



Learning about natural places

Santiago da Fonte saltpan visitor model

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ABSTRACT

Ecosal Atlantis Project pretends to develop a transnational route of traditional Atlantic salt working sites. Aveiro University, as partner, purposes to create a visitor model to *Santiago da Fontesaltpan*. In a first moment, this visitor model was tested by students and teachers of local schools in order to include this theme in the school curriculum. However, it is expected that this model can be applied by different target groups and in different natural places.

INTRODUCTION

Traditional saltpans are relevant biodiversity areas, located in wetlands, “product” of the anthropocentric intervention, assuming a replacement habitat function for diverse bird species, since these areas are used for bird nesting, feeding and rest (Sadoul, et. al., 1998; Walmsley, 1999, Sripanomyom, et. al., 2011). They are the proof of an established equilibrium created between the anthropocentric use of this habitat and the maintenance of their natural functions.

Despite this important natural value, traditional saltpans are also important from landscape, cultural and historical point of view, since artisanal salt production is an activity practiced for centuries, which has transformed and influenced the history and economy of coastal communities.

However, traditional saltpans are being abandoned, due to several reasons, namely urban development, industrial salt concurrence, produced with lower price and saltpans conservation costs (Silva, 2010). Also, these areas are no longer seen as having economic value as they were in the past, which has taken to aged and reduced workers.

This abandonment has negative consequences for the environment and also for the preservation of artisanal salt production, being urgent to invert this situation by encouraging new approaches to these areas.

Since saltpans are located in peaceful and beautiful areas, activities related to sustainable tourism, namely ecotourism and birdwatching, have a potential interest and can be developed as complementary activities to traditional salt production, since these activities must be realized in an integrated and responsible manner, having in account the preservation and conservation of traditional activities and natural values.

In this way, ECOSAL ATLANTIS Project is being developed in a way that could identify new approaches for traditional saltpans, namely “by creating a Route easily recognised by general public in the Atlantic Area (<http://ecosal-atlantis.ua.pt/>).

THE ECOSAL ATLANTIS PROJECT

The Ecosal Atlantis project, “Ecotourism in saltworks of the Atlantic: a strategy for integral and sustainable development” appears as an opportunity to promote saltpans rehabilitation through a new approach and new activities (Diputación Foral de Álava, 2009). This European transnational project is financed by Atlantic area program, is in action for three years (2010-2013) and has 13 partners in 4 countries (Portugal, Spain, France and United Kingdom).

Development of joint, integral and sustainable tourism based on the cultural and natural heritage of traditional Atlantic is the main project objective. To reach this objective, the project focuses on three key activities designed to develop tourism in Atlantic saltworking sites: Heritage, Territorial development, Biodiversity and Nature tourism activities (Diputación Foral de Álava, 2009).

These activities respond to the 4 specific objectives of the project (<http://ecosal-atlantis.ua.pt/>):

- ☐ To establish guidelines for the management of the natural and cultural heritage of saltworking sites on the basis of a common heritage database.
- ☐ To evaluate, enhance the value of and promote the traditional Atlantic saltworking sites by means of a network of players implementing joint actions.
- ☐ To maintain or restore the habitats typical of saltworking sites in the framework of nature tourism.





- To promote the conservation and understanding of Atlantic saltworking sites by circulating information and creating trans-national synergies

This project has a set of expected results, being the most important the implementation of a Route that integrates and enhances the value of Atlantic saltworking sites (figure 1).



