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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

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BIENNIAL REPORT (2011-2012)

- NORWAY -

*Memorandum drawn up by
the Directorate of Democratic Governance
The document is being circulated in the form and the languages in which it was received by the Secretariat*

BIENNIAL REPORT 2011 -2012

NORWAY

I. GENERAL INFORMATION

Date of the report: 18.10.2013

Submitted by designated authority: the Norwegian Environment Agency, P.O. Box 5672 Sluppen, NO-7485 Trondheim, Norway. The Directorate for Nature Management changed its name to the Norwegian Environment Agency as of 1st July 2013.

Norway signed the Convention on 19th of September 1979, it was ratified on 27th of May 1986 and it entered into force on 1st of September 1986.

Other biodiversity multilateral agreements that Norway has ratified:

- a. CBD
- b. CITES
- c. CMS
- d. CW- RAMSAR
- e. AEWa
- f. ACAP
- g. EUROBATS
- h. AEBOP

II. GENERAL IMPLEMENTATION OF THE CONVENTION

The following White Paper to the Parliament on biodiversity describes national general objectives, management priorities and goals:

<http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/20002001/stmeld-nr-42-2000-2001-.html?id=194978>

The nature diversity act of 2009

The present act on nature diversity was approved by the Parliament on 19th June 2009 (no. 100). This act replace or partly replace a number of other acts (e.g. the Nature Conservation Act, the Wildlife Act, the Act on Freshwater fish and Salmonids). The main principles of the new act are to protect biological, geological and landscape diversity and ecological processes through conservation and sustainable use (section 1). It places a general duty of care to all sectors (section 6). Other key concepts are 'environmental principles' such as the precautionary principle, the ecosystem approach and the polluter pays principle (section 9,10, 11). The new act broadens the scope of protection of specific natural habitats, so called 'selected habitat types' (section 52). Identified and appointed habitat types will be subject to regulations. A similar regime is introduced for species, so called 'priority species and their natural habitats' (section 23). For invasive alien species a new regulation is still under production.

General information on the new act:

<http://www.regjeringen.no/en/dep/md/press-centre/Press-releases/2009/new-nature-diversity-act.html?id=553630>

Summary of proposition to the Parliament:
http://www.regjeringen.no/pages/2265991/PDFS/OTP200820090052000EN_PDFS.pdf

The Nature Diversity Act in English:

<http://www.regjeringen.no/en/doc/Laws/Acts/nature-diversity-act.html?id=570549>

As a result of section 23 on 'priority species' 8 species have so far been approved with separate regulations for each species by Royal Decree on 5th of May 2011. These are deemed to be the first in a series of expected priority species. The appointed species were: *Anser erythropus*, *Limosa limosa*, *Cicindela maritima*, *Osmoderma eremita*, *Scolitantides orion*, *Dracocephalum ruyschiana*, *Herminium monorchis* and *Cephalanthera rubra*.

Relevant policy and action plans for species and habitats

The Directorate for Nature Management has by 2012 nominated >120 species for development and implementation of action plans. In the period 2003-2009 action plans for the following species have been published: Arctic fox *Alopex lagopus* (see DN-report 2-3003 and later updates), Lesser white-fronted goose *Anser erythropus* (see DN-report 2-2009 and 4-2011 in English), Pool frog *Rana lessonae* (see DN-report 2-2006), Great crested newt *Triturus cristatus* (see DN-report 1-2008), Corncrake *Crex crex* (see DN-report 3-2008), Pearl mussel *Margaritifera margaritifera* (see DN-report 3-2006), Eagle owl *Bubo bubo* (see DN-report 1-2009), Ortolan bunting *Emberiza hortulana* (see DN-report 5-2009), beetle *Cucujus cinnaberinus* (see DN-report 4-2009), Tiger beetle *Cicindela maritima* (see DN-report 3-2009), Slavonian grebe *Podiceps auritus* (see DN-report 7-2009) and Red helleborine *Cephalanthera rubra* (see DN-report 1-2006) (all are available online). The following action plans have been added in the period 2010-2012 (including ones for habitats and invasive alien species):

Habitats:

Calcareous lakes http://www.miljødirektoratet.no/old/dirnat/attachment/2475/DN-rapport-6-2011_net.pdf

Hay meadows [http://www.miljødirektoratet.no/old/dirnat/attachment/95/DN_handlingsplan_2009-6_net%20\(2\).pdf](http://www.miljødirektoratet.no/old/dirnat/attachment/95/DN_handlingsplan_2009-6_net%20(2).pdf)

Hollow oaks http://www.miljødirektoratet.no/old/dirnat/attachment/2762/DN-rapport-1-2012_net.pdf

Calcareous lime forests http://www.miljødirektoratet.no/old/dirnat/attachment/2550/DN-rapport-8-2011_net.pdf

Species:

Osmoderma *eremita*
http://www.miljødirektoratet.no/old/dirnat/attachment/2849/113608_DN_Rapport_2010_4_Eremitt.pdf

Northern dragonhead *Dracocephalum* *ruyschiana*:
http://www.miljødirektoratet.no/old/dirnat/attachment/2647/Rapport_2010_5_Dragehode_PR.pdf

Clouded apollo *Parnassius* *mnemosyne*:
http://www.miljødirektoratet.no/old/dirnat/attachment/1362/Rapport_3_2010_Mnemosyne.pdf

Dwarf eelgrass *Zostera* *noletii*
http://www.miljødirektoratet.no/old/dirnat/attachment/1192/Rapport_1_2010.pdf

Invasive species:

Invasive American mink *Neovison vison* http://www.miljødirektoratet.no/old/dirnat/attachment/2362/DN-rapport-5-2011_net.pdf

Raccoon dog *Nyctereutes* *procyonoides*
http://www.miljødirektoratet.no/old/dirnat/attachment/19/Rapport_2008-2.pdf

Liming of freshwater 2011-2015 to combat acid precipitation:
http://www.miljødirektoratet.no/old/dirnat/attachment/1949/DN-rapport-2-2011_net.pdf

Draft action plans have been published for the following habitats:

Coastal heathlands <http://www.miljødirektoratet.no/old/dirnat/multimedia/51954/Kystlynghei-faggrunnlag-19-mars-2012.pdf>

Zostera *Zostera marina* meadows
<http://www.miljødirektoratet.no/old/dirnat/multimedia/51115/Horningsutkast---faggrunnlag-for-alegraseng-16-12-2011v4.pdf> &

<http://www.miljødirektoratet.no/old/dirnat/multimedia/49704/Faggrunnlag-for-Alegras-Zostera-marina-i-Norge.pdf>

Pollarded, coppiced and grazed woodlands
<http://www.miljødirektoratet.no/old/dirnat/multimedia/51199/Hostingsskog-faggrunnlag-19-des-2011.pdf>

Sandy areas <http://www.miljødirektoratet.no/old/dirnat/multimedia/49254/Fagrappport---Spesielle-sandområder.pdf>

Raised bogs <http://www.miljødirektoratet.no/old/dirnat/multimedia/51698/HogmyrrappBotSer2011.pdf>

Oceanic bogs <http://www.miljødirektoratet.no/old/dirnat/rapporter/2750/rapport.pdf>

Follow-up of resolutions and recommendations

Resolution no 5 (1998) concerning the rules for the network of areas of special conservation interest (Emerald Network):

Norway initiated work to implement the Emerald Network in 2004. By 2010 the total number of nationally Protected Areas (PA) evaluated was 197. These cover about 22,500 km² (2.250.000 ha) of the land area, (including freshwater), or about 45 % of the total area of national PAs in Norway. They also cover about 1,000 km² of marine areas, and about 30 % of the total protected sea area. Since some of the PAs are aligned, or very close to each other, they have been proposed as single Emerald sites (ASCI). The number of ASCIs evaluated by now is thus 93. 36 out of 45 classified habitats have been considered relevant for Norway (cf T-PVS/Emerald (2007) 18). Concerning species 106 out of the 132 are considered relevant for Norway.

