1 No answer 7

MANAGEMENT BODY RESPONSIBLE FOR THE SPACE						
MANAGE-MENT BODY	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	Regional admin.
TOTAL	17	3	7	5	1	8



ORGANISATIONAL STRUCTURE			
STRUCTURE	No structure of its own	Own structure with individual management	Management and structure shared with other green spaces
TOTAL	9	11	21

SOURCES OF FUNDING					
BUDGET	It has its own budget	It has a shared, differentiated budget	It has a shared but not differentiated budget	No specific budget	Average €/ha/year
TOTAL	17	13	5	6	2.744

PRIVATE SPONSORS OR COLLABORATING COMPANIES	
Yes 14	No 27

INCOME DISTRIBUTION %				
INCOME	Public funds	Sale items	Services	Private sponsorship or collaborator association
AVERAGE	96,1	2,0	6,1	3,0

EXPENDITURE DISTRIBUTION %					
EXPENDITURE	% Inversions	% personal	% Maintenance and supplies	% Payment for external services	Others
AVERAGE	19,8	42,11	35,3	32,3	9,17

PLANNING INSTRUMENTS				
PLANNING INSTRUMENTS	An overall Master Plan	Sectoral Plan governing public use	Zoning plan for different uses within the space	Load limit
TOTAL	33	24	27	0

MANAGEMENT SYSTEM OF THE PUBLIC SERVICES AND EQUIPMENT			
MANAGEMENT SYSTEM	100% direct public management	Combination of direct/indirect public management	Mixed public/private management company
TOTAL	10	30	1

Nº OF COMPANIES FOR PUBLIC SERVICE AND EQUIPMENT CONCESSIONAIRES	
AVERAGE	2,44

GENERAL MEANS OF ACCESS TO THE SPACE				
MEANS OF ACCESS	Free, unrestricted entry in general	Free, unrestricted entry with restricted access in certain zones	Free entry, but payment required for certain optional services or areas	Entry by payment of entry charge or season ticket
TOTAL	25	11	6	2

IS THERE ANY SPECIFIC FACILITY FOR VISITOR RECEPTION AND INFORMATION?			
YES	31	NO	10

ARE THERE OPENING HOURS?			
YES	10	NO	31

IS THERE ANY ENVIRONMENTAL MANAGEMENT AND QUALITY SYSTEM?			
YES	16	NO	25

ACCESSIBILITY OF THE SPACE	By motorway or dual-carriageway	By a single lane major road	By a minor road	By other rural highways, forest roads, etc.	By public transport	By non-motorised greenways	On foot
TOTAL	35	21	36	22	30	15	30

PARKING SPACE				
Nº OF SPACES	Parking space for buses	Parking space for cars	Parking space for bicycles	Parking space reserved for persons with mobility problems
TOTAL	26	38	18	20

MEANS OF ACCESS TO THE SPACE	Access in private vehicles	Access on foot	Access by bicycle	Access by public transport	Other means of access
(Order of importance)	1º	2º	2,5º	3º	4º

FREQUENCY OF VISITS	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
(Order of importance)	2,9º	2,4º	2,8º	2,7º	1,9º

TYPE OF VISITS	In family groups	Groups of friends	School groups	Other groups	Individual visits
(Order of importance)	1º	2,3º	3º	4º	2,5º

APPROXIMATE Nº OF VISITORS	Average on a working day	Average on a Sunday or ordinary public holiday	On a peak day	Estimated total nº of visitors per year
AVERAGE	992	5.215	33.722	1.305.454

SOCIAL/CULTURAL LEVEL	Unqualified	Primary education	Basic secondary education	Higher secondary education	Other education	University education
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Very limited data available only in few areas

SERVICES AND EQUIPMENT AVAILABLE IN THE SPACE		Available	Payment	Management *	Access
Recreation	Bicycle hire	8	8	2PD/2PI//4PR	1
	Stables/horse-riding	11	10	10PR/1PD/	1
	Small funfair	6	2	2PR/2PD/2PI/	3
	Wildlife park or zoo	3		2PD/1PI/	2
	Bathing areas/water park or similar facilities	4	3	1PD/1PR/	
Sport	Sports facilities (tennis, basketball, football, etc.)	17	3	10PD/2PI/2PR/	1
	Adventure sport circuits	4	3	2PR/1PD/	
	Water sport instruction centre	6	4	2PI/2PR/1PD/	
	Provision of boats for water sports	5	4	2PR/1PI/1PD/	1
	Fishing equipment	2	2	2PR	1
	Exercises bars along a path	14		14PD	
	Other	3	3	1PD/2PR	1
Education	Nature guide service (guided walks with monitors)	17	9	4PI/9PD/4PR/	3
	Nature classroom	22	9	11PI/7PD/3PR/	7
	School farm	11	5	6PR/2PD/2PI/	2
	School nursery	3	1	1PI/1PR	
	School or recreational allotments	15	5	7PI/8PD/2PR/	4
	Courses, seminars, nature workshops, etc.	25	7	16PD/5PI/2PR/	8
	Other	1	1	1PI/	1



SERVICES AND EQUIPMENT AVAILABLE IN THE SPACE		Available	Payment	Management *	Access
Social / cultural	Organisation of family, school or social festivities	21	5	4PI/12PD/3PR/	5
	Organisation of cultural activities: exhibitions, theatre, concerts, competitions, workshops, etc.	17	7	8PD/5PI/3PR/	4
	Thematic centres or specific museums:	18	5	4PR/12PD/1PI/	3
	Other	1		PD	
Tourism	Small drinks stalls	18	18	6PI/10PR/	5
	Restaurants	16	16	11PR/3PI/	4
	Shops	8	8	6PR/1PI/1PD	1
	Camping areas/campsites	8	6	2PR/2PD/3PI/	2
	Accommodation in other tourist establishments	10	10	9PR/	1
	Golf course	5	4	2PI/2PR/	
	Tourist river trips	5	3	2PR/1PI	1
	Overland tourist trips	4	3	1PD/1PR/1PI/	1
Mixed	Parking	38	3	25PD/4PR/2PI/	9
	Toilets	31	1	17PD/3PI/1PR/	7
	Visitor Information Centre/ Reception or Interpretation Centre	29	1	18PD/7PI/	7
	Botanical Garden	8	1	3PD/2PI/	3
Social services	Centre for minors, the elderly, persons with disabilities, etc	3	1	2PD/	1
TOTAL		417	171	180PD/105PR/82PI	90

Management: PD (Direct Public Management) PI (Indirect Public Management) PR (Private Management)

