

Innovative legal instruments for ecological restoration

GEERT VAN HOORICK¹

Abstract: Direct biotope protection linked with provisions integrating nature and landscape conservation interest in all permit and planning procedures, habitat banking and Ökokonto are important innovative legal instruments. They can make ecological restoration more effective by facilitating a proactive, eco-regional and market based approach. The management of nature and landscape in general can be enhanced by acquiescence obligations and voluntary but long-term instruments like public servitudes together with a greenfund.

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Introduction

The Birds and Habitats Directives force the member states firstly to take the necessary management measures (art. 6.1. Habitats Directive), and secondly to take compensatory measures for damage in cases in which negative plans or projects have been allowed because of overriding public interests (art. 6.4. Habitat Directive), both in order to ensure a favourable conservation status of certain species and habitats in the Natura 2000 sites (art. 3.1. Habitats Directive).

It is up to the member states to provide for appropriate policy instruments to fulfill their obligations. Since nature conservation legislation has a long history in all countries, there are a lot of traditional legal instruments – regulatory and voluntary – available such as expropriation, designation of protected areas and management contracts.

Recently, some innovative legal instruments have been developed, some in legislation adopted in certain member states, some not (yet) adopted but only in draft legislation made by specialists in environmental law. At the Ghent University (Belgium) the Centre for Environmental Law carried out a project for the Flemish government in order to draft an integrated legislation on nature conservation, landscape care, forests, wild flora and fauna, and hunting: the Preliminary Draft of the Flemish Nature Code. The results were published in a book (Van Hoorick et al. 2005) and translated in English (Van Hoorick et al. 2008). The draft was also partly based on comparative legal research about legal instruments for nature and landscape conservation (Van Hoorick 2000). In the framework of this conference it is interesting to examine the potential of these instruments for ecological restoration.

Materials and methods

In this contribution, which is based on the study of legislation and literature, I want to talk about some innovative legal instruments mentioned in that preliminary draft, and in existing legislation or policy in the Flemish Region, the Netherlands, Germany and the

¹ Department for Public Law, Centre for Environmental Law, Law Faculty, Ghent University, Universiteitstraat 4, 9000 Ghent, Belgium, geert.vanhoorick@ugent.be.

U.S.A.-These include direct biotope protection systems, instruments integrating nature and landscape interests in planning and permit procedures (including compensation), acquiescence obligations to enhance a sound management, and new more or less experimental legal techniques to improve compensation.

Results and discussion

Direct biotope protection

Area-based protection regimes require the designation of an area as a certain type of protected area in the legislation, such as national park, nature reserve, protected site, etc. to be applicable. By means of that designation a bunch of protection (and management) measures come into force on the designated land. The designation – which takes a lot of time to be prepared – is usually made by governmental regulation or decision. Sometimes the boundaries in the designation are not ecologically sound or, even worse, the designation itself remains absent, because of the unwillingness of politicians. Moreover, project developers, landowners and farmers often bring cases before the administrative courts to squash designation orders.

State of the nature reports in every country show that area-based protection goes too slow. In the Flemish Region for instance the administration responsible for landscape care estimated that at the current speed only by 2040 all valuable landscapes would finally be designated. In the meanwhile a lot of these landscapes may already be harmed or destroyed.

Therefore other instruments ensuring a stand-still of nature and landscape values are necessary. One of these instruments are direct biotope protection regimes. In the legislation certain types of biotopes are mentioned and they are all protected once the legislation comes into force: it is prohibited to harm or destroy them, except with a specific permit. It is the legislator's task to reach an agreement on which biotopes must be listed. Designation is not necessary but of course a kind of biotope register with maps can be very useful to monitor and enforce the protection regime. In Germany direct biotope protection was introduced in the Bundesnaturschutzgesetz in 1987, in the Flemish Region it has existed since 1991 (even in the old Town and Country Planning Act from 1962 heathlands and peatlands were protected) and it is very prominent in the Preliminary Draft of the Flemish Nature Code (Van Hoorick et al. 2005, 2008). One can think of the following biotopes: e.g. moorlands, heathlands, marshes, reeds, wet meadows, open dunes, dry grasslands, forests and bushes at dry and warm locations, fenwoods, marshy and riparian forests, open rock formations, alpine grasslands, etc. At least all habitat types from Annex I Habitats Directive must be on the list. The fact that a given biotope is degraded, does not exclude it from the protection regime. It is also important to bring smaller (and more common, but therefore not less important) landscape elements under the scope of such a regime, such as tree rows, hedgerows, ponds, etc. By adopting rules that require at least a compensation in case of destroying a biotope because of higher interests, a stand-still can theoretically be obtained. The German direct biotope protection regime brought with one article in the law more than 3 % of the surface under protection, which was more surface than with the creation of nature reserves during more than 50 years (Van Hoorick, 2000).