Resolution no 6 (1998) listing the species requiring specific habitat conservation measures:

The Norwegian policy is generally based on the white paper "Report to the Storting no 42 (2000-01): Biological Diversity. Sector Responsibility and Coordination." Furthermore, the Ministry of the Environment has initiated a nation-wide project on registration of biodiversity in the municipalities. This project has ended in a countrywide database ("Nature base") and this is continuously updated and an important tool for all planning activities.

The Parliament in 2000 decided to establish a National Data Bank for Species (Norwegian Biodiversity Information Centre, www.biodiversity.no) concentrating primarily on red-listed species and alien species. The unit will be in charge of producing updates of the national red list and black lists for alien species through national expert committees. The first red list from the unit was published in 2006 and the most recent in 2010. The first black list from the unit was produced in 2007 and the second in 2012. The red list volumes contain both English and Norwegian text. An accompanying volume to the 2010-list describes 'Environmental Conditions and Impacts for Red List Species'. All reports from the unit can be accessed via their web site.

Recommendation no 10 (1988) concerning the protection of the Brown Bear Ursus arctos:

The management of Brown Bear in Norway is generally in compliance with the ideas and proposals contained in this recommendation. A comprehensive plan for management of large carnivores, including the Brown Bear, was adopted by the Parliament in the spring of 2004 and 2011, cf the white paper "Report to the Storting no 15 (2003-04): Large carnivorous in Norwegian wildlife" and Recommendation S. no 174 (2003-04) and a private member's bill no 163 S (2010-11) to the Parliament. Reference is also given to the Norwegian contribution to the "Final Draft Action Plan for Conservation of the Brown Bear

(*Ursus arctos*) in Europe” under the Bern Convention, cf T-PVS (98) 23 rev., Strasbourg, 21 January 1999 (cf also ”Nature and Environment” no 114).

Recommendation no 17 (1989) on the protection of the Wolf Canis lupus in Europe:

The ideas and proposals contained in this recommendation are, with a couple of exceptions, reflected in Norway's protection and management of its endangered Wolf population. The exceptions are the recommendations contained in § 4 and § 6 of the operational part of the recommendation, which are not considered to be relevant for Norwegian conditions. Reference is also given to document T-PVS (99) 49, and white paper ”Report to the Storting no 15 (2003-04): Large carnivorous in Norwegian wildlife” and Recommendation S. no 174 (2003-04) and a private member’s bill no 163 S (2010-11) to the Parliament for a more in depth review of the Norwegian management of the Norwegian-Swedish Wolf population, as well as further information given under chapter II.2 above.

Recommendation no 18 (1989) on the protection of indigenous crayfish in Europe:

The management of crayfish in Norway is fully in compliance with the recommendations adopted by the Standing Committee of the Convention. Everyone who wish to harvest crayfish today, need to have a specific licence.

Recommendation no 20 (1991) on the protection of the European Lynx Lynx lynx:

The management of European Lynx in Norway is generally in compliance with the recommendations adopted by the Standing Committee of the Convention, cf letter from the Directorate for Nature Management dated 3 May 1996, and white paper ”Report to the Storting no 15 (2003-04): Large carnivorous in Norwegian wildlife” and Recommendation S. no 174 (2003-04) and a private member’s bill no 163 S (2010-11) to the Parliament on the management of large carnivores, including European Lynx. Reference is also given to the ”Nature and Environment” no 112 on this species.

Recommendation no 22 (1991) on the conservation of the Pearl Mussel Margaritifera margaritifera and other freshwater mussels (Unionidae), cf also Recommendation no 80 (2000) on the implementation of the Action Plan for the conservation of the pearl mussel (Margaritifera margaritifera):

The management of Pearl Mussel in Norway is fully in compliance with the recommendations adopted by the Standing Committee of the Convention, as it is fully protected by the Act relating to Salmon- and Freshwater Fisheries. Following the recommendation no 80 Norway has intensified the efforts to study this species, aiming at increasing the knowledge of its biology and also aiming at developing a management strategy for the species. It is suggested that Norway holds more than 80% of the European population of this species. Norway is also continuing to add calcium to acidified watercourses and lakes, resulting in improved habitats for e.g the pearl mussel. An action plan was published in 2006 (see DN-report 2006-3).

Recommendation no 48 (1996) on the conservation of European globally threatened birds, cf also Recommendation no 60 (1997) on the implementation of the Action Plans for globally threatened birds in Europe, and Recommendation no 75 (1999) on the implementation of new Action Plans for globally threatened birds in Europe, and Recommendation no 93 (2002) on the further implementation of Action Plans for Globally threatened birds and on other issues of interest for bird conservation in the Convention’s range:

Norway holds breeding populations of two of the species mentioned in the Appendix to Recommendations no 48 and no 60; Lesser White-fronted Goose *Anser erythropus* and Corncrake *Crex crex*. The Directorate for Nature Management and the Norwegian Ornithological Society (NOF) are responsible for a program that monitors the population development and breeding success of the Fennoscandian population of Lesser white-fronted geese. A satellite tracking study has also been accomplished in order to reveal the migratory routes, stopover sites on migration and wintering grounds for the species. The project involves several nations, i.e. Azerbaijan, Bulgaria, Finland, Russia, Hungary, Romania, Kazakhstan and Ukraine and is today coordinated by a full time officer placed in the AEWA

Secretariat. See follow up of the AEWA International Single Species Action Plan for the lesser white-fronted goose and meetings of the international working group under the plan.

Separate action plans have been published by the Directorate for nature management for Corncrake (DN-report 2008-3) and for Lesser white-fronted goose (DN-report 2009-2).

A monitoring and management project for Corncrakes in Southern Norway is also established. Breeding Corncrakes are localised, and information on the sites is conveyed to local landowners. Mowing of the breeding meadows is recommended postponed.

*Recommendation no 75 specifically asks for National Action Plans for four species listed in the Appendix to the recommendation in coordination with the African-Eurasian Migratory Waterbirds Agreement (AEWA) under the Bonn Convention. One of these species is Steller's Eider *Polysticta stelleri*, which is included in the "Circumpolar Eider Conservation Strategy and Action Plan" under Conservation of Arctic Flora and Fauna (CAFF), issued in June 1997, and partly funded by the Directorate for Nature Management. This Strategy and Action Plan was implemented in the period 2000-02 under CAFF.*

For other species covered by the Bern Convention Appendices, see under section II ('General implementation of the Convention' and paragraph 'Relevant policy and action plans for species and habitats).

Recommendation no 51 (1996) on action plans for invertebrate species in the Appendices of the Convention and Recommendation no 52 (1996) on habitat conservation for invertebrate species:

Increasing knowledge and focus on rare invertebrate species over the last decade has resulted in both new species protection regimes and new protected sites. Different research programmes has been initiated and two examples are:

Under the national programme for mapping and monitoring of biodiversity, the programme INVENT-ART is an example of reinforced nationwide mapping of rare or undiscovered insects. Some publicised results from this project (now in its third phase) can be seen at: <http://www.artsdatabanken.no/Article.aspx?m=264&amid=8986>

The Norwegian Biodiversity Information Centre administer a nationwide Species-programme. Over the last years >500 new species to Norway has been described, of which 100 were new to science. Most of these are invertebrates. Results from ongoing initiatives under this programme can be seen at <http://www.artsdatabanken.no/artArticle.aspx?m=224&amid=6052>

*Recommendation no 53 (1996) on the conservation of European Otter *Lutra lutra*:*

A national monitoring programme and studies on the biology of this species have been performed by the Norwegian Institute for Nature Research. Among the conclusions are that this species is still increasing in Norway and are now re-colonising former areas in the southern and interior parts of the country. The total population is probably now between 20.000 and 30.000 individuals and increasing. (See also information on this species under chapter II.2 above.)

