

“The local population is not aware” of nature conservation: implementing and managing the Natura 2000 network in a mountainous area of Galicia, Spain

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Abstract

The Natura 2000 Network (N2000N) is the main conservation instrument of the European Union. Its implementation for the whole EU territory in the last 30 years has largely been carried out top-down, combining the local level poorly. The Queixa and San Mamede mountain ranges, located in south-eastern Galicia, have been proposed as a single natural park since at least the 1970s, although political inactivity and lack of interest in conservation by the local population have made this difficult to achieve. However, most of this mountain area has been designated as N2000N territory. This article demonstrates that the designation took place in a non-transparent manner and without public participation. As a consequence, our analysis questions the legitimacy of the Galician N2000N areas. The article addresses N2000N management and academic criticism in this respect. Finally, we recommend involvement of the local population in the future, as the only way to guarantee effective conservation and improve perceptions of the N2000N at local level. The analysis presented here is relevant for the future of this and other mountainous areas belonging to the network.

Profile

Protected area

Natura 2000 Network

Mountain range

Queixa and

San Mamede

Country

Spain

Introduction

During the second half of the 20th century, science began to bring to light the continuing disappearance of habitats and species, leading to a massive increase in the worldwide creation of protected natural areas (Dudley, 2008). The systematic implementation of nature protection policies through networks began with the 1972 United Nations Conference on the Human Environment in Stockholm. At regional level, in 1973 the Council of Europe set up a European network of biogenetic reserves for habitat conservation, and in the early 1990s the EU agreed to set up the Natura 2000 Network (N2000N). Although it is an EU-wide initiative, Rauschmayer et al. (2009) have shown that its implementation has varied between countries.

The N2000N covers 12% of Galicia's land area (EUROPARC-España 2021). In Galicia, practically no protected natural areas had been declared prior to its implementation, and Galician conservation policy was non-existent, despite the fact that the devolved Galician Government had had full powers in the management and protection of nature since the early 1980s (Paül et al. 2015; Paül 2017). The actual implementation of the N2000N (in 2004), however, was effected quickly, without public consultation, by the Galician Government.

The aim of the present research was to decipher the local population's perceptions regarding the N2000N development process in a specific area. Despite recurring debates over the last two decades on its possible extension, the current extent within Galicia of the N2000N has been considered definitive since

2014, when all Galician N2000N areas were designated Special Areas of Conservation (SAC) (Decree 37/2014). In addition, with the approval of Galician Act 5/2019, on natural heritage and biodiversity, all SACs were given the legal status of *Natura 2000 Network protected areas*.

This article focuses on an area in Galicia formed by two adjacent mountain ranges (Queixa and San Mamede) that make up the so-called Manzaneda Massif (also known as the Macizo Central, Central Massif in English). The area has been proposed as a natural park since the 1970s. According to Section 24.1 of Galician Act 5/2019, natural parks are “*natural areas which, due to the beauty of their landscapes, the representativeness of their ecosystems or the singularity of their flora, fauna or geological diversity, including geomorphological forms, possess ecological, aesthetic, educational and scientific values whose conservation deserves preferential care*”. However, the creation of a new nature park to include the Manzaneda Massif has been postponed indefinitely, despite the announcement in around 2005 of its immediate effective implementation, and has never come to fruition (Paül et al. 2015; Paül 2017).

The total protected area that we focus on here is considerable, covering 46,986 ha (Macizo Central SAC), see Figure 1. For the purposes of this paper, the Bidueiral de Montederramo SAC located in the San Mamede mountain range (1,984 ha) is assumed as assembled with the Macizo Central SAC. The Macizo Central SAC is the largest SAC in Galicia if we take into account that the Ancares-Courel SAC (102,635 ha) consists of two separate mountain ranges that have been amalgamated administratively (Figure 1). Due to

