



EUROPEAN COOPERATION PROJECT PARKATLANTIC

**A space and nature study and inventory
of five Atlantic territories**

**First summary elements of
landscape and natural space
studies for each city**



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1. The cities' identities revealed by the natural spaces

The hills and water courses have a profound influence on the history and living environment of each city.

The public spaces associated with the high points and the water courses contribute hugely to the landscape identity of the city and its appeal:

The castle, bridges, quays and the paths along the banks of the Shannon and associated canals in Limerick make for strong contact with the water courses as well as increased readability of all related city frontages.

Similarly, in the Angers metropolitan areas, the major network of small and large rivers combined with more than 60 km of paths along the banks and numerous public "natural" spaces are ideal for exploring the riverside towns and villages: Angers on the Maine and numerous towns and villages on the Loire, Mayenne, Sarthe and Loir.

Many hilltops surrounding the city of Santiago de Compostela are laid out as public spaces with ideal lookout points from which to discover the site.

The Boulevard des Pyrénées in Pau, along with the castle grounds and Parc Beaumont, offer notable balconies over the Pyrénées.

Proposals

- V. N. de Famalicão does not have a large river. The city is surrounded by fairly high hills but there is no real lookout point. Future expansions should consider this failing.
- There is one high point in Limerick from which to discover a good part of the city: it is in old council housing building which is very badly damaged.
- Creating a public garden as a lookout point, combined with a non-motorised track leading to the city centre, could herald the restoration of the quarter.
- Overall, the land for the viewpoints and on the river banks must be watched carefully.
- In the local town planning scheme for Angers, for example, the presentation report highlights interesting viewpoints but does not provide especially for preserving them. Their survival is therefore shaky and on the spot. Precisely, the viewpoint on the Avenue de Grésillé in Angers is poorly maintained and there is no guarantee it will survive.

2. Large natural spaces in contact with the city

- **In addition, the public natural spaces give local populations a chance to enjoy close contact with Nature.**

The Westfields marshes in Limerick: a virtually undeveloped natural space combined with a garden; test of natural meadow plantings.

Ile Saint-Aubin in Angers: natural space maintained as part of an organic municipal farm, very undeveloped and with limited access.

Parc Balzac in Angers: developed natural space with contemporary composition, with differential management of grassed spaces.

The Selva Negra in Santiago de Compostela, where the city is trying to reconstitute the original forest of oaks and sweet chestnuts, today replaced by eucalyptus plantations in the main.

The communal forest of Bastard or "bois de Pau" (Pau woods), a large forest criss-crossed by streams and ditches, with a wide variety of species, glades in natural meadows and a network of major footpaths and bridle paths.

- **The large public and private natural spaces in the cities take on multiple ecological functions:**

- Biodiversity reservoirs;
- Role of regulation runoff water,
- Natural air and water depollutants,
- Climate regulator,
- Major contribution to the architecture of green and blue networks.

Proposals

Overall, the surveys show that the users of public parks prefer the natural spaces to be developed rather than left alone.

- Facilities felt to be necessary include a drinking water fountain, washrooms (dry lavatories), shaded car park, information signs, orientation table and marked paths.

The experiment at Selva Negra, where techniques to eliminate the eucalyptus in favour of regenerating large areas of oak and sweet chestnut forest are being developed, could be repeated in other forests in Galicia and Portugal that are facing similar problems of increasingly rare oak groves.

In a similar move, municipal grants for planting local species in private spaces could be reinstated.

The Ribeira Forest in Famalicão must be protected better and enhanced, under a programme similar to the Selva Negra experiment.

The Bastard Forest in Pau is a space that is greatly appreciated by Pau residents, but it is cut off from the city by the motorway and suffers adversely from traffic noise. There is no bus service to it. Thought must be given to improving access to the wood and soundproofing it.

The urban natural park on the banks of the Gave in Pau is an exemplary flagship project by the urban area; its design is both ecological and focused on the inhabitants of the community. One of the major aspects to consider is the relationship between the city centre and the Gave, rendered difficult by the railway line.

In the metropolitan area of Angers, the linear forests along the banks of water courses sometimes have significant gaps, with potentially harmful consequences on the erosion and water quality. In addition, these interruptions create interesting landscape openings. The metropolitan area, with the river basin management unions, helps to manage these environments appropriately.

3. Public parks and gardens in the city

- **Parks linked to castles or old religious buildings**

Very popular with tourists, they contribute to the city's brand image.