Recommendation no 57 (1997) on the introduction of organisms belonging to non-native species into the environment and Recommendation no 77 (1999) on the eradication of non-native terrestrial vertebrates:

The official policy in Norway is fully in compliance with the recommendations adopted by the Standing Committee of the Convention. The 2009 Biodiversity Act has a separate chapter on this issue and a new regulation detailing use of these species will be issued. Of the species listed in the appendix to Recommendation no 77, only the American Mink (*Neovison vison*) is of major concern to Norway, although the Raccoon Dog (*Nyctereutes procyonoides*) might also become a growing problem in the NE part of the country. Both species may be hunted all year around in Norway. Implementation of national action plans against raccoon dog (see Norwegian DN-report 2-2008) and mink (see DN-report 5-2011) has started.

Recommendation no 58 (1997) on the reintroduction of organisms belonging to wild species and on restocking and reinforcing populations of such organisms in the environment:

A small number of recovery projects have been undertaken, particularly on threatened bird species. Some have been concluded some years ago with positive results, e.g the re-introduction projects in collaboration with Sweden dealing with *Falco peregrinus* (see under chapter II.2 above) and *Bubo bubo*, and in collaboration with Scotland dealing with *Haliaeetus albicilla*. An example of collaborative efforts between Norway and Sweden on mammals has been the re-introduction efforts of Otter *Lutra lutra* into Sweden based on Norwegian animals. This programme has been ceased due to high levels of mortality at the release sites. In 2010 and 2011 we saw the first attempts to support the wild population of Lesser White-fronted Goose by release of young birds at a staging site.

In 1999 the Directorate for Nature Management (DN) ordered the development of a Status Report and Action Plan on the highly endangered Scandinavian population of Arctic Fox *Alopex lagopus*. During the year 2000 a recovery project to strengthen the population of the Arctic Fox on the Norwegian mainland, involving breeding in captivity, was established. No specimen were caught during 2000, but in 2001 six juvenile Arctic Foxes were caught for this recovery project. An official Action Plan for the Arctic Fox was published in 2003 (cf DN-report 2003-2). In the following years the programme has been perceived as a success and involves several different elements, ia breeding, re-introduction, feeding and culling of red fox as a competitor. The species was listed as CR in the national red list of 2010. The population numbers today less than 100 adults in Norway. A breeding facility was established in 2005. More than 200 pups have been bred at this facility, and 160 of these released into the wild. These pups have themselves been breeding in 2010 and 2011. A record number of pups (271) were born in 2011.

Recommendation no 92 (2002) on sixteen new action plans for most threatened birds on the Convention area:

The recommendation concerns two species in Norway: Gyr falcon and white-tailed sea eagle. The former species has been under a nationwide programme of monitoring for the last two decades. Norway contributes with eaglets within reintroduction programmes in Scotland and Ireland. The national population of sea eagle now counts above 5000 individuals. The gyrfalcon population in Norway is stable and it also forms part of a national monitoring programme.

Recommendation no 99 (2003) on the European strategy on invasive alien species

Norway has published a national strategy on IAS, and continues to develop sectoral policies. Norway has been active in the collaboration with Convention activities and inter alia North European countries, cf. www.nobanis.org The Directorate for nature management has established a team focussing on the issue and commissioned a number of research projects on mapping and eradicating IAS. The national threatened species unit was commissioned a task to produce a method to collect and analyse information on IAS. This task culminated in a 'black list' on IAS published in May 2007, cf. <http://www.artsdatabanken.no/Article.aspx?m=172&amid=2581>

A collaboration project with the directorate has been initiated with the union for horticulturalists in Norway and another project together with the union for zoo-traders in Norway. Both projects aims to disseminate information on the risks with alien species and information on current legislation.

Recommendation no 103 (2004) on five new action plans for most threatened birds in the Convention's area

In Norway the recommendation concerns great snipe. This species has been surveyed nationwide and Norway has been leading in the European work in developing an action plan for the species. The Norwegian population is the highest in Western Europe and new breeding sites are still being uncovered. Much scientific studies have been conducted on this species during the last decades.

Recommendation no 109 (2004) on minimizing adverse effects of wind power generation on wildlife

Norway supported the proposed guidelines for development of wind power and how environmental issues should be integrated in the planning. The guidelines on national coordination has now been implemented to a larger extent than in the initial phase of wind mill development. Norway has in 2006 accepted an invitation from the Convention to evaluate the process concerning wind mill development on Smøla. A major research programme running in the period 2007-2011 on the conflicts with migratory species has been initiated and concluded in 2011.

Recommendation no 110 (2004) on minimising adverse effects of above ground electricity transmission facilities (power lines) on birds

Already in the 1980ies it was conducted studies on the impact of transmission lines on wildlife in general. The knowledge of how these lines influence inter alia bird population is thus quite good. The recommendations from these studies have been made available to the responsible institutions. The recommendation from the Convention and inter alia from the CMS has also been forwarded is continuously implemented on new power lines and when old ones are replaced. A national programme on mitigation was concluded in 2011 and a new programme for concrete mitigation initiated for eagle owl.

Recommendation no 115 (2005) on the conservation and management of transboundary populations of large carnivores

In Norway this particularly applies to the common wolf population with Sweden. This population is managed inter alia through a very close cooperation with the neighbouring country. Updated information on the Scandinavian population and on research cooperation can be found on the web: <http://www.rovdata.no> (in Norwegian) and (in English).

Recommendation no 125 (2007) on trade in invasive and potentially invasive species in Europe

In 2007 a national strategy for alien species was signed by 11 Ministries. The strategy lays the foundation for how each sector handles the issue. Involvement of the private sector has been another approach, involving in particular the zoo-traders and the horticultural enterprises. A national advisory group on aliens species was established in 2007 and major tasks have been to implement action plans and to finance research. One such action plan is the one for raccoon dog (see Directorate for nature management report 2008-2). Norway established a new national nature diversity act in 2009. This act emphasises the need to use ia risk analysis as a fundamental prerequisite before importing alien species. It is expected that a new regulation enters into force in 2013 regulating all import of alien species, except vascular plants.

Recommendation no 134 (2008) on the European code of conduct on horticulture and invasive alien plants

See comments under rec. no 125. A collaborating partnership has been initiated with the private sector to implement the code of conduct in the horticultural business.

Recommendation 135 (2008) on addressing the impact of climate change on biodiversity

In 2007 the Directorate for nature management issued a report on climate change adaption in nature management (see report 2007-2b: Climate change – Nature Management Measures). Recommendations from this report has been followed up by integrating climate change aspects in biodiversity management, e.g in protected area management, combating alien species, semi natural ecosystem management, water management plans. Further development of biodiversity monitoring programmes is also strongly focused, with the terrestrial monitoring program having undergone evaluation with regard to CC effects, and the freshwater and marine monitoring programs being under evaluation. Climate change effects on biodiversity are focused in the research programme NORKLIMA (2004-2013), see www.forskningsradet.no/.../Satellite?...norklima%2FHovedsidemal. An assessment of climate change effects on nature and society in the north (NorACIA), focussing on different sectors, including

biodiversity was published in 2010 (start 2006), and specific vulnerability analyses for the effects of CC on cultural landscapes, on freshwater systems and on sea shores in Norway has been undertaken. A Norwegian climate change adaptation committee was appointed in December 2008 to analyse risks, vulnerability and adaptation for different sectors, including natural environment. The work ended in A Norwegian Official Report (NOU 2010-10) submitted on 15 Nov. 2010. Particular focus has in 2010 and 2011 been on addressing the indirect effects of CC – e.g. potential effects on biodiversity from mitigation measures. In 2011 the Norwegian Directorate for Nature evaluated the potential conflicts with biodiversity of a list of 202 possible mitigation measures suggested by an official commission.

