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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

CONVENTION RELATIVE A LA CONSERVATION DE LA VIE SAUVAGE ET DU MILIEU NATUREL DE L'EUROPE

Standing Committee Comité permanent

33rd meeting 33^e Réunion

Stgrasbourg, 3-6 December 2013 Strasbourg, 3-6 décembre 2013

GENERAL REPORTS (2009-2012) RAPPORTS GENERAUX (2009-2012)

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ANDORRA / ANDORRE

RAPPORT GENERAL DE LA PRINCIPAUTE D'ANDORRE A LA CONVENTION DE BERNE

2009-2012

1. INFORMATIONS GÉNÉRALES

- Nom de la Partie contractante : Principauté d'Andorre
- Date d'entrée en vigueur de la Convention pour la Partie contractante : 1^{er} février 2001
- Date du rapport : octobre 2013
- Période de référence du rapport : 2009 2012
- Autorité chargée de l'application de la Convention :

Ministère du Tourisme et de l'Environnement

Gouvernement de l'Andorre,

Carrer Prat de la Creu 62-64

AD500 Andorra la Vella

ANDORRA

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- Autres conventions auxquelles adhère la Partie à la Convention de Berne

Principales conventions ayant une incidence sur la conservation de la vie sauvage et du milieu naturel auxquelles l'Andorre a adhéré :

- Convention de Ramsar du 2 février 1971 sur les zones humides d'importance internationale particulièrement comme habitats des oiseaux d'eau, entrée en vigueur le 23 novembre 2012.
- Convention Européenne du Paysage, entrée en vigueur le 1er juillet 2012.
- Convention-cadre des Nations Unies sur les changements climatiques, entrée en vigueur le 31 mai 2011.
- Convention des Nations Unies pour la lutte contre la désertification, entrée en vigueur le 17 juillet 2002
- Convention de Washington du 3 mars 1973 sur le commerce de la faune et de la flore sauvages menacées d'extinction, non en vigueur mais les documents réalisés en Andorre sont reconnus par le CITES

2. APPLICATION GÉNÉRALE DE LA CONVENTION

Législation d'application :

- Loi de protection des animaux du 12 juillet 2012
- Décret d'approbation du Règlement relatif aux conditions de transport, d'importation et d'exportation des animaux sauvages du 16 mars 2005
- Règlement de protection des milieux aquatiques du 2 mars 2005
- Loi sur la pêche et la gestion des milieux aquatiques du 28 juin 2002
- Décret pour l'approbation du Règlement des espèces animales protégées du 28 février 2001
- Loi sur la chasse du 13 avril 2000

Plans d'actions :

- Projet Felis : sur le chat sauvage
- Projet Gallipyr : sur le grand tétras, le lagopède alpin et la perdrix grise
- PACT : plan d'action pour la conservation du gypaète barbu
- Estratègia nacional del paisatge (ENP) : la stratégie nationale du paysage a été approuvée par le Gouvernement en décembre 2011, elle fixe 7 objectifs de qualité du paysage et elle se décline en une vingtaine d'actions prévues jusqu'en 2015.
- Projet BMSAnd : Suivi de l'état de conservation des papillons de l'Andorre.
- Projet SOCA : Suivi des oiseaux communs de l'Andorre.

Accords avec d'autres Etats en matière de conservation de la flore, de la faune et de leurs habitats :

- Projets Gallipyr et Nécropyr : dans le cadre des travaux de la Communauté de Travail des Pyrénées (CTP).
- Accord trilatéral sur la biodiversité : signé avec l'Espagne et la France en 2006, pour les thèmes concernant l'ours et le loup dans les Pyrénées.
- Accord d'échange de données : avec la Catalogne
- Participation au Réseau d'éducation environnementale Pyrénées Vivantes

3. CONSERVATION DES HABITATS

Catégories de zones protégées :

- Parc natural de les Valls de Sorteny : premier parc naturel de l'Andorre créé en juin 1999
- Parc natural de les valls del Comapedrosa : créé en juillet 2006, ce parc a une superficie de plus de 1.500 ha et englobe le plus haut pic du pays, le pic du Comapedrosa

Ces 2 parcs ont été créés par les communes et disposent d'un plan d'action et de plans de gestion annuel.

Autres mesures de protection des habitats en dehors des zones protégées :

- Suivi des zones humides : « monitoring » annuel d'une centaine de zones humides sur les 1750 inventoriées.
- Suivi de la végétation des berges : suivi annuel et suivi quinquennal de la qualité des formations végétales des berges des cours d'eaux et de leur évolution depuis 2000.

4. CONSERVATION DES ESPÈCES

Espèces de flore sauvage

2010 : projet SIG sur les zones humides

2008/2010 : étude de la flore allochtone d'Andorre 2009-2013 : suivi de la flore menacée d'Andorre

Espèces de faune

2009 -2010 : suivi des amphibiens d'Andorre

2007-2012 : étude de la dynamique des cavités des forêts andorranes

2009-2011 : étude des micromammifères d'Andorre. Checklist et liste rouge.

5. RECHERCHE SCIENTIFIQUE

Projets et programmes liés à la conservation des habitats au niveau national (par exemple, recherches sur la gestion d'habitats particuliers, projets de mise en valeur du milieu naturel)

- 2009-2013 : étude et suivi de l'habitat des combes à neiges avec le suivi entre autres espèces du *Salix herbacea* (espèce alpine bio-indicateur face au changement climatique), peut permettre de comprendre comment peuvent évoluer les habitats alpins suite au changement climatique. Dans le cadre de cette étude, une cartographie de l'évolution des combes à neige a été faite à partir de photos aériennes et elle peut être consulté sur la page web du CENMA.
- Depuis 2003 : étude des pâturages supra forestiers d'Andorre, principalement dans la vallée du Madriu, portant sur l'évaluation de la biodiversité et la qualité fourragère des pâturages, ainsi que sur leurs utilisations par les différents éleveurs du pays.
- Étude sur l'adaptation de *Gentiana lutea* (espèce avec des propriétés pharmaceutiques) en Andorre, essai de culture de l'espèce en utilisant des plantes de différentes tailles.
- Étude de la classification (situation géographique et environnementale) des forêts de protection contre les avalanches. Ces forêts peuvent permettre d'éviter certaines avalanches et elles abritent une grande biodiversité (grand tétras, hibou pyrénéen, ...).
- Élaboration de la carte journalière du risque d'incendies en Andorre, à partir des données météorologiques journalières obtenues des différentes stations météo réparties sur tout le territoire (calcul journalier de *Fire Weather Index* (FWI)). (www.incendis.ad)
- Étude des chiroptères d'Andorre, en collaboration avec le Musée des Sciences Naturelles de Granollers différents habitats ont été prospecté dans le but de faire une liste des chauves-souris présente en Andorre.
- Depuis 2002 : études sur la diversité et l'abondance de micromammifères en Andorre.
- Depuis 2004: développement du projet Andorra Butterfly Monitoring Scheme (BMSAnd) qui permet le suivi des papillons et leur sensibilité face au changement climatique et a l'utilisation des sols.

6. ACTIVITÉS INTERNATIONALES

Projets et programmes bilatéraux ayant pour objet la conservation de la flore et de la faune de l'Europe, et de leurs habitats

- Journée sur le paysage et les stations de ski alpin en 2012
- Salmopyr en 2011
- Journée sur les parcs naturels en 2010
- Nécropyr en 2010
- Gallypir en 2009
- **ICP FOREST :** International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests operating under the UNECE Convention on Long-range Transboundary Air Pollution. Depuis 2004 avec trois stations et à partir de 2013 avec 8 stations. Afin de suivre les effets de la pollution atmosphérique sur les écosystèmes forestiers en Europe.
- *Global Biodiversity Information Facility* (**GBIF**): depuis 2010, ce projet permet de centraliser et organiser l'information relative à la biodiversité et permettre sa consultation sur le portail du GBIF: www.gbif.org.

