



THE FIRST NATIONAL REPORT

OF HUNGARY

**AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY
WATERBIRDS (The Hague, 1995)**

Implementation from acquisition to 2005.

Contracting Party: HUNGARY

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1. Overview of Action Plan implementation

1.1 Summary of progress to date

In Hungary there is a tradition of both the hunting and protection of waterfowl. Waterbirds were protected during the breeding phase already in the 19th century, while in 1901 the lapwing (*Vanellus vanellus*), the plovers (*Pluvialis*, *Eudromias*, *Charadrius* spp.), the pratincole (*Glareola pratincola*), marsh terns (*Chlidonias* spp.) and the black-headed gull (*Larus ridibundus*) gained legal protection. In 1912 the great white egret (*Casmerodius albus*), the little egret (*Egretta garzetta*), the spoonbill (*Platalea leucorodia*), the glossy ibis (*Plegadis falcinellus*) and the squacco heron (*Ardeola ralloides*) gained protection due to nature conservation aspects throughout the whole year. Until the '90-s nearly all important waterbird habitats became protected and also nearly all waterbird species. At present there are only nine game waterbird species in Hungary. Hungary is a party to all relevant international conventions (CMS, CITES, Ramsar Convention, Bern Convention, CBD). Numerous management plans for protected areas have already been adopted, others are under preparation. Hungary makes an effort to implement country specific provisions laid down in International Single Species Action Plans. Hungary on the day of acquisition has already fulfilled most of the provisions of the Action Plan.

An import step of the last year was Hungary's accession to the European Union in May 2004, and thus the Birds Directive and Habitats Directive becoming into force in the country. Implementation began in October 2004 when the Special Protection Areas were designated by the Government and the proposed Sites of Conservation Interest were submitted to the EU Commission.

It is definitely due to the AEWA Action Plan, that in June, 2005 Ministerial Decree No. 56/2005 (VI.25.), amending the implementation decree of the Act on hunting, was adopted. In compliance with the regulation the use of leadshot is forbidden by force of the law on wetlands from 15th August, 2005. The regulation lists 33 such wetland areas, among them all Ramsar areas, being important bird habitats. Moreover the competent regional hunting authority has to prohibit the use of leadshot in a case- by-case resolution on the certain fishpond or wetland being continuously under water where birds occur regularly.

1.2 Outline of planned actions for national implementation over the next three years

The most important tasks of the upcoming 3 years are:

- the realization of the protection of Natura 2000 sites,
- the implementation of already existing management plans, and the preparation of management plans for those protected areas, where this still not exists,
- the implementation of the regulation on leadshot hunting, and the education concerning this issue,
- the systematic implementation of the Single Species Action Plan.

1.3 Outline of priorities for international co-operation over the next three years

Hungary is a party to all relevant international conventions (CMS, CITES, Ramsar Convention, Bern Convention, CBD). Hungary undertakes the international obligations and participates actively in all conventions.

2. Species conservation

Legal measures

2.1 Has a national policy/strategy or legislation to protect and conserve species covered by the Agreement (Table 1: column A; column B) and their supporting important areas been developed? If so:

- a. What are the main features of the policy/legislation?
- b. Which organisations are responsible for implementation?
- c. How does it relate to other national initiatives (e.g. national Biodiversity Action Plans)?

Nature Conservation Act No. 53 of 1996, Article 43 orders the following concerning protected species:

Regarding protected bird species and species that are listed as „a species of nature conservation significance of European Community” the authorisation of the competent Inspectorate for Environmental, Nature and Water Management, regarding strictly protected species the National Chief Inspectorate for Environmental, Nature and Water Management shall be required for:

- any population control
- the collection, capture, killing, possession and training of any individual
- the breeding in captivity of any individual
- the taxidermal preparation and preservation or the possession of such preparations of any individual
- the keeping of any individual in live animal collections
- the supplementing of any population with individuals from foreign populations
- the artificial exchange of genetic matter between populations
- the exchange or sale and purchase of any individual
- the exportation from, importation to or transportation through the Republic of Hungary of any individual
- the reintroduction or introduction of any individual
- the application of alarming methods in order to prevent any damage caused by them
- the transfer of the nest of any individual
- the domestication of any individual

Strictly protected species -according to *Government Decree No. 8/1998 (I.23.) about the Detailed Rules on Protection, Keeping, Display and Utilisation of Protected Species-*, are allowed to be kept, displayed or utilised only for nature conservation or other public interest purposes.