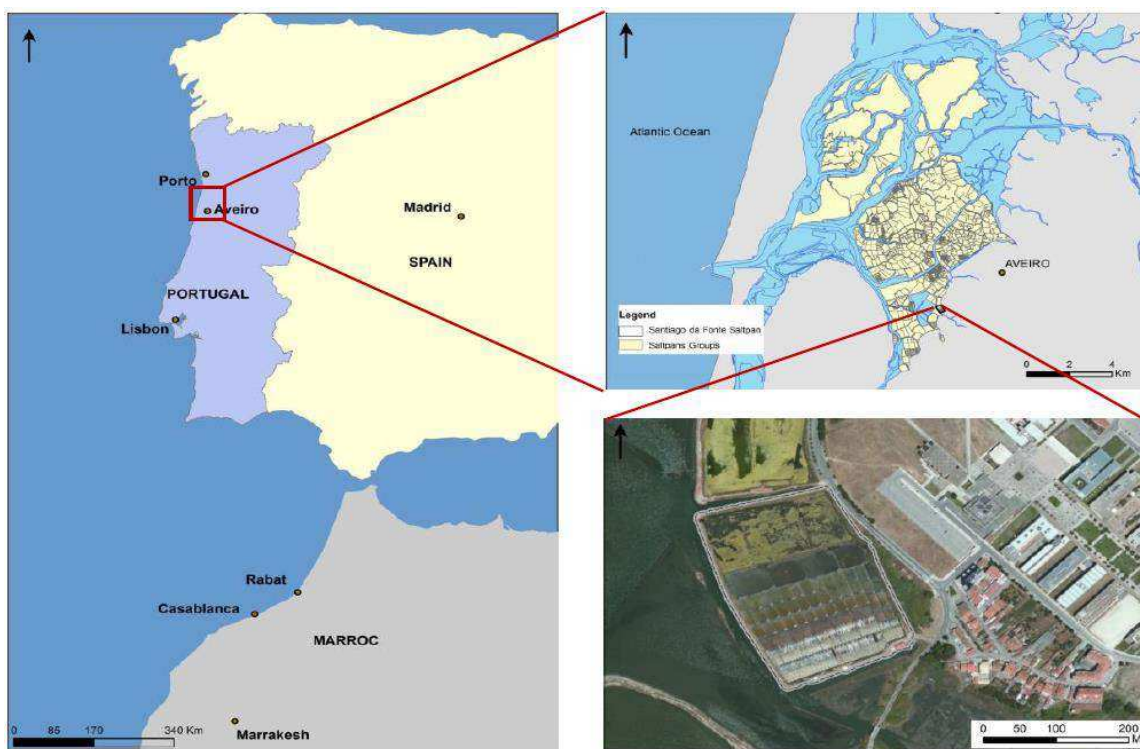
Figure 1 –Salt pans included in the Traditional Salt Atlantic Route

In this way, it was important the development of a set of activities, by the different partners, that allowed the starting up of that Route. The route creation and its perpetuation are relevant results that promote a joint future work between partners and also new participants, who have conditions to fulfil minimum requirements. The international work

group will propose “Traditional Salt Atlantic Route” recognition to the Committee of Cultural Routes of European Council.

SANTIAGO DA FONTE SALTPAN –A PILOT PROJECT AREA

Aveiro University is one of the Ecosal Atlantisproject partners, since ownsfive salt pans in “*Salgado de Aveiro*” area. Santiago da Fonte is the only one of these set that is still producing artisanal sea salt, and, by this way, it was the pilot area for the development of the diverse activities realized for theproject. This saltpan is located in “Ria the Aveiro” lagoon, an important wetland in the centre of Portugal(figure 2).In the total area of “Ria de Aveiro” lagoon there are now only nine active salt pans.



Location of Santiagoda Fonte Saltpan

Type of activities realized in Santiago da Fonte Saltpan

Several activities were realized under the Ecosal Atlantis project in Santiago da Fonte saltpan. The main objective was to create visit conditions to this saltpan and by this way, to raise the knowledge of different public about salt pans and artisanal salt production.





One of the activities realized by Aveiro University was the development of a standard guidevisitor model that is expected to be applied in other route saltpans areas and, in this way, could support the route self-sufficiency and its perpetuation.

For the definition of this standard guide visitor model, it was proposed a study of different approaches according to different target public. Since this saltpan belongs to a university, and, by this way, realized activities should be adequate to educational and scientific purposes, three different target public were selected: public school, specialized or scientific public and disabled public, in a way that accessible tourism could also be promoted.

