

(3) Environmental Justice, Ethics and Values

- Political ecology and ecological conflicts

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IGNORANCE AND UNCERTAINTY IN CONSERVATION CONFLICTS: SOLUTIONS FROM EUROPEAN UNION BIODIVERSITY POLICIES

Conflicts in conservation often include aspects of ignorance and uncertainty. This paper concentrates on conservation conflicts dealing with at least one of these aspects and occurring in connection with the Birds Directive and the Fauna-Flora-Habitat-Directive of the European Union. It shows practical solution examples of such conflicts regarding species conservation as well as habitat conservation based on several judgements of the Court of Justice of the European Union.

The methodology applied is an in-depth analysis of more than hundred judgements of the Court of Justice of the European Union released since 1984. The judgements are in particular assessed with regard to situations where the Court had to decide based on a total lack of information about future developments as well as on withstanding opinions on technical matters.

The analysis shows regarding ignorance in habitat conservation that the Court applied the precautionary principle on conflicts inside and even outside of protected areas in order to

prevent any deterioration of the species and their biotopes. Concerning ignorance in species conservation no such application could be found yet.

Regarding uncertainty, the Court applied in habitat as well as species conservation the instrument of the distribution of the burden of proof while - by doing so - he also partly refers to the precautionary principle. The Court uses existing formal rules as well as – if there are no such rules available – creates innovative new rules in order to distribute the burden of proof and its extent among conflicting parties. This is done based on criteria such as the narrow interpretation of exemptions, the general availability of scientific proof concerning the asserted theme, the effectiveness of conservation and the absolute lack of any possibility to prevent damage.

These results of the paper summarize for the first time based on several practical examples main problems and solutions related to ignorance and uncertainty within conflicts related to species and habitat conservation in the case law of the European Union. The approaches applied in these judgements by the Court of the European Union can widely serve as a pattern for parties and decision makers during similar conflicts in other world regions as well as for legislative bodies there providing the legislative basis of such decisions. The outline of the paper is as follows;

1. Introduction: Aim and method
2. Overview on EU, ECJ and definitions of ignorance & uncertainty
3. Ignorance & Uncertainty in habitat conservation
4. Uncertainty in species conservation
5. Conclusion

1. Introduction

The aim of the paper is to show pattern of practical solutions for dealing with ignorance and uncertainty within conservation conflicts regarding species and habitat conservation through structured and comprehensive assessment of jurisdiction based on an in-depth review of more than 100 cases decided in practice since 1985 by the Court of Justice of the European Union (EU).

2. Overview

This intensity of the regional integration within the EU is unique in the world. Member States of the EU gave up a wide part of their sovereignty with their accession to this regional integration organization. Nowadays, they are subject to the jurisdiction of the European Court of Justice (ECJ) also in EU-related environmental matters. The EU covers also conservation issues in their autonomous legislation. These are in particular the Birds –Directive¹ and the Habitats Directive² which cover Species conservation and Habitat conservation including Natura 2000 respectively. This legislation was already in far more than 100 cases since its release subject of the interpretation by the ECJ. Within several of them the ECJ had already to deal with ignorance, uncertainty and risk.

These three terms will be used in the following manner within this paper (based on Faber et al. 1996, 212):

Ignorance: *if not all results of future happening are known* (e.g., future adaptations/genetic modifications of species)

¹ EEC (1979) Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds. Official Journal L 103, 25/04/1979, 1–18 and its amending acts, recently replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version); Official Journal of the European Union (OJEU) 26.1.2010 L 20/7.

² EEC (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal L 206, 22/07/1992, 7–50 and its amending acts.

Uncertainty: *if potential results are known, but probabilities are not known* (e.g., expedition into a yet unexplored rainforest site)

Risk: *if all potential results are known, and also their probabilities* (e.g., horse race)

3. Ignorance on conservation status outside and inside of reserves

Article 3 and 4 of the Birds Directive contain several conservation duties of the Member States to protect areas on behalf of birds inside and outside of Special Protection Areas – SPAs respectively (Mauerhofer 2010; Iojă et al. 2010). Such SPAs play a major role in the reserve policy of the EU (Mauerhofer, 2010) addressing the Member States such as seen in a case which was brought forward by the Commission against Spain (C-355/90). The ECJ stated in this case that '*...The obligations on Member States under Articles 3 and 4 of the directive therefore exist before any reduction is observed in the number of birds or any risk of a protected species becoming extinct has materialized*' {Para 15}, confirmed explicitly in case 117/00 for all species in areas outside of reserves protected by Article 3 Birds Directive}. This shows clearly an application of the precautionary principle for cases of ignorance. Effective conservation measures have to be taken in order to prevent any threat, known or unknown, leading to a reduction in the number of birds. Of course, the question comes up how to react against unknown threats and therefore how to counteract against ignorance.