FUNCTIONS	ACTIVITIES	Presence	Frequency**
Recreation	Short walks	39	38 MF/1O
	Short bicycle rides	26	13 MF/9F/3O
	Horse-riding	13	10 O/2MF/1F/
	Picnicking	37	6O/21MF/10F/
	Use of children's playgrounds	21	12 MF/7F/1O/
	Bathing	5	2MF/3F/
	Others		
Sport	Rambling/Cross-country walking	33	13 F/6O/15MF/
	Sport on open-air tracks or fields	18	4O/4MF/10F/
	Use of gym apparatus	14	9 F/5O/
	Use of adventure sport circuits: rock-climbing walls, zip-lines, tree-borne rope bridges	8	2F/5O/1MF/
	Water sports (canoeing, sailing, rowing, etc.)	6	3O/2MF/1F/
	Mountain sports: mountaineering, climbing	10	4O/1F/5MF
	Mountain biking	25	14MF/8F/3O/
	Fishing	7	2O/3F/2MF/
	Others	1	F/
Education	Educational walks	26	18F/4MF/4O/
	Guided visits with monitors	26	15F/7MF/4O/
	Visits to Interpretation Centres, Nature Classrooms, School-Workshops, School Farms or similar facilities	28	16F/9MF/3O/
	Organisation of seminars, courses, nature workshops, etc.	31	15F/12O/4MF/
	Environmental awareness-raising activities and campaigns	29	8F/16O/5MF/
	Environmental knowledge and training, in general	28	12F/12O/4MF/
	Others	1	F/
Social / cultural	Festive events related to the environment or the history of the city	22	4MF/9O/9F/
	Conservation of the inherited landscape as an expression of identity of scenic or cultural value	16	5O/9F/2MF/
	Cultural activities	19	6F/11O/2MF/
	Conservation of elements related to the historical, cultural, ethnological or religious heritage, etc.	19	6O/3MF/10F/
	Organisation of regulated sporting competitions and events	25	20 O/4F/1MF/
	Promotion of activities by volunteers and associations related to the protection of the space	26	10 O/3MF/13F/
	Place for meeting and socialising between different groups (young, old) or minorities	9	3MF/4O/2F
	Refuge for activities of marginalised groups	7	2F/5O/
	Integration of groups at risk of social exclusion	15	7O/1MF/7F
	Others	1	F/

FUNCTIONS	ACTIVITIES	Presence	Frequency**
Therapeutic: source of health and well-being	Source of direct contact with nature	37	20MF/16F/1O
	Enjoyment of the landscape as a place of relaxation and a source of healthy living	36	13MF/22F/1O/
	Visits for the specific observation of the fauna, flora or other elements	36	27 F/3MF/6O/
	Therapeutic use for the improvement of health; existence of therapeutic centres or itineraries	6	6O
	Others	1	1F
	TOTAL	706	195O/291F/220MF

\*\* Frequency: O (occasionally) F (frequently) MF (very frequently)

IS THERE A DYNAMISATION PLAN			WHO IS RESPONSIBLE FOR THE PROMOTION?				
	YES	NO		Managers	Concessionaires	Joint action	Others
N° espaces	7	34	TOTAL		0	26	3

MEDIA AND PROMOTION CHANNELS							
	Leaflets	Press	Radio	TV	Website	Newsletter	Others
N° espaces	28	33	21	18	36	18	4

ORGANISATION OF PROGRAMMES					ORGANISATION OF SPECIAL EVENTS	
Addressees	General public	School public	Families	Other groups		
N° espaces	30	26	2	4	AVERAGE	4,7

ASSOCIATIONS AND GROUPS INVOLVED IN CONSERVATION	
AVERAGE	4,3

DOES THE SPACE HAVE A BUILDING TO FACILITATE THE PARTICIPATION?				IS THERE ANY DOCUMENTATION CENTRE?			
YES	20	NO	11	YES	24	NO	17

MONITORING	N° spaces	%	Dialy	Weekly	Fortnightly	Monthly
Control of the number of vehicles	16	39,0	I	IX	I	II
Control of the number of persons visiting the space as a whole	20	48,8	X			I
Control of the number of users of specific equipment or sectors	19	46,3	III	I	I	
Studies of activities of the users and the ways they use the space	21	51,2				
Opinion surveys and user satisfaction	26	63,4				
Monitoring of the state of repair of the equipment	35	85,4	II	III		III
Studies or monitoring of the impact of users on the natural surroundings	17	41,5				
Other studies	1	2,4	I			

MONITORING	Three-monthly	Half-yearly	Annual	Biannual	every 5 years	Irregularly	Majority
Contrôle du nb de véhicules dans les parkings						I	Weekly
Contrôle du nb de personnes visitant l'espace	III			I		I	Dialy
Contrôle du nb d'utilisateurs des équipements ou de secteurs particuliers			II			IX	Irregularly
Etudes sur l'utilisation de l'espace par les usagers		I	II	I	I	X	Irregularly
Enquêtes sur l'opinion et la satisfaction			III	II	I	XIV	Irregularly
Inspection de l'état des équipements		XI				III	Half-yearly
Etudes ou travaux de suivi de l'impact des usagers sur le milieu naturel			I	I		VI	Irregularly
Autres études: usagers au Centre de Visitants							Dialy

DEGREE OF SATISFACTION	Low	Medium	High	Very High	No reply
N° spaces	No significant data				

MAIN PROBLEMS DETECTED	N° spaces
Insufficient surveillance	23
Insufficient equipment	19
Poaching	15
Overload of equipment	15
Vandalism	15
Generation of waste	10
Uncontrolled traffic	9
Marginal activities	8
High fire hazard	8
Prohibited uses	6

## 4. SYNTHESIS OF TECHNICAL MEETING

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Teresa Pastor, FEDENATUR

### Concept of periurban/metropolitan nature park

There coexist different realities under the concept of the periurban/metropolitan nature park and, therefore, different models of management. However, periurban nature parks make no sense if they are not integrated into the idea of a green network. All the prospective studies of what the city of 2050 will be like assert that it must be green and digital. The periurban nature parks in addition to fulfilling their social and natural functions, must play an essential role in the conception and planning of the development of land. Periurban nature parks must be seen as discontinuities in the face of urban expansion, as corridors, as gateways open to the affirmation of a given territory, of a green territorial identity which, in addition to controlling urban expansion, contribute towards improving the quality of life in our cities.



The River Loire on its passage through Tours.