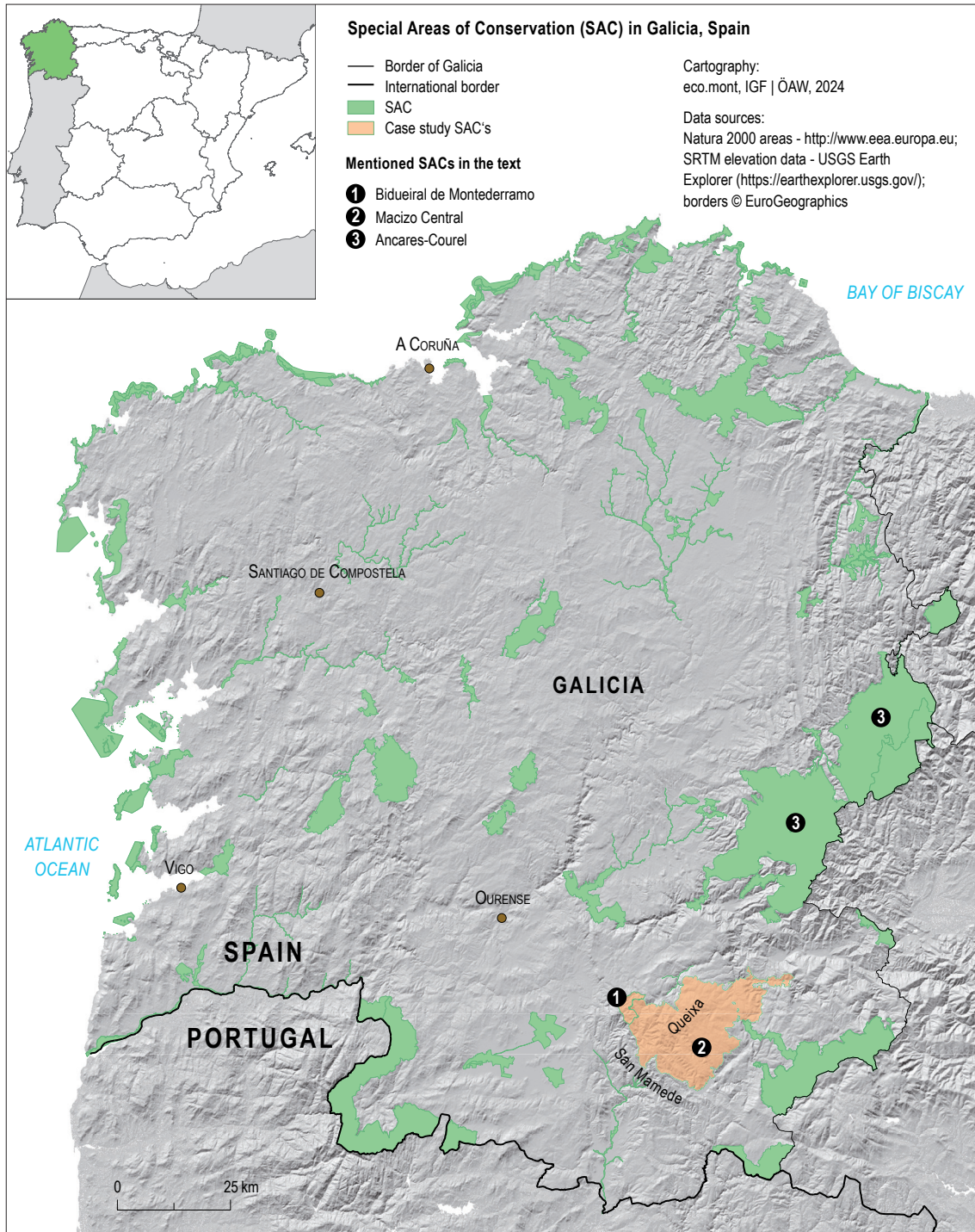


Figure 1 – Special Areas of Conservation (SAC) in Galicia, Spain.

its large size, Macizo Central SAC is particularly representative of the N2000N in Galicia.