For conservation and legal status of all waterbird species that are occur in Hungary and to which the AEWA applies, see in Appendix 8. All other waterbird species, that are occur in Hungary, but not listed in Annex 2. of this Agreement (great skua – *Catharacta skua*, jaegers – *Stercorarius* spp., kittiwake – *Rissa tridactyla* and all North American vagrants) are also protected in Hungary.

Furthermore some species haven't occurred yet in Hungary, but are occurred in other EU Member States, are also listed as „a species of nature conservation significance of European Community”. (*Gavia adamsii*, *Ardea melanocephala*, *Ixobrychus sturmii*, *Geronticus eremita*, *Aenigmatolimnas marginalis*, *Fulica cristata*, *Porphyrio alleni*, *Pluvianus aegyptius*, *Charadrius asiaticus*, *Charadrius mongolus*, *Calidris tenuirostris*, *Gallinago stenura*, *Larus audouinii*, *Larus leucophthalmus*, *Larus cirrocephalus*, *Sterna bengalensis*, *Sterna maxima*, *Sterna bergii*, *Sterna dougallii*)

2.2 What legal measures or practices has your country developed to prohibit or regulate for the following (refer also to section 4 on hunting):

- a. Taking of, and trade in birds listed in Column A and B of Table 1 (where utilization or trade contravenes the provisions set out in paragraphs 2.1.1 (a) and 2.1.2 of the Action Plan)?
- b. Methods of taking?
- c. Setting of taking limits and monitoring these limits?
- d. Sustainable hunting of species listed in Categories 2 and 3 (and marked by an asterisk) in Column A only?
- e. Exemptions to the provisions set out in paragraphs 2.1.1, 2.1.2 and 2.1.3?

In Hungary nine waterbird species are huntable. These are as follows:

- ✚ bean goose (*Anser fabalis*) – Column B 1 (ssp. *fabalis*), Column C (1) (ssp. *rossicus*),
- ✚ greater white-fronted goose (*Anser albifrons*) – Column A 3a*,
- ✚ mallard (*Anas platyrhynchos*) – Column B 2c,
- ✚ teal (*Anas crecca*) – Column C 1,
- ✚ garganey (*Anas querquedula*) – Column B 2c,
- ✚ pochard (*Aythya ferina*) – Column C 1,
- ✚ goldeneye (*Bucephala clangula*) – Column C 1,
- ✚ coot (*Fulica atra*) – Column C 1,
- ✚ and woodcock (*Scolopax rusticola*) – Column C 1.

Hungary's hunting legislation establishes the following open seasons:

- Bean goose and greater white-fronted goose: from 1st of October to 31st of January, in Region of Tiszántúl from 1st of December to 31st of January.
- Mallard, teal and coot: from 1st of September to 31st of January.
- Pochard and goldeneye: from 1st of October to 31st of January.
- Woodcock: from 1st of March to 10th of April.

No open season declared for garganey since 2004. The captive bred and released mallards are huntable all year around.

Only roding woodcocks can be hunted.

Accordingly, in June, 2005 Ministerial Decree No. 56/2005 (VI.25.), amending the implementation decree of the Hunting Act, all trade with shot specimens of bean goose, greater whitefronted goose, garganey, teal, pochard, goldeneye, coot and woodcock, and any parts and derivates of them, is prohibited.

For the prohibited taking methods see Section 4.1.

There is a daily bag limit for all waterbird species. Only four woodcocks, four bean and greater whitefronted geese aggregate, and eight mallards, teals, pochards, goldeneye and coots aggregate can be shot per day per hunter. This regulation does not apply to captive bred and released mallards.

Only one species from Column A, the greater white-fronted goose is huntable species in Hungary. For legal measures for sustainable hunting, see above.

No exemptions have been made to the provisions set out in paragraphs 2.1.1, 2.1.2 and 2.1.3. Some licenses have been issued by nature conservation authorities to shoot great cormorant (*Phalacrocorax carbo*) and yellow-legged gull (*Larus cachinnans*) at fishponds to prevent serious damage to fishstocks, and to collect eggs of mute swan (*Cygnus olor*) in order to protect some endangered species (e.g. ferruginous duck).