### European legislative viewpoint

Although European legislation does not recognise periurban nature parks, the reality is that they exist and they function. A protected park is a well-defined territory, with management instruments and a series of persons appointed to manage them. This said, a European, regional and local perspective is needed to prevent nature parks from becoming islands. Moreover, the situation in the urban periphery is highly complex with a great deal of pressure placed on the loss of nature heritage.



Aerial view of Vitoria-Gasteiz showing the limits of the protected nature area of the Green Ring.



In the Thematic Strategy on the Urban Environment adopted in 2006 no territorial proposal was included; reference was only made to contamination, noise, mobility and sustainable building.

## 1. PLANNING AND MANAGEMENT

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### 1.1. Management models

Under the concept of periurban/metropolitan nature park there coexist different realities and, therefore, different models of management. As these are nature systems, the effects of management are slow to appreciate in periurban nature parks, and so that for any action to be effective, time is needed. For example, a plantation of trees takes a long time to grow. It is recommended that the project of a park is not affected by the vagaries of politics (changes in government or strategies) and that the project is described in an approved *ad hoc* plan which guides it.

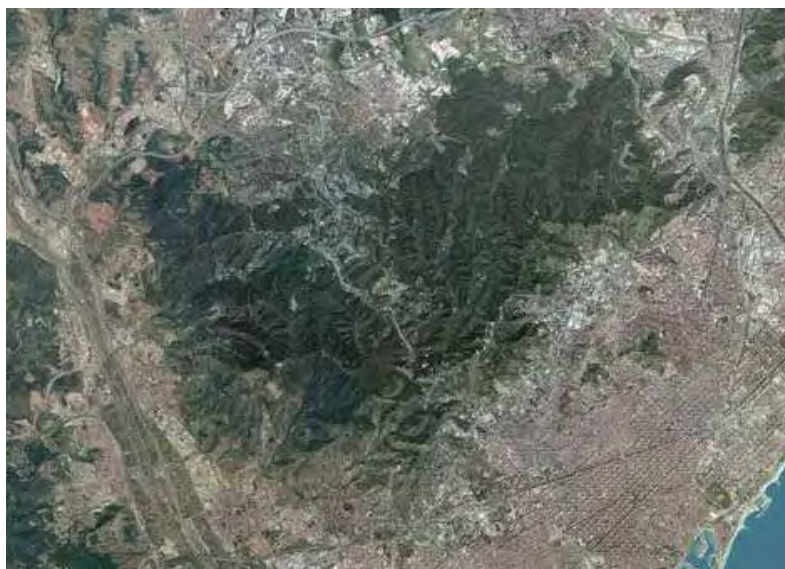
From the questionnaires analyzed it can be deduced that the management of periurban nature sites is governed by four distinct models. In order of importance, they are:

- 1º Direct management by a local government
- 2º Direct management by other higher-level governments (especially regional)
- 3º Consortium between different governments
- 4º Management delegated to a public body

Within these 4 models, in terms of administrative structure, the presence of shared management structures for several sites or networks of sites predominates, followed in second place by sites which are structured individually with individual management and, in third place, by sites without an administrative structure.

In general, opting for one or another kind of management is no more than a reflection of the complexity of the territory where the periurban/metropolitan nature park or the periurban nature parks system is located. Some parks only cover one municipality and are managed by the corresponding local government. In other cases, the parks are located between several major municipalities and/or they wish to expand or connect with other sites, in which case, the management usually takes the form of a consortium involving the municipalities and other governments involved. A single provincial authority, such as the Barcelona Provincial Council, can apply a remarkable variety of management systems for the different parks it manages (direct management, in the form of a consortium, co-management with another provincial council) in response to the territorial realities of the area where parks are located. This is not an invention, but rather a subtle response to the territory which is not always easy, as its aim is to provide a service to each and every park while maintaining the independence of each one.

The type of government which has promoted the creation or declaration of the Park also significantly affects the management model followed. For example, the cases of Parc Serralada Litoral or Parc de Collserola arose as a result of local initiatives joined, at a later date, by supra-municipal authorities, such as an association of municipalities, the provincial authority and/or the regional authority. In other cases, it is the association itself or a higher tier of government (provincial or regional) which took the initiative in protecting and giving these sites value.



Aerial view of Parc de Collserola showing the nine 9 municipalities which surround the park: Barcelona, Cerdanyola del Vallés, Esplugues de Llobregat, Molins de Rei, Montcada i Reixac, el Papiol, Sant Cugat del Vallés, Sant Feliu de Llobregat and Sant Just Desvern.

The existence of an **autonomous managing body** responsible for implementing the development plan of the park and carrying out its daily management is a guarantee for the future of the park's project, beyond the political will expressed at a given time.

Regarding the view of the park as a visible and tangible reality by citizens, it is important to have a **central office and rules** which governs its functioning. In addition, an important task of the managing body is communicating with the public.

It is also important to design periurban parks as a network, rather than as disconnected elements of a territory.

### **Advantages and disadvantages of a consortium of governments (municipal, supra-municipal, regional)**

Firstly, the involvement of all the municipalities in the area where the park is located is very important for its smooth running while ensuring that the park project is to an extent protected from the vagaries of politics. If all levels are involved, all have their share of responsibility. However, this shared responsibility can be two sides of the same coin, because when difficulties arise, this responsibility may represent a problem in terms of dilution. Moreover, the involvement of the different governments of the consortium may not be enough, because, even if it becomes a shared emblematic project, it does not stop it from being a project which at the same time is both everybody's and nobody's in particular. This can lead to feelings of loneliness on the part of the manager. It is, therefore, essential for the park's project to be emblematic and strategic for the city; that is, to become part of the city's project for the future. This is the case of the Grand Parc de Miribel Jonage, a site which covers several municipalities belonging to two different departments (provinces) and which plays a significant role in the metropolitan strategy of Grand Lyon, at present being promoted by its mayor.



Aerial view of Parc Nature de Miribel-Jonage in Lyon.

The management consortium of the Grand Parc de Miribel Jonage made up of 16 entities of which 13 are municipalities, with very varying sizes, from very small to huge ones, such as the municipality itself of the city of Lyon, in addition to the Metropolitan area (Communauté urbaine de Lyon) and two departments. The consortium (*syndicat*) brings together 27 politicians with different mandates. With a structure as complex as this, the park only works due to the strength of the project. The park project has always permitted politicians to reach agreements on key issues. Nature parks should, therefore, not be ideological instruments although they are political tools. Another original characteristic of the Grand Parc de Miribel Jonage is that it is managed by a mixed economy company which gives it operational agility. 51% of the board of directors is controlled by the consortium. The organization also has a weak point: there is a democratic deficit. Politicians are not held to account for the management of the park, as they are third-level elected representatives. This can be solved by creating an association of park users which occasionally remind politicians that citizens have expectations. The drawing-up of the park management document for the period 2005-2015 was, nevertheless, widely consulted and agreed with the users.

