Contribution of cultural services to wetland restoration

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0. Introduction

Since past millennia, human beings in the Mediterranean Basin have been intimately related to wetlands, benefitting from their services, using their significant resources and implicating them in their spiritual quests. As a result, cultural aspects have always coexisted with biodiversity and ecosystems creating integrated cultural and natural heritage.

For two decades now, the Ramsar Convention and MedWet, its regional initiative in the Mediterranean, have argued convincingly that the conservation and wise use of this diverse heritage would require an equally integrated approach and have promoted this view at many levels and with multiple means. Thus, in 2002 and 2005, Ramsar COP Resolutions VIII.19 and IX.21 have advocated ‘Taking into account cultural aspects in the management of wetlands’. In 2004, the Ramsar Culture Working Group was established, which developed the ‘Ramsar Guidance on culture and wetlands’ and presented it at COP10 (Changwon, Republic of Korea, 2008). Last year, the Ramsar Culture Network was established in collaboration with the World Heritage Centre of UNESCO. Far-reaching special events on culture and wetlands have been organised during Ramsar COPs, especially COP11 (Bucharest, Romania, 2012) and the Agadir International Symposium on Water and Wetlands in the Mediterranean also in early 2012.

Med-INA, the Mediterranean Institute for Nature and Anthropos, founded in 2003, has played a significant role in these developments and today ensures the Secretariat of the RCN. The MAVA Foundation for Nature has followed with great interest progress made on the integrated approach to natural and cultural heritage and has supported it morally and financially.

Through all these efforts, the notion of reconnecting people to wetlands through culture – traditional and contemporary– has gained considerable understanding and acceptance; in addition, the social and financial benefits that could be derived in for local societies through the increase of visitors to sensitive natural and cultural sites has started being appreciated. The main challenge though remains to devise and implement measures and activities that would create the necessary infrastructure and tools necessary to achieve the desired synergy.

1. Wetland restoration

Anthropic pressures on water and wetlands in the Mediterranean have existed since ancient times and have been documented historically. During the 20th century however pressures have dramatically intensified, due to rapidly increasing populations in the South and East, growing demand for natural resources –especially land and water– and the impact of mass tourism. As a result, the degradation of Mediterranean wetlands has become dramatic and their recent losses are estimated at 50%.

In February 1991 the Grado International Symposium, a major event organised in Northern Italy, concluded with the following mission statement:

‘To stop and reverse the loss and degradation of Mediterranean wetlands.’
One year later, it gave birth to the MedWet Initiative, which today brings together 27 states and many international and non-governmental organisations in the framework of the Mediterranean Wetlands Committee and of Ramsar Convention.

Reversing the loss and degradation of wetlands does not imply only defensive measures, but also includes restoration actions. Unfortunately these have been rather limited in the region, as they require long-term efforts and large financial and human resources, while they are often considered politically sensitive due to vested interests. Of course there have been important success stories such as the Camargue in France, the Doñana National Park in Spain and the Prespa Lakes shared by Albania, Greece and the FYR of Macedonia, but their number is small.

A major difficulty that creates considerable controversy is how to determine the level and the objectives of restoration activities. Practical considerations, and the need to ensure the sustainability of results, often play a key role in establishing a realistic framework. Restoring complex wetland functions, however, often requires much more sophisticated and expensive approaches, which may prove controversial. It is clear that social consensus is required in developing restoration action plans, which can be achieved only through broad consultation. Gaining public support can be catalysed by re-establishing the traditional cultural links of local societies with water and wetlands. In addition, convincing them of concrete benefits that can accrue from restored wetlands—mainly through increased quality tourism—can greatly contribute to positive attitudes.

A related difficulty in this context is conserving and restoring appropriate cultural practices, which formed part of local traditions but today are disappearing mainly due to globalisation, and facilitating the emergence and growth of contemporary cultural practices. Thus, to obtain synergy, restoration plans and activities are called to address both biodiversity and cultural aspects, as well as socio-economic considerations. As mentioned above, this is done best through integrated methods and not through parallel and asymptotic approaches.

2. Improving cultural infrastructure

Improving the cultural infrastructure of wetland sites through concrete actions is perhaps the most effective means for reaching synergy. A few characteristic examples may provide a better understanding and encourage future action.

**Developing knowledge**

The investigation of the natural and cultural heritage of sensitive sites in a holistic manner, and the interrelation of the two, is often missing and must be developed by multidisciplinary teams.

In the case of Prespa Lakes, for example, an integrated approach to nature and human beings has been promoted through the works of biologist Giorgos Catsadorakis and others that have been instrumental in making the area known and attracting national and international visitors, such as:


For Lake Karla, a major Mediterranean site drained in the sixties and today under partial restoration, the Med-iNA team, with the contribution of local experts, has prepared a detailed walking guide that covers both natural and cultural aspects within a historic and geographic context. It is a work that will be useful both for the visitor and the local inhabitant, including youth.

A very good model of integrated presentation of wetland knowledge is through the recent publication of the Camargue encyclopaedia:


We hope that similar works can be encouraged for other major wetland sites in the region.

*Disseminating knowledge*

It is not sufficient to gather and process knowledge about wetland heritage, but this knowledge must be disseminated to appropriate audiences: local, national and international. Publications are useful in this, but sometimes they do not reach the appropriate readership.