- **18th and 19th century parks**

Larger and frequently closed at night, they are the ideal setting for the cities' floral art and acclimatised exotic plant collections.

The historical gardens contain sculptures, fountains, engineered ironwork, paving, cobblestones and mosaic pavements. They require specific expertise and extensive maintenance. The most significant examples are:

- The Parque de Alameda (or Santa Susana) in Santiago de Compostela.

Created in the 14th century and acquired by the city in the 19th century. Festive spaces, plant collections, oak forest, terraces, steps, sculptures, fountains - all these extend on a promontory of more than 8.5 ha connecting to the old city. This is the most frequented garden by inhabitants and tourists alike.

- The château gardens, the Jardin des Plantes and the Jardin du Mail in Angers.

Three contrasting gardens representing the changes in the art of gardens, with very specific compositions: borders and mediaeval geometry of the château gardens, French-style borders in the Jardin du Mail setting off the local authority buildings and English-style composition for the Jardin des Plantes.

- The castle gardens (Renaissance) and the Parc Beaumont (19th century) in Pau

- The two central parks in Limerick, People's Park and O'Brien Park

Dating from the Victorian era, donated by influential people in the city to its inhabitants. Laid out in English-style, they have stela and statues commemorating the city's best-known personalities, fountains, rose gardens and flower borders.

- The Parque 1 de maio in Famalicão (19th century), at the crossroads of two wide tree-lined avenues.

Contemporary parks

Created on newly-acquired land as part of the urban expansion programme, the contemporary gardens are a new take on the art of gardens, with changes in uses and materials and a more intense dialogue with the natural components or old rural throwbacks - low walls, fountains, etc.

- The Parque de Granell in Santiago de Compostela is a fine example of a composition that interacts well with the topography and enhances the stream and existing woods.

- The Parque de Sinçães in Famalicão is the hinge pin between two districts and combined with the university, it also deals with a very pronounced topography. The City Hall gardens, inspired by Burle Max, a well-known Brazilian landscape designer, and their remarkable mosaic pavements testify to the expertise in northern Portugal.

- Parc Balzac in Angers is a fine example of a very successful composition based on registers of basically natural environments.

The new public parks created in old private gardens acquired by the cities are where the history of sites face up to contemporary developments. Santiago de Compostela has two highly-successful examples of this type of garden, Parque de Belvís and Parque de Bonaval.

Proposals

- A major challenge for historical gardens is preserving the know-how, respecting historical patterns, procuring ground materials, plants, etc. with the requirements specific to each garden and each city, corresponding to budgets that are also higher. Budgets justified by the reputation of these spaces, their integration with the identity and perception of the city.
 - There are frequently problems in procuring materials for slabbing, cobblestones and edging in France as dressed stone quarries are becoming increasingly rare. The shale quarries in Angers are under threat. In and around Pau, the limestone quarries, once so sought after, especially Arudy limestone, have disappeared. The communities could support the activities.
 - In Pau, the most distant parts of the castle gardens often show signs of deterioration and a plan to restore these spaces is necessary.
- Overall, the contemporary gardens are important sites for expressing art with Nature and a more poetic and sustainable dialogue with the environments.
- The Atlantic gardens enjoy a mild winter climate and a whole range of tropical plants can be used for exotic tableaux. This additional facet of new gardens could be expanded, especially in Famalicão and Santiago de Compostela.

4. Lines of trees and isolated trees

- Given their minimum soil footprint for a considerable volume of vegetation, trees play a major ecological role (climatic moderation, maintaining the fauna, etc.) and a structuring landscape role, with a green frame for perspectives, in contrast to the buildings.
- But the harmonious development of a tree under street operating conditions is quite a gamble and often conflicts with car parking and underground networks.
- The maintenance, creation and replanting of lines of trees require elaborate techniques and assume specific governance methods.
- The city of Angers, with its sixteen thousand trees lining the streets and recipient of the National Tree Award in 2000, is a prime example of experience in this area.