The public school approach

The project has started with the development of an informal education guide visitor model, in order to propose a thematic integration in school curricula, taking into account a sustainable development transversal approach (Martins, et. al, 2009). The main objective was to raise awareness to scholar public about the importance of the conservation of saltpans and artisanal salt production. In this way, the work was developed in three different phases. In a first phase, it was realized a pilot-test guided visit with a pilot-group of teachers and students from different levels of education, belonging to Aveiro basic and secondary schools (figure 3).

In this phase, teachers and students have made a visit to Santiago da Fonte saltpan where different approaches were referred, namely: the importance of saltpans for the biodiversity and how the artisanal salt production is realized. It was also possible to collect some samples of invertebrates and sediments that were observed afterwards in geosciences laboratory.

In a second phase, students and teachers have realized some activities, in a classroom context, in a way to understand what they have learned in the visit realized to Santiago da Fonte Saltpan (figure 4 and 5).



Figure 3 –Pilot test guided visit

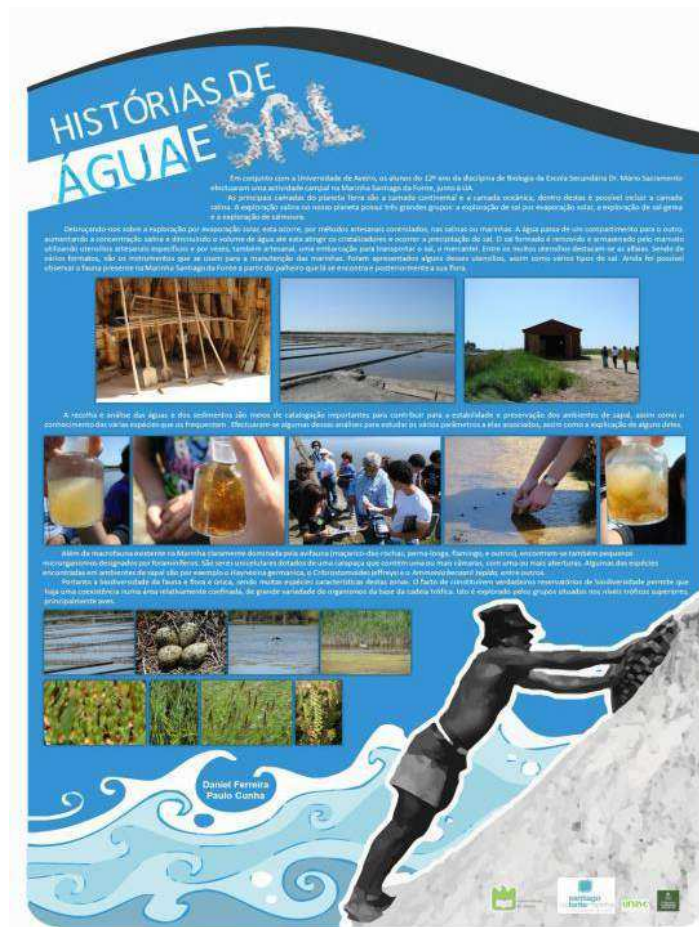


Figure 4 –poster realized by secondary students





Figure 5 –T-shirts production and fashion show based on saltpan theme

In the last phase, it was possible to develop a pedagogic guidewith school teacher's contributions, expecting that this theme could be integrated in the local school curricula.

The principal results achieved with this activity were (Martins, et. al., 2009):

- ☐ The development of a technical pedagogic resource guide;
- ☐ The awareness and teachers training for the inclusion of the theme in school curricula (local schools);
- ☐ The guided visit modelassessment to enable it is replication / adaptation to other natural areas with similar characteristics.