Single Species Action Plans

2.3 Of the species covered by the Agreement (species listed in Table 1: column A), which spend part or all of their life history in your country, which have formal international (Category 1, species marked with an asterisk) or national (column A) Single Species Action Plans:

- a. Proposed?
- b. In preparation?
- c. Being implemented?

Please append a list of species and their action plan status. (For international plans indicate which other countries are involved in plan development/implementation.)

For the following species, the International Action Plan is being implemented in Hungary (Action Plans prepared by BirdLife and adopted by European Commission):

- ✚ Pygmy cormorant – *Phalacrocorax pygmeus*,
- ✚ Lesser whitefronted goose – *Anser erythropus*,
- ✚ Red-breasted goose – *Branta ruficollis*,
- ✚ White-headed duck – *Oxyura leucocephala*,
- ✚ Corncrace – *Crex crex*,
- ✚ Slender-billed curlew – *Numenius tenuirostris*.

For the conservation of species the Ministry of Environment and Water has started to elaborate species action plans. Until now 19 species, but no waterbird species action plans were elaborated taking into consideration various national and international legislation and conventions – with special respect to the 92/43/EEC Habitats Directive of the EU. At present, action plans for further 10 species are under preparation, including one of the most threatened Hungarian waterbird species, the kentish plover – *Charadrius alexandrinus*. Financial background for the action plans is ensured by the Ministry of Environment and Water.

In 2003, BirdLife Hungary published national action plans for conservation of 14 bird species. The list of birds includes the following waterbirds.

- ✚ Black stork – *Ciconia nigra*,
- ✚ White stork – *Ciconia ciconia*,
- ✚ Ferruginous duck – *Aythya nyroca*,
- ✚ Corncrake – *Crex crex*,
- ✚ Kentish plover – *Charadrius alexandrinus*.

These action plans, however, have not been adopted formally by the Ministry of Environment and Water.

Emergency measures

2.4 Describe any bilateral or multilateral co-operative action that your country has undertaken to develop and implement emergency measures to conserve species in response to unfavourable or endangering conditions occurring in the Agreement area.

Hungary is a party of all relevant international conventions. (Ramsar convention, CITES, CMS, Bern Convention, CBD.)

Related legislation (hunting and wildlife conservation) was harmonised to the obligations of these conventions already before joining.

On the territory of each national park directorate there are protected natural areas and areas planned to be protected, which are connected to the natural areas of the neighbouring countries, therefore Hungary, in the framework of bi- and multilateral nature conservation cooperation, works on the harmonization of nature conservation management. The most important field of cooperation are the transboundary national parks and landscape protection areas, the establishment of common ecological systems etc. At the Fertő-Hanság National Park successful transboundary cooperation exists between Hungary and Austria and a joint committee supervises the activities of the park. Hungary and Slovakia have recently established a transboundary Ramsar site at the Upper Tisza Region and there is ongoing cooperation concerning Natura 2000 sites and hunting issues; cooperation exists with Ukraine concerning the designation of the border-crossing of highway M3 so that it has minimum adverse effect on biodiversity; cooperation with Romania used to focus mainly on the protected border areas and areas planned for protection but now it expands to the transfer of experience about the establishment of the Natura 2000 network, cooperation with Serbia-Montenegro is currently formulating at the ministerial level.

There are some transboundary wetlands designated as Ramsar sites by Hungary:

- Lake Fertő (good co-operation between the Hungarian and the Austrian national parks for Lake Neusiedl), both sides of the border are Ramsar sites
- Béda-Karapanca (good co-operation established with the Croatian Kopacki Rit Nature Park, under a 2003-2005 project supported by the Netherlands and organised by ECNC, to harmonise management and establish the joint ecological network) both sides of the border are Ramsar sites
- Biharugra and Begécs Fishponds (good contacts with the Romanian partners)
- Valley of Ipoly (good contacts with the Slovak partner, adjacent Ramsar site on the Slovak side)

- Upper Tisza (jointly designated by Hungary and Slovakia as announced by the Ramsar Secretariat in November 2004). The Ukraine and Romania have been invited several times, for the last time during the 5th European Regional Meeting in December 2004, to designate the Upper Tisza within their territories.