In the case of the Larnaka Salt Lakes, Med-iNA has attempted to reach a broader public through specially designed panels placed in the city airport and harbour, along with the printing of a brochure that has been widely distributed and through public awareness activities. The existence close to the wetland of a major spiritual Islamic site (Umm Haram shrine – Hala Sultan Tekke), as well as important prehistoric finds, has provided the opportunity to attract the interest of international visitors.

A very effective means to disseminate integrated knowledge is through the operation of visitor centres. Interesting models are the centres in Sekovlje Soline and Skocjan Caves in Slovenia, the Sidi Boughaba education and visitor centre in Morocco and the recently completed visitor centre of Ghar el Melh in Tunisia. However, it should be noted that visitor centres are expensive to establish and to operate and require highly trained staff, especially when cultural aspects are incorporated. Thus, a substantial visitor centre has been proposed for Larnaka but its construction has been postponed twice. On the other hand, a very good option seems to be the case of Doñana National Park, where the visitor centre and the management body premises are hosted at the same facility.

*Managing visitors*

We have noted that the promotion of the cultural heritage of wetlands can increase visitor flow, which strengthens conservation efforts and has positive contributions to local economies, as in the case of Kerkini and Prespa Lakes in Northern Greece. Beyond providing the necessary facilities for visitors—usually through appropriate centres—visitation of sensitive sites must be managed carefully, so that negative impacts can be minimised.

Thus, in the case of Tunis Lagoon, the study led by professor María José Viñals aims at estimating the capacity of the sensitive Chikly Fort area and in devising the appropriate measures for managing effectively visitor pressures. Besides contributing to the restoration of the Tunis Lagoon, the study is expected to provide a very useful model for other Mediterranean wetland sites with similar conditions.

3. **Restoration in the Ramsar guidance**
It is proposed that the lessons learned from the Med-INA project ‘Using cultural values for wetland restoration’ (2010-2013; 10/90) be incorporated in the Ramsar guidance for culture and wetlands as an additional general objective (see below).

O... – To use cultural practices in order to strengthen wetland conservation initiatives.

The following key actions are suggested to implement the above objective:

a) carry out an inventory of cultural resources and practices related to the wetland site in restoration;

b) disseminate broadly knowledge of the cultural heritage of the site among local inhabitants and visitors in order to raise interest and support for restoration actions;

c) identify and encourage the cultural practices that have a direct positive impact on wetland functions and consider their sustainability;

d) incorporate in restoration plans both the natural and the cultural heritage;

e) take into account visitor flows in restoration planning and provide management measures and appropriate facilities;

f) Promote good practice case studies.

Med-INA will propose the addition of this objective to the planned revision of the Ramsar guidance.

4. Towards integrated restoration

On a more practical level, for the integrated restoration of a wetland site, which takes fully into account not only biodiversity aspects but also its cultural heritage, a number of steps should be carefully considered. These include:

- Establishment of a dedicated multidisciplinary team of experts from the natural and human sciences. The team must work closely together in developing a common approach.

- Collection by the team of international knowledge and experience, as well as lessons learned, from similar restoration efforts in other parts of the world.

- Research on the natural and cultural heritage of the site, determining of interrelations, past history and degree of degradation, as well as contemporary pressures and trends.

- Proposal of detailed restoration objectives for all key areas, which would include description, responsibilities, required resources, time scale and success indicators.

- Consultation with major stakeholders and the public on the restoration objectives with the aim to achieve a substantial degree of consensus.

- Development of an action plan for reaching the objectives agreed and implementing the restoration scheme. The action plan should address both the relief of pressures causing degradation and concrete actions for redressing damaged areas and re-establishing wetland functions. The plan must be approved by the pertinent authorities so that implementation can proceed.

- In parallel, preparation of an information, public awareness and participation campaign that will be carried out in conjunction with restoration actions.

- Scheduled review of the restoration process, involving public consultation, and launching of corrective measures if required.
- Completion of the restoration activities and evaluation of their results; investigation on complementary interventions to ensure the sustainability of the restoration scheme.

It should be noted in this context that, although the overall approach should be integrated bringing together all the disciplines required, there could be decentralised actions, as long as central coordination remains. Thus, archaeological research in a wetland site and restoration of monuments, or a programme for the conservation of menaced flora and fauna species can be carried out independently by the corresponding responsible agencies—public, academic or non-governmental. However, there is always need of information exchange and consultation especially from successful case studies.

As wetland sites that have been restored are the result of human interventions and not only of natural processes, it is clear that they will require long-term human monitoring and eventually management at least until wetland functions are substantially re-established. Thus, such care-taking responsibilities must be assigned quite early in the process, preferably to the agencies that have planned and executed the initial restoration processes.

The brief comments above make clear that wetland restoration is a difficult and expensive process, with results that cannot be guaranteed. It is obvious, therefore, that conserving wetlands and avoiding their degradation through pre-emptive measures and actions is a preferable option, as discussed during the Agadir International Symposium on Water and Wetlands in February 2012. On the other hand, it can be argued that the willingness of societies to invest in the restoration of the natural and cultural heritage of wetlands is a strong indication of their recognised values to humanity and a positive omen for their future.

Selected bibliography


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