By directly protecting the biotopes, chances for ecological restoration increase. Instead of creating a new biotope from zero, one can ameliorate an existing (perhaps degraded) one by expanding it or by better management. Furthermore, one can more easily create an ecological network, thus improve the connectivity.

Integrating nature and landscape interests in planning and licensing

The really important planning and permit procedures are mostly laid down in other than nature conservation legislation. That other legislation, e.g. on town and country planning, on transport infrastructures, on classified installations, etc. does not frequently mention conservation interests as to be considered in the planning or permit procedure, and when it does it is unfortunately in a quite general way that leaves a very large discretion to the government. In the Flemish Region e.g. the building permit is issued in accordance with the spatial destination plans, and in principle it is not needed to take into account for instance the existence of an ecologically valuable biotope there. Therefore it is necessary that nature conservation legislation “*breaks in*” into those other legislations so that nature and landscape interests will be strongly integrated in the decision-making process, based on whatever legislation.

This can be done by introducing a regime on encroachments in nature and landscape in nature and landscape conservation legislation, in which those activities that can negatively affect nature and landscape, are mentioned, and if not yet subject to another permit procedure, made subject to a specific permit. Not only permit but also planning procedures are covered because the earlier in the decision-making process, the better the possibilities to take into account nature and landscape interests. The regime contains obligations for the operator and the government (= all public authorities) to avoid, mitigate and compensate damage to nature and landscape, if the project or plan is allowed, and obligations for the government to balance interests when deciding to adopt the plan or issue the permit. In case of very important nature and landscape interests -, only overriding public interest can justify an encroachment. A beautiful example is art. 6.3. and 6.4. of the Habitats Directive itself. But it is needed to extend such regimes to protect nature and landscape values outside (European) protected areas, and to apply them for instance in relation to direct biotope protection. That is the only way to obtain a stand-still, because otherwise a lot of nature and landscape elements will disappear without getting attention. In that respect the German “*Eingriffsregelung*”, which has existed since the enactment of the Bundesnaturschutzgesetz in 1976, is to be mentioned, and the extension to planning decisions in 1993 has made possible that in spatial planning even compensation zones must be introduced. Later, if a certain according to the plan allowed negative project is carried out, compensation becomes easier. In the Flemish Region, apart from protected areas, only a very weak (but better than nothing) “*Nature Check*” (in Dutch: “*natuurtoets*”) was introduced in 1997, obliging the government to avoid, mitigate or restore only avoidable damage to nature (the Belgian Farmers Union obtained that the same for unavoidable damage in the draft legislation, was omitted in the final version), when issuing permits (Van Hoorick 2000). The Preliminary Draft of the Flemish Nature Code (Van Hoorick et al. 2005, 2008) is a lot more straightforward in this respect and contains a whole chapter on the “*Nature and Landscape Check*” (in Dutch: “*natuur- en landschapstoets*”).

A regime on encroachments in nature and landscape, applied to planning and licensing, makes a proactive and eco-regional approach possible in project development related to ecological restoration.