The Visegrád Group is the cooperation among four countries in the Central European region (Hungary, Czech Republic, Slovakia and Poland) in a number of fields of common interest, including environment. Several joint projects have been carried out in the field of environment protection and nature conservation. At the ministerial meeting of 2003 a map of the ecological network of the four countries (plus Croatia and Ukraine) was presented. Other important issues are the experiences in the establishment of Natura 2000 network and activities in relation to the transboundary Natura 2000 sites.

All these activities can be used to active protection of migratory waterbird species.

Re-establishments

2.5 Has a policy on species re-establishments been developed in your country? If yes, please outline the main features of the policy and give details of any re-establishment programmes for species covered by the Agreement.

There was an unsuccessful re-introduction program for white-headed duck in the middle of '80s.

Introductions

2.6 Has your country developed and implemented legal measures to prohibit the introduction of nonnative species? Please provide details, particularly describing measures to control the release or introduction of non-native species (please indicate which species and their status).

At the moment, non native waterbird species occur in Hungary only as vagrants. There are three accepted records of Canada goose (*Branta canadensis*), one of Egyptian goose (*Alopochen niloticus*) and two of Ruddy duck (*Oxyura jamaicensis*).

There is no exotic animal species significantly endangering native waterbird populations in Hungary. However, the effect of the introduction of grass carp (*Ctenopharyngodon idella*) on the Ferruginous duck population needs further investigation.

But some invasive plant species, e. g. *Acer negundo*, *Solidago canadensis*, *Solidago gigantea* pose a serious threat to wetlands ecosystems and waterbird populations.

Control of invasive alien species is incorporated into Act No. 53 of 1996 on nature conservation, into the National Nature Conservation Master Plan (chapter 5.4.1.2.5) and also into the National Biodiversity Strategy and Action Plan and into legislation and programmes of certain sectoral activities such as common health, plant protection, animal husbandry. It is to be noted that Hungary established a rather strict system on controlling

invasive alien species in the 20th century, including obligatory control of certain aliens, border control and quarantine.

The system mentioned above has been considerably changed by joining the European Community. Therefore, Hungary has started to develop its national strategy based on the European Strategy on Invasive Alien Species and on Decision VI/23 of the CBD.

Within the European Community the trade of certain invasive species is not regulated and the import of these species may have considerable negative effect on the native flora (e.g.: ornamental use of *Solidago gigantea*).

The national strategy on invasive species, which is under development, should be built into the national legislation in order to be effective.

The development of management plans for the major invasive plant species started in 2002. At present management plans for 30 major species are complete and some of them are officially published by the Ministry of Environment and Water. Furthermore, management plans for seven invasive mammal species and eight fish species have been drafted.

A 408-page publication "Invasive Plants in Hungary" was published by the Ministry of Environment and Water in 2004, and a 20 page English booklet came out in 2003 on the subject (the latter is also available on the internet, titled "Invasive Alien Species in Hungary").

Act No. 53 of 1996 on Nature Conservation contains the definition of invasive alien species and promotes native tree species to be planted in afforestations, but it contains no detailed regulations on how to fight invasive species.

Actions to control invasive species are included in the National Biodiversity Strategy and Action Plan (as a result of a coordinated action of focal points of different conventions).

The book "Invasive Plants in Hungary" contains chapters on the impacts and eradication methods of several species that have an impact on wetlands, such as *Acer negundo*, *Amorpha fruticosa* and *Solidago* species. Eradication projects have also been undertaken, and of course, had been preceded by risk assessments for the concrete sites.

A new regulation of the Animal Welfare Act is currently being made, which will regulate the keeping of pet animals and keeping and selling animals in pet shops. The Ministry of Environment and Water proposed a prohibition of the keeping of certain invasive species, including ruddy duck (*Oxyura jamaicensis*), raccoon (*Procyon lotor*) and raccoon dog (*Nyctereutes procyonoides*) that may pose a threat to the indigenous fauna and flora of the country.

3. Habitat conservation

Habitat inventories

3.1 Has your country developed and published inventories of important habitats for species covered by the Agreement? If yes, please provide details, including any provisions to maintain or update these inventories.