The involvement in the consortium of governments with a territorial perspective of a higher tier than that of municipalities, such as provincial councils and regional authorities, is positive from a technical viewpoint. Apart from their own budgetary constraints, aside from a few exceptions, a city council seldom has the necessary experience and knowledge. Furthermore, the need to overcome the concept of protected islands and move instead towards systems or networks of protected sites, green networks, etc. requires the involvement of authorities with territorial competence and a vision of the whole. These authorities can provide, in addition,



very useful resources and experiences, learned from other similar parks. However, on the negative side, the involvement of authorities with different sizes and different hierarchies and political strategies, even opposed to each other, in the same consortium may represent a source of problems for its management.

It is also necessary for the system of protection of a periurban park to be recognised or under the guardianship of a government of a higher tier than the local one, to ensure that the park enjoys more stability against possible attempts of reduction or declassification, but at the same time it is necessary for its management or administration to be closer to the local than regional level, because of its proximity to the territory.

Besides the involvement of politicians in management consortia, it is highly recommended to facilitate the cooperation of council and institutions technicians, and members of the consortium, in order to involve them more deeply, so that communication flows better and so technical decisions may be shared. Technical work carried out over a network usually gives very good results.

From the financial point of view, a consortium usually implies a greater availability of funds: as it involves several administrations the budget is usually higher. More coordination and negotiation are, however, necessary to ensure that the different consortium members do not try to ignore or cut the budget.

However, it is also sometimes necessary to make a greater budgetary effort to please all the members of the consortium. For example, there are cases when each municipality fights to have park facilities built inside its territory, which can lead to the duplication of facilities and maintenance costs.

### **Advantages and disadvantages of direct management by a municipality**

Espaces Verts de Tours, Anillo Verde de Vitoria-Gasteiz, Arche de la Nature de Le Mans

In these three cases, the periurban nature sites are completely framed among the priorities of the city, positioning them as exemplary projects, although different corporations replace each other over time.

#### *Aspirations of expansion or connection with other sites*

In the case of Tours, the acquisition of new powers has steadily grown alongside its transformation from city to agglomeration. However, powers over green sites still pertain exclusively to the city. There are also financial constraints. The municipalities bordering the city of Tours have been invited to reflect on the development of green networks, but no progress has been made because the dialogue is still insufficient; there is still no common management design, although the City Council of Tours is working on this.

In the case of Vitoria-Gasteiz, the municipality has a concentric shape, with the city located in the centre and the green belt encircling it. Around this belt there is a “crown” of agricultural lands. Other administrations may



Bois des Hâtes en Tours. (Photo by Yves Brault)

participate in the management of the Green Belt, but their participation has never been defined. Efforts are made in order to involve citizens and there is an Advisory Board but the budget is provided basically by the City Council of Vitoria.

### **1.2. Specific planning tool for public use**

In terms of planning tools, it can be considered that the level of coverage is broad, since 80% of the sites analysed have a comprehensive Master Plan, generally lasting 10 years, in which the zoning of uses and the regulation of activities within the site are considered. However, even though these bodies have a long history and are well-consolidated, almost half the sites have no specific planning tool for public use.

It is worth noting in this respect the important work carried out recently by Barcelona Provincial Council through the development of specific tools in this area for each site regardless of their size. Barcelona Provincial Council has launched nine plans for public use. This is and has been a common working tool which began as a common debate and whose most interesting part has been the process of drafting these plans (the participation work has been performed with technicians and politicians from local councils, together with associations of all kinds, which has led to a continuation in this participation) rather than the final outcome. The plans for public use have been able to bring together all parties around a common idea. A significant part of these plans address: the issue of zoning, a common idea of the territory, and also limits on the activities requested by associations. Having participated in the plan, the bodies which later propose activities act more in line with the plan; and in this way, supply and demand come into contact; it is always best to anticipate problems.

### **1.3. Quality and environmental management systems**

The implementation of both quality and environmental systems in these sites is currently very low.

In order to reach operational capacity it is essential to have a structure of proximity adapted to the peculiarities of these sites.

Perhaps one of the chief disadvantages of conventional management systems lies in their great complexity and their difficult adaptation to the peculiarities of these sites. The Parco Nord Milano was one of the few to receive an ISO certification when it applied for one, which it finally decided not to renew because its procedure is very tedious and not well suited to managing a nature park (these certifications are really designed for the chemical industry). To compensate for this deficiency, the Parco Nord Milano is now working on a charter that includes the concept of social balance. It appears that this may work better.



Parco Nord Milano.



**The implementation of the most suitable system could be a future line of work within the Federation. Of great interest here will be the specific experiences carried out by, in addition to Parco Nord Milano, other sites such as Lille Métropole and Barcelona Provincial Council.**

To achieve a good level of quality control on the standard and strategic management of the park three basic intercommunication structures are required: one aimed at local politicians, another at users and another at park employees.

In general, and despite complications, it is considered that the creation of assemblies of users or public participation is positive and goes far beyond ecological associations, favouring the balance between the most protectionist groups and intensive users. Lille Métropole includes the participation of local and metropolitan councils who meet every six months to discuss issues related to these sites. In the case of the Parc de la Serralada Litoral, in order to democratize the decision-making structures, they have chosen to include the president of the association of users in the Assembly of the park. This person participates with his/her voice but does not have a vote.

#### **1.4. Capacity limit**

Although the saturation of facilities is a fairly common problem, which can create problems of safety and comfort for users, none of the sites analyzed has set a capacity limit as part of their ordinary management although some of them, such as the Parc de Collserola, have taken some steps in this direction by starting to limit the authorization of festive-sporting events or distributing them over several days.



Social event organised in the Espai Rural de Gallecs in Mollet del Vallés.



Popular social event in the Green Ring in Vitoria-Gasteiz.

However, one wonders whether the appropriate response to the problem of continuing saturation really lies in the regulation of entry, as is being done in some nature parks of England, or whether it would be a better approach to introduce dissuasive measures such as connections with other sites of the green network or



provide alternative sites which allow this demand of public use to be de-concentrated in peak periods. If the demand is so high it is because citizens need these types of sites and, therefore, they should be enlarged, connecting them in a network, increasing their number and creating green corridors.

