

INTERREG IIC · METROPOLISATION · PÔLE "RHÔNE - ALPES - SUISSE"

- 1 : La conception et la gestion des équipements d'accueil du public The conception and management of public fostering equipment
- 2 : La participation des citadins *Citizen participation*

Approche sur les Espaces Naturels Périurbains coordonée par Fedenatur



Periurban Natural Spaces Approach co-ordinated by Fedenatur

Bilan de la réunion technique de Mataró (Catalogne) 27 - 28 octobre 2000

Evaluation of the technical meeting at Mataró (Catalonia)

27th - 28th october 2000



INITIATIVES COMMUNAUTAIRES INTERREG IIC PROGRAMME OPERATIONNEL «MEDITERRANEE OCCIDENTALE – ALPES LATINES» ORGANISATION URBAINE ET METROPOLISATION

MISE EN PLACE D'UN RESEAU DE POLE DE COMPETENCE TRANSNATIONAL SUR LA METROPOLISATION Pôle Rhône-Alpes-Suisse



Fédération Européenne des Espaces Naturels et Ruraux Métropolitains et Périurbains Sommaire

3 Mot d'introduction Marià Martí (Secrétaire General, Fedenatur) André Grange (Secrétaire General Adjoint, Fedenatur)

> Première session: La conception et la aménagement des équipements d'accueil du public

- 5 Le projet de Can Cuyàs: restauration d'une zone d'interphase dans une zone industrielle la convertissant en aire de pique-nique et de promenade (Parc de Collserola) Josep Mascaró (Chef du Service de Projets) Marià Martí (Directeur du Parc)
- 11 L'accueil du public à Miribel-Jonage Jean Louis Michelot (Conseiller Technique du Parc nature de Miribel-Jonage)
- 15 Parc Informal Norte / Un Parc pour les personnes Ruí Simao et Sandra Moutinho

(Techniciens du Parc Florestal de Monsanto, Lisbonne)

21 Equipements d'accueil pour le public dans les parcs de l'anneau vert de Vitoria-Gasteiz Fernando de Juana

(Directeur technique du Centre d'Études de l'Environnement de Vitoria-Gasteiz)

25 La Réserve Naturelle "Sorgenti de la Muzzetta" et le Centre Botanique de la Casa Gola:

un exemple de circuit didactique intégré dans le Parc Agricole de Milan Sud

Fabrizio Scelsi (Technicien du Parc Agricole de Milan Sud)

Deuxième session:

- La participation des citadins
- 33 Comment impliquer le public et les partenaires? L'expérience de l'Arche de la Nature au Mans Vincent Nuyts (Communauté urbaine du Mans)
- 37 Les bénévoles du Parc de Collserola. Un exemple de participation citoyenne Sebastià Dunyó

(Technicien responsable du group de bénévoles du Parc de Collserola)

47

Les séminaires municipaux comme mécanismes de participation **Montserrat Grau** (Directrice-Gérante du Parc de la Serralada Litoral)

Roser Loire (Technicienne du Parc de la Serralada Litoral) Contents

- 53 Introductory word Marià Martí (General Secretary, Fedenatur) André Grange (Associate General Secretary, Fedenatur)
 First session: The conception and management of public fostering equipment
- 55 The Can Cuyàs plan: restoration of an interphase zone in an industrial area, and its conversion into a place for picnic and walks (Collserola Park) Josep Mascaró (Plans Service Head) Marià Martí (Park Director)
- 61 Public fostering at Miribel-Jonage Jean Louis Michelot (Technical Advisor of the Parc nature de Miribel-Jonage)
- 65 Informal Norte Park / A Park for the people Ruí Simao and Sandra Moutinho (Technicians of the Parc Florestal of Monsanto, Lisbon)
- 71 Facilities for receiving the public in the green belt parks of Vitoria-Gasteiz Fernando de Juana (Technical Director of the Center of Environmental Studies of Vitoria-Gasteiz)
- 75 The Natural Reserve "Sorgenti della Muzzetta" and the Botanical Center of the Casa Gola: an example of an educational route integrated into the South Milan Agricultural Park. Fabrizio Scelsi

(South Milan Agricultural Park Technician)

Second session: Citizen participation

- 83 How to involve public and partners? The experience of l'Arche de la Nature at Mans Vincent Nuyts (Communauté urbaine of Mans)
- 87 The volunteers of Collserola Park. An example of citizen participation Sebastià Dunyó (Technician in charge of the Volunteers Group)
- 97 Municipal seminars as participation mechanisms Montserrat Grau (Head-Manager of the Serralada Litoral Park) Roser Loire (Technician of the Serralada Litoral Park)

Introductory Words

Marià Martí (General Secretary, Fedenatur) and André Grange (Associate General Secretary, Fedenatur)

The relationships between the city and its surrounding area have evolved with the passing of time. In the past, these areas were not valued and were considered as a mere territorial reserve for developing the cities. These areas can be explicitly reserved for future town planning, but natural or agricultural areas without an explicit vocation are usually built up if left to the influence of town planning processes.

Nevertheless, it has been proven that these peri-urban natural or agricultural areas carry out real functions, closely linked to their proximity to a large urban centre. These functions are hardly ever taken on as such in the town planning processes, but rather constitute spontaneous responses to the secondary effects of these processes

The functions of the natural or agricultural areas are of a diverse character:

- social, because of the offer of nearby nature which can provide the public, as well as for the role of "expansion vessel" linked to the proximity of specific communities in certain suburbs or peripheral urban areas,
- economic, deriving from activities which are not always controlled, which can be implanted in these areas, like, in some cases, parallel economies,
- environment, owing to the ecological quality of some of these areas, both from the naturalistic point of view (great heritage value) as well as economic (water resources, natural risks, etc.).

Until very recently, the explicit responses directed towards taking the peri-urban natural areas into consideration responded little more than to one of the needs that they could satisfy: the areas of ecological interest were protected, as natural reserves, and their frequentation was prohibited; other areas were changed into mere parks of landscape value, without a true naturalistic interest, and also areas of an exclusively recreational vocation were set up.

Recently, the diverse value of the peri-urban natural areas has started to be integrated into the town planning processes, hence the recent appearance of the concept of "peri-urban natural area". Taking up hundreds, even thousands of hectares, these places have very diverse status and landscape. But they also share common characteristics which make them of considerable interest for the city:

- they are frequented by an urban public which is looking for entertainment and nature close to home, and they are, therefore, privileged places for environmental education and for allowing the citizens to get to know the rural environment,
- they are real green lungs which allow a true biodiversity; they
 often guarantee fundamental functions for the city: protection of
 the drinking water resources, expansion of harvests, protection
 against fires ...

The integration of the peri-urban natural areas into the town planning processes involves the widest problem in the role of nature in today's and tomorrow's city.

- What are the expectations of the city population as regards natural areas? What are the responses provided by those who make the decisions? And by town planners?
- How are peri-urban natural areas taken into consideration in the town planning processes?
- How is the town planning of these areas organised and how is its relationship with the urban network improved?
- What role can these areas play in sustainable urban development?

The acknowledgement of these peri-urban areas as entities in themselves is not always obtained, for the urban and human pressure they very often suffer and to which they are little prepared to face. Their reappraisal poses numerous questions which refer to the very nature of these areas:

- What is the status of these spaces?
- How to reconcile the different functions these areas take on?
- How to preserve the nature in the places with many visitors?
- How to present the natural functions of the park to the citizens?
- How to ensure the financial future of the parks?
- How to organise the contact areas between the country and the city?
- How to get the citizens to take part?

These kind of questions sum up the challenge posed by the problem of the "peri-urban natural areas in the Metropolitan organisation"

The works presented at this technical meeting can give a certain response to all those questions mentioned, as they represent real projects linked to the management of diverse peri-urban natural areas of different European cities.

This is a route through the different areas, both through those located in contact areas with the city as well as those further away, and which, from a situation of helplessness, were threatened in the conservation of their landscape and natural quality, as well as their capacity to have a structure to receive and concentrate the public. The existence can also be seen of models of highly organised areas, capable of receiving large numbers of public, or the possibilities offered by the fact of having a reception centre for informing and being able to initiate the citizens in the interpretation and respect for the natural environment. There also exist management models of areas of great ecological value which have been re-appraised from their educational potential.

It is also necessary to have the population on our side, and even committed in the defence of peri-urban nature, a population which is, also diverse and multiple and made up of school children, families looking for areas to go walking, people who have picnics, sportsmen and women, hunters, naturalists..., politicians, especially those in office. Policies are needed of communication, education, participation on all levels, in order to commit the majority of the citizens to the protection of peri-urban nature. Only if we have the citizens on our side can we guarantee the future of these areas which are subjected to so much anthropic pressure (demographic, communications networks, economic, etc.).

Everything we can learn from the works in this publication can be a real tool for managing peri-urban natural areas and, the majority of them, represent examples which can be applied and adapted to other circumstances. Our Federation's wish is to extend our network, make others aware of our experiences in order to facilitate their application to the cities where there are nearby natural areas, and to encourage European cities to set up the protection of this residual nature which has to guarantee the quality of the urban centres and our commitment to sustainability policies. Josep Mascaró (Plans Service Head) and Marià Martí (Park Director)

Introduction

The history of the survival and transformation of Collserola is to a great extent the history of its boundaries, of its fringes. In fact, it is in the zone's 55-kilometre perimeter strip that most of the changes and tensions have ocurred. The marks left by human activity (transport routes, settlement, residential development, cultivation, war) and by natural phenomena (fires, erosion, pests) make it possible for the last 200 years of this area to be read like a book.

Large-scale settlement of the mountain range happened relatively late. As known, Barcelona's city walls kept the population inside their perimeter until the 19th century. The measures imposed by the centralist Spanish state held Barcelona's people well away from its two rivers and mountain and it was not until the start of the 20th century that potential of the mountain began to be seen. Casinos and hotels were built, a tunnel was put through the mountain to establish the rail connection, *Modernista* houses began to encroach on the lower slopes and, in short, civilisation began what could have been the definitive invasion.

In the first half of the 20th century, the municipalities scattered around the mountain (Barcelona, Montcada, Cerdanyola, Sant Cugat, El Papiol, Molins de Rei, Sant Feliu del Llobregat, Sant Just Desvern and Esplugues del Llobregat) had an involved relationship with Collserola. People from the land below went there on day trips, for picnics, gatherings, and barbecues; and local bodies and some landowners began to use it as a location for activities that they did not dare set up in the middle of urban areas: rubish dumps, quarries, scrapyards, etc. Municipal disinterest encouraged many people to illeg ally squat in the valleys and basins and on the hillsides, with rudimentary shacks and planting orchards.