Firstly, European Important Bird Areas in Hungary is a 70-page book published by MME (BirdLife Hungary) in 1992, based on the extensive data on bird populations, trend and conservation status of the Important Bird Areas In Europe of International Council for Bird Preservation Technical Publication. In 1998 the MME published the second book titled Important Bird Areas in Hungary, which analyses the situation of wild birds in Hungary and focuses on the major conservation issues affecting birds and their habitats. New research carried out by BirdLife Hungary and its Partners suggest 43 Important Bird Areas (IBAs) for conserving a wide range of biodiversity.

The Proposed Special Protection Areas of Birds and their Habitats in Hungary, published by MME in 2002, demonstrates the special conservation measures for the most threatened species and for migratory bird, also through the establishment of national network of Special Protection Areas (SPAs) where birds and their habitats have to be maintained in a good conservation status. SPAs were designated by the Government in October 2004,

In 2004, the national wetland inventory was started and mostly carried out. This exercise identified which wetlands are in need of restoration and the the National Ramsar Committee will work out a priority list. Representative, rare or unique wetland types will be prioritised by the National Ramsar Committee on evaluating the National Wetland Inventory.

3.2 Has your country undertaken a strategic review of sites to develop a national network of important sites or areas for species covered by the Agreement? Please append a list of identified sites of international importance.

Although single comprehensive wetland policy or strategy does not exist in Hungary, nature conservation and other environment-related legislation (for instance the Act No. 53 of 1996 on nature conservation) and national programmes incorporate the conservation concept of wetlands. The National Biodiversity Strategy still under preparation will contain a chapter on wetlands. Hungary presently has 22 sites designated as Wetlands of International Importance under Ramsar Convention, with a surface area of 179,800 hectares.

For the list of identified sites of international importance, as waterbird habitats, see Appendix 2. This list includes all Ramsar sites, except for one subterranean site.

In Hungary, it is the national park directorates that work on wetland conservation (they manage wetlands for nature conservation, operate wetland exhibitions at their visitor centres, etc.). It is the directorates that twin with other similar organisations. During the preparation of the SPAs for the Natura 2000 network, the national park directorates and the Ministry of Environment and Water evaluated the proposed list of SPAs

by BirdLife Hungary and amended it (mostly by extension). This work naturally included the evaluation of wetlands as for their importance for waterbirds.

Conservation of areas

3.3 Describe the legal frameworks and other measures through which sites (including transfrontier sites) including of international importance gain practical protection. (Please append a list of internationally important protected sites.)

Today, 9.3 per cent of Hungary's territory is protected (with national or local importance) natural area. The number and extension of protected natural areas have continuously increased. Unfortunately, the proportion of areas under strict protection is relatively small (12 per cent of territory of the protected areas).

Protected natural areas of national importance cover 8.9% of Hungary's territory (828,491.3 ha) and 162,891.8 ha (1.7% of Hungary's territory) natural areas are planned for protection.

Protected natural areas are designated by individual legal regulations. Protection by force of the Act on nature conservation, justified by the protection of highly endangered habitats, like mires and alkaline lakes, is a new legal solution.

So, all mires have been declared protected by force of the Act No. 53 of 1996 on nature conservation and these natural areas are qualified as protected areas of national importance. The real protection procedure was very hard because of the lack of definition for mires. In 2003, the definition of mires was built into this Act, so the protection before the court became more effective. The protection of mires (rehabilitation, reconstruction) was also built in the National Environment Programme compiled this year, which contains the main required activities on nature conservation for the next 6 years. Most mires were considered for designation under the Habitats Directive of the European Union, and many were in fact designated as pSCIs in 2004. For 18 of the most valuable mires a management plan was prepared, or nearly finalized by the national park directorates, including plans for improving conditions for CEPA (study trails) and ecotourism.

A national inventory of mires was issued in 2002, listing over 800 mires. Most of these sites were considered for designation under the Habitats Directive of the European Union, and many were in fact designated as pSCIs in 2004. The national park directorates report on, among others, the condition of mires every year. The 2003 inventory showed, that because of the extremely dry climate period a lot of mire of the smallest ones dried up, but on the other hand some new mire were found in the less known southern part of the country. The climate in 2004 was more favourable for mires. The national status of mires and the trend of their loss is available in the 2002 publication on mires and mire protection. For the current status and trends, the yearly reports of the national park directorates are available in Hungarian at the Ministry of Environment and Water. The summary table of the 2003 report is provided here.

