

Boulieu mire, exploitation and rehabilitation.

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1989: Dumona company, to ensure its peat needs, took an interest in the Ambossu swamp, raising a very strong opposition of environmental protection associations, mainly the FRAPNA and Lo Parvi, completely opposed to the project.

1990: we decided to prioritize all potential extraction sites within a 15-km radius to determine their environmental sensitivity and economic feasibility.

1991: after this first study 6 peatlands (on 15 listed) were kept

1992: a feasibility study was carried out on each site ; 3 were kept

The Boulieu swamp, though it was kept, posed a problem due to the environmental approach.

In 1995, as the issue hadn't been moving forward for 3 years and aware of the environmental impact of our business, we gathered all stakeholders (administrations, associations, mayors of concerned municipalities...) and proposed a large-scale experimentation of temperate and cautious exploitation in Boulieu mire, gone with important compensating measures.

In this purpose we appealed to:

- the Federation of the Conservatories of Natural Areas, which at this time was working on the LIFE program "Peatlands of France"
- Olivier Manneville, associate professor at Joseph-Fourier University (Grenoble), specialist of wetlands
- Lo Parvi, regional environmental protection association of Isle-Cremieu.

The environmental study carried out with a company located in Grenoble used the ecological requirements of the partners and ended in December 2000 in an exploitation authorization of the prefect.

The compensating measures being set, they should be monitored. So, according to stakeholders' wishes, this mission has been confided to AVENIR (Natural Areas Conservatory of Isère) due to its knowledge of the site and its experience in peatlands management and restoration.

A commission is gathering on the field every 6 months to review the situation of rehabilitation and to modify it or not, according to the results.

For example, the close collaboration with Lo Parvi and AVENIR allowed specifying the most favourable shores slope for the turtle *Emys orbicularis*.

According to the compensating measures, among the 40 ha of the swamp 27 ha have been dedicated:

- to the border shores, which width has gone from 10 to 12,5 meters, gently sloping, allowing a better colonization by typical swamp vegetation which grows mainly in shallow water. The "glove fingers" development raised the shoreline, gave more place to vegetal species and various ecological niches to fauna.
- To an unexploited area covering more than 1 ha, to preserve the treefrogs (*Hyla arborea*) site and keep a part of the reed bed and its associated vegetation, including *Thelypteris palustris*
- To a preserved area in the middle of the swamp, where the biggest number of turtles had been listed ; spawning grounds will be created in co-operation with Lo Parvi association
- To the creation of strongly sunlit areas sheltered from predators, "solariums" needed to keep *Emys orbicularis* on the site
- To the preservation of a second unexploited area which, as the first one, will be a shelter, especially for fauna and in which small shallow ponds are going to be created to favour treefrog.

The exploitation follows « underwater » technique, without any water table lowering or pumpage. Rehabilitation is carried out as extraction goes along; no return after exploitation is possible.

The site is basically very homogeneous as almost solely colonized by dense *Cladium*- and reed bed. The chosen rehabilitation will improve the biological potentialities of the swamp (it still has been shown by last scientific monitorings), while water bodies creation, shoreside raising and double border shore development will lead to various ecological niches.

At the end of the exploitation, contrary to the former ones, the ponds created won't be turned into fishing ponds, the purpose being to list the site as protected area.

Extract from the extraction project committed in prefecture "Considering the site in its environment, all the parties consider that a cautious extraction and a quality biological rehabilitation requiring a bigger exploitation area is preferable to exploitation confined to a small area but carried out by using classical technique. The purpose of the exploitation technique chosen in Boulieu is to ensure a global long-term management of the swamp.