7. PUBLICATIONS

- Dantart, J.; Jubany, J. (2012). "Les papallones diürnes d'Andorra" Monographies du CENMA. Centre d'Etude de la Neige et la Montagne d'Andorre de l'Institut d'Etudes Andorranes.
- Domènech, M.; Copons, R (2008). "Els boscos de protecció". La Revista del CENMA, 1, 5-13. Centre d'Estudis de la Neu i de la Muntanya d'Andorra, Institut d'Estudis Andorrans.
- Domènech, M.; Esteban, P.; Caritg, R. (2011). "Les congestes d'Andorra (anys 1948, 1972, 1995, i 2003): primera cartografia i anàlisi". IV Jornades de Neu i Allaus. 25, 26 i 27 de maig de 2011. Vielha et Mijaran, Val d'Aran, Espagne.
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- Esteban, P.; Prohom, M.; Aguilar, E. (2011). "Tendències recents del clima d'Andorra i càlcul d'índexs diaris". IV Jornades de Neu i Allaus. 25, 26 i 27 de maig de 2011. Vielha et Mijaran, Val d'Aran, Espagne.
- Gallego, N.; Mas, R.; Esteban, P.; Margalef, A. (2011). "Les allaus a Andorra (1975-2010): Anàlisi estadístic". IV Jornades de Neu i Allaus. 25, 26 i 27 de maig de 2011. Vielha et Mijaran, Val d'Aran, Espagne.
- Divers auteurs. (2011). "Actes del IX Col·loqui Internacional de Botánica Pirenaico-cantàbrica a Ordino, Andorra". Monographies du CENMA. Centre d'Etude de la Neige et la Montagne d'Andorre de l'Institut d'Etudes Andorranes.
- Niell, M.; Agelet, A. (2011). "Remeis i plantes d'ús tradicional del Pirineu. Recull etnobotànic i etnomicològic de les Valls d'Andorra". Monographies du CENMA. Centre d'Etude de la Neige et la Montagne d'Andorre de l'Institut d'Etudes Andorranes.
- Domènech, M.; Niell, M. (2011). "Noves dades per la llista vermella de la flora d'Andorra" Acta Botànica Barcinonensia, 53: 5-10.
- Pladevall, C. (2011). "El CENMA posa la micologia a l'abast de tothom amb un curs de bolets a Ordino". Ordino és viu, 11: 8.
- Esteban, P.; Margalef, A. (2011). "La prevenció d'allaus es possible gràcies a l'anàlisi periòdic del mantell nival". Ordino és viu, 9: 8.
- Borredà, V.; Martínez-Ortí, A.; Nicolau, J. (2010). "Guia de camp dels mol·luscs d'Andorra". Monographies du CENMA. Centre d'Etude de la Neige et la Montagne d'Andorre de l'Institut d'Etudes Andorranes, Editoriale Pages.
- Lazare J.J. & Riba S. (2010). Nouvel apport à la flore de la Principauté d'Andorre. J. Bot. Soc. Bot. France 50: 17-18.
- Carrillo, E., Mercadé, A., Ninot, J., Carreras, J., Ferré, A., Font, X. (2008). Check-list i Llista vermella de la flora d'Andorra
- Lazare J.J., Cantenot Y., Riba S., Darquistade A., Dartiguelongue S. & Pujos A. (2009). Inventaire et étude écologiques des zones humides de la Principauté d'Andorre (programme national 2002-2006); interprétation géosymphytosociologique. Acta Bot. Gallica, 156: 589-605.

8. RÉUNIONS

Néant

9. DIFFICULTÉS GÉNÉRALES LIÉES À L'APPLICATION DE LA CONVENTION

L'Andorre, du fait de la petite taille de l'administration, a une difficulté spéciale pour participer aux réunions de la Convention et pour trouver des experts en Andorre pour participer aux Comités scientifiques et aux réunions techniques.

Pour plus de renseignements veuillez consulter les pages suivantes: www.mediambient.ad

www.cenma.ad.

AZERBALIAN / AZERBAÏDJAN

GENERAL REPORT OF AZERBAIJAN FOR 2009-2012

1. GENERAL INFORMATION

- Name of the Party Azerbaijan
- Entry into force of the Convention for the Party 1999
- Date of the report -14.10.13
- Period covered by the report
- Designated authority for the Convention Ministry of Ecology and Natural Resources
- Important institutional changes.
- [- Other Conventions to which the Party is a party]
 - Azerbaijan is a party to following conventions:
- 1. Convention on the Protection of the World Cultural and Natural Heritage;
- 2. United Nations Framework Convention on Climate Change;
- 3. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITIES);
- 4. Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar);
- 5. Convention on Biological Diversity (CBD);
- 6. Landscape convention;
- 7. Environmental Impact Assessment in the Transboundary Context;
- 8. Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel);
- 9. Convention on Long-Range Transboundary Air Pollution;
- 10. Stockholm Convention on Persistent Organic Pollutants;
- 11. Convention on Transboundary Effects of Industrial Accidents (Helsinki);
- 12. Framework Convention for the Protection of the Marine Environment of the Caspian Sea.

2. GENERAL IMPLEMENTATION OF THE CONVENTION

- Legislation through which the Convention is being implemented
 - Convention is being implemented through the following laws: "Law on Protection of plants", "Law on environmental protection", "Law on animals", "Law on hunting", "Law on protection of specially protected areas" and others.
- Specific policy plans, national and regional, for the protection of flora, fauna and their habitat
 - Azerbaijan Red Data Book (II edition) on endangered flora and fauna species has been printed
 on the basis of collected materials by the specialists of scientific offices, NGOs and the Ministry.
 Counting of birds and mammals is being implemented by the specialists of scientific offices,
 NGOs and the Ministry every year.

Shahdagh National Park and Samur-Yalama National Park have been established within the joint projects of International Organizations.

In order to increase protected areas in Azerbaijan Republic with the order of President of Azerbaijan Republic № 156 S, dated 16 June, 2011, new National Park – Samur-Yalama National Park is established with financial support of Germany Government.

Nowadays preparing of project on establishment of Zagatala-Balaken Biosphere Reserve is going on with the KfW.

3. HABITAT CONSERVATION

- Categories of protected areas, where appropriate, indicate background of changes IUCN Categories of protected areas:
 - I a Nature Reserves
 - II National Parks
 - IV Sanctuaries
- Name and locality of reserves shared with other parties (border areas)

Hyrkan National Park (Iran border)

Shahdagh National Park (Russia border)

Qarayazi Nature Reserve (Georgia border)

Eldar Shami Nature Reserve (Georgia border)

Qaragol Nature Reserve (Armenia border)

Basitchay Nature Reserve (Armenia border)

Zagatala Nature Reserve (Russia and Georgia border)

Ilisu Nature Reserve (Russia border)

- Other measures to protect habitat outside protected areas (regulations, etc.) (Specify, see Recommendation No. 25 (1991) of the Standing Committee on the conservation of natural areas outside protected areas proper)

In order to protect habitat outside protected areas protection is strengthened, buffer zones are established and etc.

Natural habitats under threat

20% of Azerbaijan territory was occupied by the Armenians. And now 2 National Reserves and 4 Nature sanctuaries are under the threat.

4. RESEARCH

Strengthening environmental publicity works on the direction of forming ecological consciousness, organizing environmental studies at the gardens, secondary and higher schools, implementing measures on "Ecology for children", organizing events on "Ecology day", "Earth day", "Biodiversity day", "Sea day" and events with students are implemented.

5. INTERNATIONAL ACTIVITIES

We have cooperation with KfW on establishing Samur-Yalama National Park.

Nowadays preparing of project on establishment of Zagatala-Balaken Biosphere Reserve is going on with the KfW.

6. PUBLICATIONS

Azerbaijan Red Data Book (II edition) on endangered flora and fauna species has been printed. Azerbaijan has a diverse fauna, particularly avian fauna, and some regional endemic species of amphibians, reptiles and birds as well as a rich variety of endemic plant species, other important plant species, and species of medicinal herbs. The first Red Data Book for endangered flora and fauna of

Azerbaijan was published in 1989, and covered some 140 rare and endangered plant species and 108 animal species. One hundred and eight species of fauna are recorded in the Red Data Book: forty species of insects, five species of fish, five species of amphibians and nine species of reptiles are listed as endangered. Twenty one bird species have been found to be globally or nationally threatened. Thirty three per cent of mammals in Azerbaijan are included in either the Azerbaijan Red Data Book or classified as globally threatened on the IUCN Red List, and around a quarter of mammal species have naturally restricted ranges. Species of carnivores such as the striped hyena, Caucasian leopard and wild cat are considered locally extinct due to hunting and habitat loss.

The first part of Red Book – botanical part is ready. Second part – zoological part has been translated in English. It is expected that it will contain a total of 220 animal species.

Booklets, leaflets on biological diversity, National Parks and Nature State Reserves in Azerbaijan, Caspian Sea environmental protection system were published.

7. MEETINGS

Workshops on Biodiversity, monitoring on Caspian pollution are often organized.

"Caspian: Technologies for environment" exhibition is held every year in our country. Many international organizations are invited for this exhibition.

