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opinion

Political erosion dismantles the conservation network existing in the Canary Islands

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Abstract. The outstanding nature of the Canary Islands has been recognized by European, national and regional administrations since the arrival of democracy in Spain. Forty-five per cent of its emerged territory has been declared as Natural Protected Areas, four Canarian National Parks were included within the Spanish network, more than 200 endemics were listed in the Spanish catalogue of endangered species, and 450 species were listed in the Canarian catalogue of protected species. However, in recent years, political decisions have started dismantling this splendid conservation network, which impedes construction of large infrastructure, golf courses and resorts, despite the advice of the scientific community. Canarian nature is now facing two threats: delisting and downgrading of numerous endangered species, and transfer of the management of Canarian National Parks to the regional administration.

Keywords: Biodiversity loss, endangered species, National Parks, natural protected areas, political corruption, scientific community, species delisting

Recently the Canarian Parliament has approved a new version of the Canarian catalogue of protected species (see Box 1) that reduces substantially both the number of species included (from 466 species in the 2001 list to 361 species in the 2010 list) and the protection afforded (from 381 threatened species to 160, and from 85 protected species to 18). These reductions have been widely criticized by environmental NGOs and the local scientific community[1], mainly due to the absence of a rigorous scientific process in its development. Although certainly the first version of the catalogue could be improved, the main reasons behind the new revisions were not conservation issues but rather strictly political. The reasons may include, for instance, the development of large infrastructures, such as industrial harbours and golf courses, which until the revisions were forbidden due to their impacts on protected species included in the original version of the Canarian catalogue.

Changes in the environmental legislation of the Canary Islands entail a serious threat to the nature of this region of biogeographical interest (Francisco-Ortega et al., 2000; Juan et al., 2000; Fernández-Palacios & Whittaker, 2008). Thus, we believe it is important to share our appraisal of the current situation with the international scientific community.

Within the new revised catalogue a completely new criterion for protection has emerged *"especies de interés para los ecosistemas canarios"* (literally: "*species of interest for Canarian ecosystems"*), comprising 152 species (see Box 1). The phrase is poorly chosen. It is supposed to apply only to endangered species, consequently the frequent and abundant species which usually structure and dominate the ecosystems are explicitly not listed, leading to a curious paradox: the Canarian pine (*Pinus canariensis*) is not a species of interest for the Canarian pine forest, the Macaronesian Laurel (*Laurus novocanariensis*) is

1. See different reactions at http://www.nodescatalogacion.com, http://www.wwf.es, http://www.greenpeace.org, http://www.atan.org, http://www.ecologistasenaccion.org, http://especiesamenazadascanarias.blogspot.com, http://ecooceanos.blogspot.com, http://www.seo.org, .

Box 1

Law 4/2010, June 4, of the Canarian Catalogue of Protected Species (see the original Spanish text at http://www.gobiernodecanarias.org/boc/2010/112/)

Article 3. Canarian protected species

2) Species of interest for Canarian ecosystems

The Canarian Catalogue of Protected Species will also include "species of interest for Canarian ecosystems" which are those that, without being listed in the threatening situations above (endangered or vulnerable), are worthy of particular attention for its ecological significance in areas of the Canarian Network of Natural Protected Areas or Natura 2000 network.

2. Effects of inclusion in the Catalogue

b) The legal regime for protection of "species of interest for Canarian ecosystems" will be applicable only in the territory of the Canarian Network of Natural Protected Areas or Natura 2000 Network. To this end, applicable measures shall be provided by the management plans of Natural Protected Areas and Habitats of the Natura 2000 Network in which they are located. Such plans shall include the determinations, control and monitoring to ensure effectiveness of protection, or where applicable, the justification that there is no need for plans. (...) In the case of actions promoted by reasons of public interest and priority affecting the "species of interest for Canarian ecosystems" these actions could be possible as long as they do not affect the ecosystem substantially, under the terms in paragraphs 4 to 7 of the Article 45 of the Law 42/2007, December 13, of Natural Heritage and Biodiversity.

not a species of concern for the Laurel forest, and so on. This is not to say that the most common structuring species of the Canarian ecosystems have to be included in the catalogue, but we would like to draw attention to the inadequacy of the concept.

But this conceptual shortcoming pales in comparison with the real repercussion of the new criterion, which is that those species listed here are only protected if present in an already designated Natural Protected Area (NPA). (In the Canaries, that means in either the Canarian Network of NPAs or the European Union Natura 2000 Network, which overlap extensively). If a listed species, for instance the woodcock (*Scolopax rusticola*) or the coot (*Fulica atra*) which are both included under the new criterion, dwells within the limits of the protected area they are safe; but if any birds cross those limits (which are not that obvious to birds, unfamiliar as they are with GIS), they can be shot legally by hunters. The same inconsistency affects, for instance, ca. 10 endemic species of sea lavenders (*Limonium* spp.) protected in certain ravines, but not in others.