The Natura 2000 Network

The N2000N was created following the adoption in 1979 and 1992, respectively, of the Directive on the Conservation of Wild Birds (*Birds Directive* n. 79/49/EEC) and the Directive on the Conservation of Habitats and of Wild Fauna and Flora (*Habitats Directive* n. 92/43/EEC). The former imposed on EU member

states the conservation of wild-bird habitats by creating Special Protection Areas for Birds (SPAs); the latter protects species and habitats. It also defines the procedures for establishing, planning and implementing the management of the network, by designating, first, Sites of Community Importance (SCIs), and then Special Areas of Conservation (SACs), which replaced the SCIs (Sundseth 2012; Orlikowska et al. 2016). Currently, the N2000N consists of 27,031 protected areas and more than 1.2 million km² (DG Environment 2022), and is considered the cornerstone

of the EU's nature conservation policy (Fontaine et al. 2007).

Sundseth and Creed (2008) define the N2000N as the largest network of protected areas in the world, and Rosa and da Silva (2005) as the most innovative and ambitious nature conservation initiative ever undertaken. McCauley (2008) and Apostolopoulou and Pantis (2009) view the N2000N as being designed for both the protection of biodiversity and the development of anthropogenic activities which facilitate conservation. The N2000N can therefore be seen as a European strategy for sustainable development. In fact, Ferranti et al. (2014) have distinguished three successive management paradigms in its implementation:

- a technocratic-scientific approach that favoured ecological problems over socio-economic ones (1990s), characterized by the idea that complex problems can only be tackled through scientific and technical means;
- a participatory perspective (2000s), which seeks to involve those who are affected by a specific problem in policy deliberations; and
- the economic view of sustainable development (2010s), which includes the concept of ecosystem services and focuses on the application of quantitative concepts and measures such as cost-benefit analysis, willingness-to-pay and market value.

Yet the N2000N has been widely criticized for its preference for a top-down approach. Following a review of the literature, this top-down approach can be described as follows:

- an asymmetrical distribution of power, characterized by an over-presence and over-action of governmental bodies, and a lack of participation on the part of civil society (Blicharska et al. 2016);
- a lack of encouragement for local participation (Dimitrakopoulos et al. 2010; Crofts 2014; Blicharska et al. 2016). When it has occurred, it has been selective, has been developed only in the advanced stages of a project's implementation, and has allowed the participation only of actors predefined by the government (Bouwma et al. 2008, 2010; Blicharska et al. 2016).
- the process of designating a protected area leads almost invariably to local opposition, and local communities are rarely given the opportunity to voice their views (Rosa & da Silva 2005; Grodzinska-Jurczak & Cent 2011; Sarvasová et al. 2013; Winkel et al. 2015). It is assumed that the population, in general, will oppose protection by default (Hiedanpää 2002), because government authorities do not believe that people understand the limits that should be placed on the use of nature (Garde 2005);
- site selection is limited to scientific habitat and species criteria (Turnhout et al. 2015), without the involvement of the local population (Cent et al. 2013; Ferranti et al. 2014), and carried out in a technocratic manner (Liefferink et al. 2011);

- decision-making takes place at national level, to respond to the EU framework, and is implemented in regional and local contexts without dialogue between the different levels (Lindstad et al. 2015); and
- a preference for unilaterally imposed regulatory policy, without conciliatory channels based on dialogue and negotiation (Pinton et al. 2006; Marquette 2007; Bouwma et al. 2010; Apostolopoulou et al. 2012).

According to Liefferink et al. (2011), the implementation of the N2000N could in fact have been carried out in bottom-up fashion, involving decision-making based on a network of relationships between mainly local actors, and at various scales (Liefferink & Jordan 2004; Niedziałkowski et al. 2015). Rauschmayer et al. (2009) argue that a bottom-up approach has only recently (since the late 2000s) – and tentatively – started to be put into practice.

Methodology

This research is based on interviews which sought to ascertain social perceptions of the N2000N in the study area.¹ The specific interview technique used favours open dialogue between the interviewee and the researcher, allowing visions about the object of analysis to emerge (Jennings 2005). The interviews were conducted face to face and involved 30 people from various stakeholder groups, from the public and/or private spheres. The group comprised:

- political representatives of the area (1);
- hunters (2);
- business owners (2);
- public officials (2);
- researchers (2);
- environmentalists (2); and
- members of the local population *strictu sensu* strongly connected to the place (19).