The economic development of the sixties, the famous *desarollismo*, or expansionism, had a severe impact on the park's fringe areas. The transitional space was relentlessly reduced; Barcelona and the entire metropolitan area were exerting a strong outward push, cutting into

the buffer zones that absorb and filter human pressure. As a result of this, and in order to regulate the metropolitan territory, the General Metropolitan Plan was created at the beginning of the 1970s (and passed in 1978). Nine years later, and as a necessary complementary measure aimed specifically at the protection of the natural space of Collserola, the Special Ordinance and Protection Plan for the Collserola Park Natural Environment was drafted (it was approved in 1987).

This measure of protection for the park has had, and still has, a key role in the conservation of this natural space. In spite of this, the point where its weakness is most evident is precisely at the boundaries of the park, and additionally, in the park's relationships with the other natural areas in its environs. It stands to reason that if the park has limits, that is to say, if it is a defined land area, its management cannot exceed those limits. Thus a paradox can arise, in that the act of protecting land can bring with it the isolation of the land protected.

Because of this, there is a clear need for integrated management, and the forging of close co-operation between the administration of the park and those of the surrounding local authorities. There are two parts to this: firstly, reversing the direction of the land consumption push that has always gone from the city towards the mountain. This inversion can be accomplished through a 'colonisation' - in the sense of a natural invasion - of the fringe areas where it is possible: urban parks, gardens, cleared land, sporting installations, infrastructure protection areas, etc. The other aspect can be addressed by creating links between Collserola and its neighbouring natural spaces: the Coastal Range, Sant Llorenç, Garraf, Montcada, the Besòs River and the Llobregat River. This, then, amounts to the 'Green Ring' - that is, a system in which all the natural spaces of the metropolitan region are connected, a concept put forward by the Diputació de Barcelona.



Can Cuyàs

Can Cuyàs has an area of 226.438 m² and is part of the municipality of Montcada i Reixac. It is bordered by an industrial zone and a recently created housing district. As such, it is clearly a fringe zone between the city and the Collserola Park and an example of a periurban area affected by the scenarios already mentioned. Until 1988 it was occupied by a large number of illegal installations, such as orchards, enclosures, storehouses, ponds, stockyards, and especially dwellings. The area lacked natural vegetation, its topography had been altered, and the activities being carried out were threatening to completely overrun the zone. As such its environmental quality was very poor.



In 1998 occupation of all the area's installations and ruins was brought to an end and all the debris that these land uses had generated were removed.

Another negative element affecting this area was the lack of care that had gone into the planning of the new industrial estate at the bottom of the hillside, impeding watercourses and having a severe physical impact whilst not incorporating any kind of remedial measures for the damage done.

Because of this, the technical services of the park intervened to impose management criteria on the industrial estate's zone of contact with the park. There was a linked intervention regarding the route of an access road for trucks involved in the construction of the estate - this route would have future use for access to leisure areas and as a central walking path for the whole zone.



All this work was made possible by the Montcada i Reixac Council inclusion of the Park as a participant in the industrial area's development plan.

In 1999 initial landscape works and reafforestation was carried out, aimed at stabilising the entire area while the overall plan was being created. The groundwork for the re-introduction of Mediterranean flora and fauna was thus laid, with the consolidation of riverbank vegetation in the watercourses, and of meadows with small woods and scattered trees in the open spaces. Biological diversity was thus encouraged.

Once these initial two stages had been carried out, the release of the plan followed, which is designed to guide restoration of the land, returning it to a natural state, and at the same time providing recreation for the people living nearby.

Finally, it should be mentioned that the legacy of 1960s urban development on this land meant that the municipality of Montcada i Reixac did not identify or have any relationship with Collserola Park. Between the urban nucleus and the Park there are railways, motorways, a main highway, a cement factory with a quarrying zone, housing districts unconnected to the urban centre, industrial estates, and an abrupt relief change where the Park meets these districts. This development generated a marginal territory, a no man's land, which offered no clue or suggestion that it was a protected natural space. Additionally, it did not enable the people of this municipality to perceive that what they had right beside them was a natural park, and that, furthermore, it was theirs.

The Plan

The plan proposed attempted to offer an historic new direction: to reveal that Collserola Park exists at Montcada i Reixac, to create a point of reference and identify the Park with the city, to generate a point that would encourage entry, passage - and in short, contact. The plan aimed to reverse negative trends, creating a point of encounter that would harmonise with the Park, and generate an area of environmental and landscape quality ensuring that most people living around it would make it their own. Through these actions a slow but irreversible disappearance of marginal activities and illegal occupations would be fostered.

The definition of the plan's basic criteria was based on a two-fold reality: the physical reality of the territory, and the social reality in which the zone is immersed. The serious problems of these two realities had to be tackled together and that led to the formulation of the area as a park: the Can Cuyás Park.

The morphological conditions of the land and its environment were, as stated above, extremely precarious. The establishment of the new industrial estate required large flat sites, leading to some large differences in level, which made it necessary to create large banks that encroach on part of the park zone. These earth movements had cut watercourses and, even more seriously, no measures had been taken to cater for and drain off the rain water from the affected basin, and as a result, this water collected on the streets of the industrial zone when it rained.



On the other hand, the sociological reality of the surroundings is that they are unstructured suburbs with a population in the most disadvantaged social sectors. The area lacks an identity and has some irrational land uses. In spite of the proximity of the Can Cuyàs neighbourhood to the mountain range, physical access to it is extremely difficult.

The essential aspects of the land's potential are: it marks the frontier between pine forests and open areas and so is especially rich in bird life (buzzards and kestrels); it consists of the first foothills of the mountain range on the alluvial plane of the Besòs, and is consequently dominated by its landscape; it is an important passage for communications routes (the A-18 and A-19 motorways, the N-152 main highway, the railway) between the Montcada hill and Collserola, and so offers a strategic view point.

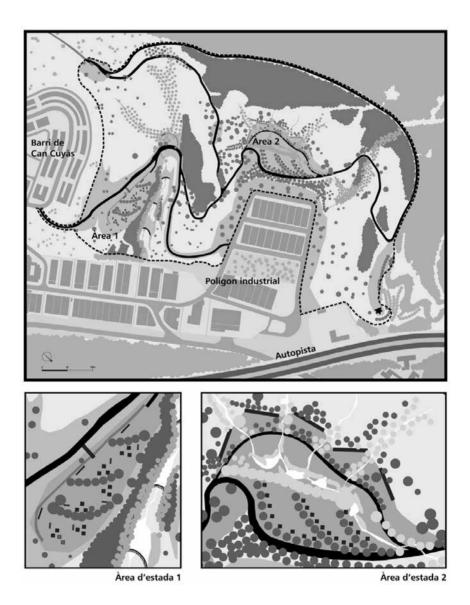
Given these realities, conversion of the park into a different kind of place was necessary. On one hand, working with the topography, the territory had to be landscaped so as to retain as much rain water as possible. This was achieved through the creation of gentle basins in the gullies, accompanied by minor earth retention dikes. In this way, scattered wetland zones and areas of riparian vegetation were created, collecting water and absorbing a good proportion of it. Another objective was to create a filter zone at the edge of the industrial estate, with appropriate vegetation. The banks mentioned earlier, created by the levelling of the estate, were in the end reformed by the land developer, following the guidelines and under the supervision of the Council and Consortium technical services, employing gabion walls, reinforced earth walls and banks with gradients less than 1:2. In the southern part of the park there is a watercourse with very steep walls and very degraded vegetation consisting basically of reeds and nitrophile plants. This was also handled using the construction of small dikes to retain the maximum amount of rain water, and with planting to create a riparian vegetation community. Once the transformation process, unleashed by all these works, has begun, nature can to a relatively large extent be left to do its work. And that is exactly the most important feature that the area can offer to visitors: nature at work, and the opportunity to immerse oneself in it.





The leisure possibilities on offer essentially consist of the creation of a system of walking tracks, which pass through different types of landscape and which also give access to trails going deeper into Collserola Park. The importance of the leisure walks makes the track network a priority element and rest and picnicking are the other activities to be fostered.

To this end two flattened areas will be created and equipped, with gradients of less than with appropriate outdoor furniture, so that they can be used for both passive and active recreation. In two carefully chosen high points, panoramic lookouts will be created. The view from these points has considerable urbanistic interest since it is composed of many kinds of historical elements not visible from other places.



The vegetation that is to be planted will be of key importance, as it will achieve two objectives: firstly, it will recreate the different plant regimes that are associated with the local climate, orientation and topographical conditions. These communities can be summed up as: pines and scattered ilexes which characterise the eastern and south-eastern slopes of the park along with scrub and grasslands; hazelnuts, osiers, poplars, and nettles in the watercourses and basin areas to retain rainwater. The other goal is to create a visual and acoustic barrier which, like a screen, will camouflage the industrial estate: This vegetation to be planted will be pines and ilexes accompanied by exotic species that offer high resistance and effectiveness: mimosas, *Cotoneaster, Mioporum, Pittosporum, Forsythia, Cupressucyparis.*

This plan and project have been conceived as long-term ventures, as in any attempt to reverse a trend, time is an ally. If the planned processes have been correctly predicted, nature can only respond positively and so the cycle will be self-reinforcing. The same can be said for land use: if what is offered becomes popular, excursionists will make the space their own and will look after and protect it.

Ongoing monitor of the project will be essential in order to generate the information needed to reinforce its successes and correct its errors.

Public fostering at Miribel-Jonage

Jean-Louis Michelot (Technical Advisor of the Parc nature de Miribel-Jonage)

A high public visiting rate

The parc nature de Miribel-Jonage constitutes the main leisure area of the Lyon conurbation, due to its free access and its attractiveness (ponds, recreation gently slopes ...).

We estimate its visitor frequency to be 3,5 million people per year, with rushes of 50 000 people per day.

Visiting rate is uneven in space and time

- concentration near beaches
- visiting rate more scattered in natural environments : bike, hunting...



Principles of park's values highlights

Public fostering must be thought in the frame of the general project of making the park's values coming out.

The park has four roles :

- drinkable water
- flood expansion
- leisure
- natural heritage

Therefore, it is not a matter of developing leisure in a continuous fashion, but rather to find an equilibrium between recreation and natural environment conservation.