In order to prevent the saturation of ecologically sensitive areas, some parks have established as a working strategy zoning with the objective of balancing the pressure of public use in function of the capacity or fragility of the environment. There arises, however, the question of whether it would be a good idea to establish minimum areas to establish this zoning. To control excess visiting numbers, in the case of the Espace Naturel Lille Métropole, they are sometimes forced to ban some events, and to establish an authorization system to which end they have hired three people. Where admission is charged, prices can be adapted to spread visitor numbers over time. There are several solutions which can be applied to mitigate the effects of excess visiting numbers in fragile areas, such as promoting guided tours, planting stinging plants or plants with spikes to make it unpleasant to leave paths, planting flower beds which may be picked to prevent people from picking protected flowers... All of these are little more than palliative measures: the real solution to the excess visitor numbers is to enlarge and multiply the number of nature sites.

Regarding the regulation of opening times, very few of the sites studied employ this tool, but we should consider whether it could be a useful tool to reduce the problem of vandalism.

## 2. VISITOR NUMBERS AND PUBLIC USE

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The preliminary results of the questionnaire show that:

Connection: our sites are poorly connected with cities by non-motorized means of transport (by non-motorised routes) and there is a low presence of bicycle parking places. This is still more surprising when the most usual means of transport to the park, after vehicles, are bicycles and people arriving on foot. Public transport is also widely present in our sites by bus, train and even in some cases small river boats.



Train stop for Parc de Collserola.



Tram access to Arche de la Nature in Le Mans.

Universal accessibility: it is worth noting the high number of sites that do not even have a number of parking places reserved for handicapped persons. One of the needs patent in the majority of sites is to improve accessibility to some of the basic facilities to allow this type of users to enjoy them.

Number of visitors: many sites still do not know the overall number of visitors they receive, and even less how they are distributed during the year.



Car park for handicapped persons in Parc de Collserola.

Type of visitor: as expected, the main groups of users of periurban nature sites are families and groups of friends, although we should note in third place the presence of a significant number of individual users who come to walk or do outdoor sports. Nevertheless, we still do not have much knowledge in general about users, about their socio-cultural profile, and their demands and expectations.



Visitors in the Parc Agrari del Baix Llobregat.

Frequency of visits: the visits to these sites occur over several days a year, but not with any set regularity. In general, we can say that visiting is “torrential” in nature; that is, it is concentrated at weekends or during holidays, but for the rest of the week it is usually very low. There are exceptions, such as the Parco Nord Milano, where daily visits are important thanks to their proximity to the city.

Facilities: with regards to the facilities present in these sites, we should note the prevalence of educational facilities (nature classrooms, educational farms, school allotments, learning workshops, guided educational paths, etc.) which are even more important than recreational facilities (in second place), and followed by cultural facilities and, finally, sports.

## 2.1. Studies on visitor numbers and Questionnaires of satisfaction or perception

Studies on visitor numbers provide essential information on how to manage our parks. These studies are often surprising (in terms of times of visits or most visited areas), confirming their importance. In spite of this, very few sites have carried out studies on visitor numbers on a regular basis. When hiring a company to produce a study, it is important to compare its results with the perceptions of the team who are managing the park to see how the questionnaire can be improved, to establish a more appropriate frequency and to try and gain the best possible picture of reality.

As has been noted before, it is necessary to improve our knowledge of users, understanding their tastes, where they have come from, their level of education, etc. More social research should be done in order to manage, not only the supply, but also the demand.



Meeting on public use organised by users of Parc de Collserola.

Periurban nature parks have a vocation for offering leisure, but, at the same time, this must be cheap and can sometimes create tensions.



The ideal thing would be to carry out studies and surveys when planning the park in order to best define which ecological, social and economic functions the park will play (or the different areas it comprises). It is important to ascertain how many people come, when they come and why they come.

#### Espace Naturel Lille Métropole (ENLM)

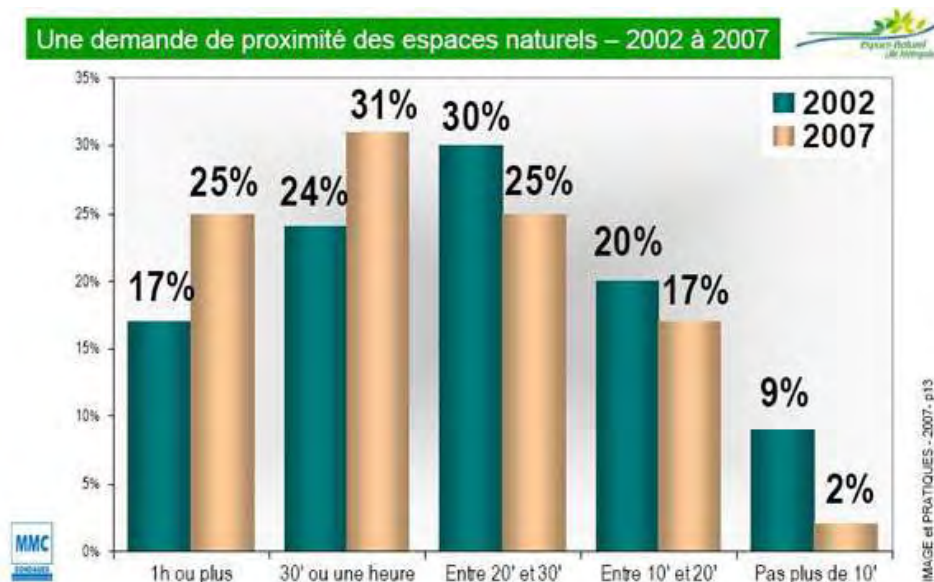
For example, the Espace Naturel Lille Métropole carried out a series of questionnaires in its founding stage which were very helpful in burying preconceptions. For example, they had planned the building of a playground and a health trail (with parallel bars and exercise machines, etc.), both entailing significant investments. However, the results of the questionnaires showed that none of these facilities had any sense, because what the vast majority of people wanted was to walk and see animals and nature, for the sites to have a strong identity with only a minimum level of comfort. Thus, from the survey results, they decided to implement eco-grazing with animals, to devote one of the parks to nature discovery, another to water, etc. It was the territory itself which gave the park its identity.



Exercises bars along a path in the periurban park Santa Catalina (Jaén).

Another example of the usefulness of surveys in taking appropriate management measures is that in 1989 and 1992 the feeling of insecurity was a major problem, which meant that users were mostly male. They decided then to create the Eco-guards service, with highly-visible and easily-identifiable uniforms, and implemented a policy to promote the park and to transform all the jobs of the park, including gardeners, who must also be trained to answer user's questions. All these measures succeed in reversing the citizens' perception of insecurity.