A representative sample was not sought, in either statistical or spatial terms. Rather, opinions and ideas were collected from actors who had a good knowledge of, or relationship with, the study area, until the saturation threshold was reached, i.e. when the successive contributions made by the interviewees no longer contributed anything new to the research (Jennings 2005; Valentine 2005). The structure of the interviews encouraged dialogue, using phrases such as “*Tell me about ...*”. It also included alternative direct questions when more specific information was needed. This structure facilitated the systematic collection of information covering:

- perception of the natural values of the place, using the phrase “*Tell me about the main values that exist in the*

¹ Interviewees' words are quoted verbatim (in translation). The quotation in the title of the article is from participant E9. Participant anonymity has been respected in line with current data protection policy.

area...”, and two alternative direct questions: “Can you describe the values that exist in the area?” and “What is your opinion of them?”;

- opinions concerning the existing (lack of) protection, using the phrase “Tell me whether the area we are talking about is protected...”, and three alternative direct questions: “What means of protection are you aware of?”, “Do you think they are working well?” and “Do you consider that they have effects, limitations, incentives, etc.”;
- assessment of the management of protected natural areas in the region, avoiding specific terms such as “N2000N” (Morange & Schmoll 2016), asking “Tell me about whether the area we are talking about is well managed...”, and two alternative direct questions: “What management actions have you noticed?” and “How do you perceive them?”; and
- environmental changes and the future of the area, using the phrases “Describe for me what the area you are talking about and / or these mountains were like 40 years ago, and what they are like now...” and “Tell me about the future for this area and these mountains...”, and three alternative direct questions: “What changes have occurred in the last 40 years?”, “Throughout your life, what changes and / or continuities have you noticed?” and “How do you see the future of these mountains?”.

The interviews were conducted between 1 October 2018 and 31 December 2020, and lasted approximately one hour each. Everyday language was used, adapting the conversation to the profile of the interviewee. The interviews were intended to elicit honest subjective responses. In order to guarantee anonymity, the code E was used for each of the interviewees. In some cases, conversations were recorded with their permission, and in others systematic notes were taken. Subsequently, recordings were transcribed and all responses were coded and analysed. The responses were translated from Galician into English.

Open coding resulted in the identification of two clusters. Behind Table 1, there are 23 individual codes related to the perceived problems and threats of the N2000N in the case study, and their implied consequences. The codes are an abstract interpretation of the key issues raised by participants. They include both

emic codes (taken directly from informants’ words) and etic codes (derived from latent content analysis from the researchers’ external perspective) (Crang 2005; Cope 2010) – i.e. the two clusters referred to above.

Results

The results are presented in terms of the two clusters, which can be summarized as how local people view the N2000N, and their role.

Legitimized vulnerability? The local vision of Natura 2000 Network

According to those interviewed, nature protection in this area of Galicia is restricted to a small natural park (O Invernadeiro NP), in the southeast of the Queixa mountain range (Figure 2). For some, it should be extended to protect the whole massif within a large nature park. However, one person stated that such an expansion would be unnecessary, because “this [wider] area is self-preserving, nothing more is needed” (E7).

It is very significant that, of the 30 interviewees, only 6 spontaneously mentioned the N2000N. Hence, it can be inferred that perception of nature protection in the mountains studied is very limited. However, in getting our interviewees to reflect on the N2000N through the use of more pointed questions (see Methodology), we were able to identify what they viewed as specific problems of N2000N in Queixa-San Mamede and current threats that affect the protected area. These are summarized analytically in Table 1.

The first perceived problem is that protection is too generic. Interviewees perceive a lack of protection in Queixa-San Mamede, which, according to some, is because politicians do not see the defence of nature as leading to electoral gains. Another aspect that stands out is the lack of governmental interest at regional level in nature conservation, leading to generic protection on paper, without it being put into practice. According to E6, “They consider these mountain ranges as something marginal... [where] the actions are only ones of destruction [and] permissiveness.... Here, care and conservation never existed [because] they don’t care.”