GEORGIA / GÉORGIE

1. GENERAL INFORMATION

Report is prepared on 20.11.2013 by the Ministry of Environment and Natural Resources Protection of Georgia, 6 Gulua street, 0114, Tbilisi, Georgia. Tel: +995 32 272 72 31; e-mail: biodepbio@moe.gov.ge

Entry into force of the Convention for Georgia - 1/3/2010

Georgia is a party to the following biodiversity multirateral agreements:

- Convention on Biological Diversity
 - Convention on Wetlands of International Importance especially as Waterfowl Habitat
 - Convention on International Trade in Endangered Species of Wild Fauna and Flora
 - Convention on the Conservation of Migratory Species of Wild Animals
 - European Landscape Convention
 - Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area
 - African-Eurasian Waterbird Agreement
 - Agreement on the Conservation of Populations of European Bats
 - Cartagena Protocol on Biosafety

2. GENERAL IMPLEMENTATION OF THE CONVENTION

Legislation through which the Convention is being implemented

Main legislative acts concerning habitate and species conservation adopted by Georgia are:

- 1. Law on Wildlife (1996)
- 2. Law on "Red List" and "Red Data Book" of Georgia (2003)
- 3. Law on the System of Protected Areas (1996)

Specific policy plans, national and regional, for the protection of flora, fauna and their habitat

In 2013 the Ministry of Environment and Natural Resources Protection initiated new law on Species and Habitates, which will cover all issues related with the species and habitat conservation, hunting, international and domestic trade, monitoring. Law covers requirements of the two main EU directives (Birds Directive; Habitates Directive). As of today, concept for new law is elaborated, needs are assessed and structure for new law is drafted. It's supposed that new law will be adopted by July 2014.

Follow-up to general recommendations and guidelines of the Standing Committee

- 1. Recommendation No. 162 (2012) of the Standing Committee, adopted on 30 November 2012, on the conservation of large carnivores populations in Europe requesting special conservation action
- a. In 2012 Georgia started monitoring of selected species, under the National Biodiversity Monitoring System (NBMS). Research is being carried out, by the Ilia State University.

In 2012 together with other species included in the appendixes of the Bern Convention, one species from the carnivores, specifically Brown Bear (*Ursus arctos*) was covered by the research. Survey showed that size of the Brown Bear population is approximately 1650 individuals.

None of the carnivore species are included in the research for 2013, however other Bern Convention species are surveyed, such as *Capra aegagrus, Cervus elaphus, Rupicapra rupicapra*. Results of the survey should be submitted to the Ministry by the end of the 2013. Results submitted should include information about the quantity of the species per population, distribution maps and density of the population. Also recommendations for the future monitoring process for the selected species.

In 2013 together with the state budget project is also supported by the GIZ (German International Cooperation Society).

It's supposed, that from next year list of the species surveyed will be expanded.

b. In the end of 2011 The Biodiversity Protection Service under the Ministry of Environment Protection initiated the updating process of the NBSAP with assistance of GIZ (German International Cooperation Society) project "Sustainable Management of Biodiversity in South Caucasus". At present draft of the new NBSAP is elaborated. It's supposed that second NBSAP will be adopted by the government by the end of 2013.

One of the goals of the second NBSAP is C.2: By 2020, the status of biodiversity has been considerably improved through effective conservation measures and sustainable use. Under this goal there are several specific actions. Among them are elaboration and implementation of the national action plans for the Brown Bear (*Ursus arctos*) and Leopard (*Panthera pardus*).

- c. Two species which are included in the appendixes of the Bern convention are included in the Red list of Georgia, which was approved in 2006. Eurasian lynx (*lynx lynx*) is listed under category CR and Brown Bear (*Ursus arctos*) under category EN.
- d. In addition to above-mentioned, the Ministry of Environment and Natural Resources Protection of Georgia is working to settle new shelter for the captivated Brown Bears. As of today Tbilisi Zoo is used as a shelter for confiscated specimens.

2. Recommendation No. 154 (2011) of the Standing Committee, adopted on 2 December 2011, on the European Code of Conduct on Pets and Invasive Alien Species

a. The alien flora of Georgia has been studied since the first half of the 20th century, but until 2009, there were no publications summarizing the information on the alien flora at the national level. The first attempt to fill this gap was the publication of "Alien Flora of Georgia" by a team of Georgian and Swiss scientists (Kikodze et al. 2010). It provides an overview of the alien and invasive plant species with regard to the Georgian flora. Some of the ecological and biological characteristics of the alien plants in Georgia are discussed and a list of plant invaders and potential invaders is provided. This is a preliminary and largely compilatory work based on the existing literature sources, field surveys and modelling studies carried out within the framework of a Swiss-Georgian research project. The methodological part follows "The alien flora of Switzerland" (Gassmann & Weber, 2002).

Moreover, a recently established study, jointly carried out by the Swiss-Georgian consortium on invasive species (Thalmann, 2013) aimed at identifying (i) areas most at risk due to invasive alien plants (IAP) and (ii) the most prominent IAP at present and in the future. For this was established a three-step procedure: First was determined and mapped the areas of high conservation value in Georgia (basically the 43 Protected Areas), secondly was mapped the present occurrences (based on field and herbarium records) of the 9 potentially most harmful IAP species out of 16 invasive species

identified in a previous survey and predicted the distribution under current and future climate conditions at a resolution of 1km2 using firstly species distribution models based on 6 climate variables. Finally was overlaid the new combined distribution maps of all 9 IAPs on the one with the areas of high conservation value to identify the Protected Areas most at risk by IAP.

Despite the fact that the above publications were prepared in recent years, there is an urgent need to extend and combine these two studies, i.e. to enlarge the Thalmann study from only 9 to 50 IAP to identify the areas with highest concentration of alien plants and set-up monitoring system of most notorious aliens that pose immediate threat to local biodiversity.

In this regard, per request of the Ministry of Environment and Natural Resources Protection of Georgia, GIZ provided local grant to the Ilia State University. The objective of the local grant is to support the Institute of Botany under Ilia State University in elaborating Indicator P9 "Number and distribution of invasive species" within the framework of the National Biomonitoring System (NBMS).

The specific objectives are as follows:

- Identification of 50 worst alien plant species threatening biodiversity in Georgia
- Preparation of distributional maps of all target species based on the literature sources, herbarium vouchers and consultation with relevant local and international experts
- Identification of areas supporting high numbers of invasive plants and presence of aliens in protected areas
- Set-up of baseline data collection and monitoring programme of most notorious aliens (5-10 species)
- Training of Protected Area's staff in identification of invasive plants and actions to prevent their spread

First results of the project should be submitted to the Ministry by the end of 2013, such as Identification of 50 worst alien plant species threatening biodiversity in Georgia and distribution maps of the all target species. Final results will be provided by September 2014.

b. In the end of 2011 The Biodiversity Protection Service under the Ministry of Environment Protection initiated the updating process of the NBSAP with assistance of GIZ (German International Cooperation) project "Sustainable Management of Biodiversity in South Caucasus". At present draft of the new NBSAP is elaborated. It's supposed that new NBSAP will be adopted by the government by the end of 2013.

Among other activities it covers issues related with the invasive species. Specifically one of the goals of new NBSAP is B.2: By 2020, the impact and Pathways of alien invasive species have been evaluated and identified, and measures are in place to manage their pathways and prevent their introduction and establishment.

Specific activities regarding invasive species included in the NBSAP are following:

- Assess known and potential pathways of invasive alien species and subspecies, and develop preventive measures.
- Asses the status of the invasive alien species and model their impact on native biodiversity.
- Establish alien species management strategy and legal base.
- Identify the ways of penetration of marine invasive species
- Elaborate efficient mechanisms for the regulation of marine invasive species, including *Mnemyopsys leidi, Rapana venosa.*
- Study dissemination of marine invasive species.
- Create a system for monitoring of the marine invasive species.

- Identify invasive species, ways of invasion in inland waters and effects of invasion; elaboration and implementation of measures for prevention.

-

3. EUROPEAN CHARTER ON FUNGI-GATHERING AND BIODIVERSITY

Existing forest legislation allows collection of these products free of charge for personal consumption. No thresholds have been specified beyond which the collection of these products would be regarded as commercial, while many rural dwellers collect and sell them for gaining some cash. Because no annual quotas are defined, there might be significant risks of unsustainable extraction.

Fungi-gathering for primary commercial purposes is not regulated by the existing forest code.

4. HABITAT CONSERVATION

At present the total area of Protected Areas is 520 273 hectares, which is about 7.46 % of the country's territory. About 75 % of Protected Areas are covered by forests. Primary function of the Protected Areas is protection of natural heritage of the country, unique biodiversity and eco systems. There are 64 different categories of Protected Areas according to the IUCN:

- 14 Strict Nature Reserves
- 10 National Parks
- 18 Managed Nature Reserves
- 24 Natural Monuments
- 2 Protected Landscapes

Lagodekhi Protected Areas, Javakheti Protected Areas, Machakhela National Park and Vashlovani National Park are bordering to the Protected Areas in respective bordering countries.

- a. Lagodekhi Protected Areas are located in the most northeastern part of Georgia, in the Lagodekhi District. This includes the Lagodekhi Strict Nature Reserve and Lagodekhi Managed Nature Reserve along the southern slopes of the main range of the Great Caucasus. The height of the Protected Areas varies within 400-3500 m above the sea level.
- b. Javakheti Protected Areas established for ensuring the continuous development of the natural process for protection of the biodiversity of the Javakheti wetland, especially for migratory birds and recovery of the habitats.

