



revitalising industrial sites

Nantes Métropole

Estuary Angelica

Case study on natural assets

2004

Nantes Métropole
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This report is part of the REVIT selfguiding trail.

1. Site-Specific Natural Assets

	Flora Assets	Fauna Assets	Others
Nantes	Estuary Angelica	-	-

Description

Estuary Angelica (*Angelica heterocarpa* Lloyd) is an endemic species of France, which exists only in the Loire, Charente, Gironde, Adour and Nive estuaries.

For the Loire Estuary, most of the Estuary Angelica sites (nearly 80%) are on the banks and shores of the Loire of the Nantes conglomeration and a reduction in its area of propagation has been noted for some time.



2. How Nature Is Protected

Extracts from the national and local regulations

Species registered in **Appendix II of the Habitats Directive** (EEC of 21/05/1992) and in Appendix I of the **Act of 10/07/1976 relating to nature conservancy**. This exceptional statute is seeking to prevent the disappearance of the threatened species and to enable the conservation of its biotope. It prohibits in particular “the destruction, the cutting (.../...) the removal of all or part of the wild specimens”.

France’s responsibility in the survival of this plant is therefore total and has justified protective measures at national and international level: registered in the Habitats Directive and the Bern Convention, it is regarded as a vulnerable species by the “Red Book Of The Threatened Flora Of France”.

Consequently, due consideration of this protected and vulnerable species in the Nantes Island/Loire Bank development project, currently in hand, is essential in order to ensure its protection and its survival.

This is why the Nantes Metropolis is committed to an Estuary Angelica protection and enhancement programme, particularly in the context of the Nantes Island/Loire Bank development projects.

3. Removing, Replacing Possibilities

On Nantes Island, all of its shores have been strongly colonised by Estuary Angelica. Consequently, the Nantes Metropolis is committed to incorporate its preservation and development in the restoration choices for its shores. **With Angelica's survival becoming one of the project's issues.**

In addition, in an earlier Loire Bank development project at Couëron (downstream from Nantes Island), the National Nature Conservancy Council had given a reserved opinion, on the grounds that the plan to transfer the angelica plants was "acceptable but that it was essential and urgent that **a total conservation plan for the species in the Loire Estuary be established**".

Consequently, the Nantes Metropolis is committed, in the context of the development of the first sector of Nantes Island, to the simultaneous development of:

- An shore-development project restoring a habitat for Estuary Angelica.
- An outline study of a conservation plan, based in the first instance on a precise inventory.

The National Council of Nature Conservancy (NCNC) approved this experimental approach in 2002.

In 2004, the draft conservation plan's objectives and action plan were authenticated by the NCNC, which described the **approach as exemplary**. It is now a question of putting it into practice.

4. Conservation Actions

In partnership with the National Botanical Academy of Brest (Nantes Branch) and the Nantes Town Hall's Botanical Gardens, the Conservation Plan must be now be put into practice. Its Action Plan contains six objectives:

1. To ensure the conservation of Estuary Angelica in the Loire Estuary and to meet the territory's development requirements in the Loire Estuary
2. To constitute a dynamic network of refugia over the entire Loire Estuary
3. To define and implement practices that are propitious for Estuary Angelica
4. To improve knowledge of Estuary Angelica applicable to its conservation
5. To enhance Estuary Angelica as a powerful element of the Loire Estuary's identity
6. To evaluate the Action Plan's results
7.

This exemplary approach is enshrined in a detailed Action Plan that is seeking to improve the scientific knowledge of the species, to define the conditions of its conservation, to associate all of the territory's players and to build up their accountability.

The Nantes Island project is concerned with all of these actions, as angelica is strongly established on the island's shores. More particularly, however, it will be a question of putting this territory and this project at the heart of this experimental approach.

5. Costs (Draft Planning And Estimated Budget)

Programme for Including Estuary Angelica in the "Nantes Island" Programme:	2004	2005	2006
Establishing and applying an Experimental Programme: <ul style="list-style-type: none"> ▪ Monitoring the experimentation in progress on Sector 1 ▪ Conducting new experiments on other sectors of the island 	40 days	40 days	40 days
Drafting specifications applicable to all embankment activity: <ul style="list-style-type: none"> ▪ For development purposes ▪ For maintenance purposes 	10 days	5 days	5 days
Following through and evaluating the development programmes of the other sectors	10 days	10 days	10 days
Constituting, animating and exploiting various monitoring and evaluation tools: <ul style="list-style-type: none"> ▪ A local scientific council ▪ A population evolution observatory ▪ A scientific follow-up ▪ A database, to capture and analyse the results of the monitoring. 	20 days	20 days	20 days
Associating the socio-economic players directly concerned with the conservation of angelica and building up their accountability.	5 days	5 days	5 days
Identifying Nantes Island sites where issues of territorial development and angelica conservation are superimposed on one another.	5 days	2 days	2 days
Informing, communicating and constituting the necessary media: <ul style="list-style-type: none"> ▪ For the awareness of all this territory's players ▪ For the awareness of the general public ▪ For making this exercise known ▪ For providing information of every kind about angelica 	6 days	6 days	6 days
Assembly and Co-ordination	24 days	12 days	12 days
TOTAL (Est.)	€4 000	€0 000	€0 000

6. Communication & Information

The inventory, the current state of knowledge concerning Estuary Angelica and the broad objectives of the conservation plan will be communicated to the programme partners, the institutional players and the relevant communes in the form of a CD-ROM, (list being compiled, a run of 60 copies to be envisaged).

The CD-ROM (diagnosis part) could be issued to any organisation or person that asks for it. It could also be put on line at the Nantes Metropolis website.

A presentation map with an information note relating to the place of angelica in the conglomeration could also be published. This document would present, at a scale to be defined (1/25,000 to 1/40,000), the propagation area of the species in 2002, plus some elements relating to the status of angelica and its interest. It is a question of an initial mass awareness phase, as recommended in the Conservation Plan.