The new law could have negative implications for conservation biogeography, and this can be illustrated with some examples of the Canarian flora and fauna. The endemic legume *Cicer canariensis*, previously considered as vulnerable in the 2001 Canarian catalogue, is now included under the criterion species of interest. From its 12 locations (ten in La Palma and two in Tenerife), the six populations in the North of La Palma[2] are outside NPAs and therefore unprotected according to the new law. Metapopulation dynamics in this species could be affected by this new criterion if source populations within these northern locations are threatened, endangering sink populations included in NPAs. The same could apply to the Abalone or Canarian clam (*Haliotis tuberculata* ssp. *coccinea*) or the Sea Horse (*Hippocampus hippocampus*). Both are marine species with sparse populations in the meso- and infra-littoral, which do not always coincide with the geographical location of the marine Special Areas for Conservation, which occupy mainly leeward fringes on the Archipelago's coasts. Collection and capture of both species is prohibited by the Regulation of the Fish-

2. According to the evaluation of this species by the Canarian Government (Servicio de Biodiversidad 2009), there are six population nuclei in the North of La Palma, distributed in three locations more than 10 km distant one from each other.

eries Law of the Canary Islands, but their inclusion in the new criterion may lead to confusion on the fishing ban in populations outside of the reserve networks.

The case of the sea grass *Cymodocea nodosa* is of particular interest for two reasons; this species structures a community (*"sebadales"*), considered as Natural Habitat of Community Interest by the Habitats Directive, and its presence in the littoral zone is one of the main obstacles to the construction or enlargement of harbours. The most recent is the *Puerto de Granadilla*, where conservation of a European priority ecosystem comes into conflict with European funding of a large infrastructure. The *sebadales* are a key community from an ecological point of view as they play an important role in the carbon cycle, stabilize sandy soils, export biomass and act as a fish nursery area (Barberá et al. 2005). The latter characteristic is also very important for the sustainability of local fisheries. Also, the marine meadows of *C. nodosa* in the Canary Islands and Mauritania are the most extensive examples at the species' southern limit and compromising them may therefore lead to range contraction. The construction of *Puerto de Granadilla* will severely damage one of the most genetically diverse patches of *sebadales* in the Archipelago (Alberto et al. 2008). In 2009, as a precautionary measure, the Superior Court of Justice of the Canary Islands suspended the proposal submitted by the Canarian Government, the Port Authority and the Canarian Company of Gas Transportation, to delist *C. nodosa*[3]. Currently, the European Courts have declared admissible the complaint filed by the NGO *Ecologistas en Acción* asking for the public release of documents that included alternatives to the construction of the harbour (including a renewal of the infrastructures of already existing harbours), that were hidden from the European Commission by Spain's National Government.

This controversial criterion — *especies de interés para los ecosistemas canaries* — is an adaptation of the criterion *"species susceptible to habitat disturbance"*, from the previous catalogue. In fact, many of the species of interest come from the former list of *susceptible* species or are downgraded threatened species. However in the former criterion there were no restrictions in the protection, such as the location or not in a NPA, and the main consideration to include a species was that its habitat was threatened, in regression, fragmented or limited. The previous criterion for protection was much more appropriate if we think about the design of the Canarian Network of NPAs. Unfortunately the Canarian Network was not based on a thorough analysis of metapopulation dynamics, genetic diversity or viability of populations, but simply in protecting less degraded remnants of communities that were still available. As in many parts of the world, reserves were not designed to meet the principles of systematic conservation planning needed to achieve representativeness and persistence of biodiversity (Margules and Pressey 2000). The situation further worsens in the Canaries when data, trends and viability of populations are almost unknown.

The Canarian Network is largely protecting species from marginal populations. Moreover, the protection of species present only in the current Reserve Network inhibits re-establishment of original distributions. A good example is the laurel forest in Anaga Rural Park, which nowadays is the best representation of this forest type in Tenerife yet still an impoverished fraction of its past distribution throughout the windward slope of the island. From the point of view of mitigating the effects of global change, vulnerability of certain species outside the Network would hinder altitudinal migration, especially when ecological corridors are not included in the design of NPAs.

