

Workshop 5 – Nature restoration/development in harbours: coping with the Birds and Habitats Directives

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Introductory statements (for full-text articles see Proceedings)

1. Management Plans in perspective of article 6.1 of the Habitats Directive: a common interest binding fishermen, ecologists, hunters, port planners and recreationists (*Neumann*)
2. Maintenance of the favourable conservation status in two Special Protection Areas in co-habitation with development of the Antwerp harbour (*Spanoghe et al.*)
3. Tidal wetland restoration at Ketenisse polder (Schelde Estuary, Belgium): developments in the first year (*Van den Bergh et al.*)
4. Nature restoration in the harbour of Rotterdam, the Netherlands (*Zindler et al.*)

Major questions/provocative statements

1. With regard to an unanticipated colonization of harbour areas by species qualifying for Birds- or Habitat Directives (BHD), should the possibility be created to **exclude areas from jurisdiction of these BHD**? And is it recommendable to change the EU-directives to facilitate initiatives by port authorities and industry to **temporary set aside areas** with a high natural potential?
 2. Compensation measures should start five years before a harmful effect of a proposed plan/project is expected. **Conservation banking** (acquisition of areas in advance, to be used for restoration/compensation in the future) has the future.
 3. Quantitative **conservation objectives** are preferable over qualitative objectives.
 4. The EU should enforce a specified **monitoring scheme** with regard to the Bird- and Habitat Directives.
- Are there specific natural values in harbour areas that should get priority in the conservation objectives for these areas? For instance, harbour areas are relatively

favourable for pioneer species and migrating fish species (ships and fish both need channels without barriers).

- How to interpret jurisprudence about significant effects? A recent ruling by the EU Court about the Dutch Cockle Fisheries in the Wadden Sea has been interpreted in the Netherlands as: there is an effect, unless one proves there is not. How do other countries deal with this issue?
- In finding agreement between the conservation objectives of the Bird and Habitats Directive and the goals of the Water Framework Directive, what should get priority: improving water quality or habitat restoration? Or better: can they be combined in harbour regions?

Discussion/answers to questions

1. Regarding ‘unanticipated colonization by species qualifying for birds or habitats directives’: introduce the possibility to exclude areas from jurisdiction of Birds and Habitats Directives

Explanation

The question is: how to reconcile industrial development and an increase in EU-qualifying species in newly-developed harbour areas? Large areas in developing harbours are quiet and activities that do occur are predictable. The substrate is often sandy with moisture and salt gradients. As a consequence, land that is not in use yet is often colonized by rare species, in particular pioneer species. That may imply new designations and higher conservation objectives. Port authorities and industry are therefore reluctant to accommodate this development, afraid as they are that the Bird and Habitats Directives (BHD) will restrict further industrial development of these sites. These new settlements may be viewed as an extra bonus, on top of the natural values that are already protected through the conservation objectives. Some species are quite mobile; thus, they will probably move to other sites when the locations where they have settled will be given over to industrial activities, as planned.

The introductory statement 4 presents some interesting examples from the harbour of Rotterdam (‘clay factory’, ploughing under of orchids on pipeline and cable sections). The Port Authority was nature-minded, but that has changed because of BHD-new nature-problem.

Discussion

If you are going to exclude areas from the BHD in port areas, you will also have to do that in other areas (e.g. agriculture, military).

In the Netherlands, the present formulation of the Flora and Fauna Act is very strict with respect to the protection of areas that have been colonized by such species. It is hardly possible to force species out. Comparable law in Flanders leaves more room.

It is contradictory to the BHD, in which continuous designation of new areas (and dropping other ones that no longer meet the criteria) is an important ingredient. Thus, exclusion would go against the Directives.

Conclusions

It is important to define precise relatively high (to accommodate possible new colonisations) conservation objectives, and designate a large area for these objectives. That gives you certainties and flexibility, important for industry, and more nature than you would have with the 'old' conservation objectives that do not take into account possible new colonisations. These new conservation objectives would also have to include objectives for species that are not present in the area yet, may even never have been present there before. In the management plan it can be specified that a certain area (e.g. 5%, without specifying the exact locations, they may vary in time) is allocated to such new developments. Within this area dynamic planning can be part of the management, while meeting the objectives is guarded by a network manager (often the port authority).

This concept is particularly useful for mobile pioneer species such as coastal birds. For species such as orchids the Management Plan should be location-specific.

It is not a solution to focus only on the national perspective and allow deterioration in a specific SPA/SAC because it does not affect the national objectives, for instance because it is counterbalanced by an improvement in another SAC/SPA. Each country is responsible for reaching a favourable conservation status for each SPA/SAC that has been designated.

2. Compensation measures should start five years before a harmful effect of a proposed plan/project is expected

Explanation

When to start with compensation measures? The EU requires that compensation measures become effective at the moment that the project for which the compensation is necessary will start to affect the qualifying species or habitats in the area. However, countries often do not comply with this clause. And even if the planning, land acquisition and construction are carried out in time, the necessary soil development, species colonization, population growth and vegetation succession will take time. In other words: the implementation by national governments of the present requirement in the Directives about the timing of nature compensation is too lenient/soft. There is also increasing evidence that compensation is often only partly successful.

Discussion

It is an illusion that projects are going to wait for the definition and execution of proper compensation plans. Therefore, go with the flow: adapt.

It is important to discriminate between species/habitats: for some species/habitats five years will be enough, others need much more time.

The general conclusion was that compensation measures should be started as far in advance as possible. This led to a discussion on **habitat banking and conservation banking**. Habitat banking is always connected to a specific plan or project, and is therefore initiated by the party that wants to carry out that plan or project. Habitat banking has a bad reputation, because of the way it has been discussed and proposed in the past: as a confusing array of shifting compensation locations, shifting objectives (compensation, restoration, mitigation) and a tendency to use it as an excuse to skip appropriate assessment.

