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Halting the loss of biodiversity in the Netherlands

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Summary

Taking nature into account

European Union Heads of State and Government have committed themselves repeatedly to the objective of halting the loss of biodiversity by 2010. The Communication on halting the loss of biodiversity of the European Commission proposes actions to meet this target.

The actions point out how existing EU instruments can be applied in a more targeted fashion by Member States so that biodiversity can profit more. Our analyses for the Netherlands show that such EU instruments as the Birds and Habitats Directives and the Nitrates Directive form an important impetus for Dutch biodiversity protection. Nonetheless, biodiversity trends remain negative. Key aspects to halt the further loss of biodiversity in the Netherlands are: streamlining Natura 2000 together with the National Ecological Network in development; connecting the conservation of nature areas with the management of the wider countryside and improving environmental conditions for nature.

A key aspect in supporting biodiversity conservation is to take nature protection into account in the day-to-day implementation of sectoral policies. An important step in biodiversity conservation in Member States, including the Netherlands, is to promote the integration provided by EU instruments such as the Water Framework Directive and the reformed Common Agricultural Policy. The Commission can support this by stimulating the exchange of best practices between Member States.

The Commission could stimulate an EU-wide understanding of the connection of Natura 2000 with other designated nature areas, and could identify ecological bottlenecks in the network on the European scale. Discussions in the European Parliament on biodiversity would benefit from an annual European nature balance that reports, on the one hand, on the ecological coherence of European nature areas and ecological bottlenecks, and on the other, on the effectiveness of EU and national policies.

Introduction

The Dutch prime minister was very clear during the World Summit on Sustainable Development in Johannesburg in 2002 when he said: 'We must stop looting the treasure house of the Creation'. In Johannesburg and on several other occasions, the EU Heads of State and Government agreed to halt the decline of biodiversity in the EU by 2010. The need for urgent implementation of this objective was re-confirmed by the Spring Council in 2006.

After the Johannesburg summit in 2002, the EU started to review its biodiversity strategy. This process was concluded by the European Commission presentation of a policy paper on biodiversity in May 2006 that updates and extends an earlier biodiversity strategy. The Commission also presented a detailed Action Plan that sets out the steps that need to be taken to meet the 2010 biodiversity target (EC, 2006).

Biodiversity envelops a broad array of issues, including species and natural habitats, as well as the goods and services that ecosystems supply to humanity. There are also many reasons for conserving biodiversity, ranging from ethical, through to esthetical and economic (MEA, 2004).

The Netherlands Environmental Assessment Agency (MNP) will, in this report, review the state of biodiversity and conservation policies in the Netherlands against the background of its commitment to the 2010 biodiversity goal. The appropriateness of the Commission's Action Plan as framework for halting the loss of biodiversity in the Netherlands is also considered.

It is MNP's aim to provide adequate information on the state of biodiversity in the Netherlands and on the main threats and policy challenges in order to be able to support political discussion and decision making. This discussion is relevant both at the national level

and within the EU. After all, Member States play the key role in the urgent implementation of the 2010 biodiversity goal that was supported by the European Council in March 2006.

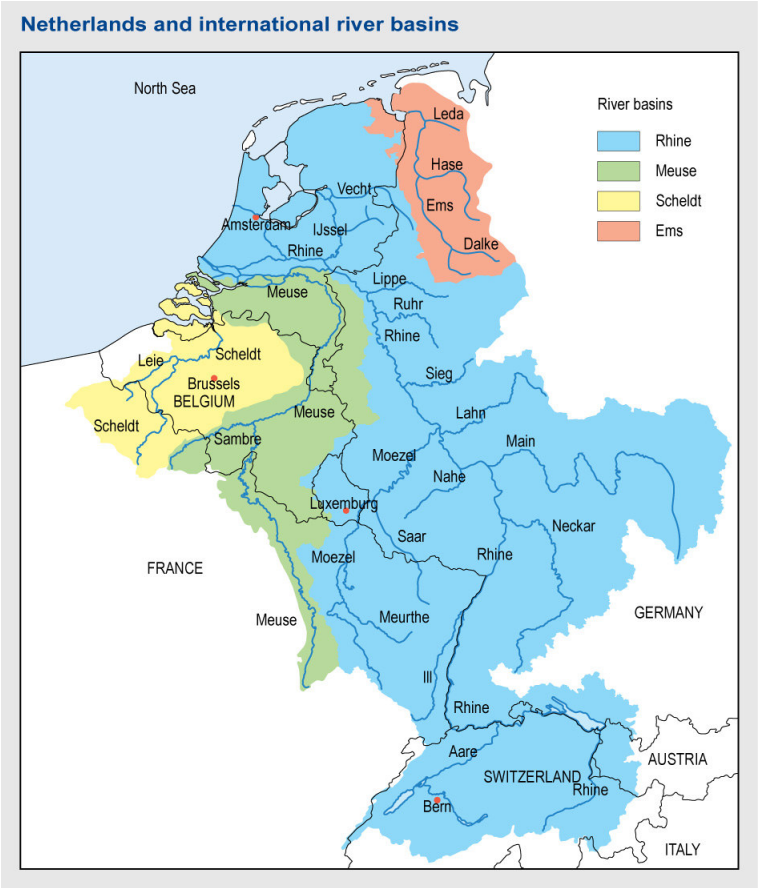


Figure 1. The Netherlands constitutes the delta of four European river basins of which the Rhine and Meuse rivers are the most important.

The biodiversity scene in the Netherlands

State of biodiversity

The international significance of biodiversity and landscapes in the Netherlands is determined by its position in the delta of Rhine, Meuse, Scheldt and Ems rivers (*Figure 1*). Half of the Netherlands' land mass is found below sea level with the polders reflecting as characteristic landscapes. The richness of gradients in the Netherlands as a result of its position on the edge of the continent, yields a large nature potential. The Dutch wetlands, dunes, estuaries, marshes, lowland rivers and Wadden Sea are considered to be nature areas of international importance. Gradients between, for instance, rivers and Pleistocene sand ridges are biodiversity hotspots. However, habitats of international significance, such as on chalk grasslands and beech forests, also occur in the more continental east and south-east.