The practice of protecting taxa only in NPAs is already working in Catalonia (the only precedent in Spain). The Catalonian Plan of Areas of Natural Interest includes species of flora and fauna strictly protected in designated areas. To our knowledge no cases of the failure of these practices or public disapproval have been reported there, but we suspect that the species with restricted protection in the Catalonian NPA Net-

3. See news in http://www.laprovincia.es.
4. See http://www.laopinion.es, http://www. ecologistasenacción.org.

work were not demoted from higher protection. In theory, the main aim of the existence of regional catalogues is ensuring the protection of particular species that are not considered by the National Catalogue. On the other hand several authors have questioned and analysed the effectiveness of NPAs Networks in biodiversity conservation (Jaffre et al. 1998, Rodrigues et al. 2004) and concluded that reserve networks are geographically and taxonomically unbalanced leaving a big proportion of endemic and threatened species unprotected.

This way of thinking may function well when protecting a resource, for instance marine sanctuaries are intended to increase catch in neighbouring areas outside, and this works competently in the Canaries' Marine Reserves with Fishery Interest, but is nonsensical when the aim of the declaration is to protect a threatened species. If a species is protected when within a NPA, but unprotected when beyond the area, what is really achieved in terms of protection? Might it be too cynical to suggest the greatest achievement would be the political goal of inflating the number of species included in the catalogue thus reducing the number of critics of delisting? Despite numerous public protests and the clear opposition of the majority of the Canarian scientific community, the new catalogue was presented by the leading political force in the Regional Parliament. These kinds of conflicts are not exclusive to the Canary Islands and are nowadays taking place in different regions of the world (Possingham et al. 2010, Metzger et al. 2011).

If the delisting itself is not of sufficient concern, other news makes the outlook even bleaker. The Canaries harbour four of the 13 National Parks (NPs) in Spain – *Cañadas del Teide* (Tenerife), *Caldera de Taburiente* (La Palma), *Timanfaya* (Lanzarote) and *Garajonay* (La Gomera) – despite representing only 1.5% of the country's geographical area. After decentralization of the Spanish State with the arrival of the democracy, the NPs were simultaneously co-managed by the Central Government (Madrid) and the Regional Governments. However, the Spanish Constitutional Court now has determined that NPs management is exclusively a matter for the Regional Governments. Consequently the Central Government has transferred all management to the regions. In the case of the Canarian archipelago, this management was intended to be subsequently delegated to the respective island Councils ("*Cabildos*") in 2012, although recently the new deputy of Environment of the Canarian Government expressed her intention to discuss again this transfer and to limit the management of the island Councils in the NPs.

The transfer to regions is not inherently bad, and for instance would work exceptionally well in Northern European countries. The problem is not the law but how it is developed when the main political parties that govern in the Canary Islands show no interests in conservation, and an alarming number of its politicians, including some who have significant responsibilities in conservation, have been charged with environmental crimes[5]. Although some implications of decentralization should be positive, for instance the creation of regional lists and plans considering the particulars of each NP or the proximity to local specialists and technicians with a wider knowledge of the region, the result is exactly opposite. With the proximity of the management centres to the NPs, the likelihood of patronage and corruption seems likely to increase while unification of conservation criteria across the archipelago's four NPs seems destined to decrease, especially if the different island Councils are governed by different political parties, which is currently the case. In addition, joint management of the NPs and the other NPAs in each island would dilute the rigor and resources

5. See press references in http://www.abc.es/20100322/canarias-canarias/tres-imputados-coronan-nueva-20100322.html (last accessed August/2011); http://www.canarias-semanal.com/elhierro.html (last accessed August/2011); http://www.eldia.es/2011-04-13/CANARIAS/5-Es-frecuente-alcaldes-esten-imputados-delitos-urbanisticos.html (last accessed August/2011); http://www.elpais.com/articulo/espana/corrupcion/presenta/elecciones/elpepiesp/20110410elpepinac_1/Tes (last accessed August/2011); http://www.europapress.es/islas-canarias/noticia-imputados-canarias-logran-mantenerse-instituciones-20110524094822.html (last accessed August/2011) .

dedicated to NPs. Considering that budgets are not fixed this would imply that funding to manage the NPs could eventually be used in other tasks, more consistent with the "needs of the moment". A recently created Commission of Canarian NPs, constituted mainly of politicians and with only two advocates for environmental issues, left aside the present directors and conservators of the NPs. It could also happen that once transferred to the Councils, the election of new directors will not consider the balance between conservation and management skills that such position requires.

The island Councils are already in charge of the management of the Canarian Network of NPAs. While some of these areas have been actively managed others lack any type of control. The situation of similar NPAs varies among islands and for most the action plans have been partially or barely fulfilled, so that nowadays (more than ten years after its declaration) it is still easy to find dumps, illegal constructions, invasive species, together with other potential emerging threats. Despite the capacity and good work of environmental technicians, who struggle with budget cuts every year, the Councils have demonstrated a trajectory of inefficiency and lack of commitment to the management of NPAs. Within the new Canarian NPs framework, the rabbits will receive the responsibility of taking care of the lettuces.

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