Total area of Javakheti Protected Areas is 16209.42ha, which consists:

- Javakheti National Park 13498.02ha
- Kartsakhi Lake Strict Nature Reserve 157.5ha
- Sulda Lake Strict Nature Reserve 309.3ha
- Khanchali Lake Strict Nature Reserve 727.3ha
- Bughdasheni Lake Strict Nature Reserve 119.3ha
- Madatapa Lake Strict Nature Reserve 1398ha
- c. Machakhela National Park is located in the south-western part of Georgia in autonomous republic of Adjara, in the ravine of the river Machakhela, which represents the transboundary river between Georgia and Turkey. Machakhela ravine characterized with endemic and relict species. It covers 8733 ha. 75% of the total area is covered by forest. 13 species of woody plants are the member of the red list. The National Park is also rich with its fauna..
- d. Vashlovani Protected Areas are located in the extreme eastern part of Georgia, in the Dedoplistskaro district. It consists of:

- Vashlovani Strict Nature Reserve 10 143 ha
- Vashlovani National Park 24 610 ha
- Eagle Gorge Nature Monument 100.4 ha
- Takhti-Tepa Nature Monument 9.7 ha
- Alazani Floodplains Nature Monument 204.4 ha

5. SPECIES CONSERVATION

10 mammal, 3 reptile and 2 fish species included in the Appendix II are listed in the Red List of Georgia. At the same time 9 reptile species from the appendix III are included in the red list.

6. RESEARCH

In 2012 Georgia first started monitoring of selected species, under the National Biodiversity Monitoring System (NBMS). In 2013 together with the state budget project is also supported by the GIZ (German International Cooperation Society). Research is being carried out, by the Ilia State University.

In 2012 the most important mammal species were surveyed. Study was carried out on the whole territory of Georgia, except of the Abkhazia and South Osetia. It showed following quantities

Brown Bear (*Ursus arctos*) – 1643 individuals; Wild goat (*Capra aegagrus*) – 150 individuals; European roe deer (*Cervus elaphus*) – 500 individuals; Northern chamois (*Rupicapra rupicapra*) – 3551 individuals; Wolf (*Canis lupus*) – 1400 individuals;

In 2013, following Bern Convention species has been surveyed: *Capra aegagrus*, *Cervus elaphus*, *Rupicapra rupicapra*. Results of the survey should be submitted to the Ministry by the end of the 2013. Results submitted should include information about the quantity of the species per population, distribution maps and density of the population. Also recommendations for the future monitoring process for the selected species.

It's supposed, that from the next year list of the surveyed species will be expanded.

Scientists of the Ilia State University carry out permanent researches on three dolphin species (*Tursiops truncatus ponticus, Delphinus delphis ponticus, Phocoena phocoena relicta*) distributed in the Georgian part of the Black Sea coastline.

7. INTERNATIONAL ACTIVITIES

a. In 2009-2011 Georgia participated in the joint project for the countries of the EU Neighbourhood Policy East Area and Russia, aimed establishment and development of the emerald network. The project is implemented by the scientific non-governmental organization "Nacres".

During this project (Phase 1) by 2012 following activities were implemented:

- Sites database for the potential Emerald sites with all respective ecological data;
- Digital boundaries for all Emerald sites in GIS;
- Distribution maps of 83 species and 10 habitats in GIS;

- Population estimate and distribution per biogeographical region in Georgia for all species and habitats of Resolutions No. 4 (1996) and No. 6 (1998) of the Bern Convention and Annex I of the Habitats Directive:

In 2013 second phase of this project has started.

b. In 2011 Georgia volunteered to participate in the Economics of Ecosystems and Biodiversity (TEEB) initiative as one of the pilot countries. During 2012 year scoping study was conducted. The project was implemented by the WWF Caucasus. Priority economic sectors of the Scoping study were: Hydropower, Tourism, Forestry, Agriculture;

The government of Georgia is committed to undertake a full National TEEB study. At present country is looking for opportunities with various international institutions to secure some funding for this study. TEEB related issues are involved in the Georgian Biodiversity Strategy and Action Plan (NBSAP) that is on its way of finalization.

8. PUBLICATIONS

Red list of Georgia is published on the official web-site of the Ministry (moe.gov.ge). Results of the monitoring under the newly established biodiversity monitoring system are regularly published on the web-site biomonitoring.moe.gov.ge.

The agency of Protected Areas regularly issues leaflets and brochures concerning the protected areas of Georgia.

9. MEETINGS

- 1. European Regional CITES Plants Meeting, Tbilisi, Georgia, 19-23 September, 2011 Main topics of the meeting were:
- Outcomes of the 19th Meeting of the CITES Plants Committee Priorities for the European Region
- Sustainable Harvest of Galanthus waronowii in Georgia
- The global market in Snowdrops current and future demands
- Sustainable Harvest of Bulbs in Turkey
- Trade in Medicinals, Cosmetics and Pharmaceuticals
- CITES Timber Trade
- CITES Timber identification and training tools to support Enforcement
- Timber Trade in the Caucasus
- 2. Subregional workshop for Eastern Europe and Central Asia on Valuation and Incentive Measures, Tbilisi, Georgia, 29-31 May 2012

The workshop is aimed to:

- To provide decision-makers in the sub-region with economic arguments for the conservation and sustainable use of biodiversity, as well as with information on state-of-the-art tools that enhance the quality of decision-making processes regarding conservation and sustainable use;
- To provide a platform for these decision-makers to exchange views and assess the applicability, needs for adaptation, and limitations of these arguments and tools in their countries, with a view to promote common understanding;
- To promote synergies and enhanced cooperation among relevant policy areas and sectors by mainstreaming biodiversity and ecosystem services;
- To support the revision and review or update of national biodiversity strategy and action plans in light of the Strategic Plan for Biodiversity 2011-2020, in particular with regard to Aichi

Biodiversity Targets 2 and 3, as well as other relevant targets, including through the development of national targets as foreseen by decision X/2.

- 3. 6th Biodiversity in Europe Conference, Batumi, Georgia from 15 to 18 April 2013:
- a. decided to establish the Pan-European Biodiversity Platform, as a follow-up to the Pan-European Biological and Landscape Diversity Strategy (PEBLDS), to implement the Pan-European 2020 Strategy for Biodiversity
- b. decided to set up a Steering Committee that will lead the process:
- this structure is to be led by official representatives of governments and regional economic integration organizations, and open to the involvement of NGOs, academia, and businesses, reflecting sub-regional balance
- members of this Steering Committee are to actively contribute, financially and/or in-kind, to the Platform
- members are to meet virtually or back to back with other events and a first meeting of the Steering Committee is to take place in 2013
- c. decided that the Steering Committee is tasked with:
- developing a work programme, building upon existing efforts across the regions with a view to enhance consistency and effectiveness, and identifying a limited number of priority themes for pan-European cooperation, reviewing them periodically
- setting-up, where needed and depending on the availability of funding, thematic working groups to address these priority themes
- facilitating cooperation on the implementation of the Pan-European 2020 Strategy for Biodiversity through concrete project activities in the region, learning from each other through the exchange of experience and expertise, (including preparation to and implementation of biodiversity-related MEA COP decisions, work on indicators, NBSAPs, etc.)
- facilitating the mobilization of resources for the implementation of the Pan-European 2020 Strategy for Biodiversity
- supporting synergies for biodiversity-related MEA implementation and reporting in the region, and inviting representation from the Secretariats of biodiversity-related MEAs
- engaging stakeholders (including NGOs, academia, and businesses) to cooperate in the framework of the Platform
- ensuring active and timely communication of the results and achievements of pan-European cooperation
- organizing regular Biodiversity in Europe conferences
- d. encouraged UNEP to provide the Secretariat services for the Platform, in accordance with UNEP Governing Council Decision UNEP/GC/27/2
- e. requested the Steering Committee to decide on the desired way to encourage formalized support for the Secretariat, be it through a submission to the next United Nations Environment Assembly (UNEA) of UNEP in 2014, direct request to UNEP, or through other means.