The Netherlands is considered to be of more than average importance for migratory waterfowl, waders and meadow birds. For example, currently, about half of all European geese spend the winter in the Netherlands. A large number of European meadow birds depend on the Netherlands for breeding. In particular, a considerable percentage (>10%) of the European populations of the Black-tailed Godwit, Oystercatcher and Lapwing breed in this country (*Table 1*).

Pressures on biodiversity

The Netherlands is a densely populated country and almost entirely under cultivation. Road traffic is intense, and agricultural and industrial production is high. Most Dutch people live in small and medium-sized cities, and urban sprawl is considerable in comparison to other European regions. Some call the Netherlands a sparsely populated city, others a densely

populated rural area. Biodiversity should most suitably be placed within this urban fabric. As a consequence, many nature areas are fairly small and isolated from other areas, and habitat fragmentation is large.

Table 1. International significance of birds in the Netherlands (MNP, 2004b)

Migratory birds	*% of total population hibernating or stopping in the Netherlands (2002)*	**Breeding birds**	*% of European population breeding in the Netherlands (2000)*
White-fronted Goose	80	Black-tailed Godwit	48
Barnacle Goose	80	Oystercatcher	31
Greylag Goose	50	Lapwing	13
Bean Goose	20	Redshank	6
Brent Goose	40	Snipe	0.1
Pink-footed Goose	95	Ruff	0.1

Furthermore, environmental quality in the Netherlands is, in general, under more pressure than elsewhere in Europe (*Figure* 2). Eutrophication, acidification and the lowering of the groundwater table (drawdown) constitute important pressures on nature. Because high groundwater tables create basic conditions for much natural vegetation, groundwater drawdown has profound impacts on the ecology of grasslands and wetlands.

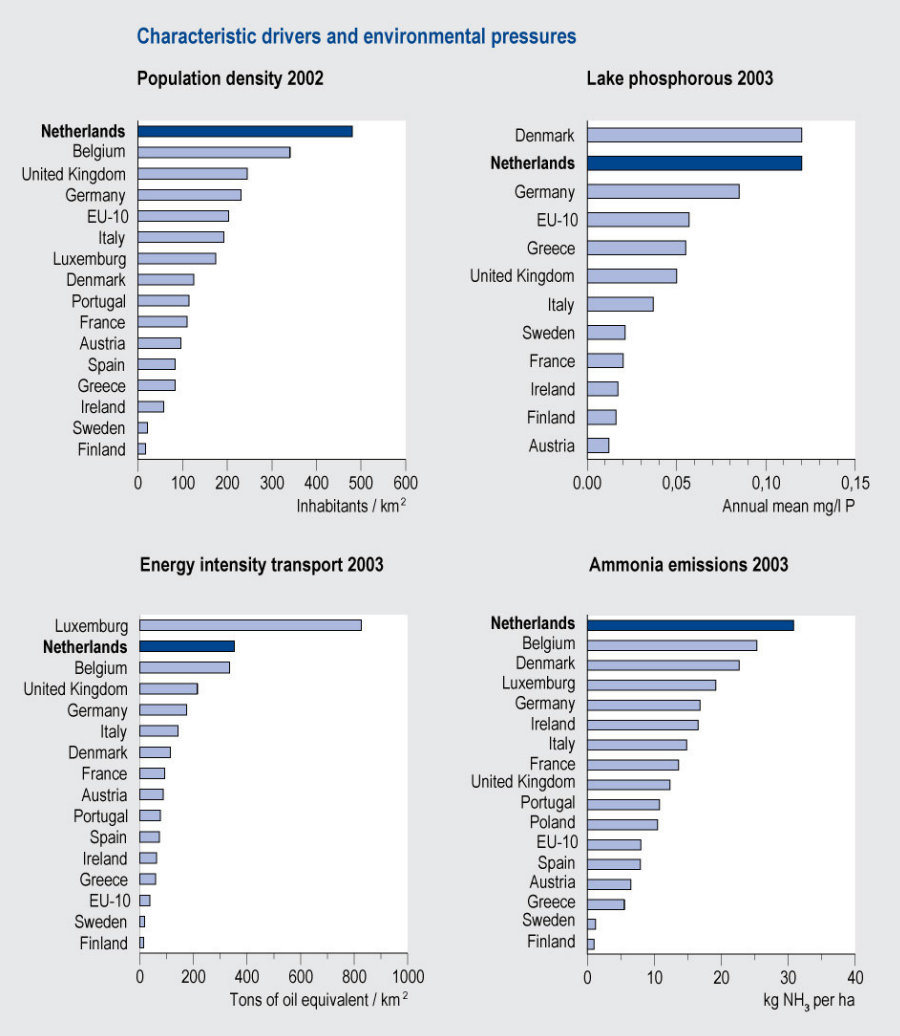


Figure 2. The Netherlands is densely populated with intense land use and economic activities. Consequently, environmental pressures are high.

Intensification of land use caused the structure of the Dutch landscape to change considerably in the 20th century, as reflected in the disappearance of small landscape elements such as ditches, spinneys, hedges, shelter belts and linear planting of shrubs and trees. The openness of the landscapes in the west and north of the Netherlands has also been curtailed by urbanisation, and construction of road and rail infrastructure and industrial sites.