Recommendation no 138 (2008) on the European Strategy for plant conservation

Norway has in 2006 started a programme to develop action plans and fund the approved action plans. The first plant species to get its action plan was the red hellebore (see DN-report 2006-1) and *Zostera noltei* (see DN-report 2010-1). New action plans for other plant species are under development (*Herminium monorchis* and *Dracocephalus ruyschiana*). The hellebore, *Herminium* and *Dracocephalus* were all appointed as ‘priority species’ in 2010 with individual set of regulations applicable and management regimes established.

Recommendation no 139 on the control of the raccoon dog

Norway has established a national action plan aiming to eradicate and hinder establishment of this species, cf DN-report 2008-2.

Recommendation no 144 (2009) on the wind park in Smøla (Norway) and other wind farm developments in Norway

Norway has funded an international research programme on the impacts of windturbines in general and with the Smøla plant as an example (see <http://www.cedren.no/Projects/BirdWind.aspx>). The results of the first years 2007-2010 can be found in NINA report 620 (see <http://www.nina.no/archive/nina/PppBasePdf/rapport/2010/620.pdf>). Norway also acted as a host for an international windturbine conference in 2011 on mitigation techniques. The results from this programme will contribute to future windturbine development in Norway. A new research programme called INTACT on avoidance techniques for existing windfarms and birds has been initiated in 2013, see press release <http://www.statkraft.com/presscentre/news/painting-wind-turbines-at-smola.aspx>

III. HABITAT CONSERVATION

Resolution no 1 and recommendations no 14, 15 and 16 on habitat conservation:

Thematic county nature protection plans

A systematic conservation programme for different types of natural habitats (thematic nature protection plans), based on regional inventories, was initiated in Norway in the beginning of the 1970s. Regional (county) conservation plans for wetlands (especially those important for waterfowl), mires/bogs (primarily selected on botanical and hydrological criteria), broad-leaved forest (selected mainly on botanical criteria) and important seabird colonies were given priority. In 1985 inventories started in order to identify coniferous forests for protection, and elaboration of conservation plans for coniferous forests have been given high priority since 1988, when the recommendations from a national task force on protection of coniferous forest were presented.

In the reporting period work has continued to implement a national plan for marine protected areas. This will concern coral reefs and special marine ecosystems, as well as representative sites and particular sites for flora and fauna (cf the white paper Report to the Storting no 43 (1998-99) on the Protection and Use of the Coastal Environment). If all 36 proposed sites were to be protected these would constitute 10% of territorial waters and 0,5% of EEZ. The hearing process for many new marine sites for protection fully started in 2012. Through the mapping program MAREANO a number of interesting sites have been uncovered, see <http://www.mareano.no/> Hitherto 9 cold water coral reefs have been protected

in Norway. These cover an area of 2.4445km². In addition a ban on bottom trawl has been implemented at 46 sites. More information on coral reefs can be found at <http://www.imr.no/> Recently three new marine and large reserves were established in Norway (out of a series of coming marine reserves): Færder national park, Hvaler national park (both in outer Oslofjord) and Tauterryggen nature reserve (inside Trondheimsfjord).

By the end of 2010 the work 70 thematic county nature protection plans were finalized. The Phase I plan for establishment of a network of coniferous nature reserves has been completed, as has phase II (additional coniferous forests). A phase III is currently running (an extension of the forest protection scheme). It includes not only coniferous forests, but also other types of forested areas. In addition to this a program for new national parks and landscape protection areas are almost completed. When this program is fulfilled it is expected to raise the percentage of mainland Norway under nature conservation protection to well above 17%. Information on establishment of protected sites in Norway can be found at <http://www.miljostatus.no/Tema/Naturmangfold/Vernet-natur/>

Preparation of a county conservation plan is a time-consuming process, including the following steps:

1. Systematic inventories and evaluation of sites based on scientific criteria
2. The County Governor collects information on properties, names of landowners and other formalities concerning sites of high conservation priority, and makes preliminary judgements concerning conflicts with other interests
3. The County Governor informs landowners, the municipalities and different agencies at the county level about the conservation proposal
4. These are given the opportunity to make preliminary comments on the conservation proposals
5. The County Governor elaborates a draft conservation plan, which is sent to the Directorate for Nature Management for technical/scientific approval
6. The County Governor sends the proposal to landowners, organisations and municipalities at the local level and agencies at the county level for a formal hearing
7. Landowners, municipalities and others at the local level give their written comments to the plan
8. The County Governor makes his final proposal for a conservation plan
9. The Directorate for Nature Management sends the plan to organisations, agencies and ministries at the national level for comments
10. The Directorate for Nature Management analyses the comments, finalises the conservation plan, and presents its proposal to the Ministry of Environment
11. The Ministry of Environment presents the proposal to the Government, and the Government adopts the conservation plan through a Royal Decree.

Following the legal establishment of protected areas under the Biodiversity Act, the decision has to be published, the sites have to be marked in the field, the question of possible economic compensation to land owners has to be settled (the land will normally still be owned by private land owners), and management plans may be elaborated if necessary.

The total land area under legal protection increased from 24.557 km² (7.58 %) in 2000 to 26.298 km² (8.12 %) by 2002, to 47.143 km² (14.6%) by the end of 2008, by the end of 2010 it was 52.021 km² (16,1%) and by the end of 2011 this had increased to 54.400km² (16,8%). Table 1 gives the status for area protection in Norway by the end of 2012. The conservation programme with the intent of a total of 16% terrestrial area under protection (incl freshwater) has thus been achieved. Analysis of the established protection network and new goals for terrestrial and marine protection will however further increase the area under protection.

Norwegian Nature Research Institute has published a gap analysis of terrestrial protected areas in Norway, cf report <http://www.nina.no/archive/nina/PppBasePdf/rapport/2010/535.pdf>

Emerald Network

Norway initiated work to implement the Emerald Network in 2004. In February 2013 the Norwegian Ministry of Environment made a proposal to the Council of Europe, for 636 sites as potential for the Emerald Network (containing 833 reserves, covering 43.000 km²). This proposal marked the beginning of Phase II, according to the calendar (T-PVS/PA(2010)08revE) for Emerald Network. The total area of these sites is approximately 43.000 km², mostly terrestrial and freshwater area. The first national biogeographic seminar was arranged in Trondheim (Norway) last June. The conclusions from the seminar shows that most species and habitats require additional sites and better documentation. An evaluation process to fill-in these gaps has been taken. A final proposal from Norway is supposed to be delivered by the end of 2014.

Table 1. Number and area of protected areas in Norway by the end of 2012

Type	Number	Area km²	Percentage of mainland
National park	36	31.317	9,7
Nature reserve	2051	5.649	1,7
Landscape protection	202	17.322	5,4
Other	473	390	0,1
Total	2.762	54.678	16.9

Other areas

In addition approximately 2.900km² of sea areas are protected (out of ca. 90.000 km² inside 12 nautical miles, and two areas (totally covering 63 km²) are protected according to the Wildlife Act. Twenty-two areas are protected according to the Svalbard Act (totalling 35.029 km², equalling 65% of its land area), cf table 2. Of marine waters around Svalbard 87% of the territorial waters out to 12 nautical miles have been protected. The act on the environment on Svalbard entered into force on 1st July 2002, cf. Svalbardmiljøloven.

Regarding Jan Mayen, 375 km² of the islands total of 377km² have been established as a nature reserve. Of the territorial waters 99% have been protected as a nature reserve.

