**Determining the location of protected areas in France: Does “scientific interest” matter?**

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**Supporting information**

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**Appendix S1: Availability of the data**

The “Archives Nationales” is a national public service created to collect, classify, inventory, conserve, restore and provide access to public archives from, among others, the central administration of the State (see <http://www.archives-nationales.culture.gouv.fr/en>). The archives we used are all located in Pierrefitte-sur-Seine (59 Rue Guynemer, 93383 Pierrefitte-sur-Seine, France).

Reference codes of the archives concerning the National Council of Nature Protection (NCNP):

* 20070642/1
* 20070642/2

The NCNP archives include detailed records of each meeting of the NCNP[[1]](#footnote-1).

Reference codes of the archives concerning the NNRs:

* Marais de Bruges: 20080058/57 & 20080058/58
* Val de Munster: 20080058/116 & 20080058/117
* Plan de Tuéda: 20080058/124 & 20080058/125

**Appendix S2: Detailed description of the creation of the three Natural Nature Reserves**

1. **Marais de Bruges NNR**

The creation of the Marais de Bruges NNR (Fig. 1) depended on the proactive role played by the local authorities in Bruges, specifically through the relationships between the mayor and a few key actors. Presented at the SC of the NCNP as one of the last wetlands of the region, this site was characterized by the rarity of its plant species and the diversity of its plant and bird species. Even though the project received a positive opinion from all those involved in the consultation (SC, inquiry commissioner, site commission, and NCNP), its creation almost failed. The main difficulty relating to the Marais de Bruges project was the need to finance the purchase of 107 ha of land recently acquired by the Land Development and Rural Establishment Company (LDREC)[[2]](#footnote-2) and sold to a farmer for a maize farming project. In France, LDRECs are private non-profit organizations under the authority of the Ministry of Agriculture. They are in charge of implementing policies for agricultural land consolidation by acquiring lands and reselling it to farmers. It is important to observe that as a non-profit organization, the LDREC cannot hold land for more than 5 years to avoid land speculation. As the NNR project was incompatible with the farmer’s project, which required the draining of the wetlands, the LDREC faced both the farmer’s legal complaint and the financial loss due to the land acquisition, which led the Ministry of Agriculture to oppose the NNR project in the absence of financial compensation for the LDREC. For 3 years, the local authorities in Bruges tried to enlist the Ministry of the Environment as well as the regional and departmental authorities into financing the purchase of the LDREC lands. Confronted by hunting associations on another salient matter relating to turtle dove hunting, the regional and departmental authorities refused the financing plan to create the NNR. Three solutions were then proposed by the Ministry of the Environment: abandoning the project, increasing state funding, or integrating the lands into a broader land-use planning program without a guarantee for the creation of the NNR and state financial participation. While the second proposal was rejected by the Ministry of Finances, the Ministry of the Environment started to delegate the elaboration of a land-use planning program, promoted and supported by the local ministerial representative. Meanwhile, the Mayor of Bruges proposed a new funding plan directly to the Minister, with the municipality’s increased financial contribution that would eventually be compensated by the state if financial measures were taken for nature protection in the region. Through the active communication of the Mayor of Bruges who personally knew and asked for the support of the then-President of the National Assembly and Vice-President of the Senate along with the support of local state authorities, the funding plans were finally accepted by the Minister of the Environment.[[3]](#footnote-3) The fact that the local authority was at the origin of the project, which was very rare, was recognized on multiple occasions during the exchanges between the Minister, the Ministry, and local state representatives. Despite the opposition of a few farmers who had obtained the right to use the land of the future NNR, the Marais de Bruges NNR was created in 1983.