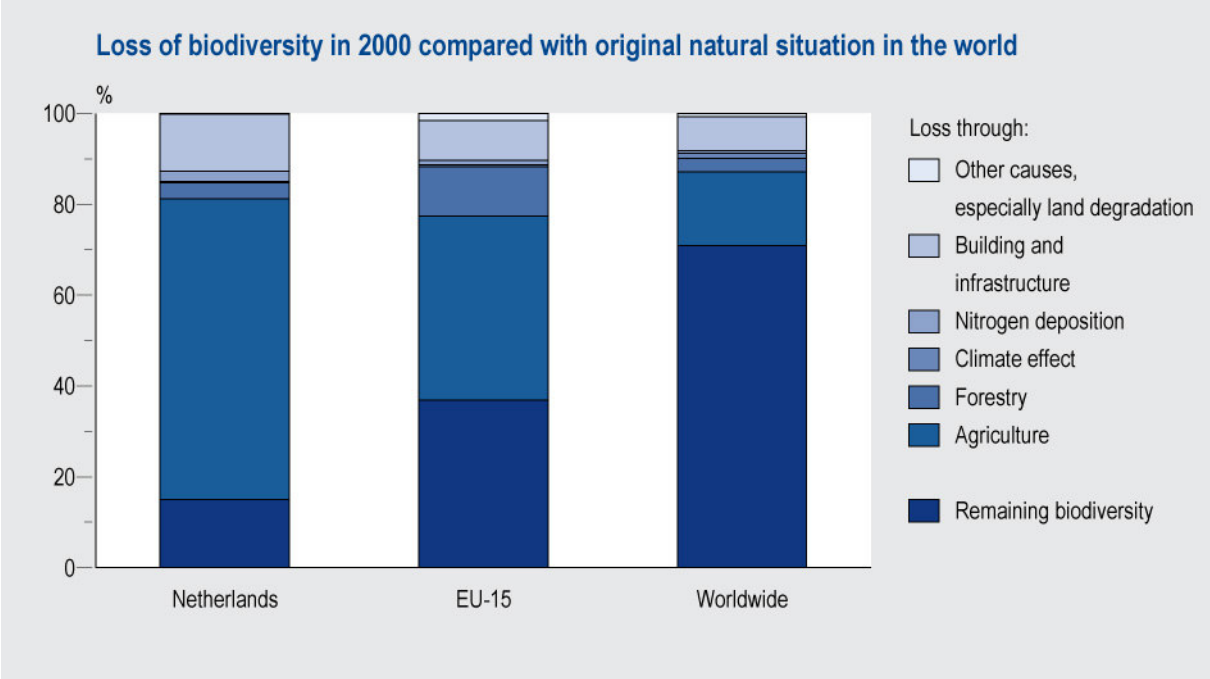


Figure 3. Loss of biodiversity in 2000 compared with the original natural situation in the Netherlands, Europe and the world (MNP, 2004a). Biodiversity loss has been expressed as mean abundance of the original species compared with the natural or low-impacted state, implying that many characteristic species have become much less abundant or even extinct, while a few species have become much more abundant and widespread.

Reduced and fragmented habitats, high environmental pressure and reduced landscape diversity has resulted in a loss of approximately 80% of the original biodiversity of the Netherlands. For the EU15 as a whole this percentage is about 65% and worldwide it is estimated at 30% (*Figure* 3). The national Red List indicator shows that in many groups of animals and plants, species are endangered. During the last century some endangered species even became extinct (*Figure* 4).

Nature conservation has been an issue in Dutch society since the early 1900s. Considerable conservation efforts have yielded local and regional successes in the conservation or restoration of biodiversity. Nevertheless, biodiversity continues to decline as pressures such as landscape fragmentation, air and water pollution, and unnatural hydrological conditions remain.

Biodiversity conservation in the polder

Just as all the EU Member States and the EU itself, the Netherlands has ratified the Convention on Biological Diversity. The main instrument for national implementation here is the Dutch nature conservation policy (LNV, 2000), emphasising the conservation of species and nature sites. Internationally, the Netherlands' policy is to support international conventions and organisations in the field of biodiversity conservation; while the aim of the financial programmes is to support local and regional conservation programmes and projects abroad.

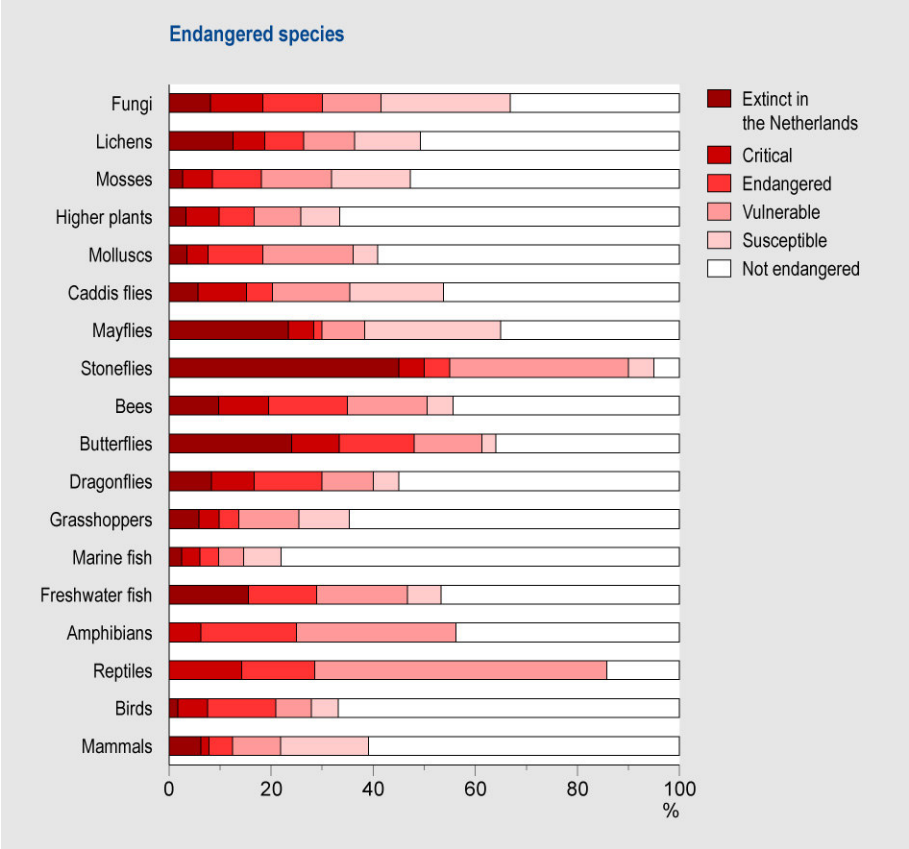


Figure 4. Many Dutch plants and animal species are endangered. Red Lists for a number of plant and animal groups reveal that over a third of the species in each species group is endangered and that many species have become extinct (Source: EC-LNV, Nationaal Herbarium Nederland, EIS, Stichting Anemoon).

Nature site designation

The cornerstone of Dutch nature policy is the establishment of the so-called National Ecological Network (EHS) to be finalised in 2018. The land covered by the EHS will be about 725,000 ha, which represents about 20% of the national territory. The EHS, in applying an offensive approach, combines conservation of existing sites, nature restoration, establishment of ecological corridors, and transformation of agricultural land into nature, often in combination with measures for flood prevention. A defensive approach, restricted to the management of existing nature sites, has proven to be insufficient to halt the loss of species. This is because many sites in the Netherlands are small and isolated, and environmental and hydrological conditions are unfavourable, given the requirements of habitats and species (MNP, 2005a).