Table 1 – Local actors’ criticisms of Natura 2000 in Queixa-San Mamede.

Problems	Consequences
Protection too generic	- Fraudulent use of conservation policies - Lack of effective protection - Land-use conflicts - Natural degradation
Extreme rigidity; limitation of activities	- Need to obtain permits from the relevant government levels, which are located far away from where the affected citizens live - People feel discouraged about nature protection
Lack of planning, investment and funding	- Few direct benefits to local people of area being designated N2000N - Little compensation for local people
Unfulfilled promises of socio-economic development	- Frustration
Perceived threats	
Competitive motorized and non-motorized sporting activities, construction of dams, firebreaks, forest fires, forest tracks, hunting, livestock, mining, timber extraction, wind farms	

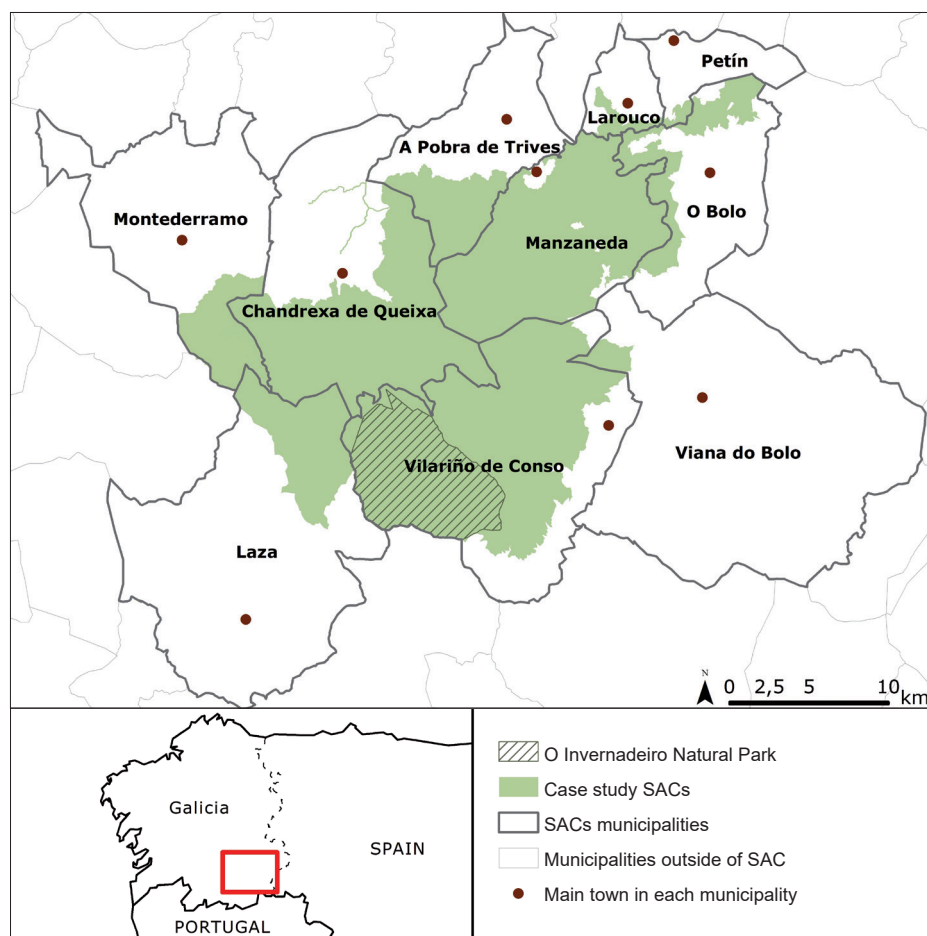


Figure 2 – Queixa and San Mamede SACs: municipalities involved and O Invernadeiro Natural Park.

