

STRENGTHS AND WEAKNESSES OF THE BUREAUCRATIC PROCEDURE FOR A-PRIORI EVALUATION OF RESTORATION PROJECTS: TWO CASE STUDIES FROM THE LAZIO REGION.

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Abstract: In the last eight years, the Lazio Region (Italy) financed more than 50 conservation projects in Natura 2000 sites through European funds. Approximately 15 of them were focused on Annexe I habitat rehabilitation or restoration. Most of the projects did not follow a logical framework based on ecological restoration principles. We present two case studies to show the strengths and the weaknesses of the bureaucratic procedure of project approval and funding from our point of view of project evaluators for the Regional Directorate for the Environment. The first refers to two freshwater habitats, 3150 (natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* vegetation type) and 3260 (water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation), included in a small internal lake which hosts four Annexe II fish species and one endemic fish species. The second refers to the 6220 habitat (*pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*) in a Site of Community Importance in north-west Lazio. Overall, the projects were lacking in the historical analysis of resources use, in the investigation of habitat deterioration causes, in clear and detailed objectives, in the stakeholders involvement, and in the evaluation and monitoring plan. To overcome these problems, the Regional Authority decided to subject all the conservation projects to implication assessments, even if this is not required by the EU Directive; this has been the only tool through which the central authority could re-orientate the projects. Starting from our experience and from the adaptive management approach, we propose to the Regional and to the National Environmental Agency some guidelines for restoration projects.

Keywords: restoration projects, bureaucratization procedure, funds assignment.

Introduction

In the Lazio Region (west-central Italy), 202 Natura 2000 sites (Sites of European Community Importance, SCIs, and Special Protection Areas, SPAs) are now present, covering 25% of the regional territory. During the period 2000–2006, the Regional Directorate for Nature Conservation (RDNC) financed through EU funds for regional development (FESRs) the proposal of management plans for 100 SCIs/SPAs. Many plans listed the actions needed to restore or to maintain in a favourable status the Natura 2000 habitat and species. Then, the RDNC decided to finance through FESRs 51 of these actions.

In this paper we present a critical review of the bureaucratic procedure for projects selection and funding, and the projects development using two case studies. The aims of this review are to point out strenghts and weaknesses of both the procedure and the projects, and to propose new guidelines for future restoration actions.

Methods

We reconstructed the funding procedure and analyzed all the financed projects to find the ones most representative of the funding system. The two we selected were critically reviewed to point out their strenghts and weaknesses. Finally, cross-analysis of funding procedure and project structure allowed us to find a new general strategy for future restoration actions, which is now in the process of being approved by the RDNC.

Results

The bureaucratic procedure for project funding can be summarized as follows:

- 1) after completion of the SCIs management plans, the RDNC selected 15 restoration and 36 conservation actions using the priority level given in the plans as criterion;
- 2) the RDNC deliberated on earmarkings to the local administrators of the SCIs lands to implement the selected actions;
- 3) the local administrators made public calls for project proposals, selected the best ones and sent them to the RDNC for final approval;
- 4) at this step, the Natura 2000 Office realized that many projects were lacking in key points (see below), and decided to submit all the projects to the procedure of implications assessment to correct and re-orientate them;
- 5) the authors modified the projects accordingly and the local administrators sent them to the Regional Funding Office for funds transfer;
- 6) finally, the projects were implemented under the supervision of both the authors and the Natura 2000 officers.

The projects we present regard two SCIs, IT6050015 Lago di Posta Fibreno and IT6010039 Acropoli di Tarquinia, located in the Lazio Region (west-central Italy).

The SCI/SPA Lago di Posta Fibreno (300 m a.s.l.) is 139 hectares large and includes a lake and the final part of some affluents. Natura 2000 habitats in the lake are the 3140 “Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.”, 3260 “Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation”, and 92AO “*Salix alba* and *Populus alba* galleries”; in the affluents, togheter with the 3260 and the 92AO, the 3150 “Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* type vegetation” and a community with large sedges (*Magnocaricion*) were found during the ante-operam investigation. The project was entitled “Maintenance of open areas (drainage channels) in the common reed stands”. Its general aim was to reactivate depurative processes in the lake while the specific aim was to recreate open spaces in the watercourses currently occupied by common reed (*Phragmites australis*) stands, to allow the natural re-expansion of hydrophytes (Riserva Naturale Regionale Lago di Posta Fibreno, 2008). The project was implemented in spring 2007 by digging out the central axis of the channels’ bottom down to a depth of

0.3 m; accumulation of excavation muds along the banks behind the sedges belt; manual removal of the common reed along the banks, taking care to preserve large sedges; manual pruning of *Salix* ss.pp. and *Populus* ss.pp. In May 2007 the post-operam survey revealed an explosion of *Riccia fluitans*, a very rare species typical of 3150 habitat, and other important hydrophytes. After that, no other surveys were made.