5. Gardens and squares in recent districts

- Natural spaces created in new districts vary tremendously according to how fast the city is growing, the urban strategies and State and local authority intervention alongside or with the private developers.
- The large post-war estates up to the 1990s/Monplaisir and Belle Beille districts in Angers and Saragosse and Le Hameau districts in Pau:
 - Dominated by social housing, these are densely-populated districts with large apartment buildings, extensive green spaces and apply only to France.
 - Overall the spaces lack composition and usage ; they are not used by the inhabitants and therefore there is no social control.
- "Sustainable" districts since the 1990s/Vinhal district in Famalicão/Lac de Maine and Desjardins districts in Angers
 - Featuring a variety of housing units, from detached houses to rented social housing blocks, these districts have a far wider social mix.
 - They have a network of non-motorised routes leading to the facilities and link various types of garden, from inner courtyards in blocks to the more extensive neighbourhood gardens. These spaces are well designed and away from car-specific spaces.
- All recent districts in Santiago have community gardens, with playgrounds and sports grounds. The urban composition is the strong point of new districts. It meets the requirements of the Spanish, whose life revolves mainly around the public space.
- Unlike Limerick, where there are fewer public spaces and gardens. Social interaction takes place on the sports grounds and, given the rigours of the climate, in the very lively pubs. In addition, a large number of households have a garden. Away from the densely-populated centre, the inhabitants only occasionally plan a walk in the park.

PROPOSALS

- The success of green routes and gardens in the new districts needs to be thought out in advance by cities: land strategies, planning, supervision of private developments under a coherent overall plan.
- New sustainable paths in town planning must be found in scheduling and design in conjunction with the users and developers (see benchmarking examples).

6. Other garden experiments

- **"Allotments":**
 - ▶ One thousand plots in the municipality of Angers, four hundred in the municipality of Pau .Enclosed areas managed by an association, divided into plots of 150 to 300 m², each one allocated to an inhabitant.
 - ▶ The plots must be cultivated entirely for food although flowers can be grown alongside the vegetables.
 - ▶ Exchanges of growing expertise.
 - ▶ Development of solidarities between families
 - ▶ Community life paced by the seasons and festivals.
- **"Hortas de vecinos" or neighbourhood gardens in Santiago de Compostela**

.The neighbourhood gardens in Santiago are not enclosed. Plots of 30 to 100 m² are located in the Parque de Belvís and are under direct municipal control. They are associated with a market for organic products.

 - ▶ Neighbourhood gardens located on private land also exist on the Monte de Almaciga.
- **Vegetable garden-school** in Angers (allotments) and Limerick (O'Brien Park).
- **Gardening at the foot of apartment buildings in Angers**

The city allows volunteer residents to cultivate the open ground at the foot of social housing buildings: flowers, herbs and vegetables are grown under collective design and management, supervised by the city departments.

- **Flowers at the foot of facades in the streets of Angers**

At the request of private individuals, creating spaces at the foot of facades where shrubs, flowers and climbing plants can be planted directly into the ground on the public pavements.

- **Self-service herb garden in Avrillé (metropolitan area of Angers)**

Five small neighbourhood gardens created by the municipality where everyone can help themselves to herbs for cooking.

- **Market gardener "nurseries" in Pau**

Innovative experiment where the commune grants the land to an association to supervise young people in reintegration programmes (training in horticulture and market gardening) or to help young market gardeners in starting up their activity (training, loan of equipment, help in seeking land).

Proposals

- Experiments involving allotments, shared gardens, neighbourhood gardens and garden-schools are very important in the context of the economic crisis, the loss of links to life cycles, the drop in quality of common food products and to contribute to the life and solidarity in the districts.
- Experiments to be introduced in Famalicão and Limerick although there is less demand as a large proportion of inhabitants has a private garden.
- To be expanded in the larger cities, with a need to anticipate in order to obtain the land. In France, the municipalities can provide for locations reserved for allotments in the town planning documents. The documents for the Pau urban area do not show these (to be checked). Angers has a scheduled allotment plan on land already acquired.

- The market gardener training experiment, including as part of a reintegration programme, must be supported by strong municipal action in promoting local productions and developing farm-to-fork outlets, mainly markets, but also fruit and vegetable cooperatives, etc.
- Angers seems to be an ideal city (ideal soil and significant expertise) to expand this type of experiment.