To reach that aim, management must be graded from the city to nature:

- different access modes : car / by foot
- different visiting rates
- different kinds of public

General public fostering

• Today

Nowadays, visitors to the park benefit from a signaling way of fostering: explanatory or directional boards.

They can find a certain amount of information at the sports center (la Planète Tonique), which acts as a general fostering office of the park, without being designed or organized as such.





• The project : to create a true park fostering Today, the park wishes to offer to the visitors a compret

Today, the park wishes to offer to the visitors a comprehensive and easy to reach information:

- To meet the public : mediators (staff on the spot, having the task of informing visitors)
- at a short-medium term : reinforcing the general fostering role at the Planète Tonique (enlargement of offices, staff training)
- at a medium-long term : equipment of a « home of the park » in the middle of the place, in an easy to reach location close to the different facets of the park (actual gravel extraction sites, with direct contact between leisure and natural areas).

Fostering in leisure areas

· Sports center

La Planète Tonique is a leisure area of about twenty hectares, devoted to public fun activities; admsion is charged.

This space is under current qualitative improvement and subjected to a process of a wider public attendance.

Open leisure spaces

Some hundreds of hectares are open free to public :

- leisure areas : attended beaches, meadows, bike tracks
- drink shops, restaurant
- horse riding centers
- aerial center

Project : improving of fostering in leisure areas
 Current equipment performs well, but it equild be derived.

Current equipment performs well, but it could be developed, better coordinated and devoted to a real fostering politic:

- creation of a permanent restaurant
- to confer an information role to the extant equipment
- creation of a sign based information channel

Natural and rural areas

Current state

Currently, equipmentis limited in the « natural » part of the park (1200 hectares out of 2200) :

- sports area of a municipality
- restaurant

Some actions in terms of fostering and management of public access have been carried out during the last few years:

- control of vehicular traffic (closing of many paths)
- provision of landscape car parkings
- sign-based fostering (information boards)
- sign-based directional information

Tomorrow

The project aims at developing the fostering in this part of the park, based on a smooth management logic:

- reinforcement of human presence (keepers-mediators)
- improvement of gates (strong sign-based information)

- a better integration of current equipment into the project (restaurant...) :

- management of low key fostering points in the natural environment (stops)







Contact between leisure and nature

The creation of two very distinct spaces, one devoted to leisure and the other one devoted to conservation, must be avoided. On the contrary, It's a matter of carrying out a balanced management, setting a transition between leisure and nature.

Following this logic, the old gravel extraction areas, under culy rrent rehabilitation, can play a very important role, because they are able to foster a high biodiversity, alongside high levels of human interaction

· Firsts trials

This sector has been the target of firsts applications of this principle, particularly in the framework of a LIFE project.

- ecological restoration of the old gravel extraction sites
 discovery path
 landscape treatment

Furthermore, the park has developed environmental education activities: visits, activities for children, setting up of an exhibition...

• Projects

The following activities should be much developed during the future years:

To allow people to discover nature

- Exploitation of a beach as a starting point and entertainment site.
- Setting up of a ludic discovery area

To create an education center (Allivoz farmhouse)

- A more educational approach
- Central topic : water
- public : To give priority to groups

The park has recently restored another building (cutting farmhouse), which will act as a fostering place for the pedagogic activities by the park partner associations.

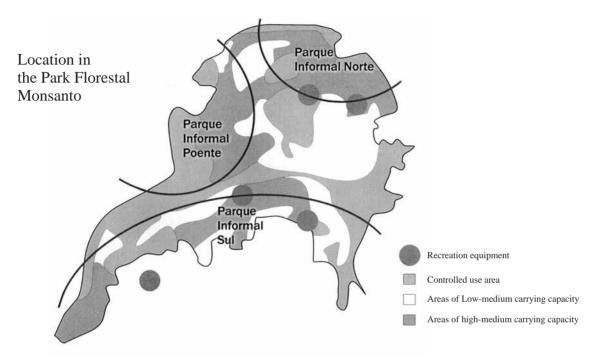


Informal Norte Park / A Park for the people

Ruí Simao and Sandra Moutinho (Technicians of the Parc Florestal of Monsanto, Lisbon)

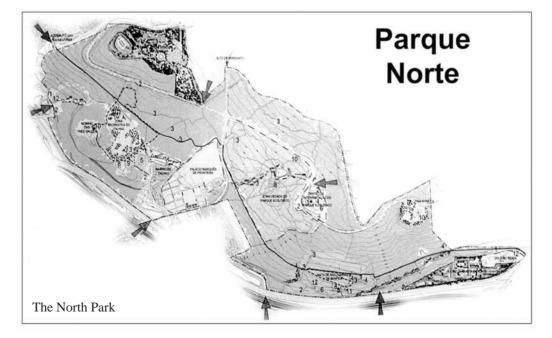
Concept

"Leisure zone with a medium availability of equipment and services, together with a carrying capacity of approximately 50 visitors/ha."



Main General Features of the Park Florestal of Monsanto

- Area: 1000 ha.
- Maximum Altitude : 227m
- Pedestrian paths: 364 Km
- Lithology: grounds of a basalt and calcareous origin at the centre of the Park.
- Relief: rugged, with altitudes ranging from 227m to 20m.
- Main tree species: Umbrela pine (Pinus pinea)
- Age of the Vegetation: 60 years old



The organisation of the current public offer at the Park

	Quantification	Types
Leisure and recreation Areas	3	Mata SDBenfica Z:R:do Calhau, Z. Vedada PE
Recreational Equipment	3	Park for Children
Sports Equipment	4	Sports center pavilion Adventure Park C. Maintenance
Reception, information and guidance Posts	2	CI, Poste Mata SDBenfica
Municipal Services of Public use	3	CRASPEM Viveiros Quinta Fonte; CI
Other equipment	20	Zones Estadia, P. de Merendas and Miradouros
Pedestrian paths Network	48 Km	

The organisation of the current private offer at the Park

	Quantification	Types
Sport Parks	1	Portuguese trapshooting Club
Services	4	Restaurants, Snack's and Associate Centre
Other Spaces	1	Palace Marquês de Fronteira



Generic Actions to implement

- Quantitative and qualitative increase of the outdoor leisure offer
- Building up of a pedestrian and cycling path system, with an easy link with the urban network and some stop and/or access areas for public services.
- Spread of the Park's offer, while highlighting the firm "Monsanto Ecological Park"
- Dynamisation of the Park from the part of private bodies linked to the environment, which contribute to the reinforcement of the offer.
- Valuation of the Park from an ecological and landscape point of view.
- Park user's security reinforcement.

Equip. / Strut. / Serv. Park proposal

	Quantification	Types
Leisure and recreation areas	3/1	viewpoint of Barcal
Entertainment Equipment	3/0	
Sports Equipment	4/0	
Reception, information and guidance posts	2/3	Entrance by the Alamedas, PRA Serafina, Qta da Fonte
Public use municipal services	3/2	Fostering Center, home of C. Econautas
Other equipment	20/0	
Bike walks network	22 Km	

Human resources

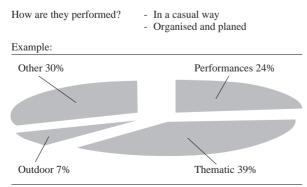
	Quantification	Obs.
Technicians	24	Projects; Management; Dynamisation; Spread
Workers	28	18 people, 10 reinsertion programmes-based
Forestry Police	20	on 3 rotating shifts

The public

Examples of activities that can be performed at the Park

- Pedestrian itineraries;Thematic itineraries;
- Outdoor Sports;
- Leisure or entertainment Activities;
- Thematic Activities;

Environmental education projects



Activities planed and organised at P. North between January and August 2000



Facilities for receiving the public in the green belt parks of Vitoria-Gasteiz.

Fernando de Juana (Technical Director of the Center of Environmental Studies of Vitoria-Gasteiz)

The Green Belt of Vitoria-Gasteiz is a set of green areas for public use which are located in the urban periphery like a "membrane" between the city and the natural and rural areas which surround it. The total planned surface area is some 850 hectares, some 450 of which have already been made into peri-urban parks.

The management strategy of the Green Belt is oriented towards the two-fold aim of making maximum advantage of the educational and recreational potential of these areas, whilst guaranteeing the conservation of itsnatura as a values area Consequently, the first efforts have been directed towards both the protection and improvement of the natural habitats, as well as to regulating the uses and activities that are undertaken spontaneously by the public. In this sense, firstly, the control of access was taken on, in order to stop the transit of vehicles off the roads and car parks, channelling the flow of users through a network of pedestrian, cycling and equestrian routes. In this way, the use of the parks for walking has been promoted, in preference to other less respective that efful sympathetic to the natural environment. We must point out in this respect that walking and country excursions occupy the top place in the leisure activities of the people of Vitoria, with a participation figure of 48.8 %, compared with only 8.9 % in the case of sports, for example. In general, these are usually long walks, bearing in mind that the citizens who practice this activity spend an average of 2:04 hours a day. This is why the formation of pedestrian paths and the maintenance of the condition of the existing pavements, represents one of the most important areas of work.





The main criteria which has been followed in laying out the routes has been to make it possible to connect the areas which make up the Green Belt, not just between each other, but also to the wide network of green areas and pedestrian paths that Vitoria-Gasteiz has, and to the traditional routes which allow access from the city to the rural environment and mountain. Whenever it has been possible, the option has been taken to create independent routes for pedestrians, bicycles and horses in order to avoid possible conflict between the different types of user. The total length of the paths made at this time is over 23 km, to which we must add another almost 10 km at the project stage. In the future, once the execution of the Green Belt has been completed, it is envisaged that this figure will be over 60 km.

The facilities direct are completed with a series of stopping areas in each one of the parks, equipped with picnic tables, drinking water fountains and litter bins. There are two observatories for waterfowl in the wetlands of Salburúa Park, where on Saturdays, Sundays and public holidays there are guides with observation instruments that help the visitors to identify the different species.



But as well as an area designed for the leisure and recreation of the citizens of Vitoria-Gasteiz, the Green Belt is contemplated as an especially appropriate scene for the development of environmental education and diffusion. The main facility which it has in this sense is the Casa de la Dehesa de Olárizu, a building of some $1,000 \text{ m}^2$ built up surface area which, as well as housing the headquarters of the Centre of Environmental Studies – the organism which manages the Green Belt –, it carries out the functions of the information point and environmental documentation centre.