Natura 2000 in the Netherlands

The Netherlands in its entirety falls within the Atlantic biogeographical region. The Habitats Directive accommodates in the Netherlands 51 habitat types and 35 species listed in Annex II (36 including foreseen additions). The Birds Directive accommodates in the Netherlands 44 breeding bird species in Annex 1 and 64 migratory bird species. Legal protection is offered to most bird species and 67 species in Annex IV of the Habitat Directive.

The Netherlands has designated 142 Sites of Community Importance (SCIs) and 80 Special Areas of Conservation (SPAs), largely overlapping. In total this makes 162 Natura 2000 sites. Freshwater, brackish and coastal sites taken collectively for the Habitats Directive (SCIs) come to about 750,000 ha. For the Birds Directive (SPAs) this is about 1 million hectares. On land, Natura 2000 encompasses about 10% of the Dutch terrestrial territory overlapping with the National Ecological Network by 95%. The designations include only a small area of farmland.

Almost 100% of Dutch surface waters, excluding the North Sea, are designated as SCI or SPA or both. Except for the coastal zone, no decisions on the North Sea have been made yet.

The establishment of the EHS is now at the halfway mark (*Figure* 5). The EHS consist partly of nature sites, the property of the government or conservation organisations, and partly of

privately owned land under nature management contracts. Major water bodies, such as the Wadden Sea, Lake IJssel, the Zeeland delta and the North Sea, are designated as being part of the EHS as well. For the EHS, there is a national system of nature quality targets with full geographic coverage.

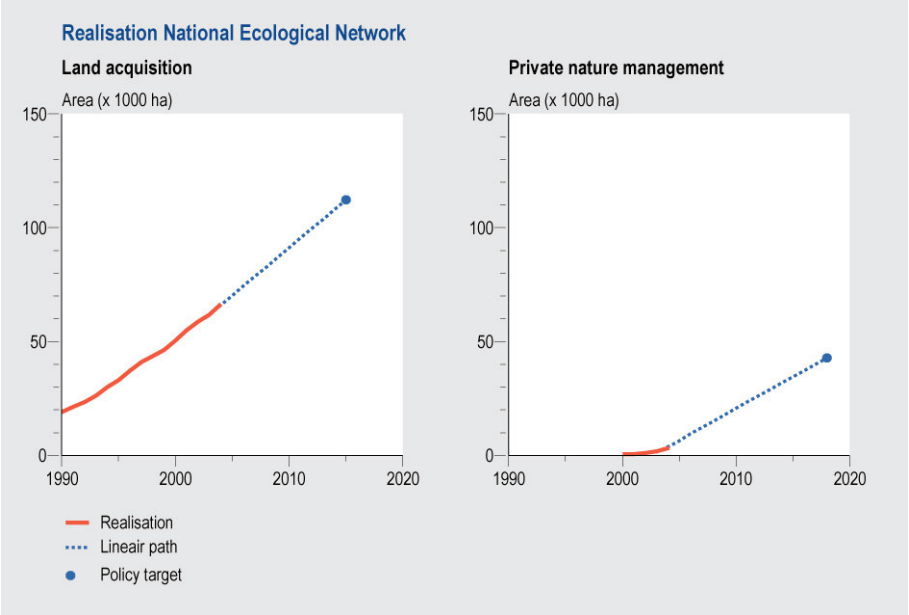


Figure 5. The acquisition of land for the National Ecological Network is developing according to schedule. Only recently has privately owned land been brought under nature management contracts (MNP, 2005b).

In a process parallel to the establishment of the EHS, which is ongoing, the Netherlands has classified sites for the European Natura 2000 network (*Figure* 6). Both types of sites fall almost entirely within the EHS. The lists of sites have been approved by the European Commission for both directives. The Dutch government is now preparing the formal designation of the SCIs as special areas of conservation (SCAs) for protection under Dutch law. The government has chosen to develop management plans for all Natura 2000 sites to be realised in 2009. In these plans, conservation goals are detailed and measures to improve the conservation status outlined. Currently, we see that the policy processes for EHS and Natura 2000 are becoming more integrated, although integration started rather late and is not yet conclusive.

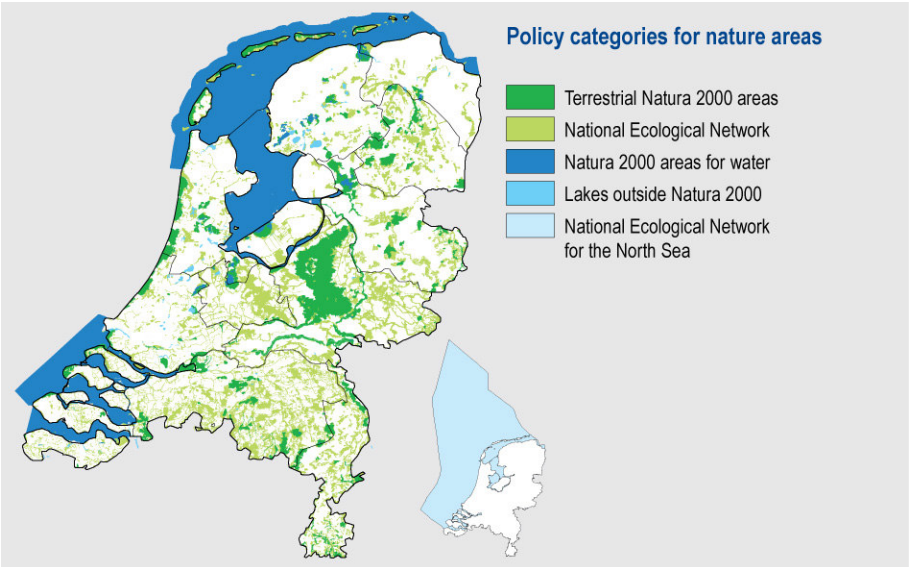


Fig 6. Natura 2000 sites and the National Ecological Network in the Netherlands.