3.1. Uncertainty in selecting sites

The ECJ gave also rulings regarding uncertainty in selecting site. This started with very general prescriptions on the overall number of sites to be designated under Article 4 of the Birds Directive and has been recently concretized down to the level of individual species.

In general, Article 4 of the Birds Directive obliges the Member States to classify in particular the most suitable territories in number and size as Special Protection Areas (SPAs) for the conservation of migrating species and species listed in Annex I of this Directive. Therefore, their protection requirements have to take into account the geographical sea and land area where the Birds Directive applies.

The first case of several in this connection took place against the Netherlands (C-3/96). Therein, the ECJ applied as benchmark the so-called Important Bird Areas (IBA) – inventory achieved by an NGO in providing the scientific evidence on the Special Protection Areas where Member States fail to provide such proofs. The ECJ stated in this case regarding such an inventory from the year 1989 (IBA89) that *'(i)n the circumstances, IBA 89 has proved to be the only document containing scientific evidence making it possible to assess whether the defendant State has fulfilled its obligation to classify as SPAs the most suitable territories in number and area for conservation of the protected species. The situation would be different if the Kingdom of the Netherlands had produced scientific evidence in particular to show that the obligation in question could be fulfilled by classifying as SPAs territories whose number and total area were less than those resulting from IBA 89'* (para. 69f).

Afterwards, the Court used similar words in its holding on the Birds Directive for example in the case 240/00 between the Commission and Finland as well as in the cases C-378/01 and C-235/04 between the Commission and the Republics of Italy and Spain, respectively. Partly, it based its decision therein already on the successor inventory, namely the IBA 2000.

In all these cases, the ECJ did not have to go into detail. However, this changed in the case C-334/04 against Hellenic Republic (Greece) regarding the failure alleged by the Commission to classify areas of importance for the conservation of birds. In this case the ECJ ruled – beside the well-known general formulation firstly used in the case against the Netherlands –

down to the species level. Thus, besides an overall failure by Greece to implement the classification duty, the ECJ also stated that one species is not represented in any special protection area and 11 species are insufficiently represented (C-334/04). This shows that the ECJ does not even refrain from entering into the ‘battlefield of scientific facts’. This was even more surprising in particular with regard to the different proof which was brought forward by the two parties of the case concerning the uncertainty about the extent of occurrence for the 11 species, finally considered to be insufficiently represented by the ECJ.

3.2. Uncertainty about changing boundaries of designated sites

Once protected areas have been designated within the framework of Natura 2000, Member States continuously intended to reduce or alter the boundaries. But the ECJ made it clear in a judgement against Portugal that in these cases a Member State does not have the same discretion such as during selection because that State has to prove that suitability for conservation falls away and/or site was not suitable from the beginning (C-191/05, paragraph 13). However, an Appropriate Assessment based on Article 6 (3) of the Habitat Directive regarding such a change of the borders is possible.

3.3. Uncertainty on implementing an Appropriate Assessment

The ECJ took a similar position in comparison to reducing or altering SPAs, when it comes to uncertainty whether an Appropriate Assessment has to be implemented or not. It has decided based on Article 6 (3) of the Habitat Directive in a preliminary ruling that *‘any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site’s conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or*

projects‘ (C-127/02, para 45). Again any discretion of the authority is excluded. Without any objective information proving the opposite, the authority has to implement an Appropriate Assessment.