To do this, it has a thematic library with over 5,000 documents in different formats, with independent spaces given over to the general public, to children and technicians or researchers, and offering the possibility of consulting and borrowing materials, Internet access, advice and programmed activities. The Centre also has a hall of around 200 m^2 surface area destined to temporary exhibitions of an environmental theme, an audio-visual room and several classrooms in which training programmes related to the environment and sustainable development are carried out.



In the same Olárizu Park, very near to the Casa de la Dehesa, there are facilities destined specifically for educational and leisure activities related to the environment, agriculture and gardening. These cover a 50,000 m² plot which contains ecological vegetable gardens for adults, schoolchildren's vegetable plots, a forest nursery of indigenous plants, an educational arboretum, a collection of ornamental plants, a tropical greenhouse, etc. It is also equipped with a bio-climatic building which houses an information office, services, cloakroom, store and agroforestry machinery and tools workshop. All of this allows a wide range of organised course and activities to be carried out, such as guided tours, gardening workshops and organic horticultural workshops, in which over 3,000 people take part each year.





Complementary to the existing facilities, the building is now being projected of an interpretation centre in Salburúa Park, destined to both increasing and diversifying the leisure and educational offer of the Green Belt, and to promoting research applied to the conservation and management of natural areas in general and the wetlands in particular. With a total built up surface area of some 2,000 m², this complex will house the following facilities:

- Reception and services: including entrance foyer with information desk, group reception area, cafeteria-restaurant, green / book shop and toilets.

- Exhibition hall: destined to housing a permanent exhibition about the wetlands and other temporary exhibitions related to environmental themes.

- Resource centre and complementary activities: made up of a library, with a section for adults and another for children, an information library and work rooms.

- Hall: which will meet the double function of projection room, as a possible complement to the exhibitions and lecture hall.
- Research centre: equipped with technical offices and laboratory destined to research staff.
- Observatory: this will consist of a tower of sufficient height to allow the visitor to have a complete panoramic view of the Salburúa Park.

- Logistics: the necessary spaces for the management of the complex, such as stores, workshops and maintenance and surveillance premises.

- External spaces: destined to carrying out open-air activities related to leisure or environmental education.

The Natural Reserve "Sorgenti della Muzzetta" and the Botanical Centre of the Casa Gola: an example of an educational route integrated into the South Milan Agricultural Park.

Fabrizio Scelsi (South Milan Agricultural Park Technician)

1. The South Milan Agricultural Park

1.1 Generalities

The South Milan Agricultural Park, constituted by Regional Law no. 24 of 1990, covers about 48,000 ha in the southern area of the Province of Milan. It is a regional park in the metropolitan belt and encompases a densely populated and industrialised area. The Governing Body is the Province of Milan.

The Park territory is made up of the agricultural and nature areas pertaining to the 61 town councils, among them Milan, and isdissected by a dense irrigated network which constitutes one of the Park's characteristic elements. A large part of its surface area is occupied by crop growing, rice, cereals, fodder and poplars, while the areas of natural interest are represented, primarily, by woodlands and wetlands which are infrequent and cover a smaller area.



Among the best known natural features are: the Natural Reserve "Fontanile Nuovo di Bareggio" and the Natural Reserve "Sorgenti della Muzzetta" of Rodano and Settala, characterised by the presence of fountains and waterside woodlands; the Cusago Wood and Riazzolo Wood in Corbetta, the last remnants of the plains forest which covered the territory in the past; the Boscaccio Lake, in Trezzano sul Naviglio, a disused quarry destined to become a sanctuary for the fauna; the Lacchiarella Oasis and the Pasturago Wetlands, interesting marsh areas with reedbeds and flooded areas. To these places we can add a large number of valuable fountains, streams, canals, ponds, which constitute a natural heritage of considerable importance thant needs to be protected and valued.

Elements of an historical and cultural nature characterise the whole of the Park territory and find their maximum expression in the abbeys of Chiaravalle, Viboldone and Mirasole, in the Villa Invernizzi della Tenuta di Trenzanesio, in the castles, among them those of Cusago and Peschiera, in the country houses with closed courtyards.Industrial archaeology elements are also prominent, like the water mills still existing along the streams, and lastly the minor elements of agrarian history like the small chapels or the sign posts which mark the most important routes or underline particular moments of the life of the community.

1.2 Aims

The management of this historic infrastructure is complex and challenging and supports the agricultural activity, the conservation and promotion of the natural environment and the cultural and recreational enjoyment of the territory by the citizens, in line with the aims stated in the constituting law of the Park. As regards the latter, the law states the following:

"The aims of the South Milan Agricultural Park [...] are:

- the care and restoration of the landscape and environment of the areas of communication between city and countryside, as well as the connection of the external areas with the urban green systems;
- the ecological balance of the metropolitan area;
- safeguarding, qualifying and promoting agricultural-forest-crop-growing activities, in accordance with the destination of the area;
- the cultural and recreational enjoyment of the environment by the citizens.

1.3 Enjoyment

The cultural leisure by the citizens is therefore, a focal point of the Park's management strategy. The question of enjoyment and environmental education is currently carried out mainly through activities, among them guided tours to the two natural reserves present inside the Park, as well as to country houses, which illustrate agricultural practices and the tasting of local products.



The Park is also working specifically towards the creation of visitor's centres inside the territory that can serve as "reference points for the citizens with regard to environmental information and education".

Near one of the Park's main attractions for the visitors, the Natural Reserve "Sorgenti della Muzzetta", the Botanical Centre of the Casa Gola is currently being established. The aim is to create in the eastern section of the Park a naturalistic-cultural route which is made up of a natural environment representative of the Milanese Plain and a museum structure in which the most relevant botanical aspects of the Park can be illustrated; there is a focus on the botanical features of the nature reserve. The route is set in an environment which has a recreational role, due to its location near the city and because of the presence of other places of interest. Among these is the air boat landing, which fulfils a recreational function, the Carengione, with the characteristics of an area of naturalist interest, and the Tenuta di Trenzanesio, of relevant importance from the historical-architectural point of view.

Over the next few years the Park envisages to later enrich the cultural route from the Reserve and the Casa Gola, with a permanent exhibition on every day activities, which will be housed in the Cascina Castello, a few hundred metres from the entrance to the reserve. The possibility is being explored for making a cycle track in this area of the Park, with the aim of connecting with the pedestrian route which runs through the aforementioned places of cultural-recreational interest.

2. The Natural Reserve "Sorgenti della Muzzetta"

Among the most frequented places inside the Park, is the Natural Reserve "Sorgenti della Muzzetta", characterised by the presence of a large fountain and an interesting waterside wood. The visits, led by specialised staff winds along an educational route which crosses the main environments of the reserve. The route is bordered by information panels, resting area and a hide for observing the waterfowl.



2.1 Generalities

The Natural Reserve "Sorgenti della Muzzetta", classified by the regional regulations as "partially biological", falls in a small, flat area in the area surrounding the town of Lucino between the towns of Rodano and Settala, in the eastern part of the South Milan Agricultural park.

The reserve, surviving element of the Lombard landscape is characterised by the presence of a fountain with three heads, called Molino, Vallazze and Regelada, by an alluvial wood and crop growing areas, surrounded by hedgerows and bushes. Around the reserve are located several historic country houses with a notable architectural worth.

The reserve, constituted by the deliberation of the Regional Council no. III/1800 of the 15th November 1984, covers a surface area made up of 63.3 ha, 25 of which constitute the area of the reserve and 38.3 are considered as an area of respect; the management of the area has been commissioned to the Park.

The reserve is located at around 109 m above sea level, inside a densely humanised area, mainly of agricultural use. The ownership of the land on which the reserve has been constituted is partly private and partly public, following recent acquisition carried out by the Province.

2.2 Description of the environment

From the geological point of view, the subsoil of the area in question forms part of a alluvium complex attributed to the recent deluge, which constitutes the structure of the Lombard plain to the S-E of Milan. The stratographic sections show a rocky surface of gravel mixed with sand with a thickness of about 40 m, accompanied by sandy strata which alternate with clay strata.

As regards the importance of the springs, their value is variable, according to the level of the strata, which is also influenced both by climatic As regards the important to an event of the strategy of the level of the strategy of the level of the strategy of the latter, every sear the foundation, for a period of variable duration, remain completely dry, above all during the month of April, with negative effects on the ecological communities of the reserve.

As regards the climate, the reserve falls into an area characterised by an average annual temperature of 12.6 $^{\circ}$ C, and with an average annual rainfall of 1010 mm. The rainy season is split into two periods of maximum (May and October) and two of minimum (January and July). From a bio-climatic point of view, in its whole the reserve territory falls in the tableland of the mesaxonian region and ipomesaxonian sub-region type B, to which corresponds potential natural vegetation made up of forest formation dominated by white holm oak (Quercus robur), replaced by hygrophilous woods in the wet seasons and waterside vegetation.

The flora in the reserve numbers just under 300 vegetable greater species, with the prevalence of elements of Nordic, Eurasian and Euro-Siberian distribution.

The vegetation includes diverse types which can be divided up, starting from the water or land environments, in the following table:

1 bush vegetation	4 wet meadow vegetation
2 aquatic microphyte vegetation	5 wood margin bush vegetation
3 heliophilic vegetation	6 hygrophilous forest vegetation

Certainly the most interesting vegetation, from a naturalist point of view, present inside the reserve is the forest vegetation, which mainly consists of hygrophilous species, elders (Alnus glutinosa), white willows (Salix alba), grey willows (Salix cinerea), accompanied sporadically by white elder and elm (Quercus robur) and lesser elms (Ulmus minor); the latter have recently been affected by the attack of pathogenic agents. Deeper in the undergrowth, there are diverse wood species of great phytogenic interest, now non-existent or which have become quite rare on the plain around Milan.

The reserve represents a sanctuary of notable importance for many species of animals, especially considering the high level of human influence in the area.

The most visible fauna by a long way is represented by birds, present with diverse species linked to the water environment (water hens, royal duck, king fishers, nightingale, heron, egret, etc.), in the wooded environment (green beak, greater red beak, wryneck, golden oriole, robin redbreast, etc.) and in the open environments (shrike, lark, partridge). Of a certain consistence, in relation to the small size of the area, are also the populations of night birds of prey (owls) and day birds of prey (kestrel). In total there are around 70 species of which thirty are nesting hirds

The mammal fauna is, on the other hand, represented by few species, among them stand out for their interest and rarity, the red field mouse and the white-bellied shrew. Also present are the fox, the weasel and the hare.