Acquiescence obligations

The need to create an ecological network for nature conservation is obvious. The problem that a lot of species will not survive in “*green*” islands – even if they are bigger than before – in the middle of “*grey*” mass still exists. Natura 2000 cannot work if government does not pay attention to the binding corridors and stepstones (cf. art. 10 Habitats Directive). For those binding corridors and stepstones an adequate direct biotope protection and a nature and landscape check is very important. But also measures that enhance a sound management, inside Natura 2000 and of biotopes and landscape elements outside Natura 2000 are necessary, together with nature and landscape developing measures, e.g. creating new ponds, meadows, etc. Traditionally the creation of nature reserves, which provide a sound management by private nature conservation organizations or by the government itself, has been very important. Therefore it is often required to buy the land. But given the huge surface of Natura 2000, it is obvious that this can only be a solution for very vulnerable biotopes. Unfortunately it is not a solution for certain smaller landscape elements like hedgerows etc. Other instruments with a long tradition are management contracts. The problem is that they attract only a limited amount of farmers, are only temporarily, and are not suited for vulnerable or very management-intensive biotopes or landscape elements, e.g. chalk-grasslands, pollard willows. One must search for new instruments ensuring a sound long-term management, without confronting the landowner or user with time-consuming measures or high costs.

In that respect acquiescence obligations (in Dutch: “*gedoogverplichtingen*”, in German: “*Duldungspflichte*”) are very interesting. I remember that in a certain draft of EC-regulation on set-aside dating from the eighties, farmers were obliged to permanently set-aside 5 or 10 % of their land for nature and landscape. That measure never got through, but one must admit it is legally one of the easiest ways to create corridors and stepstones in the countryside. One step further is that the legislator provides that the landowner or -user must acquiesce certain (rather small) actions from the government. This can for instance mean that they must refrain from cultivation or plantation in a distance of 10 meters from an area of water and let the government do the management of that verge. Or they are forced e.g. to let the government create ponds or uproot exotic tree species (like the *Prunus serotina*), or place artificial nests, etc. The Preliminary Draft of the Flemish Nature Code (Van Hoorick et al. 2005, 2008) could be a good inspiration source for such measures. An old example that – if I am not mistaken – still exists in the legislation of Belgium is that owners of coastal dunes have to acquiesce the plantation of trees on their land by the government because of coastal protection against flooding. It is now time to adopt similar acquiescence obligations in the interest of nature and landscape conservation (Van Hoorick 2000).

Ecological restoration would benefit from these obligations. The costs (financially and in terms of time) shift from the landowners or -users towards the government, but the government action could be very (cost)effective because of the possibility to take large

scale management measures, the socially easier acceptability (in comparison with obliging the owners to do themselves certain management actions) and the sustainability of the management compared to e.g.. management contracts.

New legal-economic techniques to improve restoration

One of the huge problems related to the creation and management of nature and landscape values, is finance, i.e. insufficient funds. Another problem related to compensation is that it takes time to create or improve a biotope. Consequently there is in fact no stand-still. Nature and landscape policy could learn from experiences with more economic approaches in the broader environmental policy: one can mention here for instance the tradable emission rights. I want to talk about three interesting new legal-economic instruments, "*habitat banking*" in the U.S.A (normally called mitigation banking in the U.S.A.), "*Ökokonto*" in Germany, and "*Groenfonds*" in the Netherlands. The first two are laid down and regulated in the law, the third has not a legal basis yet, but is the phase of pilot projects.

In the U.S.A. one has in the framework of the Clean Water Act more than 10 years experience of mitigation banking for wetlands. The bankers (e.g. private nature conservation organizations, but also companies, even project developers themselves) buy, create, enhance or restore degraded wetlands and they get therefore mitigation credits once the wetlands have been accredited by the government. The mitigation credits can be sold to project developers who will damage or destroy wetlands by carrying out allowed development projects. The price of mitigation credits is set by the market, it depends on the relation between supply and demand. Theoretically mitigation credits will be produced as long as the market value is higher than the expenses for conservation measures done by the banker before. The land remains in ownership of the banker. The advantages of mitigation banking are that an ecologically sound (accreditation is necessary) compensation is carried out before damaging or destroying the (other) wetland, that planning a compensation in a geographical region becomes possible (in comparison with a single-project compensation), and that nature and landscape values get financially validated. Most of the disadvantages that are sometimes mentioned in literature are in fact no disadvantages of the banking system but of the system of mitigation itself. (By the way the term mitigation means in this context what we normally call compensation.) A disadvantage of mitigation itself is e.g. that the banker needs a large starting capital.