3.4. Uncertainty in granting permission

The situation just described concerns the question whether or not an Appropriate Assessment shall be implemented. With the situation described in the following, the Appropriate Assessment has already been implemented. Now, the authority has to decide whether the permission shall be granted or not. The legal basis for that decision is clearly explained in Article 6 (3) of the Habitat Directive. According to this norm, the competent national authorities, taking account of the appropriate assessment of the implications of certain plans and/or projects for the site concerned in the light of the site’s conservation objectives, are to permit such an activity only if they have made certain that it will not adversely affect the integrity of that site. According to the ECJ in the case mentioned before against the Netherlands, this authorization criterion ‘*integrates the precautionary principle*’ (C-127/02, para. 58). In the same ruling the ECJ stated that there should concerning the absence of such adverse effects ‘... *no reasonable scientific doubt remain.....*’be (para 61). Hence, bringing forward just one such doubt should keep the public authority away from granting the permission (apart from the next steps of that procedure described in Art 6 paragraph 4 Habitats Directive). Article 7 Habitats Directive applies this interpretation in the sense of the Precautionary Principle even also on those sites which have been designated as Special Protection Areas under Art 5 of the Directive.

4. Uncertainty on effective implementation of strict species conservation system

The cases described up to now all dealt with the maintenance or restoration of habitats of wild species. But the Birds and the Habitats Directives of the EU also address the issue of uncertainty regarding the conservation of wild species as such. Several judgments of the ECJ already exist in this connection. They concern in particular the Articles 5 to 9 Birds Directive and Articles 12 to 16 Habitats Directive. These articles mainly cover the concrete conservation of wild bird species and other wild animal species as well as wild plants respectively.

4.1. Uncertainty about the existence of a strict species conservation system

Article 12(1) of the Habitats Directive requires Member States to take all the requisite specific measures for effective implementation of the system of strict protection. By interpreting this Article the ECJ found in the case against Ireland (C-183/05 para 30) that a Member State has to proof on '*the adoption of coherent and coordinated measures of a preventive nature*' for effective protection not only "*the existence of a network of full-time rangers and officers responsible for monitoring and protecting species*". Furthermore, the ECJ ruled that '*(a)s noted by the Advocate General in point 24 of his Opinion, the transposition of Article 12(1) of the Directive requires the Member States not only to adopt a comprehensive legislative framework but also to implement concrete and specific protection measures ...*' {Para 29}'. Finally, the ECJ highlighted the precautionary principle in the case against Ireland in the following way: '*(s)imilarly, the system of strict protection presupposes the adoption of coherent and coordinated measures of a preventive nature (Case C-518/04 Commission v Greece, not published in the ECR, paragraph 16)*' {Para 30}. By emphasizing the 'preventive nature' of the measures to be taken, it can be assumed that here, the ECJ applies a similar benchmark than in the habitat-related cases cited above. Thus, measures

have likely to be taken before any quantitative or qualitative decline is observed and any threat or risk has materialized.

4.2. Uncertainty due to unsubstantiated assumptions

On the other hand, it can be concluded that the Commission of European Union has to provide more than assumptions to the ECJ on circumstances threatening wild species. This was so in a case against the Kingdom of Spain concerning the Iberian Lynx (C-308/08) where the ECJ sought to interpret the provisions of Article 12 (4) of the Habitats Directive. This norm provides that *'Member States shall establish a system to monitor the incidental capture and killing of the animal species listed in Annex IV (a). In the light of the information gathered, Member States shall take further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned.'* The Iberian lynx which is found only in Spain is among the species listed in Annex IV (a) to the Habitats Directive. The facts of the case concerned the incidental killing of the Iberian Lynx by vehicles along a road in Spain (Para 57). Spain was able to prove that it continues to study new measures capable of improving the conditions for conservation and improvement of species as provided in Article 12 (4) of the Habitats Directive (Para 59) and the court agreed with it and dismissed the case filed against Spain. Similarly, in an earlier decided case against Ireland (C-183/05), the court ruled out presumption by holding that *'In that regard, it must be borne in mind that, according to settled case-law, in an action for failure to fulfil obligations brought under Article 226 EC it is for the Commission to prove that the obligation has not been fulfilled without being able to rely on any presumption (Case C-221/04 Commission v Spain [2006] ECR I-4515, paragraph 59 and the case-law cited){Para 39}*. Concrete evidence is also required to prove a breach of the provisions above thus *'(I)n the present case, it must be held that the*

Commission has not put forward any concrete evidence to substantiate the seventh part of its second complaint (Para 40}’.