Secondly, extreme rigidity and limitation of activities are widely highlighted. Although this may seem to contradict the problem just outlined, there is also talk of too much bureaucracy, and too many obstacles and prohibitions linked to N2000N which prevent traditional activities from being carried out: “*The government does not let you do anything [...]: you cut a tree and you have to ask for permission [...]. The rules and traditional use do not coincide*” (E15), implying that “*People do not want protection because of the prohibitions [...]. They want to do things the way they always have [and] they do not want regulation*” (E10).

Finally, interviewees point out the unfulfilled promises of socio-economic development. Environmental policy lacks planning and financial resources and is seen as outdated; it also fails to include adequate environmental education. All this generates frustration among the participants. Ignorance of, and opposition to, conservation were also mentioned: “*People didn’t understand it [conservation] and didn’t even know about it*” (E9); “*People here were initially opposed to protection*” (E6).

The role of the local population

Interviewees also talk about their lack of participation in environmental decisions. Some believe that the government is not interested in knowing people’s opinions, which justifies the government’s neglect and abandonment of projects with a view solely to “*main-*

taining a very profitable patronage network” (E2). Forest management, for example, according to E15, “*has been totally abandoned*”.

The different levels of government are perceived as both authoritarian and lacking in leadership, at the broader (Galician Government) and local levels (Ourense Provincial Council, and the ten municipalities mapped in Figure 2). The sole exception is Manzaneda Municipal Council, which has allegedly tried to do things differently, albeit in isolation, as indicated by E7: “*Manzaneda is a leader, with a completely different vision [...] to help, [...] to give a boost, quite the opposite of the rest who [only] see problems, [...] with typical narrow, short-sighted views.*” This particular impression possibly has to do with the efforts of local governments in Manzaneda from 2007 to 2019,² who gave great importance to the local and territorial development agenda. Others blame the situation on the population itself for its lack of engagement and failure to voice any dissent; according to E3: “*There is and they have what they want.*”

² The vast majority of local governments in the case-study area are, and have been, in the hands of the two major Spanish political parties. From 2007 to 2019, however, the Manzaneda Municipal Council was led by the Galician Nationalist Bloc or a political splinter group of the Bloc.

Discussion

With the creation of the N2000N, Galicia increased the extent of its protected areas considerably. Queixa-San Mamede is evidence of this: in the 1990s, the protected area of Invernadeiro Natural Park covered just 5,722 ha and included just one municipality (Vilariño de Conso) and a small part of the Queixa range (Figure 2), but it went on to have almost 50,000 ha designated as N2000N, a ten-fold increase. According to the statements made by our interviewees, however, the protection of these mountains through its N2000N status is weak, limited and fragile, echoing what Paül et al. (2015) and Paül (2017) say of Galician protected natural areas as a whole.

Arguably, the absence of opposition during the implementation of N2000N in Queixa-San Mamede was due to the government's failure to provide the local population with sufficient information about the implementation process itself – a failure which is common according to Cent et al. (2013) and Ferranti et al. (2014). Locally, then, people were not in a position to put forward any alternative visions and the implementation occurred differently here compared to the rest of Europe (Grodzinska-Jurczak & Cent 2011; Winkel et al. 2015). The majority of the population is still, in 2024, unaware of the protection that is in place, which echoes what some authors indicated decades ago in relation to the creation and public recognition of other protected natural areas (Troitiño 1995; Hiedanpää 2002; Garde 2005; Dowie 2009). In Queixa-San Mamede the real meaning of the N2000N is still largely unknown.

Because processes that involve the population in conservation, such as those defined by Nogué et al. (2010), have been lacking in Queixa-San Mamede, its designation as a protected area can be considered as lacking legal foundation, as well as real usefulness in terms of both environmental and socio-economic benefits. For example, politicians gain scant political profit from defending the environment, and so potential socio-economic gains to the local communities fail to materialize. The political lack of interest in placing value on conservation roles seems to stem from the worry that any limitations imposed on natural resources might well be rejected by the local populations (see e.g. Dowie 2009).