Recently, the ENLM carried out a campaign of exhaustive questionnaires (80 questions) for which they employed 6 people stationed at the different accesses. They also installed eco-counters at strategic points of the park. They found that 65% of visitors came from a radius of less than 5 km; that is, they were very local visits, made by inhabitants of the area who were going to visit anyway. With the eco-counters it was also shown that night-time visits in some areas were very high. (see 5.2)



Graph showing the maximum time that visitors would be travel to a periurban park; as a result of the questionnaire carried out by Espace Naturel de Lille Metropole.

## Parc de Collserola

Two studies have been carried out in this site: in 2003, a study on the perception among park visitors and in 2009 a study, not yet finished, of visitor habits (see 5.1). The first was conducted with 700 interviews targeting the general public and schoolchildren and showed that in terms of the provision of formal environmental education the demand far exceeded the available supply. The level of satisfaction was very high. There was significant support in quality at the expense of a number of students and the rating was very positive. As to general perception, most visitors came to do sports. One issue of concern was security and the lack of surveillance.

Eco-counters were used for the study on visitors. They differentiated the count of people driving across the park to work from those using the park. A total of 5 eco-counters and 9 manual counters were installed in order to assess the weight of the former. In 2003 there was a significant difference between week and weekend public. In contrast, the visitor study conducted in 2009 saw a narrowing in the gap. There are families who frequent the park after school and people who do sports during the week. A relevant issue is the ecological



A dual carriageway cuts through Parc de Collserola.

footprint left by cars as they pass through the park This is an issue to be discussed with the motorway concession companies to see how to reduce traffic, or its effects, in the park. The traffic intensity figures on secondary roads were provided by Barcelona Provincial Council and the frequencies of trains by Ferrocarriles de la Generalitat de Catalonia. The study was conducted by a metropolitan study company and cost 60,000 euros, which was paid by the Abertis motorway concession company. The visitor study is still not complete because there are points which have not yet been taken into account, such as the numbers of clients of restaurants, riding centres, clubs located in the park, etc. They expect to have all these figures by September. The results of this visitor study should be useful to take action, and make decisions, for example, on the issue of bicycles, whose abuse of areas where they are not allowed and at excessive speeds raises the need to put up checkpoints and involve the city council in this issue, as the park has no sanctioning powers. Perhaps some degree of segregation between bike trails and walking paths should be considered.

## Parco Nord Milano

They have been able to carry out surveys into levels of satisfaction every two years, conducted in a somewhat “artesian” manner with the help of universities. This has allowed them to know what users like and what they need to improve. Thanks to these surveys they have found that what drives this participation is the history of the park (since its foundation). This is what makes users feel attached to it and what makes people become the eyes of the park, ensuring an acceptable level of security.

**At the level of FEDENATUR two challenges which are posed could be the minimum establishment of a monitoring study carried out on a regular basis along with a joint methodology both in the assessment and the parameters collected to allow a comparison of results.**



## 2.2. Development promotion plans

The surveys show that only 15% of the sites have development promotion plans. However, there are also sites which are noteworthy for the large number of participatory activities, events and activities to promote social use, with an average of four to five special events a year and more than four associations which cooperate or participate in their development.



Parco Nord Milano is a great public square in the city of Milan.

Parco Nord Milano is one of the most dynamic examples. They organize 150 events a year, most of them concentrated in just two weeks in June during the biodiversity festival. They also organize events of a scientific nature with universities, and the Natural History Museum of Milan; and also leisure events aimed at publics of all ages and social strata, and ecological culture events linked to biodiversity and the fragility of flora and wildlife in the face of human actions. In September, they devote a great deal of effort to sustainable mobility in conjunction with other events on the same subject organised throughout Italy and Europe and they also put on a festival for women. Their efforts are aimed at taking advantage of the great opportunity offered by the high number of visitors received by the Parco Nord Milano to do environmental education which is currently focused on the preservation of biodiversity and climate change. At a school level they work with groups in primary and secondary education.

Barcelona Provincial Council runs several development promotion programmes, some of which are already 30 years old, such as those aimed to schools. The goal is to maintain a constantly-updated agenda and to design programmes addressed to people living near the parks, offering them cultural activities, theatre, poetry, concerts. In order to decide on the range of activities they hold meetings with culture councillors from the local councils involved and draw up a joint programme of the activities available. This helps to create an identity. They also have a suggestions box which they respond to rapidly. They have incorporated events at a European level such as the “European Day of Parks”, “World Bird Day” or “Bat Day”. They also have a “Circle of friends of the parks” to whom they propose activities throughout of the year.

The Parco di Montemarcello-Magra has a programme entitled “The Park on Board” which covers the summer period. Another event, called “Park under the Stars”, is itinerant and pays visits to the different municipalities.

**At the level of Fedenatur, it might be interesting to agree on some joint working lines for development promotion.**

## 2.3. General accessibility

The accessibility to the park is closely linked to the model of city and territory.

The attitude of users themselves is often contradictory. For example, surveys conducted by the ENLM show that users do not want to see cars or hunters in the parks, but when asked how they access the park they respond that by car. It is necessary to enable soft road networks, green ways, to encourage the use of bicycles so that they become indispensable.

Graph detailing the average type of transport of the users of periurban sites in Lille; as the result of a questionnaire carried out by Espace Naturel de Lille Metropole.





In the case of Collserola Park (Barcelona) there is a railway public transport which operated before the establishment of the park. In order to improve the offer, a coach was provided on Sundays for a year, but they saw that it was not profitable because people did not use it.

It is very important to promote accessibility in the outlying areas. A study was carried out in Barcelona on the entire contact/boundary area of the park with the city (about 15 km). 78 actions were designed to restore and restructure this territory that will need a global investment of €70m. For the time being, this has not been carried out and at the moment with the onset of the crisis, the project has been stopped.



Train stop for Parc de Collserola.

Parco Nord Milano has built 20 km path by which you can access on foot or by bicycle. The idea is to promote transport without vehicles. They have worked with the different adjacent

local councils so that these cycle trails are connected with other municipalities so as to favour a compact but not fragmented city. They have also worked on public transport: two tramlines travel to Parco Nord Milano and the subway is set to arrive in the future. Work has also been done on encouraging the habit of bicycle use, and they are working with a company which will make bicycles available for the users of the park.

The majority of users access the network of nature parks of Barcelona Provincial Council by the public transport system. Some parks have launched the “Park Bus” scheme. It should be said that their use is symbolic compared with the number of users coming by other means. To encourage their use, they have reached agreements so that, with the same ticket, users will have discounts at museums and restaurants of the parks.