4.3. Uncertainty on deliberativeness of species killing/catching

Another case against Spain (C-221/04) concerned the deliberativeness of killing/catching of wild species prohibited also by Article 12(1) (a) Habitats Directive. Therein the Commission had to proof deliberate action regarding the killing of a protected species through a specific hunting method (snares) mainly addressing a non-protected species. The Commission failed even to prove that the protected species occurred in the area wherein the hunting method was applied, but the Court required that “... *it must be proven that the author of the act intended the capture or killing of a specimen ... or, at the very least, accepted the possibility of such capture or killing*” (C-221/04,Para.71). Although the ECJ consequently dismissed the action this interpretation given of deliberativeness can be considered important because rather broad. As for example in comparison with the Austrian Criminal Law Act, it covers even the slightest extent of intentional behaviour. While in the sense of that Act ‘deliberativeness’ is only the middle of three gradual forms of intentional behaviours. Thus, the proof of deliberativeness in the ECJ’s interpretation could be achieved rather easily.

4.4. Uncertainty on deliberativeness in species disturbance

In the following, another example is provided wherein the Commission of the EU succeeded in bringing forward the extent of proof required by the ECJ.

This happened in the case (C-103/00) against Greece. The Commission asked the ECJ to condemn Greece for failing to fulfil her obligations under Article 12(1) (b) and (d) of the Habitats Directive by failing to offer strict protection to the sea turtle *Caretta caretta* so as to avoid disturbance of the species during its breeding period. The Commission could – based on a field visit - bring forward evidence on the presence of pedalos and small boats around

two breeding beaches coupled with the presence of illegal buildings on another breeding beach. The Greek Government did not dispute the accuracy of those findings.

The ECJ then concluded that the use of mopeds as well as the presence of pedalos and small boats constitute the deliberate disturbance of the species in question during its breeding period for the purposes of Article 12(1)(b) of the Directive {Paras 32-36}. And the existence of illegal buildings he considered as liable to lead to the deterioration or destruction of the breeding site within the meaning of Article 12 (1) (d) of the Directive {para 38}.

4.5. Derogation from species protection and the burden of proof

Article 12 (1) Habitats Directive prohibits all forms of deliberate capture or killing of specimens of the species in the wild while Article 16(1) allows the member States to derogate from the strict provisions of Articles 12, 13, 14 and 15 subject to certain preconditions such as to prevent serious damage to crops, livestock and other types of property. An explicit precondition laid down in Article 16 paragraph 1 Habitats Directive is that “*the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range*”. Despite this clear wording, the ECJ ruled differently in a case against Finland (C-342/05). This case was brought against the Republic of Finland under Articles 12(1) and 16(1) of the Habitat’s Directive for hunting wolf which was considered to be in breach of the said provisions. Therein, the ECJ decided that , a Member State which wants to hunt a certain species despite “*unfavourable conservation status*” has in general to prove that the grant of such derogations “*are not such as to worsen the unfavourable conservation status of those populations or to prevent their restoration at a favourable conservation status*” (C-342/05, par 29). But nevertheless, the ECJ found that ‘*...by authorising wolf hunting on a preventive basis, without it being established that the hunting is such as to prevent serious damage within the meaning of Article 16(1) (b) of the*

Habitats Directive, the Republic of Finland has failed to fulfil its obligations under Articles 12(1) and 16(1)(b) of that directive;...(Para 47). Thus Finland managed to prove that the derogation did not worsen the unfavourable conservation status of those populations or to prevent their restoration at a favourable conservation status. But it failed to provide sufficient evidence for another precondition, namely the effectiveness of the hunting.

In summary, according to the ECJ the burden of proof shifts to the Member State in case of the uncertainty on the development of an unfavourable conservation status through a derogation applied for.

4.6. Uncertainty on numbers of derogations from species conservation

As already mentioned, Article 9 Birds Directive provides the basis for granting derogations from the species conservation norms of this Directive. Important criteria are therein the restriction of derogations to “*small numbers*” and “*effected populations*”. The Member States of the EU are in this connection increasingly challenged by findings of the ECJ. Because, the Court has already defined “*small numbers*” and “*effected populations*” based on recommendations of the so-called ORNIS-Committee (see e.g., C-79/03 paragraph 36, and Case C-344/03, paragraph 53). This is the Committee for the Adaptation to Technical and Scientific Progress instituted under Article 16 Birds Directive, consisting of representatives of the Member States and chaired by a representative of the Commission of the EU’.