Spatial configuration and environmental conditions for nature areas

Despite the progress in site designation, the fragmentation level of Dutch nature is high. Studies show that populations of many species are subject to unfavourable conditions due to suboptimal spatial configuration of suitable habitats (*Figure* 7).

The last decade has seen important improvements in the quality of air and water (MNP, 2005c). Nonetheless, bottlenecks in environmental quality for both Natura 2000 and EHS still exist. Key issues for terrestrial sites are exceedance of critical levels for nitrogen deposition (*Figure* 8) and the unnatural hydrological conditions (*Figure* 9), while for aquatic nature an important key issue is the excess of phosphate (*Figure* 2).

To summarise, the achievement of the nature conservation quality target for both EHS and Natura 2000 sites has, in general, not yet been realised (*Figure* 10). Important causes are unsuitable environmental and hydrological conditions, as well as feeble spatial coherence (MNP, 2005a, 2005b, 2006). Nonetheless, there are local successes. For example, the restoration of pools in heathlands has resulted in the return and conservation of endangered species, and improvement of water quality in rivers has resulted in the return of characteristic species like the Club-tailed Dragonfly and the Yellow-legged Dragonfly. Decreasing nitrogen depositions has already diminished management efforts, although depositions are still above the critical levels for many ecosystems. About 2000 ha new nature area has been established in the foreland of the main rivers.

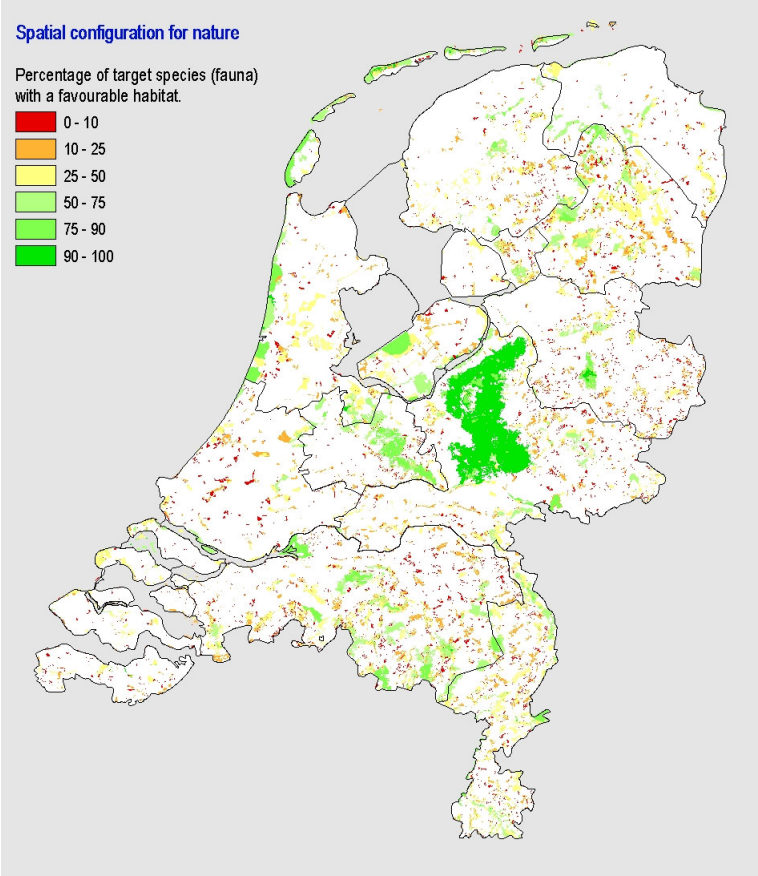


Figure 7. Nature sites for which the spatial configuration for animal target species is unfavourable (MNP, 2005a).

Wider countryside

Biodiversity is not restricted to nature sites but occurs in the wider countryside as well. Many species depend fully or partly on agricultural land not necessarily included in any specific nature protection scheme (MNP, 2002).

Biodiversity conservation in the wider countryside is only partly outlined in Dutch policy. The main policy instruments for the conservation of farmland biodiversity are formed by the biodiversity measures under the Farmland Conservation Scheme. This scheme is co-funded by the EU and facilitates nature and landscape management contracts with farmers on a voluntary basis for a six year period. There is a strong focus here on meadow-bird management (nest protection, postponed mowing).

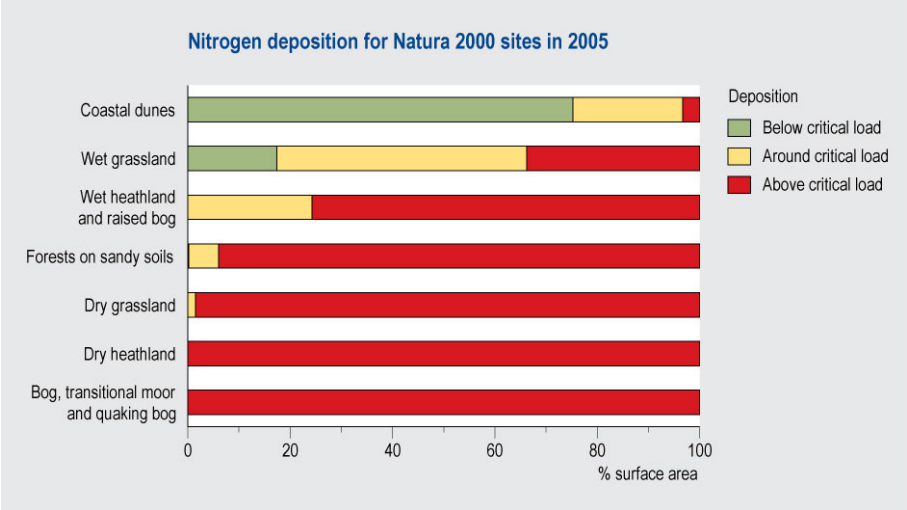


Figure 8. The internationally established critical loads for nitrogen are exceeded for most Natura 2000 habitats (MNP, 2005b).

The Dutch government has designated areas for which agreements can be concluded under this scheme. The target is to bring approximately 120,000 ha under the scheme in 2018, amounting to about 7 % of Dutch farmland. The scheme does not have a biodiversity target.