NORWAY / NORVÈGE

IMPLEMENTATION OF THE CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

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_nett.pdf Hav meadows

http://www.miljødirektoratet.no/old/dirnat/attachment/95/DN_handlingsplan_2009-6 nett%20(2).pdf

Hollow oaks

http://www.miljødirektoratet.no/old/dirnat/attachment/2762/DN-rapport-1-2012_nett.pdf Calcareous lime forests

http://www.miljødirektoratet.no/old/dirnat/attachment/2550/DN-rapport-8-2011 nett.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 noltei

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_nett.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_nett.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.milj & direktoratet.no/old/dirnat/multimedia/51115/Horingsutkast---faggrunnlag-for-alegraseng--16-12-2011v4.pdf & alegraseng--16-12-2011v4.pdf & 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.milj & direktoratet.no/old/dirnat/multimedia/49254/Fagrapport---Spesielle-sandomrader.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 magaritifera):

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 Conventuon 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 raccon 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 *Haliaetus 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 gyr falcon 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 adaption 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 ia 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 ia 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 km^2 (7.58 %) in 2000 to 26.298 km^2 (8.12 %) by 2002, to 47.143 km^2 (14.6%) by the end of 2008, by the end of 2010 it was 52.021 km^2 (16,1%) and by the end of 2011 this had increased to 54.400km^2 (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 (<u>T-PVS/PA(2010)08revE</u>) 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 km ²	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

Туре	Number	Area km ²	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 proteted 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

Gimsøymyrene mire 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 cooperates 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, Atractylocarpus 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 ia 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 virdis*, 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 brachyrhyncus*, 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 ia 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 ia 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.	Licence hunting	
	felled	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
Wolverine Gulo gulo			
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
Wolf Canis lupus			
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
Species	number
Goshawk Accipiter gentilis	Humber
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 Aquila chrysaetos	
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 Haliaeetus	
albicilla	26
2003-04	31
2004-05	43
2005-06	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 Lynx	iidiii sei	Quota	Felled
lynx	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 MEDTHODS 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, cf 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 ia 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 ia 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=E NG&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).

SERBIA / SERBIE

THE BIENNIAL REPORT OF THE REPUBLIC OF SERBIA (2011-2012)

MINISTRY OF ENERGY, DEVELOPMET AND ENVIRONMENTAL PROTECTION OF THE REPUBLIC OF SERBIA

The Republic of Serbia is the contracting party to the Bern Convention since May 2008.

Competent Authorities to Grant Exceptions:

The Ministry of Energy, Development and Environmental Protection of the Republic of Serbia according to conditions provided by the Institute for Nature Conservation of Serbia and the Provincial Institute for Nature Conservation in Vojvodina

Data has been provided by the Ministry of Energy, Development and Environmental Protection of the Republic of Serbia and the Institute for Nature Conservation in Vojvodina.

1. EXCEPTIONS CONCERNING STRICTLY PROTECTED FLORA SPECIES (ART.5 – APPENDIX I)

2011

Name of the species	No. of specimens involved (when practical)	No. of licences	Reasons for issuing of licences (art. 9, i. to v.) ¹	Impact on population
Paenia officinalis	18	1	scientific research	none
Ramonda serbica	10	1	scientific research	none

Name of the species	No. of specimens involved (when practical)	No. of licences	Reasons for issuing of licences (art. 9, i. to v.) ¹	Impact on population
Paenia tenvifolia	3	1	scientific research	none
Ramonda serbica	10	1	scientific research	none
Marsilea quadrifolia	10	1	scientific research	none

Where appropriate, please add a text providing information on:

Information on the conservation status of the derogated species	Strictly protected by the Rulebook on proclamation and protection of strictly protected and protected species of wild flora, fauna and fungi ("Official Gazette of RS", No 5/10)
The authority empowered to declare that the conditions have been fulfilled	The Ministry of Energy, Development and Environmental Protection of the Republic of Serbia
Conditions of risk and the circumstances and the time and place under which exception where granted	
The controls involved	Environmental inspectors at the republic, regional or local level and hunting inspectors
Justification for derogation for a species	
in an unfavourable conservation status	
Alternative solutions considered and	
scientific data to compare them	
Results of derogations (e.g. Cumulative	
effects and compensation measures	
where relevant)	
Comments/notes	

2. EXCEPTIONS CONCERNING STRICTLY PROTECTED FAUNA SPECIES (ART. 6 - APPENDIX II)

Name of the species	No. of specimens involved (when practical)	Authorised action (art. 6, a. to f.) ²	No. of licences	Reasons for issuing of licences (art. 9, i. to v.) ³	Impact on population
Ursus arctos	3		1	i/iv	none
Rhinolophus blastii	7		1	i/iv	none
Rhinolophus euryale	8		1	i/iv	none
Rhinolophus ferrumequinim	2		1	i/iv	none
Rhinolophus hipposideros	5		1	i/iv	none
Eptesicus serotius	3		1	i/iv	none
Miniopterus schreibersii	5		1	i/iv	none
Myotis myotis	12		1	i/iv	none

Nyctalus leisleri	14	1	i/iv	none
Nyctalus noctula	12	1	i/iv	none
Ardea purpurea	17	1	i/iv	none
Ardeola ralloides	32	1	i/iv	none
Egretta garzetta	11	1	i/iv	none
Ixobrychus minutus	5	1	i/iv	none
Nycticorax nycticorax	203	1	i/iv	none
Ciconia ciconia	11	1	i/iv	none
Ciconia nigra	25	1	i/iv	none
Platea leucorodia	27	1	i/iv	none
Plegadis falcinellus	5	1	i/iv	none
Alcedo attis	7	1	i/iv	none
Coracias garrulus	287	1	i/iv	none
Merops apiaster	3	1	i/iv	none
Upopa epops	1	1	i/iv	none
Accipiter nisus	2	1	i/iv	none
Buteo buteo	9	1	i/iv	none
Gyps fulvus	30	1	i/iv	none
Haliaeetus albicilla	31	1	i/iv	none
Circaetus galicus	2	1	i/iv	none
Falco subbuteo	3	1	i/iv	none
Falco tinnunculus	152	1	i/iv	none
Falco vespeptinus	91	1	i/iv	none
Himantopus himantopus	8	1	i/iv	none
Recurvirostra avosseta	3	1	i/iv	none
Porzana porzana	1	1	i/iv	none
Emberiza citrinella	49	1	i/iv	none
Emberiza schoeniclus	49	1	i/iv	none
Carduelis cannabina	12	1	i/iv	none
Carduelis carduelis	171	1	i/iv	none
Carduelis chloris	177	1	i/iv	none
Carduelis spinus	50	1	i/iv	none
Coccothraustes coccothraustes	38	1	i/iv	none
Loxia curvirostra	5	1	i/iv	none
Serinus serinus	61	1	i/iv	none
Delichon urbica	1	1	i/iv	none

Hirudo rustica	261	1	i/iv	none
Riparia riparia	444	1	i/iv	none
Lanius collurio	74	1	i/iv	none
Lanius excubitor	1	1	i/iv	none
Anthus compestris	1	1	i/iv	none
Anthus pratensis	4	1	i/iv	none
Anthus spinoletta	3	1	i/iv	none
Anthus trivalis	5	1	i/iv	none
Motacilla flava	20	1	i/iv	none
Ficedula albicollis	1	1	i/iv	none
Ficedula hypolevica	8	1	i/iv	none
Ficedula parva	1	1	i/iv	none
Muscicapa striata	15	1	i/iv	none
Aegihalos caudatus	63	1	i/iv	none
Parus ater	10	1	i/iv	none
Parus caeruleus	323	1	i/iv	none
Parus cristatus	1	1	i/iv	none
Parus major	1	1	i/iv	none
Parus montanus	12	1	i/iv	none
Parus palustris	38	1	i/iv	none
Certhia brachydactyla	1	1	i/iv	none
Prudella modularis	11	1	i/iv	none
Sitta europaea	6	1	i/iv	none
Aerocephalus arundinaceus	208	1	i/iv	none
Aerocephalus palustris	99	1	i/iv	none
Aerocephalus schoenobaenus	1340	1	i/iv	none
Aerocephalus melonopogon	100	1	i/iv	none
Aerocephalus scirpaceus	1600	1	i/iv	none
Cettia cetti	1	1	i/iv	none
Hippolais icterina	11	1	i/iv	none
Locustella fluviatilis	1	1	i/iv	none
Locustella luscinioidaes	276	1	i/iv	none
Locustella naevia	2	1	i/iv	none
Phylloscopus collybita	114	1	i/iv	none
Phylloscopus sibilatrix	34	1	i/iv	none
Phylloscopus trochilus	29	1	i/iv	none
Regulus ignicapillus	4	1	i/iv	none

Regulus regulus	14	1	i/iv	none
Sylvia atricapilla	206	1	i/iv	none
Sylvia borin	66	1	i/iv	none
Sylvia communis	66	1	i/iv	none
Sylvia curruca	19	1	i/iv	none
Sylvia nisoria	7	1	i/iv	none
Erithacus rubecula	140	1	i/iv	none
Luscinia luscinia	14	1	i/iv	none
Luscinia megarhynchos	36	1	i/iv	none
Luscinia svecica	4	1	i/iv	none
Phoenicurus ochruros	25	1	i/iv	none
Phoenicurus phoenicurus	7	1	i/iv	none
Saxicola ruberta	9	1	i/iv	none
Saxicola torquatus	14	1	i/iv	none
Turdus torquatus	2	1	i/iv	none
Troglodytes troglodites	53	1	i/iv	none
Asio otus	167	1	i/iv	none
Asio flamens	2	1	i/iv	none
Athene noctua	12	1	i/iv	none
Bubo bubo	3	1	i/iv	none
Otus scops	6	1	i/iv	none
Strix aluco	37	1	i/iv	none
Tuto alba	5	1	i/iv	none
Dendrocopus major	10	1	i/iv	none
Dendrocopus medius	2	1	i/iv	none
Dendrocopus minor	3	1	i/iv	none
Dendrocopus syriacus	5	1	i/iv	none
Jynx torquilla	6	1	i/iv	none
Picus viridis	3	1	i/iv	none
Emus orbicularis	1	1	i/iv	none
Coronella austiaca	2	1	i/iv	none
Salamandra atra	2	1	i/iv	none
Triturus karelinii	3	1	i/iv	none
Nyla arborea	4	1	i/iv	none
Maculinae arion	3	1	i/iv	none