In all these cases (C-79/03 paragraph 36, C-344/03 paragraph 53) the ECJ decided that the definitions of the ORNIS Committee are not legally binding; but by reason of scientific value of the work of the ORNIS Committee and absence before the Court of any element of scientific proof to the contrary, ORNIS Committee work forms a basis of reference for

assessing. Thus, the Member States have the burden of proof to change the definitions brought forward by the ORNIS Committee and accepted in these judgements by the ECJ.

5. Conclusions

The European Court of Justice applies “ignorance” in the sense of precautionary principle in- and outside of protected sites and decides cases under uncertainty mostly “*in dubio pro natura*” (when in doubt, favour nature). Similarly, de Satelaar (2007:3) states that ‘...pursuant to the precautionary principle, authorities are prepared to tackle risks for which there is no definitive proof that the damage will materialize.’ The ECJ has continued to apply the principle even in instances where there has been no concrete knowledge of the any perceived risks to the protected sites.

Similar is valid for the ECJ’s rulings whether for Natura 2000 sites an Appropriate Assessment pursuant to Article 6 Habitats Directive for certain plans and projects has to be implemented and whether these activities afterward can be approved by the authorities or not. Also in these two cases the ECJ puts “*in dubio*” the burden of proof respectively on the shoulders of the developer which reflects again the precautionary principle for cases of uncertainty (Mauerhofer, 2008a).

Regarding species conservation, the European Commission bears the at least burden to prove mostly the probability/likelihood of damage and deliberativeness in each case. With the wide meaning of deliberativeness as discussed above, it should be quite easy for the Commission to establish this evidence. Thus, the Commission should be usually able to put forth a water tight case which fosters the implementation of the provisions of Article 12 (1) of the Directive.

According to ECJ, Member state has to bring forward mostly the full scientific and factual proof of effective protection as provided for under Article 9 of the Habitat Directive with no negative impact. In case a Member State is not able to provide such scientific evidence, ORNIS Committee work forms the basis of the court's findings. This is according to de Sadelaar (2007:3) because '*...absence of scientific certainty as to the existence or the extent of a risk should henceforth no longer delay the adoption of preventive measures to protect the environment.*'

In summary, the ECJ ruled already in a wide range of cases on issues of ignorance and especially uncertainty. These decisions cover both, habitat as well as species conservation. In the habitat conservation cases also the issue of ignorance can be found to some extent included. While ignorance receives broad attention by the ECJ in habitat as well as species conservation. For both working field the precautionary principle is widely applied by the ECJ. The distribution and the extent of the burden of proof is a main element in all cases when the ECJ has to deal with ignorance and uncertainty.

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References

Cashman, L., 2006. Commission Compliance Promotion and Enforcement in the Field of Environment. *Journal for European Environmental and Planning Law* 5, 385–394.

Faber, M., Manstetten, R., and Proops, J., 1996. Humankind and the Environment: An Anatomy of surprise and ignorance. In: Faber, M., Proops, J. (Eds.), *Ecological Economics: Concepts and Methods*. Edward Elgar, Cheltenham, UK, pp. 205-230.

Ioja, C. I. Patroescu, M. Rozyłowicz, L. Popescu, V. D. Verghelet, M. Zotta, M. I. Felciuc, M., 2010. The Efficacy of Romania's Protected Areas Network in Conserving Biodiversity. *Biological Conservation*. 143 (11) 2468-2476

Mauerhofer, V., 2008a. 3-D Sustainability: an approach for priority setting in situation of conflicting interests towards a sustainable development. *Ecological Economics* 65, 496–506.

Mauerhofer, V., 2008b. Conservation of Wildlife in the European Union with a focus on Austria. In: Panjwani, R. (Ed.), *Wildlife Law: A Global Perspective*. American Bar Association (ABA) Publishing, Chicago, pp. 1–55.

Mauerhofer, V., 2010. Missing links: how individual's can contribute to reserve policy enforcement on the example of the European Union. *Biodiversity and Conservation* 19, 601–618.

Sadeleer N., 2007. Origin, Status and Effects of Precautionary Principle. In: Sadeleer N., *Implementing the Precautionary Principle, Approaches from the Nordic Countries, the EU and USA*. London, Sterling, VA, Earthscan, pp. 396.

Opdam, P.F.M., Broekmeyer, M.E.A., Kistenkas, F.H., 2009. Identifying uncertainties in judging the significance of human impacts on Natura 2000 sites. *Environmental Science & Policy* 12, 912–921.