Table 2. Number and area of protected areas in Svalbard by the end of 2012

Type	Number	Area km²	Percentage of mainland
National park	7	14.358	23,53
Nature reserve	21	25.108,5	41,15
Other areas	1	14	0,02
Total	29	39.480	64,7%

Transboundary/shared protected areas

Norway has in collaboration with neighbouring nations established several transboundary protected sites. Examples of these are:

1. Pasvik nature reserve: River/forest-system (Finnmark county), with protected area in the Russian Federation
2. Øvre Anarjokka national park: Bogs/forest/water-system (Finnmark county) with protected area in Finland
3. Kvisleflået nature reserve: Bog/mire-system (Hedmark county) with protected area in Sweden
4. Lundsneset nature reserve: Forest (Østfold county) with protected area in Sweden
5. Hvaler national park: Marine (Østfold county) with protected area Sweden.

In all 11 national parks in Norway have common borders with other protected areas in neighbouring countries. Several nature reserves also shares borders with Sweden, Finland and Russia.

In addition to these transboundary sites, numerous other initiatives are ongoing concerning cooperation between neighbouring countries: 1) The Greenbelt of Fennoscandia (GBF) is an agreement between Finland, Russia and Norway signed in 2010 and intend to ecological connectivity and stimulate transboundary cooperation. 2) The Nordic-Baltic Wetlands Initiative (NorBalWet) is a regional initiative under the Ramsar Convention. The following countries are included: Denmark, Estonia, Finland, Greenland, Iceland, Latvia, Lithuania, Norway, Russia and Sweden. 3) Barents Protected Areas Network (BPAN) on common conservation challenges, including protection of key areas. 4) OSPAR on ecological network on marine protected sites. 5) Habitat Contact Forum network to evaluate needs for new protected areas in the region and on management of existing ones. Involves Finland, Sweden, Russia and Norway.

Management of protected areas

The need for an improved overall strategy for management of protected areas in Norway led to the establishment of a committee on protected areas and a report published in 1989. The committee formulated a general strategy for future management of protected areas, and proposed some general criteria for allocation of resources to management actions.

The following general aims for management of protected areas have been adopted:

- Evaluate the needs for ecological management actions in all protected areas
- Develop management plans for those areas where certain actions are considered to be necessary, or eventually only short notes concerning more "stable" areas
- Make management plans realistic (scientifically, economically and with respect to practical implementation)
- Simplify/revise some existing (too ambitious) management plans
- Implement long term ecological management in a representative sample of sites, aimed at maintaining a certain ecological condition

According to the regulations for each protected area (protected under the Nature Conservation Act), a management plan for the area may be developed and adopted by the management authority.

Such a management plan may include three main parts:

1. Plan for ecological management, including
 - action plan for restoring ecological character
 - action plan for maintaining ecological character

- action plan for enhancing ecological conservation aims

2. Plan for utilisation, including

- arrangements for public access and information
- arrangements for special groups of people
- guidelines for the land owners use of the area

3. Plan for wardening, including

- agreements on wardening
- instructions for wardens

As a follow up of this work an action plan for a number of prioritised nature protected sites was published in 1996, cf Report from the Directorate for Nature Management no 4. Further work to revise a handbook for management of nature protected sites was initiated, and a new version of the handbook was published in the year 2000.

In 1998 an initiative was taken by the Ministry of Environment to delegate the management of conserved areas to the municipal level in Norway. During the reporting period all municipalities (450) have been offered the possibility to take over responsibility for the management of protected areas. In principle, this initiative covers all types of protected areas in Norway. In the early phase 16 municipalities with ca. 100 protected areas participated. This has now been replaced by a new programme with participation of 70 municipalities. Municipalities accepting the offer will be trained to cope with the task. An evaluation of this was completed in 2008.

The Norwegian policy regarding management of protected areas and species is stated in the white paper "Report to the Storting no 42 (2000-01): Biological Diversity. Sector Responsibility and Coordination." Furthermore, the actual status of the environment is updated in annual white papers called "The National State of the Environment", e.g Report to the Storting no 24 (2000-2001) and no 26 (2006-2007): The Environmental Policy of the Government and the State of the Environment in Norway.

Furthermore, the Directorate for Nature Management has issued a "National Master Plan for Monitoring of Biological Diversity" (DN Report 1998-1, Trondheim (170 pp; ISBN: 82-7072-289-8)). The Norway/UN-Trondheim Conference in September 1999 had as its main theme "The Ecosystem Approach for Sustainable Use of Biological Diversity".

Based on a framework for monitoring of protected areas outlined in 2006, the Directorate for Nature Management in 2007 and 2008 has been working with guidance on setting and assessing conservation objectives. Conservation objectives are already being included as an important part in all new management plans.

A new act on nature diversity entered into force in 2009 and replaced the Nature Conservation Act when it comes to protection of areas and management of protected areas.

In 2007 the Directorate for Nature Management issued a strategy on funding of actions in protected areas. In 2007 the Ministry of Environment issued a national strategy on alien species, where the need for actions in protected areas is highlighted.

The Norwegian policy regarding management of protected areas and species is stated in the white paper "Report to the Storting no 42 (2000-01): Biological Diversity. Sector Responsibility and Coordination." Furthermore, the actual status of the environment is updated in annual white papers called "The National State of the Environment", e.g Report to the Storting no 24 (2000-2001): The Environmental Policy of the Government and the State of the Environment in Norway.

Protected sites under threat

Some sites come under pressure from developers or other interests, and the Government may rule that these interests are overriding and of national importance, and may give exemptions from conservation regimes. At present the following important sites are under threat or developers have been given permission to interfere with the targets of the protection regime:

Åkersvika nature reserve and Ramsar site (4 lane highway), Hedmark county

Sørdalen forest nature reserve (high voltage line), Sogn og Fjordane county

Gimsøymyre nature reserve (airport), Nordland county

The Norwegian Nature Inspectorate

The Norwegian Nature Inspectorate (SNO) is the national ranger organization and the national authority for nature supervision and inspection of the whole country, on both publicly owned and privately owned land. The organisation was set up in 1997, as a consequence of the Nature inspectorate Act passed by The Norwegian Parliament in 1996.

SNO is organized as a specific part of The Norwegian Environment Agency, with special legal powers and tasks. It has a head office in Trondheim (29 persons) and a network of 60 local offices (97 persons) across the country. The local offices are divided into 3 departments and 7 sections.

SNO has a national responsibility for prevention and control of environmental crime, and co-operates closely with the national and local police and other official and private organisations, such as the municipal committees that oversee grazing, hunting and fishing rights on common land, Norwegian Pollution Control Authority, Norwegian Coastguard Service and the Archipelago Service.

SNO is also responsible for overseeing the national parks and protected areas, as well as conservation merits of national importance, such as endangered and vulnerable species and species where Norway has a special responsibility, e.g. the North Atlantic Salmon and the wild reindeer populations in the mountain areas of Southern Norway.

Protection of water courses

Conservation plans to protect specific watercourses from hydropower development have been approved by the Norwegian Parliament. The fourth conservation plan for the protection of watercourses was adopted in April 1993, resulting in a total of 341 watercourses being protected. To supplement these conservation plans a new supplementary plan was completed in 2005.

IV. SPECIES CONSERVATION

1. Wild Flora Species ¹⁾ – Appendix I

¹⁾All species names according to the taxonomy used in the Appendices of the Convention.

By 2012 in Norway and Svalbard 3148 vascular plant species and subspecies have been registered. 2480 of these are recognized as species regularly occurring, of these 180 occur on Svalbard. Ca 1500 species are recognized as native plant species, and ca 1600 additional species are aliens. Of these 1355 have been evaluated for the red list and 369 are red listed. For bryophytes the number of species on the mainland is 1071 (1066 evaluated for the red list and 225 red listed). For lichens the figure is 1985 species (1267 evaluated for the red list and 267 red listed), and among fungi the number of evaluated species is 3010 (out of ca 7000 expected species) and 900 have been red listed.