The herpetofauna is represented by few quite common species, also in relation to the sudden alterations of the area in past years. The rarest and most interesting species of the Lombard herpetofauna are totally absent.

2.3 Description of the interventions carried out

Numerous interventions have been carried out in the Natural Reserve "Sorgenti della Muzzetta" in the South Milan Agricultural Park.

From the environmental point of view certainly the most relevant intervention has been the recuperation of the fountainhead called Regelada, which appears on some



historic maps but which was lost after being buried. The head has been dug out again, respecting the original shape, reactivated with the placement of 8 pipes underground emitters and re-naturalised with the plantation in the nearby area of protection of native tree and bush species.

As regards the enjoyment for educational purposes diverse interventions have been followed. Among which we can list:

- The definition of the accesses by making 3 wooden fences and a bridge over the Tombona stream;
- The building of a rest area limited by a wooden fencing;
 The placement around the rest area of a notice board with information panels about the typical ecosystem of the fountains;
- The creation of a pedestrian path which from the main entrance passes through the most stimulating environments of the area.

Of importance, for the financial effort the Park has sustained and for the positive reflections that in the future will be produced on the environment of the reserve, it is the recent intervention of acquisition of the area presided by the Molino fountain. Awaiting carrying out the restoration works, the first systemisation of the areas has begun with the plantation along the perimeter of a thick hedge made up of typical native species of the Lombard Plain.

In the purpose of making the reserve known to school children an audiovisual display has been produced which supplies all the information of an environmental and naturalistic nature about the reserve.

3. The Botanical Centre of the Casa Gola

3.1 Premises

The purpose of allowing the visitors of the Natural Reserve "Sorgenti della Muzzetta" to delve into environmental subjects, and in the advanced stage of carrying out a museum structure of a botanical nature, which will be housed in the historic building of the Casa Gola, a short distance from the Reserve. The building, which constitutes the original nucleus of the town of Lucino, is a typical example of a Lombard country building, dating back to the late Medieval period (circa 1400). The making of this structure, with main scientific educational aims, has started thanks to the availability of the historic building, located in the municipal area of Rodano which holds its ownership. The South Milan Agricultural Park, at the end of the restoration work, will have the rights for a period of 50 years.

Currently, both the restoration and valuation of the structure from the 1400's is taking place, characterising the building and its consequent adaptation to collective enjoyment, with the creation of exhibition and meeting spaces.

The opening to the public of the new centre is envisaged for the year 2001.

3.2 Historical architectural note about the Casa Gola

The Casa Gola, linked to law 1089/1939, constitutes the original nucleus of the town of Lucino and is located on its main square, to close contact with the parish church.

The Casa Gola is a typical example of a building in the Lombard countryside and represents the remains of a rural complex articulated around a closed courtyard, as can be seen from the cadastral maps from 1721. The building was probably constructed as a convent, forming part of the neighbouring parish or even residential place considering the presence of characteristic noble elements different from neighbouring buildings. If we accept the second hypothesis, the building should be interpreted as the stately courtyard, the original place being in runs, and must have been dedicated to the home of the lord.

As regards its date, this is very difficult to establish because of the modifications that it has undergone. The structure could date back to the late Medieval period (circa 1400), as can be seen in the making of bricks of the window in the archway conserved above the facade or in the now, bricked-up windows.

The inside has been refurbished many times: the ground floor premises have been used as an artisan laboratory, as a stable, or for commercial activities. The upstairs on the other hand, has been turned into a grain-flour store, as can be seen from the openings present in the internal facade of the courtyard, adapted for lifting and lowering the grain.

3.3 Recuperation project of the Casa Gola

The building is unfortunately in a poor condition and the restoration intervention should be considered as of extreme urgency, above all because of the dilapidated roof. The Recuperation Project of the Casa Gola envisages, in short, a new roof, reconstruction of the external plastering and the cleaning of the facade, making a barrier against damp in the external walls, the reconstruction of the reinforcement and structure, as well as building a new staircase and lifts, windows and an emergency exit door.

The Park will work, therefore, for the conservation and valuation of the fourteenth century structure and for the adaptation of the building to collective enjoyment, with exhibition and meeting areas on the ground floor and scientific-educational areas upstairs. In particular, inside the Casa Gola have been installed:

- Two exhibition halls and a materials archive on the ground floor;

- A conference hall with seating for about 30, equipped with screen connected to a binocular stereo-microscope for observation at a notable magnification of the botanical material, as well as an area equipped with cupboards, work table, computer, binoculars

and multimedia equipment, upstairs.

3.4 How the idea was born for a cultural centre of a botanical nature

What are the reasons which have led to the project of a centre dedicated to diffusion in the field of botany inside a historic building in the Lombard countryside?

In accordance with the aims of the Park, because of its strategic position next to the Reserve of Sorgenti della Muzzetta and because of its historical-architectural worth, Casa Gola shows a clear vocation to house relevant educational and cultural activities. Considering the size of the intervention and the quantity and variety of the exhibition material, the model of "enjoyment centre " which it is hoped to achieve is that of a centre which will promote research and cultural diffusion. The permanent exhibitions set up inside the Casa Gola will become an important support for educational experimentation, as well as for studies in the naturalist and environmental field which have been carried out in the Park territory for years.

The idea of constituting a cultural centre of a botanical nature inside the South Milan Agricultural Park was born out of the considerations that the diffusion in this field is often lacking whether of a quantitative as well as qualitative point of view. The vegetable species, on the other hand, are those which have the main influence on the natural environment, shaping the landscape, structuring the ecosystems and influencing the seasonal ecological conditions in a determined way. Because of these reasons, botanical studies have always enjoyed a very special interest, which transcends pure ecology, including also other disciplines such as, for example, agronomy, the architecture of the landscape, climatology, archaeology, history.

The centre in the future, therefore, will be able to represent a structure in the service of those who, for work, pleasure or simply curiosity, wish to discover botany. The most relevant part of the structure will be made up of the Herbarium of the Padana Flora inside which collections of labelled vegetable samples will be conserved from various locations, mainly from the Park. The dried plants will be available to the public for reasons of research and, valuing particularly the spread function of the herbarium, for educational reasons, with equipment to attract the attention of scholars in the study of botany.

The possibility of identifying the various plant species that live in nature, as well as those grown as decoration or for food and industrial purposes, may be of interest to a potentially quite large public. Among the audience groups which the project is directed at, there are teachers of natural sciences at schools, always in search for new stimuli for children, researchers dedicated to the comparison of herbarium samples from diverse locations, landscape architects, but also farmers often interested in the identification of new pests. The public urban administrators are also concerned regarding both the harmful herbs which cause alergies and the keepers which often lack the necessary knowledge to identify the protected species. Other potential public are the homeopaths, silviculturits -always in search for new native or exotic species to cultivate, doctors, enthousiats...

3.5 Description of the intervention

From the functional point of view the structure will be made up of an information centre and a Herbarium, consisting of labelled vegetable samples (dried) which can be consulted by the public. The structure will be equipped with a multimedia post which will provide information about the main natural environments and about the activities carried out in the Park for its conservation and the acquisition is envisaged of a binocular microscope used for the consultation of the material, one of them connected to a large screen to illustrate the explanations directed to the groups of visitors in conference hall (seating around 30).

From the educational point of view the most relevant part of the structure will be made up of the Herbarium of the Padana flora, inside which collections of labelled vegetable samples will be conserved from various locations and, mainly from the Park territory

The Herbariums are dedicated to the conservation and the consultation of collections of labelled plants. They are structures with an eminently educational and scientific aim, and they represent a support of fundamental importance for the study of botany. Under the profile of diffusion the interest is evident that a structure of such significance can mean in the field of a natural sciences educational programme.

In particular, from the educational point of view, a Herbarium makes a valid contribution to stimulating awareness about the main native vegetable species, as well as about its Ecology (auto-ecology) and its contribution in the constitution of plant associations in nature (sinecology). The Herbarium can also hold collections of cultivated plants, more generally, of an agrarian interest, like the species used in the apiculture field and the weeds linked to diverse crops.

In the scientific field, the herbariums carry out very important functions for floristic and taxonomic studies, among them, above all, historical documentation and systematic comparison.

The function of historical documentation is the legacy, above all, of the information that the most ancient collections provide about the floristic wealth of a territory and the eventual variations which have taken place over the years (extinction, introduction of exotic species, etc.), as well as about the geographical distribution of the diverse species. In comparison with the current situation it is possible to formulate hypotheses regarding the effects of man's interventions or natural factors (climatic, geologic, etc.) and evaluate the degree of biodiversity on a local level.

As regards systematic comparison, Herbariums carry out absolutely essential functions for botanical studies, allowing, for example, comparing samples of the same species collections in different periods or places, of reconstructing the area of a determined species by means of the indication of the locations of collection on the label of the various samples, or constituting a sample bank for exchanges and comparisons with other institutions. In the Herbariums, the holotypes are also conserved, that is to say, the samples described for the first time as new entities, whether this are new species, subspecies or varieties.

An interesting corollary of the collections will be represented by the thematic herbariums, that will be carried out by demands of an educational nature. This will be, in particular, small herbariums of fast exhibition, made with the aim of illustrating to the school or student public some groups of species of particular practical interest. We will therefore be able to see the leaves covered with cellophane, easy to handle, herbariums about specific subjects, like, for example, pests in fields of maize, rice fields, the rural vegetation, naturalised exotic species, crops, allergenic species, species of apicultural interest, etc.

The herbarium is a structure in continuous progression, needing phyto-health care, to the extent that it is susceptible of being attacked by harmful insects, as well as continuously enriched with new plant samples collected in nature and / or from exchanges with other scientific institutions with similar aims. In the future, an Index seminum, a collection of seeds of vegetable species from the Park, whether autochtonous or not, could be also added to the proper herbarium, which will be able to be distributed for scientific and experimental purposes.

3.6 Brief history of the Herbariums

Herbariums have a long historical tradition which dates back to the Greek period (4th century BC), although their significance was not always that of a plant collection. At first, in fact, they were at most, illustrated Herbariums, made up of books in which the plants were listed, described and drawn. These works had mainly a medical interest, as they were linked to the demands of giving a name and a description to plants in order to facilitate classification in nature.

Among the oldest Illustrated Herbariums that of Teofrasto, Greek philosopher-naturalist (372-287 BC), entitled Historia plantarum is remembered, as Plinio reports in the 1st century AD.