Also, advance planning of restoration measures should not be tied to a specific proposed plan or project, but had better be based on the conservation objectives of a certain SAC/SPA: how can we improve the structure and function, make nature more robust?

Recently, a new concept has therefore evolved, under the name ‘conservation banking’. Conservation banking means that: (1) the local or national government (instead of the initiator of a proposed plan or project) defines a restoration plan that; (2) is not connected to a specific proposed plan or project but that; (3) specifically aims to improve the SAC/SPA to a level higher than the conservation objectives. The idea is that compensation may not be necessary with such an approach, or is covered by restoration measures that are part of a conservation banking scheme.

Conclusions

*Conservation banking is a promising line of thinking, as long as it is firmly based on/closely tied to the conservation objectives **and** the normal procedures of the BHDs are obeyed, such as appropriate assessment. The latter is important since compensation should only be considered as a last resort, legally/formally, but also ecologically for the very reason that it appears that compensation is often not sufficiently effective.*

3. Quantitative conservation objectives are preferable over qualitative objectives

Explanation

Qualitative: maintain or restore habitat type x. (in fact, this is semi-qualitative, because of the word ‘maintain’). Quantitative: 300 ha of habitat x, or 30 breeding pairs of species Y.

This subject is of particular importance in discussions among member states about conservation objectives for areas close to their mutual border. A state with very specific conservation objectives for species or habitats that are dependent on conditions in a neighbouring country may run into problems when that neighbouring country has very wide conservation objectives.

Discussion

It is generally agreed that conservation objectives should be quantified as much as possible. With quantitative objectives, industry and conservationists know what to aim for, what to take into account. It prevents endless discussions and allows more accurate planning by port authorities/industry. Quantitative objectives also allow a good evaluation of restoration measures. Finally, quantitative goals are also necessary to be able to determine whether you reach your national goals.

However, there are also arguments against quantitative goals:

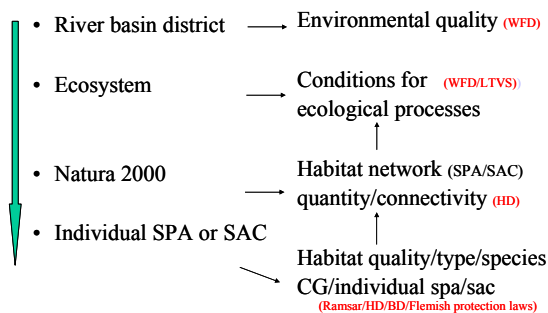
1. there is often insufficient knowledge on ecosystem functioning to determine meaningful quantitative goals. You need to understand the structure and function, the underlying processes;
2. such quantitative goals may be against the nature of an evolving ecosystem, as may be present in an estuary;
3. with respect to goals for (migratory) species: the size of the local population often depends on conditions elsewhere.

Conclusions

The definition of quantitative goals in terms of underlying physical, chemical and biological processes is the ideal. It has the advantages of quantification and does justice to the dynamic nature of many estuaries.

Harbours in estuaries are subject to several juridical commitments (Water Framework Directive – WFD, BHD, local (inter)national initiatives), each with its own objectives. A promising approach is to set goals in an integrated, hierarchical approach, starting with (1) the river basin district (WFD), via the (2) ecosystem/Natura 2000 network-level to (3) the individual SAC/SPA. An example of such a scheme has been applied to the Scheldt Estuary (and has as such been adopted by the Flemish Government).

Hierarchical integration of conservation objectives



It starts from an ecosystem view and sets objectives on all levels that are necessary to guard a full functionality of the ecosystem. This can be processes as well as habitats or species. Objectives should be set on all levels, but can in some cases be translated into objectives at a higher level.

The same applies to restoration measures: they should not be aiming at restoring specific populations (example: creation of nesting islands) or habitats, but at restoring the physical processes that generate the required habitats and populations of species.

4. EU should enforce a specified monitoring scheme

Explanation

The effectiveness of nature compensation measures is often limited. Also, restoration measures are in fact large-scale experiments that can lead to a better ecological understanding that can be used for other measures. Both arguments call for good monitoring. The EU-Directives are not specific with respect to monitoring. They do require that the countries show whether their measures are effective with respect to the conservation objectives, but monitoring is often low on the list of priorities of national or local government. Should we recommend to the EU that specific requirements with respect to monitoring are incorporated in the Bird and Habitats Directives? Which requirements would that be?

Discussion

There is a general agreement in the audience that some sort of specified minimum monitoring requirement should be included in the EU directives. Monitoring of both habitats/species and underlying processes (erosion/sedimentation, etc.), and *long-term* monitoring is called for.

Ideally the integrated hierarchical conservation goals, from which goals can be drawn for each individual juridical commitment, should be accompanied by a fitting monitoring program. The results of the latter should be published in evaluation reports for each of the legal commitments. This would be very cost effective and optimize standardization of monitoring methods. However integrated goal setting and monitoring requires integrated efforts across ministries and administrations. Often, divisions within a government (e.g. ministries) only want to be responsible for the monitoring of the results of a plan/Act for which they are responsible and are reluctant towards integrated approaches.

Conclusions

A full-time coordinating team is a key-factor for the success of management plans and integrative monitoring.

An international monitoring scheme might be very cost effective. For instance: it would be possible to select representative sites/projects for detailed monitoring, and to implement less intensive monitoring in other sites (less intensive, but sufficient to report to the EU about the conservation status). That might be cheaper than if each country develops its own monitoring scheme.