In Norway the following Appendix I species occur: *Aster sibiricus* (protected by Royal Decree 2 October 1981), *Braya purpurascens* and *Oxytropis deflexa* ssp. *norvegica* (both protected by Royal Decree 25 January 1983), *Cypripedium calceolus* and *Platanthera obtusata* ssp. *oligantha* (both protected by Decree issued by the Directorate for Nature Management 1 June 1989).

A proposal to protect 52 species (43 vascular plants and 9 invertebrates) from the Directorate for Nature Management was approved by Royal Decree on December 21st 2001. This new decree includes all plant and invertebrate species on Appendix I and II not previously protected in Norway.

The new protection includes the following Appendix I species: *Botrychium simplex*, *Botrychium matricariifolium*, *Botrychium multifidum*, *Luronium natans*, *Silene furcata* ssp. *angustiflora*, *Trisetum subalpestre*, *Najas flexilis*, *Cypripedium calceolus*, *Platanthera obtusata* ssp. *oligantha*, *Papaver lapponicum*, *Polemonium boreale* and *Saxifraga hirculus*. The older decrees on *Aster sibiricus*, *Braya purpurascens* and *Oxytropis deflexa* ssp. *norvegica* is still in force. *Liparis loeselii* is considered extinct in Norway.

A proposal by the Directorate for Nature Management presented in June 2004 included species protection of *Dracocephalum ruyschiana*, in addition to eight Appendix I species of moss that occur in Norway: *Scapania massalongi*, *Hamatocaulis vernicosus*, *Buxbaumia viridis*, *Atractylolopus alpinus*, *Cynodontium suecicum*, *Dicranum viride*, *Meesia longiseta* and *Orthotrichum rogeri*. All these species were subsequently protected by Royal Decree on July 13th 2005.

As a result of the acceptance of the act on Biodiversity in 2009 and its section 23 on 'priority species' 8 species were approved with separate regulations for each species by Royal Decree on 5th of May 2011. These are deemed to be the first in a series of expected priority species. The appointed flora species were: *Dracocephalum ruyschiana*, *Herminium monorchis* and *Cephalanthera rubra*.

We refer to main section II. General implementation and section on 'Relevant policy and action plans for species and habitats' for activities related to monitoring and restoration of species included in Appendix I.

Regulations and exceptions

The Directorate for nature management can as the management authority for the applicable acts and regulations give conditional exemptions for collection of protected species. As part of the ongoing mapping of new localities the directorate has encouraged amateurs and professionals alike to register for permits to collect in protected species.

The collections must be registered with scientific institutions and limitations to the number of samples that can be collected will be stated in the permit. Limitations aim to avoid threatening the existence of local populations. On average the directorate issues annually 1-5 exemptions from the decree, normally with a time limit of one to three years. The exemptions are mostly issued to scientific institutions or consultants working on mapping programmes. Frequently the exemptions do not result in collections of the protected species.

2. Wild Fauna Species – Appendix II

By 2012 in Norway 248 bird species have been found breeding, and on Svalbard 49 species have been found. 58 bird species have been red listed on the mainland and for Svalbard 18. Among mammals the numbers are 91 species for both mainland Norway, the marine waters and Svalbard. Of these 24 have been red listed for the mainland and 3 for Svalbard. For butterflies 2208 species have been registered (of these 462 are red listed) and for crustaceans 1969 species (both for Norway and Svalbard combined) (of these 125 have been red listed). Among molluscs 885 have been recorded and 164 red listed.

All wildlife in Norway (ie birds, mammals, reptiles and amphibians) have been protected since the adoption of the present wildlife act of 1981.

Nationwide protection of Appendix II species

A proposal on species protection in Norway adopted by Royal Decree on December 21st 2001 include the following invertebrate Appendix II species: *Leucorrhinia albifrons*, *Leucorrhinia caudalis*, *Leucorrhinia pectoralis*, *Parnassius apollo*, *Parnassius mnemosyne*, *Coenonympha hero*, *Cucujus cinnaberinus* and *Dytiscus latissimus*.

A proposal by the Directorate for Nature Management presented in June 2004 includes species protection of *Graphoderus bilineatus*, which was subsequently protected by Royal Decree on July 13th 2005.

After the rediscovery in Norway of *Osmoderma eremita* in 2008, the species was given nationwide protection by the Directorate for Nature Management on August 22nd 2008.

As a result of the biodiversity act (see paragraph I) adopted in 2009 and its section 23 on 'priority species' 8 species were approved with separate regulations for each species by Royal Decree on 5th of May 2011. These are deemed to be the first in a series of expected priority species. The appointed fauna species were: *Anser erythropus*, *Limosa limosa*, *Cicindela maritima*, *Osmoderma eremita* and *Scolitantides orion*.

Regulations and exemptions

Specific regulations have been adopted for the removal of individuals of wildlife species causing damage to crops, livestock, forests, water or other forms of property, or in the interest of public health and safety. Generally, other solutions shall within reasonable limits have been pursued in order to avoid damage, before permit is given to remove protected species. The Directorate for Nature Management has issued a Decree dated 1 September 1997, which states that permits may be issued for different species on three different management levels. These being municipality level, county level and national level.

Exemptions from the general protection of wildlife is possible under a differentiated management regime according to species and level of potential damage. Generally applications for exemptions for more numerous species is handled by the municipal level (1), while the County Governor handles more sensitive species (2). The Directorate for nature management as the national wildlife management authority handles the most sensitive species (3).

1. Municipality based Wildlife Boards

The following Appendix II species may be removed if permitted by the local Wildlife Board (one in each municipality) if they are damaging wooden constructions, crops etc.: Green Woodpecker *Picus viridis*, Grey-headed Woodpecker *Picus canus*, Black Woodpecker *Dryocopus martius*, Great Spotted Woodpecker *Dendrocopos major*, Greenfinch *Carduelis chloris* and Yellowhammer *Emberiza citrinella*.

2. County Governor

The County Governor may, when the following Appendix II species cause damage, issue permits for removal: Otter *Lutra lutra*, bats Microchiroptera, Mute Swan *Cygnus olor*, Pink-footed Goose *Anser brachyrhynchus*, Common Tern *Sterna hirundo*, Arctic Tern *Sterna paradisaea*, Golden Eagle *Aquila chrysaetos*, Goshawk *Accipiter gentilis* and Sparrowhawk *Accipiter nisus*. However, the Directorate has warned that bats are protected and should not be disturbed. To facilitate any issues related to bats a system of advisors and assistance is funded by the directorate. No known incidences related to bats have been registered in the reporting period.

3. The Directorate for Nature Management

The Directorate for Nature Management may, under particular circumstances, issue permits for removal of protected wildlife, either when wildlife causes damage or for scientific purposes. Such permits have in the biennial period been issued for the following Appendix II species: Brown Bear *Ursus arctos*, Wolverine *Gulo gulo* and Wolf *Canis lupus* (see table 1)

The Directorate for nature management issued on 18th June 2004 (no 913) a regulation for handling of dead specimen of wildlife (ie those found dead). This regulation outlines national regulations for taxidermists and contain a list for which species should be tagged and for which species it is necessary to apply for a licence to keep. The last requirement applies for 47 species (incl. bats, carnivores and birds) and is made mandatory from 2004. Of these 47 species it is necessary to register ownership and tag 8 species back in time, ie old specimens.

Large carnivore management

Management of large carnivores in Norway is regulated by the Nature Diversity Act of 2009 and the Wildlife Act of 1981. The Directorate for Nature Management issued in 2005 a regulation on the management of predators, including regulations of bear, wolverine, wolf, lynx and golden eagle. In this regulation the Norwegian populations goals for bear, wolf, lynx, wolverine and golden eagle is defined, information on which are the management authorities, and guidelines under which specific circumstances killing of carnivores can be allowed.