7. Rural spaces

- The rural spaces contain a major landscape, ecological and architectural heritage. Continued farming and forestry is weakened by division and the competition from urban development.
- The quality of links between city and countryside and the problems of competition vary from one city to the next.
 - . The rural spaces in Santiago de Compostela are very restricted and are often wasteland. The very extensive water-related rural heritage is well protected.
 - ▶ The farmland in Famalicao is very well structured by straight lines of vines belonging to the "vinho verde" vineyards. Pockets of countryside are left in the city, mainly in Vinhal, but are seemingly very much under threat.
 - ▶ The farmland remaining around the city of Limerick is mainly liable to flooding. It is open meadowland on the edge of the city limits.
 - ▶ Farming activities in Angers continue to prosper, with cereal crops, orchards and the Loire vineyards, in a well-preserved network of small fields and hedges.
 - ▶ Two types of very contrasting rural space are found in Pau: to the north corn and cereals are grown in agricultural terraces with few enclosures; in the south, towering hills dominated by grassland and the vines of the Jurençon, with outstanding views over the Pyrénées.

Proposals

- Thoughts on the complementarity and confrontation between city and countryside
- Promotion of landscapes and agricultural products
- Introduction of strategies to continue farming the land, mainly market gardens likely to feed the cities.
- Limit and rationalise the development of low-rise residential areas, especially in France and Famalicão.
- Create protected agricultural areas (see the Swiss examples in the benchmarking).

8. Parks and Gardens strategies/departments in cities

8.1. A few figures

CITY	POPULATION	PUBLIC PARK AND GARDENS SURFACE AREA IN	RATIO IN M ² /INHABITANT	NUMBER OF EMPLOYEES IN THE DEPARTMENT	HA/EMPLOYEE RATIO
ANGERS	160,000 inhab. for 46 km ²	5,500,000 m ² (excluding Ile St-Aubin of 660 ha + 235 ha d'eau + 100 ha sports + 80 ha social housing)	34 m ²	196 full-time equivalent + 14 apprentices and integration contracts	5 ha (10% of heritage outsourced 90% welfare-to-work company)
ANGERS-LOIRE-METROPOLE	283,000 inhab. for 510 km ²	2,850,000 in five large parks + 350 km of community paths	10 m ² but all the communal gardens and parks must be added (given in	34 full-time equivalent + 2 apprentices	13 ha (no outsourcing)
PAU URBAN AREA	150,000 inhab. for 182 km ²	1,060,000	7		
SANTIAGO DE COMPOSTELA	95,000 inhab. for 37 km ²	2,000,000	21	17 and 85 sub-contracted, i.e. 102	1.9 ha
V. N. DE FAMALICAO	134,000 inhab. for 11 km ²	188,000	1.5	43 full-time equivalent	0.4 ha
LIMERICK	95,000 inhab. for 31 km ²			19 full-time equivalent + sub-contracting	

8.2. Environmental policy

- Limitation of plant health products "Zero plant health products" goal in Angers, thermal weedkilling, mulching
- Limitation of watering
- in Angers irrigated lawns in new districts replaced by perennial borders and(or) shrubberies with limited maintenance
- Experimental differential management of grassed areas in Parc Balzac in Angers
- Green waste management
 - ▶ in Angers, waste composting, use of wood shavings from shredding branches for mulching
 - ▶ In Limerick, experiments with different composting systems in O'Brien Park
- Choice of species
 - .in Santiago help in planting indigenous species/forest regeneration with local oaks and sweet chestnuts
 - .in Angers, search for plant palettes using mainly indigenous plants
- Action to encourage fauna birdlife sanctuary in Parc Balzac in Angers and Westfields Park in Limerick
- Inclusion of rainwater ponds in neighbourhood gardens and parks Parc Desjardins and Mollières mixed development zone in Angers

8.3. Social policy, communication, education

- Allotments and other innovative gardens
- Relationship with the associations
- Guided tours
- Shows
- Angers Maison de l'Environnement
- Alameda parks and gardens interpretation centre and Belvís ecological interpretation centre in Santiago de Compostela

8.4. Communication

Internet sites, brochures, leaflet (see example of Santiago de Compostela)

Surveys (see the "portrait" of the Angers metropolitan area and the views of inhabitants on the Gave in Pau)

Consultation in the programming/design phases

8.5. Urban policy

- **Protections**

Need to protect natural spaces and parks from land pressures.

Two opposing examples: Protections at all levels in France/European and national protection in Ireland.

- **Planning**

Reserved locations

Orientation schemes

- **District programming and design**

- Mixed development zone in France: Desjardins district in Angers - Master

Development Plan in Santiago and Famalicão

Regardless of the legal framework or project management methods, the cities have a fundamental role in regulating urban development processes, with a need to design natural spaces within a coherent whole, adapted to the place, the key players and the inhabitants.

See the development project for the area surrounding the Shannon and canals in Limerick.