1. **Val de Munster NNR**

The Vallée de Munster project was initiated by a local environmental NGO, which wanted to protect 22 000 ha against the construction of ski and tourism infrastructure and forest roads. After receiving the project’s scientific dossier, the local state authority launched an unofficial consultation with local authorities and local ministerial representatives. This consultation led to an agreement-in-principle with some reservations. Although the local authorities contested some of the NNR regulations and the representatives of the Ministry of the Environment questioned the relevance of the NNR in protecting such a large area, the Ministry launched the NNR procedure by consulting the SC of the NCNP. The SC recognized the area’s specific interest for biodiversity and gave a favorable opinion on the project in December 1978, which resulted in the launch of a public inquiry. However, owing to well-organized opposition, the required local consultations never took place. Several weeks after the favorable opinion from the NCNP, a broad mobilization against the NNR project was launched by rural representatives. Powerful local farmer unions, the Chamber of Agriculture, and several rural tourism associations organized press conferences, published their opposition in local newspapers, and adopted motions supported by some local elected officials against the future NNR. They also asked candidates in the 1979 local elections to clearly express their opposition to the NNR project. These actions were communicated to the Ministry of the Environment and local state representatives, while elected parliamentarians were urged to reject the project. Despite local environmental NGOs writing letters to the Minister and local state representatives to express the necessity to protect the area and even elaborating a new project with only 9 000 ha, the project was abandoned by the Ministry in 1983 because of “the hostility of local elected officials.”

1. **Plan de Tuéda NNR**

The Plan de Tuéda project originates from a specific public policy instrument created in the late 1970s in France whereby a national inter-ministerial committee[[4]](#footnote-4) could require offsetting measures for development projects, specifically in mountainous areas to ensure more coordinate land development. To offset a ski development in the municipality of Les Allues, the creation of an NNR in the area of “Tuéda” was required in 1980. While the creation of an NNR in Tuéda had already been proposed in 1978, no scientific or socioeconomic study had been conducted. This offset measure therefore represented an opportunity to push forward with this idea. The first problem, which took almost 3 years to solve, was to obtain funding for the study, which was necessary to initiate the NNR creation procedure. The study elaboration was directly made by the local representative of the Ministry of the Environment in consultation with local authorities, farmers, private owners, local NGOs, public institutions, local state representatives, and hunting and fishing associations, which led to several agreements concerning the future regulations inside the NNR. An agreement was found with the local hunting association to prohibit the hunting of black grouse and subject all other hunting to hunting plans. The project was discussed in 1985 at the SC of the NCNP, which recognized the importance of protecting the remarkable features of the flora, especially the rare distribution of *Pinus cembra* and the presence of *Linnaea borealis*. However, during the consultation process, the SC of the NCNP sought to ban hunting from the NNR to better protect small game and reduce disturbance to fauna. The Ministry of the Environment then asked the local state representative to proceed with the local consultation on the basis of the NCNP’s scientific opinion. This led to breaking the previous deal, which aroused strong local protests against the project itself. The public inquiry resulted in 75 opinions against the Plan de Tuéda project with only four in favor. Through their personal relationships, private owners directly informed the elected president of the department and the Minister of the Environment about the situation, and an influential local hunting association pressured the local state representative to reinstate the hunting rights in the NNR project. Supported, among others, by the mayor, inquiry commissioner, and local state representative, the Minister of the Environment finally reinstated the hunting rights, leading to a compromise with the NCNP. In the future, the local state authority would thus regulate hunting in the event of poor wildlife management. The fact that the state subordinated the ski area development to the creation of the NNR probably contributed favorably to the project, as it could not be abandoned by local authorities.

1. **References**

Crozier, M., Thoenig, J.-C., 1975. La régulation des systèmes organisés complexes: Le cas du système de décision politico-administratif local en France. Rev. Fr. Sociol. 16, 3. https://doi.org/10.2307/3321128

1. In French, “Comité permanent du Conseil National de la Protection de la Nature.” [↑](#footnote-ref-1)
2. In French, the “Sociétés d'aménagement foncier et d'établissement rural (SAFER).” [↑](#footnote-ref-2)
3. At the time, there were no clear distinctions between local and national representatives in France, with elected representatives quite often holding different mandates. The influence of such organizations has been widely studied and documented in France (Crozier and Thoenig, 1975). [↑](#footnote-ref-3)
4. In French, the “Comité interministériel des Unités Touristiques Nouvelles.” [↑](#footnote-ref-4)