National Park Directorate	Ex lege protected mires in Hungary (2003.)	
	ha	piece
Aggtelek National Park Directorate	4614	51

Balaton-Upplands National park Directorate	13300	120
Bükk National Park Directorate	2029	29
Duna-Dráva National Park Directorate	8442	108
Duna-Ipoly National Park Directorate	10695	79
Fertő-Hanság National Park Directorate	919	23
Hortobágy National Park Directorate	6492	201
Kiskunság National Park Directorate	16475	124
Körös-Maros National Park Directorate	0	0
Órség National Park Directorate	1697	96
Sum total:	64 663	831

There is no general inventory for all peatlands.

All alkaline lakes (alkaline lakes are seasonal, shallow pools) also have been declared protected by force of the Act on Nature Conservation in 1996. These natural areas are also qualified as protected areas of national importance. The real protection procedure was very hard because of the lack of definition for alkaline lakes. In 2003, the definition of alkaline lakes was built into this Act, so the protection before the court became more effective. The protection of alkaline lakes (rehabilitation, reconstruction) was also built in the National Environment Programme compiled in the same year, which contains the main required activities on nature conservation for the next 6 years. Practically all alkaline wetlands have been included in the National ecological Network and most were designated as pSCIs in 2004 under the Habitats Directive of the European Union. For many alkaline lakes management plans have been prepared, or nearly finalized by the national park directorates, including plans for improving conditions for CEPA (study trails, e.g. at Apaj, Kelemenszék, etc.) and ecotourism.

The Government approved the second National Environmental Programme for 2003-2008 in a Parliament resolution No. 132/2003. (XII. 11.). This programme introduces thematic action programmes, one of which is titled 'Action Programme of Biodiversity Conservation and Landscape Protection'. This thematic action programme is realized in the National Nature Conservation Master Plan.

One objective of the second National Environmental Programme is to increase by 2008 the extension and proportion of natural areas to 11 per cent compared to the total territory of the country and protected by individual law.

A high proportion of natural areas planned for protection is in private property. The owners would agree with declaring their area protected only if they were compensated for the nature conservation restrictions or they got financial support for their activities supporting the conservation and nature-friendly management of the area.

According to the Act No. 53 of 1996 "it shall be prohibited to alter the conditions (substance) or the character of protected natural areas contrary to the purposes of nature conservation. During the use and development of natural areas, it shall also be ensured, taking account of traditional nature-friendly land use techniques, that the character of the landscape, its aesthetic value and natural assets as well as its characteristic natural systems and unique features are conserved."

With Hungary's accession to the European Union Natura 2000 sites had to be designated for 46 habitat types, 36 plant species, 91 bird species and 105 other animal species listed in the Birds (79/409/EEC) and Habitats (92/43/EEC) Directives. Most of these species were protected in Hungary before the accession to the EU. The lists of Natura 2000 sites contain 55 Special Protection Areas (SPA) and 467 proposed Sites of Community Interest (pSCI). It means that almost 20.6% of Hungary (1.91 million hectares) is part of the Natura 2000 network. The overlap of SPA and pSCI is 41%. 38.5% of the proposed Natura 2000 sites are protected natural areas at the national level.

For the list of SPAs that are particular interest for waterbirds, see Appendix 2.

In Hungary Natura 2000 sites were announced by the Government Decree No. 275/2004. (X.8.) in October 2004. The Decree contains the rules regarding Natura 2000 sites and the annexes of the Decree contain the lists of habitats and species of community importance that were the basis for the designation of sites, and the list and maps of the sites.

In Hungary significant part of protected natural areas or Natura 2000 sites are in private property and in case of restrictions compensation has to be paid for landowners.

According to the governmental decree on Natura 2000 sites, a separate decree has to be announced describing the detailed rules of land use on Natura 2000 sites. The Office for Nature Conservation of the Ministry of Environment and Water started to elaborate the concept of this Decree. A working group was established with the participation of local experts and the officers of the Ministry of Agriculture and Rural Development.