Despite progress in the coverage of the Farmland Conservation Scheme, certain species trends remain negative (*Figure* 11). One reason is that the scheme cannot compensate the general ecological decline of the Dutch landscape. In addition, evaluations of the scheme (Kleijn et al., 2001; Melman et al., in press.; Terwan & Guldemond, 2001) have shown that it only covers part of the important meadow-bird areas; contracts are not always applied to the right fields, and the spatial pattern of contracts is sometimes sub-optimal. There is a fairly high degree of consensus that botanical scheme packages contribute to the conservation of species-rich grasslands (Van Egmond & de Koeijer, 2005).

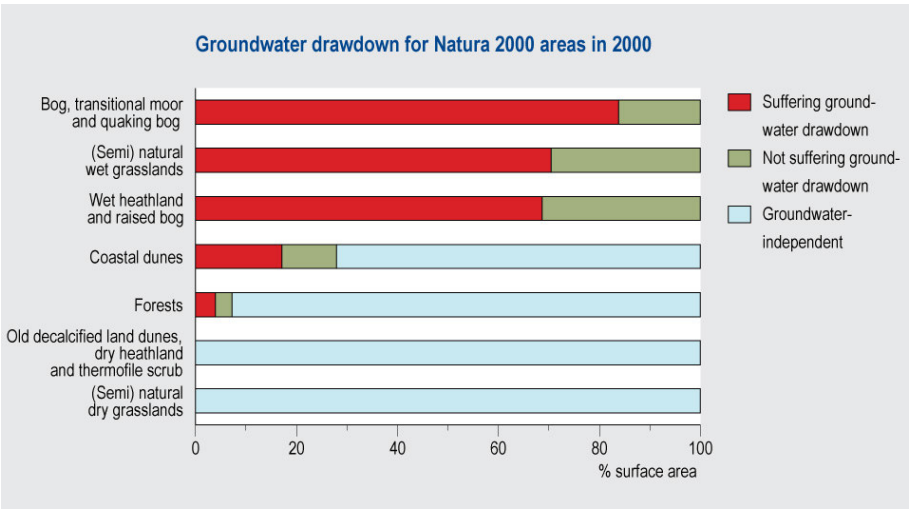


Figure 9. Hydrological bottlenecks with respect to Natura 2000 sites in the Netherlands (MNP, 2006a).

Another element of the wider countryside policy is landscape protection, including conservation of typical landscape features. These landscape features (open grasslands, small streams and wooded fringes) support biodiversity outside the National Ecological Network

(EHS). They may also act to connect fragmented parts of the EHS and Natura 2000 (MNP, 2005a). Landscape protection policy, however, is weakly enforced and financially supported to a minimal extent (MNP, 2005b). As a result, landscape features that support biodiversity decline.

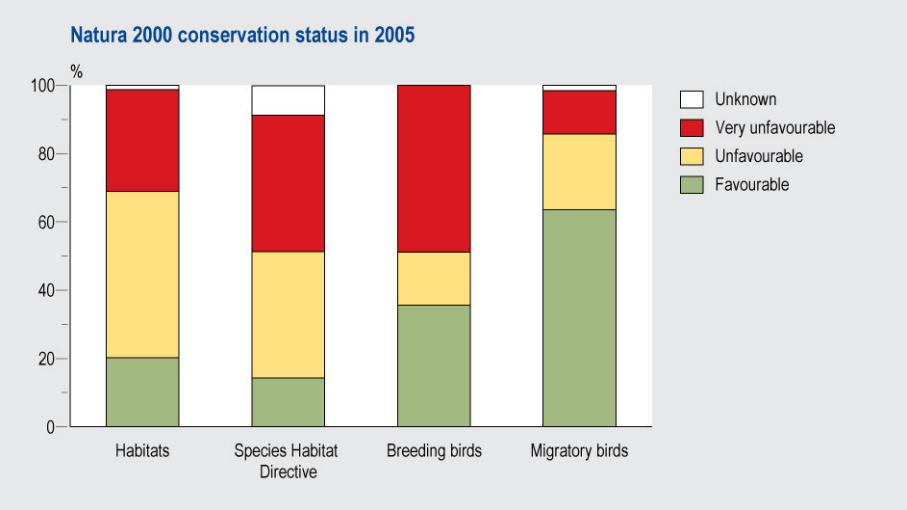


Figure 10. First estimates of the conservation status of Natura 2000 sites in the Netherlands show that conditions are favourable for about 20% of the sites. For species in the Habitats Directive this percentage is 15%, for breeding birds it is 35% and for migratory birds, 60% (MNP, 2005b).

Towards effective site management

In the Netherlands there are two lines of nature site protection operational: those derived from the Habitats and Birds Directive and those established for the National Ecological Network (EHS). Ecologically, the systems are complementary and intertwined: EHS targets have full geographic coverage, while Natura 2000 focuses on specific species and habitats of community importance.

The spatial fragmentation of nature remains a major bottleneck in the Netherlands; it not only impedes population development of plant and animals but also limits possibilities to create favourable environmental conditions. Considering Natura 2000 sites in isolation their fragmentation is even higher than when embedded within the National Ecological Network. Relieving spatial bottlenecks for the National Ecological Network also helps the Natura 2000 network.

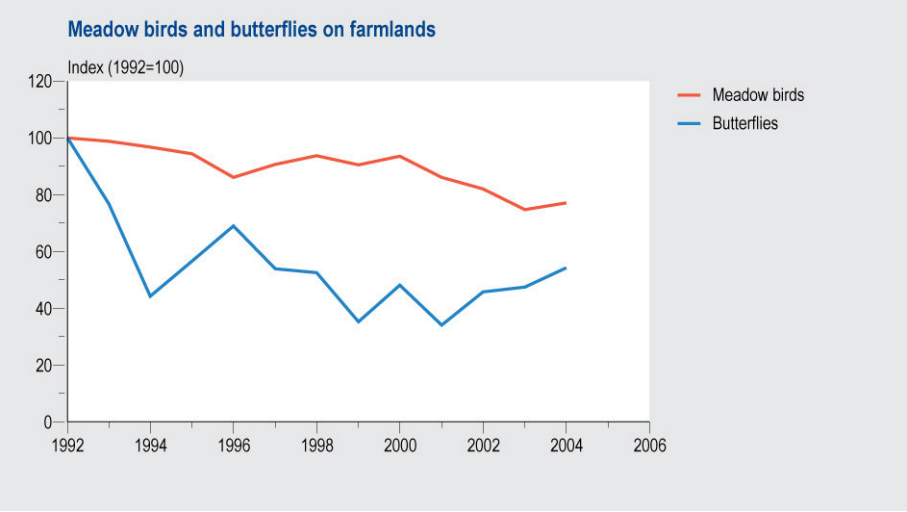


Figure 11. Both meadow birds and butterflies are declining in farmland areas.