2012			1		
	No. of				
	specimens			Reasons for	
Name of the	involved	Authorised	No. of	issuing of	Impact on
		action (art.	2.00	_	population
species	(when	6, a. to $f.)^2$	licences	licences (art.	
	practical)	,		9, i. to v.) ³	
Dhinolombus blostii	2		1	i/iv	none
Rhinolophus blastii			_		none
Rhinolophus euryale	35		1	i/iv	none
Rhinolophus ferrumequinim			1	i/iv	none
Rhinolophus hipposideros	15		1	i/iv	none
Barbastella barbastellus	2		1	i/iv	none
Miniopterus schreibersii	11		1	i/iv	none
Myotis capaccinii	13		1	i/iv	none
Myotis daubentoni	1		1	i/iv	none
Myotis emorginatus	1		1	i/iv	none
Myotis myotis	2		1	i/iv	none
Myotis mystacinus	2		1	i/iv	none
Nyctalus noctula	8		1	i/iv	none
Pipistrellus kuhlii	25		1	i/iv	none
Plecotus austriacus	5		1	i/iv	none
Vespertilio muriuns	1		1	i/iv	none
Himantopus himantopus	1		1	i/iv	none
Tringa glareola	13		1	i/iv	none
Ardea purpurea	39		1	i/iv	none
Ixobrychus minutus	10		1	i/iv	none
Nycticorax nycticorax	34		1	i/iv	none
Ciconia ciconia	3		1	i/iv	none
Alcedo attis	5		1	i/iv	none
Coracias garrulus	280		1	i/iv	none
Merops apiaster	38		1	i/iv	none
Accipiter nisus	5		1	i/iv	none
Aquila helioca	1		1	i/iv	none
Buteo buteo	12		1	i/iv	none
Gyps fulvus	15		1	i/iv	none
Haliaeetus albicilla	20		1	i/iv	none
Circaetus galicus	1		1	i/iv	none
Circus aeroginosus	2		1	i/iv	none
Falco subbuteo	3		1	i/iv	none
Falco tinnunculus	70		1	i/iv	none
Falco vespertinus	7		1	i/iv	none
Porzana porzana	1		1	i/iv	none
Cinclus cinclus	1		1	i/iv	none
Emberiza cirlus	3		1	i/iv	none
Emberiza citrinella	5		1	i/iv	none
Emberiza schoeniclus	291		1	i/iv	none
Carduelis cannabina	22		1	i/iv	none
Carduelis carduelis	192		1	i/iv	none

Carduelis chloris	246		1	i/iv	none
Carduelis spinus	12		1	i/iv	none
Coccothraustes	4.1			. ,.	
coccothraustes	41		1	i/iv	none
Serinus serinus	61		1	i/iv	none
Delichon urbica	198		1	i/iv	none
Lanius collurio	2		1	i/iv	none
Lanius excubitor	1		1	i/iv	none
Anthus compestris	1		1	i/iv	none
Anthus trivalis	53		1	i/iv	none
Motacilla flava	217		1	i/iv	none
Motacilla alba	2		1	i/iv	none
Motacilla cinerea	1		1	i/iv	none
Oriolus oriolus	8		1	i/iv	none
Aegihalos caudatus	143		1	i/iv	none
Parus ater	4		1	i/iv	none
Parus caeruleus	458		1	i/iv	none
Parus cristatus	2		1	i/iv	none
Parus lugobris	2		1	i/iv	none
Parus major	1048		1	i/iv	none
Parus palustris	20		1	i/iv	none
Prudella modularis	11		1	i/iv	none
Sitta europaea	11		1	i/iv	none
Aerocephalus arundinaceus	370		1	i/iv	none
Aerocephalus palustris	194		1	i/iv	
	174		1	1/1 V	none
Aerocephalus schoenobaenus	1069		1	i/iv	none
Aerocephalus melonopogon	53		1	i/iv	none
Aerocephalus scirpaceus	2254		1	i/iv	none
Hippolais icterina	36		1	i/iv	none
Locustella fluviatilis	6		1	i/iv	none
Locustella luscinioidaes	393		1	i/iv	none
Locustella naevia	3		1	i/iv	none
Phylloscopus collybita	96		1	i/iv	none
Phylloscopus sibilatrix	171		1	i/iv	none
Phylloscopus trochilus	144		1	i/iv	none
Regulus ignicapillus	4		1	i/iv	none
Regulus regulus	2		1	i/iv	none
Sylvia atricapilla	1412		1	i/iv	none
Sylvia borin	348		1	i/iv	none
Sylvia communis	184		1	i/iv	none
Sylvia curruca	88		1	i/iv	none
Sylvia nisoria	10		1	i/iv	none
Erithacus rubecula	178		1	i/iv	none
Luscinia megarhynchos	95		1	i/iv	none
Luscinia svecica	11		1	i/iv	
Phoenicurus ochruros	89	1	1	i/iv	none none
Phoenicurus phoenicurus	8		1	i/iv	none
Saxicola ruberta	21	 	1	i/iv	none
Saxicola torquatus	23	 	1	i/iv	none
Turdus torquatus	6	 	1	i/iv	none
Asio otus	35	 	1	i/iv	none
Bubo bubo	3	 	1	i/iv	none
Otus scops	36	 	1	i/iv	none
Otus scops	30	I	1 1	1/ 1 V	HOHE

Strix aluco	15	1	i/iv	none
Strix uralensis	3	1	i/iv	none
Tuto alba	10	1	i/iv	none
Dendrocopus major	1	1	i/iv	none
Dendrocopus medius	1	1	i/iv	none
Dendrocopus minor	4	1	i/iv	none
Dendrocopus syriacus	11	1	i/iv	none
Jynx torquilla	5	1	i/iv	none
Picus viridis	6	1	i/iv	none
Natrix tessellata	17	1	i/iv	none
Triturus cristatus	10	1	i/iv	none

Where appropriate, please add a text providing information on:

Information on the conservation status of the derogated species	Strictly protected or protected species by the Rulebook on proclamation and protection of strictly protected and protected species of wild flora, fauna and fungi ("Official Gazette of RS", No 5/10)
The authority empowered to declare that the conditions have been fulfilled	The Ministry of Energy, Development and Environmental Protection of the Republic of Serbia
Conditions of risk and the circumstances and the time and place under which exception where granted	
The controls involved	Environmental inspectors at the republic, regional or local level and hunting inspectors
Justification for derogation for a species in an unfavourable conservation status	
Alternative solutions considered and scientific data to compare them	
Results of derogations (e.g. Cumulative effects and compensation measures where relevant)	
Comments/notes	Amendments on the Rulebook on proclamation and protection of strictly protected and protected species of wild flora, fauna and fungi ("Official Gazette of RS", No 5/10) initiated by the Provincial Institute for Nature Conservation in Vojvodina regarding strict protection of Canis Lupus in all territory of Vojvodina including hunting ground Deliblatska pescara and Vrsacke planine.

Compensation for damages made by strictly protected species

During year 2011 is was recorded seven cases of damages and destructions made by bears. 60 beehives, frames, queen bees and honey combs were destroyed. A number of plum trees were damaged and one lamb and one cow we attacked and slaughtered by bears.

During year 2012 it was recorder 19 cases of damages and destructions mainly made by bears. 30 beehives, frames, queen bees and honey combs were destroyed. 11 sheep and one ram were slaughtered and a number of orchards with some 130 plum trees were badly damaged. Also some 30-40 poplar trees were damaged by beavers, 18 beehives were damaged by woodpeckers and orchard with plum trees was damaged by ravens.

According the commission established by the of Energy, Development and Environmental Protection for implementation and procedure for resolution of the applications of compensation for damages made of wild animals – strongly protected, the owners of beehives, orchards and cattle were all received the compensations.