Approximately 200 persons (incl. rangers from the national nature inspectorate) are engaged on seasonal basis to map and monitor the national occurrence of carnivores, and to report on relevant incidences involving carnivores in relation to incidences with husbandry. Every incidence of dead or injured husbandry is analysed, whether these are killed by a large carnivore or by other causes (natural mortality, accidents etc) and thereafter registered in a database. Also an overview of dead carnivores segregated on different causes of mortality (natural, licensed or quota hunted, accident, illegal or other) is available from 1997 until present in this database. E.g. through the use of GIS-technology the public may enter the database via a map of the country and sample information from different levels (municipal, regional or national) as well as information on single cases, see 'rovviltportalen' below. On the webpage of the national statistical agency (Statistics Norway) statistical information on the number of dead carnivores can be found (both in English and Norwegian), cf www.ssb.no/rovdyravg or www.ssb.no/english This statistics is based on different calculations and includes also animals found dead caused by natural causes.

In 2007 the Directorate for Nature Management opened a website called 'Rovviltportalen' ('the large carnivore portal') (www.rovviltportalen.no). The text is only in Norwegian. This website aim to simplify access to information on the issue by the general public and others. The site publishes interactive maps of sites with records of the four large carnivores and maps on husbandry carcasses found. The information also covers Golden Eagle. The site gives information on national policy, on population monitoring, gives oversight of meetings on the issue, media-clippings, specific information on each species concerning its biology and hunting practices. The site gives overviews of all licenses issued and the results of these. It is also a site giving information of requirements for hunters, and for registration of hunters, the most recent quotas, it contains access to electronic application for compensation for livestock or semi-domestic reindeer killed by large carnivores, and financial support for preventive measures to avoid killing of husbandry, etc. The site is regarded as a success and is widely used.

Exceptions for threatened or vulnerable populations of species:

The Norwegian policy towards the large carnivores is based on the White Paper to the Parliament no 15 (2003-04). The policy was debated again in the Parliament in June 2010, and revised with minor changes compared to the White Paper of 2003-04. For these species reference is also given to "Recommendation no 59 (1997) on the drafting and implementation of Action Plans of wild fauna species", "Recommendation no 74 (1999) on the conservation of large carnivores", "Recommendation no 82 (2000) on urgent measures concerning the implementation of Action Plans for large carnivores in Europe" and 'Recommendation no 115 (2005) on the conservation and management of transboundary populations of large carnivores.' In general, Norway has accepted all the recommendations from the Bern Convention regarding large carnivores.

The number of individuals killed or found dead of the three species of large carnivores on Appendix II are listed in table 1. When it is agreed upon the Directorate for nature management normally issues pending permits (licenses) for offtake of these species, or if the population level within each region is reached, the pending permits are issued by a Regional Board for large carnivores which has the authority within the region. The County Governors have the authority to confirm the final permit, when it is deemed necessary. The number of pending permits issued will therefore normally be higher than the number of actual animals felled.

Brown Bear *Ursus arctos*

For brown bear, see further information under Recommendation no 10 (December 1988) in section II. In 2012 the national population counted 137 animals as confirmed by DNA-analysis of hair and scat samples collected during the season. Exceptions reported is given in table 3.

Wolverine *Gulo gulo*

For wolverine, reference is given to the Norwegian contributions to the "Final Draft Action Plan for the Conservation of Wolverines (*Gulo gulo*) in Europe" under the Bern Convention, cf T-PVS (98) 27 rev., Strasbourg, 21 January 1999 (cf also "Nature and Environment" no 115). In 2012 the national population counted approximately 350 individuals and 44 dens. Exceptions reported is given in table 3.

Wolf *Canis lupus*

The population of Wolf is small and endangered in Norway. However, there is a general provision in the Nature Diversity Act for killing large carnivores when there is danger of a direct attack on livestock. Norway has started applying a management regime for wolves that varies according to area. In some parts the wolves will be protected and in other parts sheep and reindeer production is given priority. These management principles are also practised for brown bear and wolverine.

Reference is given to the letter from the Directorate for Nature Management to the Bern Convention of 26 March 1999 on the protection of the Wolf in Norway, i.a describing the agreement between the Swedish Environmental Protection Agency and the Norwegian Directorate for Nature Management of 7 September 1998. Norway has also contributed to the "Final Draft Action Plan for the Conservation of Wolves (*Canis lupus*) in Europe" under the Bern Convention, cf T-PVS (98) 24 rev., Strasbourg, 21 January 1999 (cf also "Nature and Environment" no 113).

The wolf population in Scandinavia is stable or growing. In 2012 the Norwegian population consisted of approximately 30 individuals and 3 confirmed breeding. There were 38 confirmed family packs of wolves in Norway and Sweden in 2012; 3 of these family packs were entirely on the Norwegian side of the border. Exceptions reported is given in table 3.

Table 3. Exceptions concerning brown bear, wolverine and wolf as reported to the Directorate for Nature Management for the hunting seasons (01.04-31.03) 2000-01, 2001-02, 2002-03, 2003-2004, 2004-2005, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-11 and 2011-2012. The numbers also contain specimens killed by road accidents, natural deaths etc.

Species	No. of ind. felled	Licence hunting	
		Lic. issued	Felled
Brown bear <i>Ursus arctos</i>			
2000-2001	7	-	-
2001-02	3	-	-
2002-03	1	-	-
2003-04	4	-	-
2004-05	1	-	-
2005-06	6	-	-
2006-07	4	6	0
2007-08	13	15	3
2008-09	12	16	2
2009-10	18	18	9
2010-11	10	19	3
2011-2012	16	27	2

<i>Wolverine Gulo gulo</i>			
2000-01	43	44	31
2001-02	32	50	23
2002-03	34	42	28
2003-04	39	50	23
2004-05	50	60	21
2005-06	63	68	38
2006-07	79	91	40
2007-08	77	94	28
2008-09	90	89	35
2009-10	89	102	35
2010-11	105	119	37
2011-12	112	119	43
<i>Wolf Canis lupus</i>			
2000-2001	17	-	-
2001-02	2	-	-
2002-03	5	-	-
2003-04	5	-	-
2004-05	7	-	-
2005-06	5	-	-
2006-07	2	2	1
2007-08	5	4	2
2008-09	5	0	0
2009-10	8	4	2
2010-11	13	9	4
2011-12	9	7	3

Otter *Lutra lutra*

The population of otter is estimated at 25.000-30.000 individuals and the population is stable in the major part of the distribution and increasing in southernmost parts of Norway. It is perceived as a common species along the coast and is also recolonizing inland areas. The rise and spread of the population causes conflicts with the fish farming industry. The increase in the population has also led to an increase of otters drowning in fishing gear or being killed accidentally by traffic. Illegal killing of otters is also known to occur. However, the death rate (both illegal and caused by accidents etc) should be perceived as insignificant in relation to the overall population and the demographic development.

Birds of prey

The numbers stated here for white-tailed eagle, golden eagle and goshawk for the seasons 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 are given in table 4. The numbers are mostly birds found dead. The numbers are regarded as being in the lows. No licence for felling in the reporting periods were given for these species. The national populations of white-tailed eagle is estimated at 3000 pairs, for golden eagle at 850-1200 pairs and of goshawk at ca. 2000-2700 pairs.

Table 4. Numbers of goshawk, golden eagle and white-tailed eagle reported as found dead for the seasons 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12.

Species	Total number
Goshawk <i>Accipiter gentilis</i>	
2003-04	44
2004-05	27
2005-06	15
2006-07	15
2007-08	9
2008-09	21
2009-10	26
2010-11	20
2011-12	21
Golden eagle <i>Aquila chrysaetos</i>	
2003-04	4
2004-05	12
2005-06	10
2006-07	14
2007-08	7
2008-09	8
2009-10	11
2010-11	14
2011-12	4
White-tailed eagle <i>Haliaeetus albicilla</i>	
2003-04	26
2004-05	31
2005-06	43
2006-07	44
2006-07	26
2007-08	32
2008-09	19
2009-10	31
2010-11	32
2011-12	

Exceptions concerning falconry

Falconry is not allowed in Norway, none exceptions from this prohibition were made in the period 2011 to 2011.