Although many nature sites are small, their perimeter is relatively large. Consequently, the impact of surrounding economic activities (often agriculture) on the quality of the sites is

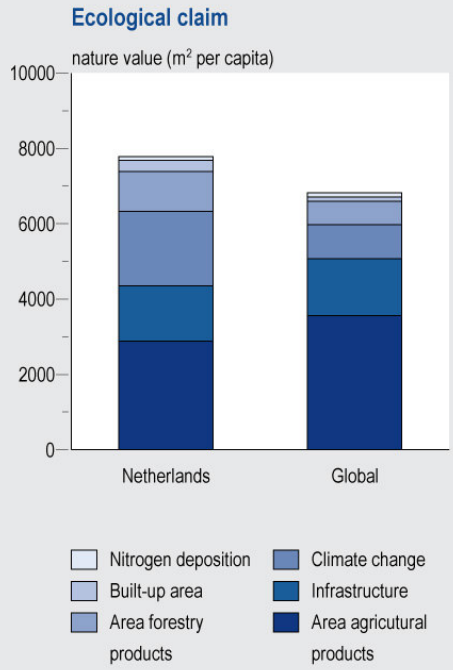
potentially high. Proper targeting of agri-environmental measures around nature sites will improve the ecological quality of the agricultural landscape and reduce the impact of agriculture on nature sites. In landscapes consisting of mosaic patterns formed by nature sites and small landscape elements, agri-environmental measures have a particularly large potential for improving the ecological quality of the landscape at large. In this way landscapes may function as large ecological units comparable to large nature sites.

In general, the feasibility of achieving favourable conditions for habitats and species is greater on large sites. This is a strong plea for better integration of Natura 2000 and EHS management (larger units, combined nature targets). Targeting agri-environmental measures will also make Dutch nature management both cheaper and more effective (MNP, 2005a, b).

Ecological claim of the Netherlands

An issue that has received little attention in the biodiversity conservation debate in the Netherlands is the impact of Dutch consumption on biodiversity worldwide. Products all over the world are directly (fruits) or indirectly (fodder) made available for consumption through trade. The fabrication of these products requires land area and infrastructure, causes pollution (nitrogen, greenhouse gases), while species from ecosystems are harvested (timber, fish). MNP has translated these different pressures on biodiversity into a single measure, called the ecological claim, expressing the loss of pristine nature area as a consequence of consumption (See *Figure*; Rood & Alkemade, 2005).

The total ecological claim per Dutch citizen is estimated to be about 1.1 times the claim of the average world citizen. About 40% of this ecological claim is in Europe. For Dutch consumption land use world wide increased from 10.5 million ha in 1990 to 11.2 million ha in 2004. For comparison, this increase roughly equals the size of the Dutch National Ecological Network in development (MNP, 2006b).



Appropriateness of the EU biodiversity framework

The EU biodiversity policy offers a broad view on biodiversity (species, habitats and goods & services). In its recent Communication on halting the loss of biodiversity, the European Commission has set down policy lines and actions required to achieve the 2010 biodiversity target (EC, 2006). The Communication does not introduce new policy instruments, but requests users to adopt a more targeted approach in the use of existing EU instruments so that biodiversity profits more.

Table 2 outlines the main policy elements in the Communication relevant to the Netherlands. Member States play a key role in the implementation of policy elements; the table below shows the realisation for the Netherlands.

From *Table* 2 we can conclude that there is a strong link between the EU and national policies for conserving biodiversity, not unexpected considering that the Action Plan especially mentions existing instruments. Nature area protection is the cornerstone, both at the EU and the Dutch level. Moreover, EU policies such as the Water Framework Directive, the NEC Directive, cross-compliance and rural development offer an appropriate framework for supporting biodiversity. Effectiveness of this framework depends on member-state specific implementation. Following the main lines of the Action Plan, we can identify the following challenges at both Dutch and EU levels.

Table 2. Overview of the main policy elements of the EC Communication on biodiversity and its realisation in the Netherlands

EU biodiversity policy element	**Realisation in the Netherlands**
Nature conservation	
• Protection of species and habitats of community interest (scientifically established lists of species and habitats) • Strict legal protection of species and habitats (application of compensation or mitigation) • Management plans for species specifically under threat • Economic activities allowed if compatible with conservation of habitats and species • Reinforcement of ecological functionality of the protected areas network (including Natura 2000) • Co-financing the management of Natura 2000	• Compliant with EU Habitats and Birds Directive (site designations approved by EC; EU legislation transposed into national law) • Management plans for all Natura 2000 sites in preparation (deadline is 2009) • National management plans in force for selected species under threat • Non-binding ecological targets for the National Ecological Network (EHS) • Natura 2000 and the EHS form part of the national territorial planning policy & are showing increasing coherent development (legal protection differs) • National budgets for nature conservation are stable but independent of conservation goals (Natura 2000 and EHS)
Environmental quality for biodiversity	
• Legal cross-references between nature directives and environmental legislation (Water Framework, National Emission Ceilings Directives) • Policy cross-references between biodiversity objectives & Thematic Strategies of the 6th Environmental Action Programme • Flagged need for gearing biodiversity objectives to legislation in preparation (marine, soil, flood risks) • Alien invasive species and genotypes recognised as an issue; actions at national level especially encouraged • Management of the marine environment for substantial reductions of pollutants by 2010-2013 and achievement of 'good environmental status'	• Ambition level of ecological targets for water bodies will remain at a standstill • Nature objectives (Natura 2000 and EHS) and water quality/quantity objectives do not match for all sites • Unlikely that SO2 and NOx NECD targets will be achieved with current policies; the chance to achieve the NECD target for ammonia is 50% • No specific national strategy yet includes biodiversity objectives in broader environmental policies but a start has been made for soil policy • There are no specific strategies to reduce the impact of alien invasive species and genotypes (except ratification of the Carthagena protocol and phytosanitary measures) • The Dutch integral management plan for the North Sea set out the policy up to 2015, incorporating an ecosystem approach and biodiversity objectives
Integration of biodiversity concern in sector policies	
• Explicit recognition of the importance of agriculture, fisheries, forestry and others on biodiversity • Successive restructuring of the Common Agriculture Policy, giving more possibilities to farmers to manage landscape and biodiversity • Gradual changes in the Common Fisheries Policy towards more environmental and biodiversity-friendly fisheries and aquaculture • Stimulation programmes for biodiversity-friendly forestry • Minimising impact of territorial plans and projects on biodiversity (through application of Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), Environmental Liability Directives)	• Compliant with EU fisheries and agriculture policies. • National rural development plan (2000-2006) contains 3 agri-environmental schemes: Farmland Conservation Scheme, Organic Farming Scheme and the Rare Domestic Breed Scheme (2 EU co-financed); these are mostly input-rather than output-oriented (biodiversity) • Farmland Conservation Scheme - focuses in implementation for grasslands, especially meadow bird management • Six per cent of all Dutch farmland contracted under biodiversity packages of agri-environmental measures (in 2004) • Almost all Dutch forests have a multifunctional use (production, biodiversity, recreation) • EIA and SEA transposed into Dutch law