APPENDIX III)4

2011

Name of the species	No. of individuals involved (when practical)	Exception made	Reasons for issuing of licences (art. 9, i. to v.) ⁵	Impact on the population
Martes foina	1		i/iv	none
Anas pelepone	1		i/iv	none
Ardea cinera	4		i/iv	none
Streptopelia turtus	1		i/iv	none
Coturnix coturnix	1		i/iv	none
Corvus frugilegus	1		i/iv	none
Corvus monedula	5		i/iv	none
Garrulus glandarius	10		i/iv	none
Passer montanus	143		i/iv	none
Testudo hermanni	Number of animals were marked and left in natura		i/iv	none

Name of the species	No. of individuals involved (when practical)	Exception made	Reasons for issuing of licences (art. 9, i. to v.) ⁵	Impact on the population
Cygnus olor	65		i/iv	none

Larus cachinnaus	87	i/iv	none
Streptopelia decaocto	12	i/iv	none
Passer montanus	350	i/iv	none
Phalacrocoxax carbo	30	i/iv	none
Testudo hermanni	62	i/iv	none
Alburnoides bipunctatus	1	i/iv	none
Aspius aspius	1	i/iv	none
Chondrostoma nasus	3	i/iv	none
Silurus glanis	7	i/iv	none
Testudo hermanni	62	i/iv	none

5. EXCEPTIONS CONCERNING THE USE OF MEANS OF CAPTURE AND KILLING SPECIFIED IN APPENDIX IV

Name of the species	No. of specimens (when practical)	No. of licences	Reasons (art. 8, a. to e.) ⁶	Method used ⁷	Impact on the population
Phalacrocorax carbo	30	1	shutdown i/iv		

Belgrade, 25th October 2013.

Prepared by the Unit for PA, Ecological Network and Appropriate Assessment in collaboration with Group fro Biodiversity and Provincial Institute for Nature Conservation in Vojvodina

Snezana Prokic, Focal Point for Bern Convention

"THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA" / "L'EX-RÉPUBLIQUE YOUGOSLAVE DE MACÉDOINE"

MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING

By Aleksandar Nastov, M.Sc. Head of Unit for Biodiversity

Department of Nature/Environment Administration

1. GENERAL INFORMATION

- Name of the Party: **REPUBLIC OF MACEDONIA**
- Entry into force of the Convention for the Party: **April 1999**
- Date of the report: **25.10.2013**
- Period covered by the report: **2009-2012**
- Designated authority for the Convention: **MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING**
- Important institutionnel changes. None
- Other Conventions to which the Republic of Macedonia is a party:
 - ➤ Convention on Wetlands of International Importance Particularly as Waterfowl Habitat (Ramsar 1971). Act of Succession in 1991;
 - ➤ Convention on the Protection of the World's Cultural and Natural Heritage (Paris, 1972). Act of Succession in 1991:
 - ➤ Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973), ratified by law in 1999;
 - ➤ Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979), ratified by law in 1999;
 - Convention on Biological diversity (Rio, 1992), ratified by law in 1997;
 - ➤ Convention on Environmental Impact Assessment in a Trans boundary Context (Espoo 1991), ratified by law in 1999;
 - Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus, 1998), ratified by law in 1999;
 - ➤ United National Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UN, 2000), ratified by law in 2002;
 - ➤ Agreement on the Conservation of Bats in Europe EUROBATS (London, 1991), ratified by law in 1999;
 - Amendment on the Conservation of European Population of Bats, ratified by law in 2002;
 - Agreement on the Conservation of African-Eurasian Migratory Water-Birds (Hague, 1995), ratified by law in 1999.

2. GENERAL IMPLEMENTATION OF THE CONVENTION

Legislation through which the Convention is being implemented

Law of Nature Protection (Official Gazette of RM 64/04, 14/06; 84/07; 35/10, 47/11, 148/11, 59/12).

Specific policy plans, national and regional, for the protection of flora, fauna and their habitat

National Environment Action Plan NEAP 1 (MEPP, 1995);

National Environment Action Plan NEAP 2 (MEPP, 2006);

Country Study for Biodiversity of the Republic of Macedonia (MEPP, 2003);

National Biodiversity Strategy and Action Plan (MEPP, 2004)

Second Strategic Action Plan for Biodiversity Conservation in RM (MEPP 2009);

Spatial Plan of the Republic of Macedonia (Macedonian Parliament, 2004);

Report of Environment Protection and Nature Conservation in Republic of Macedonia, UN/ECE,

New York and Geneva (2002).

Follow-up to general recommendations and guidelines of the Standing Committee:

Agreements, memoranda of understanding, etc. (other than conventions) with other States related to the conservation of flora, fauna and their habitat

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Republic of Croatia on the Environ Protection and Nature Conservation (Zagreb, 2002);

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Russian Federation on the Environ Protection and Nature Conservation (Moskow, 1998);

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Federal Republic of Yugoslavia on the Environ Protection and Nature Conservation (Belgrade, 2002);

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Suisse Confederation on the Environ Protection and Nature Conservation (Skopje, 2001);

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Republic of Bulgaria on the Environ Protection and Nature Conservation (Sofia, 2000);

Agreement of cooperation of Government of the Republic of Macedonia and Government of the Republic of Albania on the Protection and Sustainable Development of Lake Ohrid (Skopje, 2004);

Memoranda of Understanding and cooperation between Macedonian Ministry of Environment and Physical Planning and Albanian Environment Agency for Environment Protection and Sustainable Development (Pogradec, Albania 2000);

Memoranda of Understanding and cooperation of Environment Protection and Sustainable Development between Party of Firs Part and Party of Second Part on the UN Agreement in New York from 13 September 1995 (Skopje 2000);

Memoranda of Understanding for conservation of four European species of vultures (Aegypus monachus, Gipaetus barbatus, Gyps fulvus and Nephron percnopterus) between Macedonian Ministry of Environment and Physical Planning and Consortium of Non Governmental Organizations (2003);

Memoranda of Understanding and cooperation between Macedonian Ministry of Environment and Physical Planning and Italian Ministry of Environment for Environment Protection and Sustainable Development (Rimini, Italy 2000).

3. HABITAT CONSERVATION

Categories of protected areas, where appropriate, indicate background of changes

I a Strict Nature Reserve

I b Wildlife Area

II National Park

III Natural Monument

IV Natural Park

V Protected Landscape

VI Multi-ussing Area

			% of territoryen of MK
IUCN CATEGORY	No of Areas	(ha)	
I a Strict Nature Reserve	2	10.673	0.42
I b Wildlife Area	/		
II National Park	3	115.713	4.50
III Natural Monument	57	70.424	2.74
IV Natural Park	15	3.375	0.13
V Protected Landscape	3	5.387	0.21
VI Multi-ussing Area	1	26.923	1.05
Summary:	81	232.495	9.05

Table 1: Number and % of protected areas in Macedonia (MEPP, December 2012)

Name and locality of reserves shared with other parties (border areas)

Natural habitats under threat

Katlanovsko Blato (march), Skopje Region,

Monospitovsko Blato (march), Strumica Region,

Strusko Blato, Ohrid Region,

Studencisko Blato, Ohrid Region

Belcisko Blato, Ohrid Region,

Ezerani (march), Prespa Region

Grasslands around river Treska,

Grasslands around river Vardar,

Grasslands around river Pcinja,

Grasslands around river Bregalnica,

Grasslands around river Strumica,

Grasslands around river Crna Reka,

Grasslands around river Crn Drim,

Lake Prespa, Prespa Region,

Lake Dojran, Dojran Region,

Lake Ohrid, Ohrid Region,

Vodno Forest, Skopje Region

Gazi Baba Forest, Skopje Region,

Kanion Matka, Skopje Region

Kanion Chatino, Tikves Region

George Drenovska Klisura, Tikves Region,

George Demirkapiska Klisura, Tikves Region,

Glacial Lakes Golemo I Malo Ezero, Pelister, Pelagonia Region.

Specific information on habitat protection for migratory species

Katlanovsko Blato (march), Skopje Region, Monospitovsko Blato (march), Strumica Region,

Strusko Blato, Ohrid Region, Studencisko Blato, Ohrid Region, Belcisko Blato, Ohrid Region,

Ezerani (march), Prespa Region, Lake Prespa, Prespa Region, Lake Dojran, Dojran Region,

Lake Ohrid, Ohrid Region, Kanion Matka, Skopje Region, Kanion Chatino, Tikves Regio,

George Drenovska Klisura, Tikves Region, George Demirkapiska Klisura, Tikves Region.

Habitat of species that are in danger of extinction. Red list of endangered habitat. /

4. SPECIES CONSERVATION

Wild flora species under Appendix I

Provide information on the number of species occurring within a Party's territory

Fauna species under Appendix II

Fauna species under Appendix III

Provide information on the number of species occurring within a Party's territory

5. RESEARCH

5.1. Important projects/programs related to habitat conservation on a national scale

5.2. Important projects/programs in relation to species on App. II and III.

6. INTERNATIONAL ACTIVITIES

Projects/programs aiming at the conservation of European flora, fauna and their habitats on a bilateral basis

Projects/programs aiming at the conservation of European flora, fauna and their habitat on a multilateral basis.