Worth noting is also the Illustrated Herbarium of Pedanio Dioscoride, in the 1st century AD, entitled De Materia Medica Libri Quinque, which represented the best text on botany throughout the Middle Ages and until the Renaissance.

We still have to wait until the 18th century in order to have scientifically correct botanical descriptions, in the measure that the species dealt with their philosophical, magical, astrological or occult significance, more than for their real naturalist characteristics. In this context fits the Herbarium of Paracelso (1451-1493) who in his Dottrina dei Segni sustained that plants held a hidden sign of its use by man (for example heart shaped leaves efficient in the cure of heart disease). They are, therefore, works which represent a mixture of superstition and pseudo-medicine, to which are still added others endowed with greater scientific rigour, like the Herbariums by the German Bock, by the Belgian Dodoneus and by the Englishman Turner.

In Germany, in the course of the 15th century appeared the first printed herbariums, the so called incunable Herbariums, as well as the copies

of medieval manuscripts in turn inspired by ancient Greek and Roman works. The doctor-botanist Pier Andrea Mattioli (1500-1577) published in Venice a Illustrated Herbarium entitled Commentari alla Materia Medica di Pedacio Dioscoride di Anarzebeo, in which the work of Dioscoride is integrated and enriched with new data and descriptions, as well as beautiful botanical tables made with the shadow technique by the artists Wolfgang Meyerbeck and Giorgio Liberale. Of great precision are also the illustrations of the Illustrated Herbariums by the German authors Brunfels (1488-1534) and Fuchs (1498-1554), as well as the Italian Aldrovandi (1522-1605), whose monumental work in 360 volumes is considered to be a milestone in the renovation of Network Science in the 1500'c

Natural Science in the 1500's.

As regard the Illustrated Herbariums, the Impression Herbariums have had a lesser influence, whose technique is described in the 16th century also by Leonardo, in his Codice Atlantico. The technique consisted of impregnating with black smoke produced by a candle on one side of the vegetable sample which was then pressed between two sheets of card. With the development and affirmation of the printing technique the method was quickly abandoned.

The use of dried vegetable samples has led to the making of the first Dried Herbariums (Horti sicci), at the beginning of the 16th century. The progress by science was notable: the botanist abandoned progressively the iconographic texts in order to pass on to the study of living plants, contextually advancing the demand of conserving their collection in the form of samples available and observable at any time.

Among the first to use dried samples to show to students is remembered Luca Ghini, professor of "Medicinal Herboristory" at the Universities of Bologna and Pisa. Even today diverse dried herbariums of ancient origin have been preserved, among which an Anonymous Herbarium from '500, conserved in the Angelica Library in Rome, the Herbarium of Ulisse Aldrovandi, dating back to 1544 and conserved in the University of Bologna, the Herbarium of Andrea Cesalpino, dating from the same period as the former and conserved in the Museum of the University of Florence, an Herbarium Ducale Estense, from the 16th century, conserved in the library Estense of Modena, the Herbarium of G, Bauhin, made at the end of the 16th century and conserved in the Library of the Botanical Gardens of Basle.

The first dried herbariums are presented as relegated volumes with the samples stuck directly onto several pages. This was a system which is completely outdated, as with the passing of time it was preferred to make herbariums one a single page, with the aim of being able to add other pages as one wished. In the beginning, the label was simple and carried several names, generally the common name of the plant and a brief summary description (polynomial naming). With the introduction of the bionomic naming of species by Linneo, in the 18th century and of new methods of classification of plants the labels became more detailed, finally including, around the end of '1700 also information about the date and location of the collection, as well as notes of an ecological character.

3.7 The equipment

The Park, in view of the opening to the public of the new museum structure, has started the procedure for the acquisition of the necessary equipment, which consists, in particular, of a drier and a freezer for the preparation of the dried samples, some binoculars, used for the consultation of the materials, which is connected to a screen placed in a nearby hall in order to allow viewing by groups and scholars, a computer, necessary for cataloguing the material conserved, as well as cupboards, shelves, tables, chairs and all the elements necessary for the conservation of the dried samples and for the enjoyment of the structure. To this, we must also add a whole series of educational support, represented by botanical models which represent the magnified part of flowers, fruits, fungi, vegetable cells, etc.

The Centre will also have a small library made up of the main texts which identify the European and exotic flora, as well as scientific books and magazines on botany.

The Park has already collaborated with professionals to acquire as soon as possible the living material that, once dried, will enter to form part of the collection. The initial collection was then made up over the years with material collected by the naturalist and agrarian technicians at the Park, by students interested in making theses of a botanical nature about the environments of the Park, or also with samples exchanged with other similar structures, creating beneficial contacts with other scientific institutions.

For the constitution and running of the structure, as well as for the educational activities, the Park has placed a sum aside destined for collaboration between external staff and the staff in charge of the Park.

How to involve public and partners? The experience of l'Arche de la Nature at Mans

Vincent Nuyts (Communauté urbaine of Mans)

To involve the public in the management and protection of the site, l'Arche de la Nature relies on public participation to the space entertainment and on an active partnership politics. Participation and partnership are constantly present in the resulting communication politics.

Participation as a way of involvement

L'Arche de la Nature relies on different levels of participation by the public.

The aim of the proposed events is to raise awareness of the environment in an informal leisure setting

Thematic fairs

These fairs (bread, jam, garden, Percheron...) encourage visitor involvement.



- Participation demonstrations (e.g. : pedestrian rally, discovery walks)
- Invitations to national well known speakers to answer questions asked by the public (e.g. : Michel Lis for the garden fair)
- Organisation of gastronomic competitions (e.g.: best apple cake) and agricultural competitions (e.g.: prize delivery by the agricultural society)

Maison de l'eau

Concours départemental de galette

Pour la troisième édition du concours de galette à la Maison de l'eau, la Fédération patronale de la boulangerie-pâtisserie de la Sarthe a couronné les meilleures galettes briochées et frangipanes. Venus de tout le département, plus de quarante



pâtissiers ont participé à ce concours, le jeudi 4 janvier 2001.

Résultats du concours Galette briochée : Médaille d'or, M. Boudard, à Lamnay. Médaille d'argent,

M. Berthier à Dollon. Médaille de bronze, M. Buffet, au Grand Lucé.

Galette frangipane : Médaille d'or, M. Evrard, au Mans. Médaille d'ard, gent M. Goualard, au Mans. Médaille de bronze, M. Marchand, au Mans. Félicitations à ces heureux vainqueurs !

- Taste of traditional products (e.g. : jam varieties)
- Observation of expertise (e.g. : bread making, honey making)
- Interactive shows (e.g. : theatre works for children)

Altogether, 100 000 visitors had participated to those activities during the year 2000.

These free demonstrations contribute to the park appropriation by the public "This is your natural space, respect it as such" is a constantly reminded expression.

Stages and excursions

During stages (gardening, jam, apiculture, astronomy...) and excursions (night of the fawn, butterfly discovery), people participate to the works, researches, debates, while discovering the l'Arche de la Nature site.

Schools are a primary concern

The site provides year round opportunities for environmental education. Topics: Garden, farmhouse, wood, water.

Animal adoption

To date, some ten animals (donkeys, cows, Percherons) have been adopted by schools of the urban Community of Mans.

Competitions

- Scarecrow competition
- Herbarium competition
- Setting of a 2 000 tree arboretum by 2 000 children from schools of the urban Community of Mans.

The site has in total received 8000 scholars during the 1999 - 2000 season. These children often come back to the park with their parents to whom they act as guides.



Friends of l'Arche de la Nature

A volunteer-based friends of l'Arche de la Nature file has been created, aiming at establishing a direct link to the public. An index. card of the yearly program is devoted to that file. This file allows the direct mailing of documents, invitations, information letters to that first circle. 253 members + 158 partner files.

An Active partnership

The Partnership Principle

L'Arche de la Nature, has integrated the notion of partnership from the beginning. Since 1996, before the proper opening of the site, the structure has wished the elaboration of its entertainment activities and its management with the involvement of partners and associations which had participated to the deep thinking about its contents.

From the Maine University to the Sablons district Council, through the bird protection league or the crop raising society, some thirty associations have been committed to this work. At the end of this thought, three topics have been selected: the wood, water, rural landscape.



From then on, partnership is being actively carried out. It's a matter of a simple exchange. The associations bring their passion and knowledge of nature.

L'Arche de la Nature bring the advantageous frame to that expression, accounting for the material and financial aspects of the entertainment or management.

Involvement into district life

Surrounded by a district of 14 000 inhabitants, classified as a duty-free zone and educational-priority zone, l'Arche the la Nature has decided to set strong links with the inhabitants of the district. Inhabitants are one of the partners of the Easter egg hunting, which fosters almost 5000 children each year (E.g.: Association of the inhabitants of Sablons).

An artist project around the cow with the schools of Sablons and the HLM office has taken place in 2000.

Last, l'Arche de la Nature contributes to entertainment and fairs of the district: hyppomobile vehicle in Carnival, Stand at Sablon during its festival.



Regular meeting on the management, keeping of the site and demonstrations

The associations meet on a regular basis, to study and confront ideas about the management of the site. E.g.: Management of the wetland based on a study by the sarthois ornithological group.

Yearly meeting with all the partners.

Evaluation of the year. New ideas and projects. All the partners meet once a year.

An important communication and listening

The worry for participation and partnership relies upon an important communication politics

- Publication of a yearly program (each page remind our partners)

- Information panels for each demonstration wear our partners)
 Articles in the CUM magazine, local and national press. Reports on radio and television.
 An information newsletter for the 2000 children 2000 trees Club
 A stand at the yearly exhibition of the 4 days of Le Mans with a special topic. - A project on a journal for the friends of l'Arche de la Nature is currently being elaborated.
- A website

The l'Arche de la Nature website has been officially released and set online during the Four Days of Mans, between the 14^{th} and 18^{th} September 2000. The firsts statistical features for the period 15^{th} - 30^{th} September are the following:

- The mean number of visits per day is already 1 407
- In 15 days, the number of visits to the site lasting for more than 2.5 minutes has been 484.
- A 60 % of these visits have been made by foreigners.

A three month period will be necessary to have a true idea of visiting rate.

Partnership is also highlighted at the site, with the development of links hypertext with partner websites



Sebastià Dunyó (Technician in charge of the Volunteers Group)

· What is Voluntaris COLLSEROLA An organisation which depends on the Park

An organisation mcomprised of people who give individual voluntary support to the Park., it is not an association, nor a group of people helping sporadically. This structure fits in a particular education/participation model owhich the Park offers to the public.