3. Protected Fauna Species (Appendix Iii)

The exploitation of all species originally listed in Appendix III is regulated, with fixed hunting seasons for all of the species. For several species hunting and other forms of exploitation is only allowed in some parts of the country, while the species may be totally protected in other parts. Restrictions on hunting periods and geography are decided by the Directorate for Nature Management and each hunting period now lasts for five years until a new revision. The revised hunting periods are based on hunting

statistics as well as scientific advice and public advice. In addition the Directorate may stop hunting of species totally or in geographic regions if the circumstances changes or emergencies occur. At present the following number of species can be hunted within their set hunting seasons: 21 mammal species (9 of these are aliens) and 38 bird species (6 of these are aliens).

An extraordinary exemption for sami people have been granted by the Ministry of the Environment for two weeks spring hunt in May for goldeneye, mallard and scaup. The annual total bag quota is set at 150 birds and only sami people and those who apply for a licence can participate.

Exceptions from the ordinary hunting season may be accepted in order to avoid damage to crops, livestock or reindeer husbandry. In most cases such exceptions require the prior grant of a permit issued by either the local Wildlife Board in a municipality, the County Governor or the Norwegian Environment Agency, cf also above under paragraph 2 (on Appendix II species).

Particularly for lynx *Lynx lynx*, Norway has applied a hunting quota system for each county, to regulate the population and to prevent damage on livestock and reindeer husbandry, cf table 5. The quotas are defined by the Directorate for Nature Management or if the regional population level of lynx is reached a Regional Board for large Carnivores has authority to define the quota within the region. In the season 2008-09 the quota for felling of European Lynx was 119, and 110 were actually felled. For 2009-10 the quota was 149 and 134 were felled. In 2010 the national population of lynx counted 441-470 individuals and 75-80 family groups.

Table 5. Quota hunting concerning lynx for the seasons 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12. The total numbers also contain specimens killed by road accidents, natural deaths etc.

Species	Total number	Quota hunting	
Lynx <i>Lynx lynx</i>		Quota	Felled
	48	50	35
2003-04	56	51	44
2004-05	52	48	40
2005-06	85	74	58
2006-07	104	96	90
2007-08	136	119	110
2008-09	147	149	134
2009-10	157	175	136
2010-11	92	118	77
2011-12			

The Atlantic salmon *Salmo salar* is an Appendix III species. As a measure to safeguard threatened strains of this species in particular watercourses, mainly due to impact of the introduced parasite *Gyrodactylus salaris*, Norway has decided to apply treatment with the poisonous agent rotenone. The Norwegian policy towards the use of this agent is to restore ecosystems that stand a risk of becoming destroyed due to introduced species. Rotenone treatment has mainly been applied in watercourses with salmon stocks to eradicate *Gyrodactylus salaris*. Research has shown that there is no negative impact on e.g the populations of the Pearl Mussel *Margaritifera margaritifera*, another Appendix III species, from these rotenone treatments. Some lakes have also been treated with rotenone to try to eradicate the European Minnow *Phoxinus phoxinus* from areas where this species has been introduced.

A Norwegian case study on *Gyrodactylus salaris* was worked out in 2000 and submitted to the Convention on Biological Diversity in May 2001. A trial with an aluminium based solvent has proven less toxic to non-target species and at the same time highly effective against the parasite. It is thus expected to become a more widespread method in the years to come.

Protection of Appendix III species

On Appendix III Norway holds three species: the freshwater crayfish *Astacus astacus*, the pearl mussel *Margaritifera margaritifera* and the leech *Hirudo medicinalis*. The first two has a long standing protection regime in Norway, while the leech was given a formal and total species protection in Norway by Royal Decree on December 21st 2001.

4. CONCERNING THE USE OF METHODS FOR CAPTURE AND KILLING SPECIFIED IN APPENDIX IV

The only general exception made for means of killing as specified in Appendix IV, is the use of semi-automatic weapons, of the Norwegian reservation under I.1-2 above. In addition, persons authorised by the Directorate for nature management may use mist nets or other nets, traps and tape recorders to catch birds or other animals for scientific purposes (ringing etc.). These birds or other animals are normally released afterwards, and therefore the use of these methods will not cause local disappearance of or serious disturbance to populations of a species as stated in Article 8. Obligatory training programmes (2 different courses) with exams have to be passed for persons to hold a license for bird trapping and ringing. The same kind of programme is applicable for bat handling and ringing.

5. SPECIES LISTED ON APPENDIX I, II AND III NOT HAVING LEGAL PROTECTION

All of the species originally listed on these Appendices have legal protection as prescribed by the Convention.

Cetaceans

The small Cetacean species added to Appendix II by the decision of the Standing Committee in December 1987, are all protected under the Act relating to Sea Water Fisheries of 3 June 1983 (including those species for which Norway has made reservations).

Freshwater fish

The taking of freshwater fishes listed in Appendix III is regulated under the Act Relating to Salmonids- and Freshwater Fish etc. (1992).

VII. PUBLICATIONS/WEB

We refer to lists of publications relating to management of species and habitats under section II (General implementation). Other publications of particular relevance are the national red lists and black list. The Norwegian Environment Agency regularly published updates on inventories concerning old growth forests, wetlands, hollow oaks, fungi habitats etc. A number of smaller brochures have been published in relation to advice on management of specific habitats.

Red list for Ecosystems and Habitat Types in Norway (2011):

<http://www.artsdatabanken.no/Article.aspx?m=313&amid=11507>

National red list for threatened species (2010):

<http://www.beta.artsdatabanken.no/File/685/Norsk%20rødliste%20for%20arter>

Alien species in Norway, with black list (2012):

<http://www.beta.artsdatabanken.no/File/689/Alien%20species>

East-European program funded by ia Norway (cf European Economic Agency– EEA):

<http://www.envir.ee/1201254>

VIII. MEETINGS

The Trondheim Conference is firmly established as a forum for debate on key issues of implementation of the Convention on Biodiversity (CBD). The meetings started in 1993 and is hosted in Trondheim every three years, with the most recent in 2013. More info on the conference <http://www.naturoppsyn.no/tk7>

Norway acted as a host for the 10th Conference of the Parties to the Convention on Migratory Species (CMS) in Bergen in November 2011. http://www.cms.int/bodies/COP/cop10/resolutions_adopted/resolutions.htm

A number of international working groups related to biodiversity MEAs have been hosted in Norway in the reporting period. These have been related to issues like CITES and introduction from the sea definition, Lesser White-fronted Goose conservation, and NorBalWet wetland conservation.

EXCEPTIONS CONCERNING ARTICLES 4, 5, 6, 7 & 8

- a) General exceptions follow Norwegian reservations, cf: <http://conventions.coe.int/Treaty/Commun/ListeDeclarations.asp?NT=104&CM=8&DF=&CL=ENG&VL=1>
- b) Individual exceptions: None that result in a generalised practice
- c) Individual exceptions concerning more than ten individuals, cf section IV of this report (concerning brown bear, wolf, wolverine, lynx, golden eagle, white-tailed eagle and goshawk)
- d) Individual exceptions concerning endangered or vulnerable populations, cf section IV of this report. General exceptions for mapping of biodiversity has been given to institutions: Norwegian Institute for Nature Research and biodiversity NGO ('Sabima'). One individual researcher has also been granted licence to collect protected species outside protected areas.

All collected specimens shall be included in scientific collections of public museums. Insignificant numbers of collected specimens of invertebrates or flora or invertebrates have been collected in the reporting period (<10 specimens).

On national policy on derogations we refer to section II on general implementation (relating to carnivores).