The Parco Montemarcello-Magro rents a coach which goes through the different municipalities and picks up the park's users.

## 2.4. Universal accessibility

Although it would be difficult to make the entire heritage of a nature park available to everybody, if one takes into account the obstacles in the terrain in many of them, surveys show, however, that very few sites have really attempted to remove barriers to facilitate universal accessibility. Slightly less than half the sites have parking spaces reserved for people with mobility problems. To this we must also add the low frequency of adapted facilities and amenities, when the latest technologies are playing a key role in overcoming problems associated with the sensory limitations of some members of the public. We should mention the example of France where its strict legalisation on ensuring accessibility for disabled people makes it difficult for parks even with the biggest budgets to comply with the law.

One of the parks which has implemented most adaptations is Montemarcello-Magra, which rents a bus with accessibility for disabled people. The facilities and the path signs (in *Braille*) are adapted so that blind people can walk along them alone or accompanied. In order to promote the integration of disabled people they have hired a cooperative of disabled people who are responsible for cleaning the park.

L'Arche de la Nature (Le Mans) has conducted a sociological study on increasing accessibility, for which they have also involved an association of disabled people. They want to carry out an audit of the current



Signpost in Braille along the specially adapted route in Parc Natural del Garraf (Barcelona Provincial Council).

facilities and paths to establish a diagnosis and, subsequently, implement the necessary adaptations, which may not necessarily involve paving paths, but rather making all-terrain wheelchairs available.

The Barcelona Provincial Council Nature park Network, despite the obstacles in the terrain, found in the Parks, have designed several routes adapted for blind people and people with mobility problems, although their use



Example of chairs adapted for persons with reduced mobility in the centre of Ecomare (Texel Island – Holland).

is not exclusive. As a way of raising awareness, they propose that students and adults do the route for blind people blindfolded. Educational programs are also carried out which are aimed at training monitors to take special education school groups.

Andalusia has seen a serious debate on universal accessibility to its parks. The dilemma is whether the aim is to comply with regulations or actually facilitate accessibility for people. In an active way, that is, in addition to eliminating barriers it is necessary to implement measures to ensure that these groups know the parks. Andalusia has a Regional Integration Plan, which is a specific programme for nature parks that not only addresses problems of barriers, but also the integration of disabled groups and groups at a risk from social exclusion. Within the programme called “Nature for All”, specific activities are designed with the collaboration of these groups, with associations and with mental disabled people, etc. They are also working on the elimination of sensory barriers, the adaptation of botanical gardens for the blind and the development of audio-guides, with rather satisfactory results; so much so that the latest programme has been granted a prize for accessibility to protected nature sites at a national level.

It is worth noting the important role played by periurban nature parks in social integration. The regions of Andalusia and Catalonia (Collserola Park along with the Barcelona Provincial Council Parks, for example) have carried out, in collaboration with a savings bank, a number of employment projects for disadvantaged groups in periurban nature parks, due to the proximity of parks to cities, which have worked very well for all parties involved, including the social side of things managed by the savings bank’s social department, which has led to the renewal of the contract.

In the United Kingdom, work is being done on classifying paths according to a scale of difficulty for wheelchairs, and they have also opted to provide small all-terrain vehicles.

Studies and social research should provide regulatory measures which help us to shape the actual development of the park. On another point, sustainable mobility and creating access ways through “soft” road networks contribute towards combating the development of the city’s de-fragmenting the territory. We should work towards strengthening the environmental and social nature of periurban nature sites. PNSs show great potential for the development of social and integration plans. Plans for public use when developed in a participatory manner have shown themselves to be ideal in combining supply and demand.

### **3. PROBLEMS ASSOCIATED WITH PUBLIC USE**

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The sociological aspect of periurban nature parks is different, because it is marked by a strong local character which conditions the type of management to be implemented. Nevertheless, there is a set of recurring problems usually present in most sites, including: the saturation of visitor numbers, acts of vandalism, waste generation, insecurity and/or lack of surveillance and vehicle traffic where prohibited.



The management of public use, unlike the ecological management, is much more complex and may be, at the same time, very disappointing and very enriching.

In recent years there has been a change in attitudes on the part of users. More and more, a “thirst” for “pure and hard” nature is being detected. The numbers of young people (between 15 – 25 years old), who years ago did not often spend time in nature parks, has even increased recently.

Broadly speaking, users can be divided into two types: “*consumer users*” and “*predator users*”. The problems which arise are different. With “*consumer users*” it is necessary to prevent them from entering risk areas (ecologically sensitive), and to decide whether to install litter bins, whether to allow them to light fires, whether to provide them barbecues... with “*predator users*”, who come by car; who engage in marginal uses; who bring dogs, etc. several questions arise. In relation to car parks: should they be visible or hidden by vegetation?; Should they be at a charge or free?; How should we treat users with dogs? And how should we deal with young gangs with inappropriate behaviour?; What role should eco-guards play?...

### 1.1. Dirtiness - Vandalism

The solutions to tackle problems of dirtiness and vandalism will vary in function of the local and social realities of each place. But, in general, it has been shown that cleanliness leads to more cleanliness and dirtiness leads to more dirtiness. Similarly, it has been shown that if urban fixtures are immediately replaced after being vandalised, people end up respecting them. Maintenance tasks contribute, therefore, to projecting the image of a neat and clean space, but the problem is the high cost involved.



Examples of graffiti on public facilities in Parc de Collserola and Parc Agrari del Baix Llobregat and the build-up of rubbish around a litter bin in one of the facilities in Parc de Collserola.

One of the recurring debates is whether it is a good idea to provide periurban nature parks with litter bins, etc. Another is the reduction of urban fixtures to minimise vandalism against them. But urban fixtures also have the function of bringing to the attention and directing users in certain areas, preventing them from doing whatever they feel like throughout the park.



Example of signposting used in Rottemeren Park in Holland to channel different users of the nature site along different paths and track adapted for cyclists in the Forêt de Soignes in Bruselas.

The Green Ring of Vitoria is one of the few parks to have decided not to install any bins or containers. They do a lot of work with schools, giving them a series of guidelines to avoid both dropping litter and the actual generation of waste (children are asked, for example, to use proper hiking water bottles instead of plastic bottles and not to bring packaged food with them). This message is also passed onto the rest of users. They try to keep urban fixtures to a minimum, thereby reducing vandalism. The message they attempt to transmit is the following: "if you need so many things to visit the countryside, your place is not the park". Neither have they created parking areas so as to discourage car use and this probably also has an effect on the reduction of waste.