Table 2 (continued).

Global biodiversity	
• Strengthens worldwide governance for biodiversity (Convention of Biological Diversity and regional biodiversity agreements) • Supports biodiversity conservation in economic and development cooperation programmes	• Active scientific and political support for the CBD • Policy programme to support local/regional nature conservation projects • Financial support of (inter)national conservation organisations (NGOs) • Targeted projects on sustainable production (partnerships of local producers, NGOs and business)
Monitoring, evaluation, review	
• Annual reporting on implementation of EU Action Plan to 2010 and beyond • Implementation of appropriate indicators to inform decision makers (biodiversity headline indicators) at high political level (sustainable development indicators & structural indicators) • Monitoring and reporting system for favourable conservation status of Natura 2000	• By law the Netherlands Environmental Assessment Agency reports annually on the status of the environment and nature and on policy progress (Environment Balance, Nature Balance) • National Ecological Monitoring network put in place (NGOs with quality management done by Statistics Netherlands) • Active in development of EU headline biodiversity indicators • Monitoring of conservation goals for Natura 2000 and the National Ecological Network in development

Nature conservation

- **NL**: Reinforcing the coherence of Natura 2000 and the National Ecological Network (EHS) in spatial planning and site management.
- **NL**: Considering targets for Natura 2000 and the National Ecological Network as complementary. They have different policy backgrounds and aims; however, ecologically they are strongly interconnected.
- **EU**: Having the EU recognise that nature development and restoration can help to improve connectivity and coherence, even though restoration measures may disturb or destroy habitats in the short term (important from a Dutch perspective).
- **EU**: Providing EU-wide understanding of the connectivity of Natura 2000, along with other designated nature areas. Ecological bottlenecks in the network need to be identified and stakeholders brought together to identify remediation strategies.

Environmental quality for nature

- **NL**: Ecologically sound implementation of the EU Water Framework Directive. At present ambitions for its implementation are at a standstill. In a number of areas this will not be enough to achieve Habitat Directive objectives. Although priority is given to achieving the objectives for the protected sites as in Natura 2000, exemptions to postpone and lower the objectives are also intended for these areas (MNP, 2006a).
- **NL**: Management of the wider countryside, allowing external implications for environmental and hydrological conditions following the favourable conservation of Natura 2000 sites. Different strategies are required for (1) isolated areas with high nature values surrounded by intensively used agriculture land, (2) sites situated in a landscape mosaic containing small landscape elements and nature sites, and (3) large sites (>5000 ha). The potential of the second pillar of the Common Agricultural Policy could be used to enforce the wider countryside management for nature.
- **EU**: Provision in the near future of a comparative overview of the WFD ambitions of Member States. There is a need for changes in EU agricultural and urban wastewater policies to support member state in achieving WFD objectives.

- **EU**: Continuation of generic EU air quality policies geared to decreasing background concentrations of eutrophying and acidifying components, which makes local abatement policies for nature more effective.

Integration of biodiversity concern in sector policies

- **NL**: Improvement of suitability of agri-environmental measures for biodiversity. Farmland biodiversity is generally still declining in the Netherlands, despite considerable efforts to implement agri-environmental measures. There is scope for improvement in the effectiveness of biodiversity-related measures covered by the Dutch rural development plan (Van Egmond & de Koeijer, 2005).
- **EU**: Evaluating member state implementation of environmental and sectoral policies, and how this implementation contributes to biodiversity conservation.

Taking nature into account

EU heads of State and Government have committed themselves repeatedly to the aim of halting the loss of biodiversity by 2010-2013. On paper, the EU and national policies provide a coherent framework for biodiversity protection, further strengthened by the Commission's new communication and action plan. Yet, in practice, pressures on biodiversity remain high and trends in the Netherlands and the EU are still negative. In summary, we propose the following to improve the effectiveness of biodiversity protection:

- Take biodiversity protection into account in day-to-day implementation of sectoral policies in Member States and seize the opportunity for integration provided by EU instruments. The European Commission can support this by stimulating the exchange of best practices between Member States.
- Take biodiversity protection explicitly into account in policy preparations and reviews by the European Commission: for example, biofuel policies and further CAP reforms in future.
- Promote a highly connective network at the EU level, including Natura 2000 and other designated nature areas.
- Define measurable policy targets in order to facilitate reporting on progress. The Commission Communication on biodiversity encompasses a broad array of targets and actions. Many of these actions are not yet formulated according to the criteria: Specific, Measurable, Achievable, Result oriented and Time bound (SMART).
- Provide proper information to decision makers. Experiences in the Netherlands have shown that annual national reporting on status of and trends in biodiversity and progress in biodiversity policies help decision makers to keep track of progress and comprehend the significance of their decisions on biodiversity. An annual European nature balance might bring this information together in a systematic fashion for the use of the European Parliament, the Council of Ministers and the European Commission.

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