In Germany since 1993 not only permit but also planning decisions are subject to the Eingriffsregelung and therefore also to the compensation obligation in it. In all German states Ökokontos now exist in one or other form. The system in Saarland, one of the smaller states in Germany, is a good example. It is very similar to the mitigation banking for wetlands in the U.S.A. If the municipality draws up a spatial destination plan on basis of which nature and landscape damaging activities will be allowed for later, it must also designate a compensation zone in that same plan. The compensation zone must be an ecologically degraded (but with ecological potential) piece of land. Then the municipality itself, (public-)private nature conservation organizations, companies and even private natural persons, can buy land there and develop the nature and landscape values. Once developed, these may be booked on an Ökokonto that is

registered by the central government of the state. Certainly when a nature conservation organisation does it, it can by buying different types of land, create different biotopes, and so develop a catalogue that project developers can choose the appropriate biotope from. Project developers have to buy compensation from the banker (if I may use the same word as in the U.S.A.) at market value. The land also remains in ownership of the banker. The advantages and disadvantages of the Ökokonto are the same as for mitigation banking in the U.S.A. The role of the government seems more prominent or leading in Germany because of the designation of compensation zones in the spatial destination plan (Ducombe, 2007).

New legal-economic techniques such as habitat banking and Ökokonto facilitate not only a proactive and more eco-regional approach to project development in relation to ecological restoration, but are also market based instruments that help to finance the nature and landscape conservation policy.

The main problem with the two systems, i.e. that the banker needs a large starting-capital, can be reduced by the government by means of prefinancing for instance private nature conservation organizations. But if everyone is allowed to be a banker, some legal problems concerning subsidizing could arise in relation with the principle of equality and not disturbing the free competition according to E.C.-law. Also banking systems are of course only interesting for bankers if there are enough developments, but this does not seem a problem today ...

In the Netherlands some experiments with the Greenfund (in Dutch: "*Groenfonds*") have been set up since 2003. Owners (farmers) accept on a voluntary basis use restrictions on their land in the legal form of public servitudes (in Dutch: "*publieke erfdiensbaarheden*"). Once the owner has made the choice these restrictions remain for the next 30 years and are laid down in an contract before a notary. The government puts money in a fund per hectare of such land: 10 to 50 % of the market value depending on which restrictions apply. The fund finances green projects by giving for instance green loans (at a lower interest than on the market) to nature conservation organizations. Each year the assets (1 to 1,5 %) are then divided among the cooperating owners. The advantages of such a system are the voluntary basis, the certainty of getting paid every year (for the owners), the long-term approach (in comparison with management contracts) and the lower costs (for the government, in comparison with buying the land) (Callebaut, 2007). One can imagine that such a system could also partially be financed by project developers in order to buy compensation; this is however not the case in the Netherlands.

Conclusions

Direct biotope protection linked with provisions integrating nature and landscape conservation interest in all permit and planning procedures, habitat banking and Ökokonto are important innovative legal instruments. They can make ecological restoration more effective by facilitating a proactive, eco-regional and market based approach. The management of nature and landscape in general can be enhanced by acquiescence obligations and voluntary but long-term instruments like public servitudes together with a greenfund.

References

- Callebaut, P. (2007). Beheersovereenkomsten in de landbouw: vergelijking Vlaanderen-Nederland, evaluatie en alternatieven – Masterproef, Ghent University, 73 p.
- Ducomble, J. (2007). Habitat banking – Masterproef, Ghent University, 53 p.
- Van Hoorick, G. (2000). Juridische aspecten van het natuurbehoud en de landschapszorg, Intersentia, Antwerpen, Groningen, 841 p.
- Van Hoorick, G, Cliquet, A., Dekimpe, L. & Eerens, V. (2005). Voorontwerp van Vlaams Natuurwetboek – Voorontwerp van decreet betreffende de natuur, de landschappen, de bossen, en de wilde flora en fauna, Intersentia, Antwerpen, 325 p.
- Van Hoorick, G, Cliquet, A., Dekimpe, L. & Eerens, V. (2008). Preliminary Draft of the Flemish Nature Code - Preliminary draft of the decree on nature, landscape, forests and wild flora and fauna, Intersentia, Antwerpen, Oxford, Portland, 239 p.