The specialized/scientific public approach

As it was referred before, Santiago da Fonte saltpan is located in "Ria deAveiro" lagoon, an important area for the conservation of aquatic avifauna, having the function of reproduction and feeding area for a large number of bird species (Instituto de Conservação da Natureza e Biodiversidade [ICNB], 2006). In this way, this area was classified, in 2000, as a Special Protection Area (SPA), under Birds Directive, being in this way, integrated in the Portuguese Natura 2000 areas. In this way, some activities are being realized in a way that ecotourism and birdwatching could be developed in this saltpanand to understand how is made the avifauna reproduction (figure 6).



Figure 6 –Ecotoursim / Birdwatching

The main objectives are to understand how is the behaviour of different bird species that use this saltpan to feed, rest and nest and to monitor avifauna. For those purpose, nidification islands with water control were constructed to register nesting success and it has been realized a water level control in the saltpan for avifauna resting and feeding.

These activities are still being realized in a way that some nature tourism guidelines could be produced for saltpans belonging to the Route.

The accessible tourism approach

One of the principal objectives in defining a standard guided visit model was that the infrastructures and materials should be developed in a way that disabled people could also visit Santiago da Fonte saltpan. In this way, some activities were realized to identify the needs of disabled people during their visits to natural sites, as well as to know how to adapt the guided visitor model that is being used in Santiago da Fonte Saltpan.

To respond to this objective the work was organized in two different phases. In a first phase, it was organized a workgroup with experts in accessibility to natural places, in order to evaluate Santiago da Fonte saltpan guided visit model, the materials and the physic space. In a second phase, it was realized a pilot-test guided visit with a pilot-group of disabled people (mobility difficulties and sensorial needs) in order to understand their principal difficulties when they visit the area (figure 7).



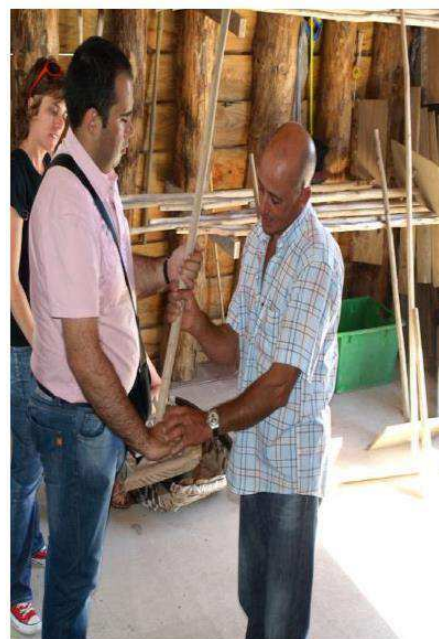


Figure 7 –Pilot test guided visit with disabled people

With this work it was possible to understand that some adaptations should be realized in Santiago da Fonte saltpan. Nevertheless it was clearly seen that these places, due to their peculiarities, doesn't offer the most adequate conditions to disabled people, with mobility and sensorial disorders. Moreover, it is necessary to have in account that, most often, these areas are placed in natural environments, under protection rules, e.g. Santiago da Fonte saltpan, integrated in Ria de Aveiro SPA (PTZPE0004), narrowing the possible adaptations that could be done.

However, some adaptations are already been realized, namely a walkway since Santiago da Fonte entrance to the warehouse and a saltpan observatory, that is being implemented according to the guidelines defined by the National Secretariat for rehabilitation and integration of people with special needs (SNRIPD, 2007).

FINAL REMARKS

With the development of the described activities, Aveiro university expected to contribute to the promotion and sustainability of "Traditional Salt Atlantic Route". It was analysed salt pans as multifunctional areas where is possible to have different compatible sustainable activities, namely: a) artisan sea salt production; b) pedagogic and didactic activities; c) ecotourism; d) Birdwatching. Some different results were achieved. It was verified that the standard guided visit model that has been used in Santiago da Fonte saltpan is possible to be adapted according to different target publics and that is possible

to be applied in other saltpans. It was also confirmed that is possible to have a diversification of activities in saltpans, namely those regarding environmental education, birdwatching and ecotourism. However, in a way that these activities could be realized in an inclusive way, it is necessary to adjust natural areas visitation to disabled public.

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