L'Arche de la Nature has chosen to employ a daily cleaning patrol to keep the site clean and, over the years, the site has come to be regarded as clean and the volume of rubbish dumped by users has significantly decreased.

The Grand Parc de Miribel-Jonage has installed selective recycling bins and has a team of informers/mediators, whose role is to inform about the need to recycle. The mediators include persons from different ethnic groups in order to overcome cultural and language problems. They also work with some 200 young people, who are part of a crime prevention programme, whose job is to clean the park as well as work together with the team of informers. When holding events, these young people are in charge of running the stand on selective recycling.

The Network of Protected Nature Sites in Andalusia, as far as the management of solid waste is concerned, is trying to modify the habits of users in order to remove bins, although this goal is encountering strong resistance. Formulas are being tested, such as eliminating bins and providing bags. The objective is to eliminate rubbish bins in the next 5 years.

The Parco di Portofino tries to transmit the idea that you should go to the park and return home with your waste by distributing rubbish bags with drawings. They have had to do a great deal of educational work, as in the countryside areas of the Liguria Region there remained the deeply rooted habit of throwing rubble and other debris into rivers. It is the City Council's job to clean the park. Regarding the type of urban fixtures, they have chosen to provide the park with very simple, easily replaceable fixtures, which has significantly reduced vandalism.

### 1.2. Barbecues – Fires

The use of barbecues in some parks such as Parc de Collserola enjoys a long tradition, but this involves a high risk of fire during the summer. Although there is a rule preventing the use of fires from May to September, except in designated areas where barbecues are located, in some places they have been removed and no new barbecues have been built for 15 years.



Area adapted for barbecues inside Parc de Collserola.

### 1.3. Security - Surveillance - Eco-guards

Depending on the regulations of each region, the park rangers may have authority or not to sanction.

In the Lombardy Region the legislation enables rangers to sanction who work voluntarily and who have authority to do so. They are first selected, then trained and on completion of training they may work voluntarily. Their task is to guard the park and promote its social use. On a voluntarily basis, they work long hours which allows the Parco Nord Milano to be guarded 24 hours a day, making it safer. In addition, they maintain a positive relationship with users. One problem they face, however, is identifying people, for which they have to resort to the police, who are stationed nearby in the municipalities adjacent to the park.



Wardens in Parque Nord Milano.



If rangers do not have sanctioning powers, the only weapon they have is the power of persuasion. This is the case of the eco-guards in Lille Métropole. In this case it is necessary for the rangers to receive adequate training in psychological assistance and communication techniques to facilitate their dealing with the public, especially in order to equip them with communication skills in the case of confrontation with people with aggressive behaviour.

The rangers in Seine-Saint-Denis are trained in psychological assistance. They also receive regular psychological counselling by phone with individual sessions.

In l'Arche de la Nature the rangers have to face problems arising from suicide attempts, so they are trained to provide on-site psychological assistance.

In the case of the Grand Parc de Miribel Jonage, which has a large bathing area, safety control is a key issue, as visitor numbers are very high; rangers suffer verbal attacks every day and between two to three deaths by drowning are recorded every year. This situation has resulted in a safety control contract signed by the eleven mayors, two governors and other public powers. They have lawyers representing police, firemen, policemen from the two departments and the national police. These powers are highly coordinated by means of a radio system. The rangers of the park cannot intervene, but they can pass on information; they can ride horses and all-terrain bicycles and they must be trained to assist psychologically the family of a drowned person.

In the case of Andalusia and Catalonia, the environmental agents can make reports which may lead to cases being taken up by the police, but this is not currently used much in practice. In addition, there is a deficit in the number of environmental agents and the specific activities assigned to them.

The security problems in the Parco di Portofino are of another kind. They must ensure urban planning control; firstly, they have to face different problems caused by the presence of wild boars (preventing people from feeding them or people who try to hunt them at night, or wild boars attacking people returning with their shopping). Secondly, they also face a rather complex situation, since much of the land is privately-owned, in many cases by very wealthy people who are not always happy to comply with the regulations of the park and who can hire lawyers to appeal against a fine even when this is for a small amount. The park is controlled by several types of police, but it is very difficult to get all the agents to sit around the table at the same time and most avoid taking any responsibility. In order to put out forest fires they have to rely on volunteers because fire-fighters do not give priority to a fire, if it is not close to homes. They maintain close contact with these volunteers who clean paths in order to prevent fires breaking out. Another security problem are *vie ferrate* climbing routes from which inexperienced or injured people sometimes have to be rescued by helicopter.

In the case of the Green Belt of Vitoria the rangers do not have authority to sanction either, but as the park is very close to the city, the local police can come to the scene quickly if necessary along with other powers such as the Department of Social Welfare in the case of illegal occupations.



Wardens working in the Green Ring of Vitoria-Gasteiz.



## CONCLUSIONS

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### Recognition of social functions

It is clear that periurban nature sites provide some very important social functions. The point of discussion is whether the administration and the citizens recognize this and to the extent that they deserve. This is an issue of feedback, to the extent that citizens recognize it, demand it and, therefore, the administration responds to them. We must ensure that citizens assume the demand of having nature sites near cities.

Sometimes it is difficult to combine the objectives of the park with the demands of public use. There are even contradictions with the administrations themselves which form part of the managing body. For example, in Collserola Park, local councils and among them, Barcelona, sometimes organize sporting events, even competitive ones, which are not in accordance with the own regulations of the park, an example being the hosting events for the World Police and Fire Olympics.

It is very important to define the border area in these sites: the area that is in contact with the cities which in our case is the most degraded and unstructured area. If we manage to make these areas structured and increase quality in them, it would be easier to take public transport there and contact with the public would be easier.

### Role of FEDENATUR

Parks are an instrument of protection but if we look closer, parks are also part of a environmental, territorial and political project. We, as technical managers, have the task of translating this political project, so as to respond to the political will expressed. Our role should be to make as many alliances as possible with the different actors of the territory in order to smooth the way of politicians and facilitate for them the decisions of a territorial nature.

Although the methods of managing different periurban nature parks are different, the objectives and political goals are similar. If we ignore politics and place ourselves only at a technical level, we run the risk of not being true agents of the process of change in our society, within which the network of nature is of great importance as an essential infrastructure so that humans can live. Presidents and managers of European periurban nature parks should reflect on the need to take a leap forward at a political level, as part of redefining social and nature policies. We are in Europe; we must be real protagonists and decide how to take part in this.