The SCI Acropoli di Tarquinia (50 m a.s.l.) covers 219 hectares in an archaeological and agricultural area. The relevant habitat is the *6220 "Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*". The main threat is overgrazing by sheep, which favours the expansion of unpalatable species (mainly *Ferula communis*, *Onopordum illyricum* and *Galactites tomentosa*) to the detriment of annuals and short grasses. The project aimed at restoring and maintaining the *Thero-Brachypodietea* community by regulating the grazing. The SCI management plan asked for a study of carrying capacity and for construction of fences, while the project did not include any study but only the fences construction. The Natura 2000 Office decided to start the fences construction because the funding was going to expire, but at the same time asked the practitioners for quantitative data of carrying capacity in different seasons to correctly regulate the grazing rotation. It also asked for an agreement between the Tarquinia municipality and the grazing land owners. Data on carrying capacity was collected in 2007 and analyzed in the spring of 2008; it will be used for rotation scheduling from the autumn of 2008.

Discussion

The main weakness of the bureaucratic procedure was its awful complexity, which caused huge delays in funding assignment so that project implementation had to be hurried to prevent the expiration of the funds. The most demanding step for the Natura 2000 Office was the projects evaluation and the assessment of their implications. Indeed, most of the projects had deficiencies which forced the Office to modify them, slowing the whole procedure. The most common deficiencies were: 1) lack of clear aims; 2) lack of historical analyses of past land use, habitat or species degradation causes, current and future threats; 3) lack of publicity; 4) lack of monitoring and management plans. This last crucial point was a consequence of a serious deficiency of the EU funds utilization procedure: the FESRs had to be used *only for restoration or conservation actions*, not for monitoring nor for future management actions.

However, the procedure presented an important strength: the involvement of local administrators. Indeed, the representatives of municipalities, provinces, joint ownerships, and protected areas were made responsible for the projects proposal and implementation, and their officers were trained through seminars and specific meetings.

One main weakness of the Lago di Posta Fibreno project was that the general restoration goal referred to an ecological process (deuration by macrophytes) in the whole lake, while the specific aim was focused on the restoration of specific habitats in the affluents; the link between them was not supported by any previous investigation or by literature. The specific aims were formulated only in a qualitative way, so in the post-operam control no measurements have been performed. This implies that future monitorings will not have any quantitative measured starting point. The main strength of the project was that it concerned not only Natura 2000 habitats but also the large

sedges habitat, extremely rare in Italy. In addition, the project was based on a spontaneous process, i.e. the expansion of the hydrophytes in the absence of *Phragmites australis*. Furthermore, the project provided the guidelines for habitats maintenance too. The Acropoli di Tarquinia project had a strong basic deficiency as it did not realize that fences construction was useless if grazing rotation was not properly scheduled, and that, to schedule grazing rotation, a quantification of carrying capacity over the whole area and in different seasons was needed. Also, the involvement of local owners was not envisaged at the beginning. Only after the re-orientation enacted by the Natura 2000 Office, the project achieved higher standards.

Conclusions

First, thanks to the experience of the Natura 2000 officers, in 2008 the Lazio Region established a new procedure for the next European funds assignment (2007 – 2013): 1) the RDNC will issue a public call for a-priori defined restoration projects; the call will contain the basic criteria that the project must fulfill, and also the step-by-step framework that the project must follow. 2) All the interested stakeholders may present a project. 3) The Natura 2000 Office will examine the projects: those which fulfill the basic criteria and follow the framework will be automatically accepted; those which do not fulfill the basic criteria or do not follow the framework will be automatically rejected; those which fulfill the criteria and the framework but are lacking in the implementation practices will be submitted to implications assessment. Tools like evaluation matrices or flowcharts to evaluate if and how much the projects meet the required criteria are still missing.

Second, the RDNC realized that monitoring the past restoration actions is absolutely necessary to avoid wasting of funds already used. Therefore, on July 2008 the RDNC allocated a special internal fund for a monitoring campaign.

Third, the RDNC realized that guidelines for restoration projects on Natura 2000 habitats and species are urgently needed: the low quality of the 2000–2007 projects demonstrates that principles of restoration ecology are missing in local administrative bodies and practitioners. We strongly encourage the SER to ask the EU Commission's Directorate for the Environment to adopt the SER International Guidelines (Society for Ecological Restoration International, 2005) as soon as possible.

Fourth, the RDNC realized that the bureaucratic times fixed by the EU for funds use are too short for restoration projects. Up to now, no solution has been found to overcome this problem.

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