The different levels of government justify their *securative* actions by citing a loss of control in decision-making. Moreover, the exclusion of the local population from the processes of creating protected areas has contributed to the decades-long standstill. Contrary to what has happened in many European countries (Beunen & de Vries 2011; Cent et al. 2013; Borrass 2014), the arrival of the N2000N was not a consequence of social pressure. Although in our case study the population acknowledges that existing natural values are worth protecting (as seen in the results section), there is no active local motivation for the design-

nation of natural areas in general or of the N2000N in particular. Rather, we see an attitude that is both sceptical and passive about the relevance of belonging to these natural areas.

In comparison with the first designations in Europe of N2000N sites, implementation in Galicia was characterized by delay. The site was first identified when the list of SCIs for the Atlantic biogeographical region was published in 2004, about 14 years after the earliest SCIs (early 1990s). Furthermore, unlike what happened in most N2000N sites (Turnhout et al. 2015), the techno-scientific criteria of the 1990s do not seem to have been the basis for the protection of these mountains. Neither the participatory approach of the 2000s nor the sustainable development approach of the 2010s (as discussed by Ferranti et al. 2014) characterized the implementation of the network in Queixa-San Mamede. Rather, it was the political-technical criterion that was decisive and predominant in complying with EU requirements. As Loefflerink et al. (2011) discuss, there was no negotiation between the regional government and local actors, despite the fact that there could in this case have been a more bottom-up approach.

The N2000N in Queixa-San Mamede is not based on pre-existing protected areas, which differentiates it from other places (Herrero 2008); excluding the Invernadeiro NP, it was created entirely *ex novo*. Conversion of the entire N2000N area into a single NP, a project proposed in 2005–2009, and discussed at the time in the local press,³ was finally rejected politically. The interviewees, in fact, had no recollection of this initiative. This potential (expanded) area, if designated specifically as a Natural Park, would correspond more closely in geographical extent and scientific interest with what is possibly the most common protection instrument in Spain (Troitiño 1995; Paül 2017; Cidrás & Paül 2021). Given the undeveloped socio-economic character of these mountains, as an NP the area would have been an undoubtedly valuable asset, as has proved to be the case for similar areas throughout the Iberian peninsula.

Conclusions

Despite the fact that protected areas have been the main conservation instrument for 150 years, in Galicia their incidence has been very low, mainly due to a lack of political interest. However, the arrival of the N2000N brought in changes, notably the creation of Macizo Central SAC. Nonetheless, the protection of these mountains is seriously inadequate, as is openly acknowledged by many of the participants interviewed in this research.

The analysis of the case of Queixa-San Mamede, moreover, shows that the local population is largely de-

³ The archives of the Ministry of the Environment house an unpublished document, dated 2009, which proposed designating the NP (SAYFOR 2009).

tached from environmental policies, and the top-down manner in which policies were implemented means that the policies lack impact in terms of local development. While the implementation of the N2000N in Queixa-San Mamede passed off unopposed, it did, theoretically allow for possible alternatives, but none were put forward. The main consequence is that the N2000N remains largely unknown today. While the populations living in these mountain ranges used to decide their daily lives, their futures are now directed by (mainly regional) politicians.

This mountain massif represents an area that is protected on paper. Ironically, however, protected status is perceived by the local population as limiting, while the area itself is perceived by environmentalists as still unprotected. In this context, the recognition and any further extension of the NP are potential sources of both conflict and ambivalent attitude. The potential (expanded) NP could, however, be an interesting option for this territory as a catalyst for revitalization.

While the implementation of the N2000N came late to this part of Galicia, it introduced a new paradigm for the region. However, although the EU requirements helped these mountains, the decision-makers seem unable to meet the socio-environmental and cultural needs that would favour the conservation and consolidation of a territorial identity that is in decline and in danger of disappearing.

For all these reasons, this article opens the door to rethinking conservation in a declining area of mountains in Europe. In Queixa-San Mamede, alternatives for re-designing the N2000N could be studied in depth. This would require a combination of substantial locally-based academic research coupled with a key role for local communities.

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