· Who currently forms Voluntaris

quantity	123 people
sex	52% men and 48% women
city	from Barcelona: 72,4 %, metropolitan not Barcelona: 24,4 % and 3,3 % out of this area.
age	class from 25 to 41 years old 48% , The remaining age classes $16/24$, $42/50$, >51 form the 15% approximately.
education	50% have received and education to the degree of middle and upper technician, executive posts, professionals
	and autonomous workers. 25% are students, the rest are technicians, sales representatives, helpers and
	auxiliary workers. A small proportion are jretired

· What do the volunteers do

Collaboration tasks:

Arranged in working groups, volunteers mundertake7 different tasks linked to the Environmental Services (inventory, reforestation monitoring, cleaning) and to the Information, Environmental Education and Public Use Services (public attendance at the Information Cente eand at Can Coll, guided tours).

Formation

About 4 sessions per year, intending to improve their activity and to increase their knowledge about the environment and its problems.

Other Activities

There are excursions directly organised by the Park or by the Volunteer's Club or other entities.

The origin and the reasons

· Where does it come from

Beginning in 1990...

It startsedto provide support to the Horta road and Molins Rrad bus lines .

... from previous experiences ...

There had been some sporadic experiences on public collaboration (Collserola Day, sporadic collaborations with entities...)

and analysis of other close projects. Previous experiences, like forests volunteers or other Park 'sprojects were considered for our project.

· Why the setting up of a Volunteer Organisation

To facilitate participation

It has always been clear that Voluntaris is an organisation aiming to facilitate tof the public with the Park.

To influence the citizen education

It has also been understood that one of the jobs to be done with the volunteers is to give them an education as citizens who are interested in the environment and its protection.

To understand the collaboration as a means but not as an end.

Overall, the collaboration carried out by the volunteers is not an end but a means of bringing interested citizens to the Park.

In short, volunteers have to be well fostered citizens but not bad rewoaded workers.

In short: they are not the less rewoaded workers, but the best fostered citizens and those who are asked for a deeper compromise.

Profile of the volunteer

· An historical definition

In a publication made by the project driving forces, the volunteer is described as a:

An optimistic and solidarity-capable person, with links to the mountain, interested in its values and aware of the global problems for the environment and society. A sensible citizen, ready to play a part, together with his/her co-workers and without sparing formation effort, in the conservation and management of nature in the Park or of its cultural heritage, and in the educational programs aiming to improve the behaviour of Park users and to spread a new way of mixing with nature and people, too. profile, together with the requirement of being over sixteen, is the one corresponding to the Volunteer of Collserola. no This

- General characteristics of last year's people
- Interested in the environment
- Interested in the Park
- With little experience in organisations
- With a quite developed educator spirit

The compromise

- What kind of compromise

individual

It's a personal compromise, so that each volunteer takes his/her own initiative, values his/her own contribution to the Park, asks for his/her own rights and participates according to his/her own interests and limitations.

reciprocal

The signature entails a agreement of each person with the Park, and of the Park with the person.

Yearly

This compromise has to be renewed yearly, after a valuation of the reciprocal contribution is made.

- Duties

to accomplish a monthly service

of a Sunday morning (Saturdays in some cases) lasting around 4 hours (depending on the working group).

Carry out the programmed education activities

which mean about 2 or 3 Saturday mornings a year.

To take part to the programmed meetings

There are two agreement signature and renewal meetings (which are devoted to the yearly volunteer meeting too) per year and the follow up and task programming meeting, once a year.

- Rights of the volunteer

to be recognised as such

To possess a proof of their volunteer status and to dispose, when necessary, of the documents justifying their contribution to the organisation.

To possess a personal equipment (T-shirt and anorak) which highlight their volunteer status.

To have access to the necessary equipment for working.

The Park has to facilitate all the tools and materials needed to fulfil the work adequately.

To be refunded for the expenses during the days on the mountain

The participation to the organisation must have no cost to the volunteer. All the travelling expenses and breakfasts of the working, education or meeting days are paid by the Park.

To get the necessary training

All the volunteers have to get a training focused towards the task they will be asked to do. They have the right to take part in all the training activities promoted, aiming to an improvement of their knowledge and expertise as an environmental volunteer.

To get advantages on the Park services and products Discounts on the Park publications and services. Right to some free publications.

To benefit from the Volunteers club activities

All the volunteers receive the L'EROLA journal and are able to take part in all the excursions organised by this association.

To belong to the Club

In becoming a volunteer, each person can associate to the Volunteer Club of Collserola, be part of a working committee or to be elected as a member of its board.

- The Return

A keystone for participation and cohesion

The return is the satisfaction of the non-explicitly recognised rights; that is, to satisfy those interests and concerns that brings the volunteers close to Collserola or that encourages them to carry out an environmental voluntary service. Without this return the volunteer looses his/her hopes and the organisation breaks up.

to share what's going on in the park

The volunteer what's going on in the park. The volunteer wants to know things work in the park, he/she wants to be informed of what's happening, he/she wants to say his/her thought and to be listened. All of this produces a sense of belonging to Collserola and of implication into its realityand project.

To work with satisfaction, the second element of the return

To feel comfortable with the co-workers, to know the use of what he/she 's doing, to be well-trained and equipped. To feel the membership to a group, to an organisation, with common interests, are features that facilitate the work and stimulate its continuity.

- Demands of the organisation

well-defined and supported tasks

There are two essential points: first, each task has to be extremely well-defined in which respect to its aims, materials and methodologies. Second, all the organisational aspects have to be well defined: which groups will do the task, who will execute the technical advising, who's the project head and which are the evaluation and revision mechanisms.

Multilevel participation

The project has to allow the participation of the volunteer to the different organisational levels. The volunteer has to be able to bring ideas to the organisation and to discuss its principles; he/she has to be able to express his/her opinion for the improvement of the tasks; he/she has to take part into the definition of the project Voluntaris in the Park; the volunteer must be able to participate to the internal bodies of the Park.

Easy general communication

The volunteer must understand the management of the organisation and the changes which take place in it. He/she must get exact information on the needs, demands and results of his/her work. He/she must know what's going on in the Park.

Specific jobs

It's essential that each new volunteer gets a specific job, as a means of carrying out his/her contribution. As far as possible this contribution should be included in an already working group. In the long term, a change in the task performed by this person could be desirable.

A clear structure, open to participation

The structure of the volunteer organisation must allow the autonomous and sensible working of people and working groups. The co-ordinators of the project must stimulate the deep thought and the participation of individuals and of groups at all levels. The organisation must have diverse communication channels allowing the access of the volunteer to the information of what's happening in the other working groups and in the Park. These channels must also facilitate the volunteer's contributions to the organisation.

How to join

Beginning the joining process

It's never done collectively. Some publicity or presentations of Voluntaris to other organisations or associations can be done, but the main promoter of the contribution is the interested person.

To answer the survey/application form

It's essential to know the expertise of the person concerning associations and environmental topics, his/her knowledge of the Park and contribution possibilities and predilections.

An interview with Voluntaris co-ordinator

to clarify ideas to expose reciprocal expectations to fit the person into the needed tasks

to take part to the previous training sessions to acquire the knowledge of the Park

to acquire the knowledge of the specific task to perform

to make a final evaluation and to sign the yearly compromise

to begin the contribution !!

Text of the information booklet for people interested in becoming Collserola Volunteers

TO BE VOLUNTEER IN COLLSEROLA

Requirements: almost none.

The sole requirement for joining our volunteer organisation is to be over 16. A tutor's consent is needed if you are under 18.

A sparse but rigorous compromise

To be Collserola Volunteer implies the compromise to come one morning per month for the accomplishment of the tasks charged by the Park.

The monthly task is performed on a Saturday, Sunday or holiday, depending on the working group. The approximate span of the working day is 4 hours.

The volunteer takes the compromise to take part in the 3 or 4 training sessions scheduled each year.

Of course, if both counterparts are satisfied from this collaboration, the compromise can be renewed yearly.

Rights

The volunteer has the right to perform the charged tasks without any difficulties.

To be trained to gather the working instructions and patterns is a primary right.

Secondly, the volunteers have the right to an identification card, a T-shirt and an anorak, which identifies them as such. Finally, they have the right to be free of economic expenses for their services: this means that the travel and breakfast during the service day is paid.



In addition, as a collaborator, the volunteer is able to enjoy certain advantages concerning some Park services and products.

The volunteer status entails the right to take part in the Club de Voluntaris activities and, if he/she wishes, the volunteer can subscribe to it as a member and take part to the working committees and, even, to the board itself.

Duties

The volunteer has to fulfil the acquired compromises by carrying out the charged tasks and attending the training sessions.

Incorporation process

To become volunteer in Collserola demands some dedication. Once again, under the supervision of the Park technicians, the candidate volunteers meet to know the Park and the task that will be charged to them.

The steps to carry out are the following:

- Presentation of the questionnaire to become volunteer
- Interview with the volunteers head
- General education sessions about the mountain and the Park (2 sessions).
- Specific training sessions, to gather the knowledge about the task to be done (2 o 3 sessions)
- To join the volunteers when performing different activities, during a certain number of weekends
- Valuation of the process
- Signature of the compromise

We are currently under the training process of the 10th generation of volunteers, which will be over by the end of September. Until then, we won't begin the interview of the interested people.



TASKS OF THE VOLUNTEER



To do one's bit to the Park project.

To be volunteer at Collserola is anything but to contribute to the good working of the Park by performing the charged jobs, while thinking about what is being done and trying to improve the current tasks.

The collaboration between the volunteers and the Park is always set out as a generous and high quality contribution that complements the professional tasks but never substitutes them.

Public service tasks and Back room tasks

Volunteers perform two main kinds of tasks: those dealing with public fostering in collaboration with the *Promotion*, *spreading and environmental education* service of the Park and those dealing with the inner running of the Park such as taking part in studies and field seasons and supporting the *Natural Environment service* projects.

The first task involves the public fostering and information by the volunteer and their guidance through the mountain, acting as hostess.

We are currently under collaboration with the Natural Environment service for the performance of a forestry inventory and the reforestation monitoring. There is also a group devoted to the performance of cleanings.

There is no need for any special education or knowledge for the performance of these tasks. There is the need, however, for a wishful spirit and enthusiasm. The rest is set by the Park, with training and monitoring sessions.