Emerald Network has been set up under the Bern Convention, with the possibility for 'observer countries' to participate as well. It is made up of Areas of Special Conservation Interest (ASCI). It was actually implemented by the Standing Committee to the Bern Convention in 1996. The idea was to supplement the NATURA 2000 Network in non-Community countries using the highest possible methodological synergy. Since the European Union is also a Contracting party to the Bern Convention, Natura 2000 is considered to be the EU contribution to the Emerald Network.

The Ministry of Environment and Physical Planning of the Republic of Macedonia would like to thank the European Environmental Agency and the Council of Europe for their support in this Fourth Phase of development of the Emerald Network in the Republic of Macedonia. The implementation of the Emerald Network represents a basic tool for preparing the Republic of Macedonia for the future designation of the NTURA 2000 ecological network and to comply in advance with the Habitats and Birds Directives. It also represents a useful instrument for the conservation of areas of great ecological value and a framework for cooperation within a homogenous network of areas covering the whole of Europe.

National Emerald Network in the Republic of Macedonia include 35 emerald sites with 752.223 ha (29,2%). In Tip A (areas important for conservation of birds specie) has been created 4 areas, in Tip B (areas important for other wild species and habitat) include 5 emerald sites, and in Tip C (areas important for wild birds, other species and habitats) include 26 emerald sites.

On national territorien has been designate 42 Important plant areas (IPA), 77 Corine Biotopes, 14 Important birds areas (IBA) and 8 Important areas for baterflies (BPA).

Natura 2000 comprises Special Protected Areas under the EC Birds Directive (Council Directive 79/409/EEC), and Special Areas of Conservation under the EC Habitats Directive (Council Directive 92/42/EE).

Natura 2000 is an example of EU-wide ecological network-building process. Through involvement of all relevant stakeholders – landowners, land-users, local, national and European authorities – across all sectors, it aims at ensuring biodiversity conservation beyond national boundaries.

Besides being an important tool for countries concerned to prepare for future work on Natura 2000 and compliance with the Habitats and Birds Directives, Emerald Network also facilitates the establishment of national networks of protected areas. It makes an important contribution to the establishment of PEEN by helping to identifie and protect its core areas.

7. PUBLICATIONS

Major publications related to the conservation of flora, fauna and their habitat e.g. on a national or regional level, or concerning specific habitat or species covered by the Convention

Analyses and Evaluation of the Biological Diversity at National Level UNEP/MEPP, 2010)

Study for Ornithological heritages on the Area Dolna Bregalnica (BLI, MES, 2012)

8. MEETINGS

Information about the most relevant national symposia and workshops

4 Congress of Ecologist of Macedonia with international participation (MES, Ohrid 2012)

Workshop for preparation of concept of New National Biodiversity Strategy and Action Plan (UNEP/GEF, MEPP 2012).

9. GENERAL IMPLEMENTATION PROBLEMS AS CAUSED BY THE CONVENTION

Emerald habitat types

Table 2: List of Emerald habitat types

Code	Habitat types
15.115	Continental glasswort swards
15.A	Continental salt steppes and saltmarshes
22.11	Lime-deficient oligotrophic waterbodies
22.412	Frogbit rafts
22.415	Salvinia covers
22.416	Aldrovanda communities
24.2	River gravel banks
31.46	Bruckenthalia heaths
34.3	Dense perennial grasslands and middle European steppes

34.5	South-eastern deciduous thickets
41.1	Beech forests
41.2	Oak-hornbeam forests
41.4	Mixed ravine and slope forests
41.5	Acidophilous oak forests
41.7	Thermophilous and supra-Mediterranean oak woods
41.8	Mixed thermophilous forests
42.17	Balkano-Pontic fir forests
42.244	Pelagonide spruce forest
42.5C	South-eastern European Scots pine forests
42.62	Western Balkan Pinus nigra forests
42.7	High oro-mediterranean pine forests
42.A	Western Palaearctic cypress, juniper and yew forests
44.1	Riparian willow formations
44.7	Oriental plane and sweet gum woods
44.8	Southern riparian galleries and thickets
44.9115	Eastern Carpathian alder swamp woods
53.3	Fen-sedge beds
54.12	Hard water springs
54.2	Rich fens
54.5	Transition mires
65.	Caves
93	Wooded steppe

Table 3: List of identified habitat types from the Habitats Directive - Annex I

CODE	Habitat types
1310	Salicornia and other annuals colonizing mud and sand
1530	Pannonic salt steppes and salt marshes
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.
3150	Natural euthrophic lakes with Magnopotamion or Hydrocharition-type vegetation
3220	Alpine rivers and the herbaceous vegetation along their banks
3230	Alpine rivers and their ligneous vegetation with Myricaria germanica
4060	Alpine and Boreal heaths
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)
5130	Juniperus communis formations on heaths or calcareous grasslands
6170	Alpine and subalpine calcareous grasslands
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*important orchid sites)
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae
7220	Petrifying springs with tufa formation (Cratoneurion)

CODE	Habitat types
7230	Alkaline fens
8140	Eastern Mediterranean screes
8210	Calcareous rocky slopes with chasmophytic vegetation
8220	Siliceous rocky slopes with chasmophytic vegetation
8310	Caves not open to the public
9110	Luzulo-Fagetum beech forests
9180	Tilio-Acerion forest of slopes, screes and ravines
91B0	Thermophilous Fraxinus angustifolia woods
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)
9250	Quercus trojana woods
9260	Castanea sativa woods
9270	Hellenic beech forests with Abies borisii-regis
9280	Quercus frainetto woods
92A0	Salix alba and Populus alba galleries
92C0	Platanus orientalis and Liquidambar orientalis woods (Platanion orientalis)
92D0	Southern riparian galleries and thickets (Nerio-Tamaricetea and Securinegion tinctoriae)
9410	Acidophilous Picea forests of the montane to alpine levels (Vaccinio-Piceetea)
9530	(Sub-)Mediterranean pine forest with endemic black pines
9560	Endemic forests with Juniperus spp.
6220	Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
7140	Transition mires and quaking bogs
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae

Emerald Species Present in the Republic of Macedonia

Within the framework of this project, the list of Emerald species present in the Republic of Macedonia was reviewed with reference to Resolution No. 6/1998 of the Bern Convention, as supplemented by identified species from Annex II of the Habitat Directive and bird species from Annex I of the Birds Directive (see Table 4).

The following graph shows the number of Emerald species identified in the Republic of Macedonia as compared to the number of species listed in Resolution No. 6.

Table 4: List of Emerald species present in the Republic of Macedonia

Invertebrates	Fish	Amphibians	Reptiles	Mammals	Plants
Lindenia	Eudontomyzon	Triturus	Testudo graeca	Rhinolophus	Marsilea
tetraphylla	spp.	carnifex	Testudo	blasii	quadrifolia
Erebia medusa	Acipenser sturio	Triturus	hermanni	Rhinolophus	Aldrovanda
polaris	Salmo	karelinii	Emys	euryale	vesiculosa
Hesperia	marmoratus	Bombina	orbicularis	Rhinolophus	Astragalus
comma catena	Barbus	variegata	Mauremys	ferrumequinum	physocalyx
Lycaena dispar	meridionalis		caspica	Rhinolophus	Angelica
Lucanus cervus	Gobio		Elaphe	hipposideros	palustris
Rosalia alpina	uranoscopus		quatuorlineata	Rhinolophus	Buxbaumia
	Phoxinellus spp.		Elaphe situla	mehelyi	viridis
	Rutilus rubilio		Vipera ursinii	Barbastella	
	Cobitis taenia			barbastellus	
	Sabanejewia			Miniopterus	
	aurata			schreibersi	
	Cottus gobio			Myotis blythii	
	Zingel spp.			Myotis capaccinii	
	Alosa spp.			Myotis	
				emarginatus	
				Myotis myotis	
				Spermophilus	
				citellus	
				Canis lupus	
				Ursus arctos	
				Lutra lutra	
				Lynx lynx	
				Rupicapra	
				rupicapra	
				balcanica	

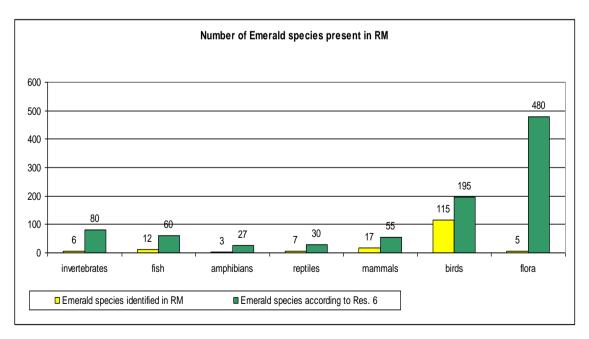


Figure 1: Number of Emerald species present in the Republic of Macedonia