A project for each task

Each task performed by volunteers is defined and explained in a project.

At an organisational level, the project makes clear how many people are needed, the performance time tables and its periodicity, as well as the resources available. At a technical level, the project specifies the reference and data collection materials, the necessary tools and the way of carrying out the work.

When a volunteer gets into a task, he/she must know the requirements and he/she must accept them. He/she must have the wish to perform it and be free of any difficulties that may prevent it.

Flexible bur rigorous

The voluntary status of the task implies a flexible schedule, adapted to the people, assuming no risk for the work that must be done.







A duty and a right

The Park offers a series of training sessions to the volunteers which, together with the regular work and the contact with the co-workers, allow their improvement as environmental volunteers.

The training is a right, because it's one of the ways the Park has to respond to the volunteers for the effort they make. But it's also a duty because it's essential to improve the tasks and to act as a Collserola volunteer.

Training and continuous learning sessions

The 4 or 5 scheduled sessions are the basis for the training of the volunteer, but not the only occasions to learning. The valuation of what is being done, the deep thinking with the co-workers and the shared work allow the reinforcement by the volunteer of what has been learned and the deepening of existing knowledge.

The training of Collserola volunteers aims at encompassing both things.

The volunteer must attend to the training sessions, but his/her deep thinking and involvement in the improvement of the performed tasks it's of an equal importance.

Basic training, to know and act

As environmental volunteers of Collserola, it's necessary that people belonging to the organisation have at least some knowledge on the Park's mountain, its environmental problems and the citizen action possibilities. This is the so-called basic training.

Specific training to be able to act

With the so-called specific training, the Park intends that each person knows the reason for each task and the way to do them while getting familiar with the necessary working tools and techniques.

Complementary training

The Park offers a series of activities to the volunteer, aiming at complement its training. So, the volunteer is able to attend to the scheduled talks done at the different centres or to take part to the thematic talks, sporadically organised at the meetings. Similarly, the volunteer receives regularly small pieces of information, texts or calls that allows him/her to deepen their knowledge of topics related to the environment and the mountain.



The signing, an important moment

The life as a volunteer starts with the agreement signing. During this symbolic, but important moment, the interested people sign the personal document of agreement with the Park, in front of the other volunteers and their heads. From then on, the concerned people start to be part of the organisation and identification material is given to them.

The compromise can be renewed yearly, as long as both counterparts find it convenient.

The keystone, the working group.

With his signature, the volunteer enters an organisation which is structured in working groups of about 5 to 8 people. So that, the volunteer performs the task in close co-operation with a small core of people.

Each group has a head or spokesperson who acts as a mediator with the volunteers co-ordinator and who regularly meet the other heads to debate common interest topics.

Therefore, the capacity of group working and of sharing responsibilities, interests or information is essential.

The information

The volunteer receives a monthly bulletin where general interest communications which involve everyone are made.

Depending on the working group and on the task, additional information can be as well sent to the volunteers concerning the work or specific calls for meetings or training activities.

Yearly schedule

In addition to the monthly service, there are a series of meetings and activities that conform the yearly schedule of the volunteer, that begins with the end of the summer holidays and ends in July.

- There is a sign and compromise renewal general meeting in autumn. This meeting is also used for the yearly meeting of the volunteers, during which the Park heads answer questions by volunteers. During this meeting, the tasks assigned to each group are set up.
- The whole winter and part of the spring is devoted to the training of small groups.
- During mid-spring, another general meeting takes place, with signing renewal and training.
- Before the summer holiday, the monitoring meetings with the different groups take place, in order to calibrate the work done and to schedule the one for the next year.

It's essential to take part to these activities, both because they facilitate the contact and knowledge between groups, and because they allow the revision and improvement of the tasks.

The participation: essential

The volunteer is able to express his/her opinions about the Park or the organisation in many different ways: talking, writing or phone calling to the co-ordinator or to the Park heads; His/her voice can be listened at the co-ordination meetings through his/her representative or directly during the yearly meeting of volunteers.

Any worry, suggestion, idea or doubt is useful and essential to adjust the running of the organisation to the needs of the people and to improve the work carried out.





QUESTIONNAIRE AND APPLICATION FORM TO INCORPORATE TO VOLUNTARIS DE COLLSEROLA



	Last name	First name				
	Address	ID				
	City	City code				
		T				
	Home Phone number	Year of birth				
	Education and/or profession					
	I can devote one Sunday morning per month to perform public fostering tasks					
	to public fostering tasks at the information centers or guided paths					
	to maintenance tasks and natural resources monitoring					
	I know Collserola Park					
	very well	nothing				
	I walk there aprox.					
	Days/year					
_	I have taken part in some of the activities performed by the volunteers:					
	In a Park center In a guided itinerary others					
	I have collaborated with the Park					
	in University research projects in temporary jobs in the Co	ollserola day				
	others:					
	I have the experience on: campaigns of Nature protection, study, monitoring,; public information tasks, groups entert					
	I'm a member of the group, association, movement,					
	The tasks what I would like to do in the Park are					
	Iy time availability is:					
	I devote my leisure time preferably to:					
	The motivations that have made me interested in the voluntary services of the Park are:					
		······				
		(you can continue in the next page)				

I'm ready to undertake the agreed tasks and to take part in the necessary training sessions.

Municipal seminars as participation mechanisms

Montserrat Grau (Head-Manager of the Serralada Litoral Park) Roser Loire (Technician of the Serralada Litoral Park)

1. Why Municipal seminars?

Among the different sectors involved in the Park, that can potentially take part in its activities or its management:

Inhabitants of the municipalities of the Park and its influ of ence area .Visitors and general public .Professional and productive sectors (agricultural, forestry, tourism...) .Education sector, children population and educators .Entities and administrations linked to the Park .Joint bodies (political representatives and technical staff)

We believe that greater participation of this last group would have a multiplying effect among all the others.

Going back to the birth of the Park, we can see that the town councils themselves made a proposal to the Generalitat de Catalunya (Regional Government) to include some part of their territory into the Natural Interest Spaces Plan (PEIN) and have kept an outstanding role in its management.

In this framework, together with the incorporation of new politician representatives each 4 year period due to local elections, we believed that it was a good moment to re-define how the distinct agents of the associated municipalities could take part in the Park activities and management.



2. AIMS OF THE MUNICIPAL SEMINARS

The municipal seminars have the following GENERAL AIMS:

- To reinforce the awareness of a common, supra-municipal, project. The management of a sole territory is assumed
- by the municipality itself and by the Park.
 - To integrate this global view into the territorial management of the municipalities.

We thought that the creation of the following groups was appropriate to better define the messages we wished to transmit.

- Political representatives
- Cultural and environmental staff
- Public works and projects staff -

Public information staff

Particular aims to each group were defined, together with the right communication strategies.

The three performed Seminars included:

- A presentation and/or working session by people with prestige and experiencedin the subjectunder consideration
- A relaxed schedule (breakfast, lunch,...) allowing a more lively communication
- A tour along the Park to broadly know the territory upon which we have been thinking.

3. THE SEMINARS: PARTICULAR AIMS AND PERFORMANCE

1ST SEMINAR: POLITICAL REPRESENTATIVES

Date: 28th April 2000

Audience: 50 representatives. Among them, almost all the majors of the associated municipalities and of the municipalities close to the Park.

We wished to take this opportunity to get together all the majors and councillors of the associated cities and those from the municipalities close to the Park, in the same forum because the inhabitants of these last municipalities are users of the Park in higher numbers (due to the high density of these population cores) than those of the towns that conform the Park themselves.

AIMS

- Valuation of the natural space (free land) in relation to the urbanised space (taken land)

- To obtain a suitable allowance in the respective municipal budgets for the conservation and management of the park.

To assume a spread role of the aims of the Park regarding their citizens.

We want to notice the participation to this seminar of Dr. Ramon Folch, UNESCO and EU consultant who, in a brilliant and categorical way, highlighted the essential elements for the protection of this territory.



2nd SEMINAR: TECHNICAL STAFF

Date: 19th May 2000

Addressed to: technical staff of the municipalities linked to the Park.

- Environmental and cultural technicians
- Urbanism and public works and services technicians

* Another specific seminar must be performed when the Protection Special Plan, currently submitted to the Environment Department of the Generalitat de Calalunya, will pass.

AIMS

- To improve the knowledge of the Park by the municipal technicians
- **To set stable mechanisms of relationship** to improve the communication between the local technicians and those from the Park, because they both act in a same territory. This co-ordination is essential for:
 - Avoid repetitions
 - Avoid contradictory performances and information

- To improve the **identification Park-municipality**, concerning both the spread and the performance of activities supported by towns.

- To benefit from the educational potential by making use of the knowledge of the natural and cultural resources of

the Park in order to involve citizens in its conservation.

For this second seminar we collaborated with the Collserola Park, which let know its large environmental education program to the audience, which has always been the object of close attention and priority by the part of our Park.

3rd SEMINAR: PUBLIC ATTENTION STAFF

Date: 26th May 2000

Addressed to: public attention/information staff

AIMS:

- To improve the knowledge of the park and their role as spreaders and transmitters of the Park's activity and reality
- To improve the identification Park-Municipality
- To improve the suitable channels for the citizen demands regarding the Park.

For this third seminar, which was set as the result of a research project performed in 1998 (Communication Plan), we relied in a member of the Nature School of Corredor (Environmental education). The seminar was set in a very dynamic fashion.

Conclusions

The time elapsed since the celebration of the seminars is not enough to calibrate it's effectiveness, if we understand this as the consecution of the intended aims. Nevertheless, we can extract several conclusions:

 1^{st} The Politician representatives of the nearby municipalities, that do not belong to the Park and that have had so far a weak relationship with it, have improved their knowledge about its aims and function. They have positively considered the option of a joint-management of the Park, through a Consortium.

 2^{nd} The consorted municipalities have expressed their willingness of a greater involvement into the Park's conservation. This decision has not yet been translated into particular measures, but a discussion forum aiming at obtaining greater resources for the Park has been opened.

 $.3^{rd}$ The Seminars have enabled a greater ease and efficiency of communication between the Park staff and the technicians of the municipalities. Stable communication channels with the public attention staff from the distinct municipalities have been established.

We allocate a positive assessment to these firsts Municipal Seminars, because they have allowed a spread of the knowledge of the Park's reality to new sectors and the establishment of a better communication dynamics among all the institutions involved in its management.