The rules of land use will be introduced from 2007 and then the compensation and subsidy for farmers will be paid within the frame of the National Rural Development Plan that will be elaborated according to the European Union's legislation.

Under the Natura 2000, Hungary has designated most of the natural and near-natural wetlands (for example, the Natura 2000 network covers most Ramsar sites). From 2007 onwards, land users will be subsidised for managing Natura 2000 areas in harmony with nature conservation.

On the other hand, national park directorates have purchased important wetlands to ensure that management is fully harmonious with nature conservation interests. It is planned that all wetlands owned by state water management will be taken over by state nature conservation (except for those parcels that are functionally used for water management).

Environmentally Sensitive Areas (ESA) have been defined and designated by each national park directorate (on their own area of competency) in three categories – highly important, important, and planned ESA. In the country's territory there are in total 30 highly important, 20 important and 11 planned ESAs designated on land under extensive cultivation, where the preservation and maintenance of nature-friendly cultivation methods serve the protection of habitats and species, including some waterbird species, such as geese and cranes. Now there is subsidy for 15 ESAs (400,000 ha). Some pilot areas of the Environmentally Sensitive Areas scheme are in flood plains and thus affect wetlands.

Hungary has designated its National Ecological Network but has not announced it by legislation. The National Ecological Network covers 30% of Hungary. The establishment of the network is the national implementation of the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) and the Hungarian Ecological Network is part of the Pan-European Ecological Network, and is related to the Green Belt international ecological network programme of IUCN.

The Ramsar Convention on Wetlands came into force for Hungary on 11 August 1979.

Hungary presently has 22 sites designated as Wetlands of International Importance, with a surface area of about 179,800 hectares.

Three new sites (Csongrád-Bokrosi Sós-tó, 770 ha, Böddi-szék and Sóséri-puszta 2734 ha included in Felső Kiskunsági Tavak, and Upper Tisza, 22,311 ha) were designated in 2003-2004.

For the full list with a short descriptions of each sites, see Appendix 10.

Within the frame of the UNESCO Man and Biosphere programme, 5 Biosphere Reserves have been designated in Hungary, including three important waterbird habitats, the wetlands of Hortobágy, the wetlands of Kiskunság and the Lake Fertő.

Both Lake Fertő and the Hortobágy have been inscribed on the World Heritage list as cultural landscapes. Lake Öreg at Tata, lying in a beautiful medieval setting of the old town of Tata, is another Ramsar site that has been declared protected by the local government.

In many cases the various types of protected areas are overlapping. All in all, every Hungarian wetland of international importance for waterbirds is protected and/or is a Natura 2000 site. Only a few wetlands of local importance still await designation.

3.4 Has your country developed a management planning process for protected sites? If yes, please outline the types of management plans and organisations responsible for development and implementation.

In general, an area can be declared protected only if its nature conservation management plan is completed. Considering that management plans for already protected areas need to be prepared as well, the preparation and harmonization of all management plans require considerable time and capacity.

Decree No. 30/2001 (XII.28.) of the Minister of Environment on nature conservation management plans integrates the main guidelines of the Ramsar Convention as well as other (e.g. IUCN) international guidelines for management plans. However, the decree made the management planning process much too complex and presently hardly any protected areas in Hungary have a management plan accepted under this legislation.

3.5 How many protected sites have formal management plans (please append a list of sites and their management planning status):

- a. Proposed?*
- b. In preparation?*
- c. Being implemented?*

Management plans (even if not officially approved ones) exist for several sites. Most international important waterbird habitats are fully under national protection, and thus, the management plan (if exists) covers these. But some, like the Upper Tisza Ramsar site is only partly covered by the Szatmár-Bereg Landscape Protection Area and its management plan. For the status of management plans of the international important wetlands, see Appendix 3.

3.6 What measures does your country have in place to ensure the wise use of wetland habitats and to prevent habitat degradation e.g. pollution control and managing water resources? Please provide examples of best practice initiatives particularly involving cross-sectoral co-operation or public participation.

Activities carried out for the implementation of the Ramsar Convention and AEWA all help to implement the objectives of the programme of work on inland water biological diversity. Habitat restorations represent a good example for this. Recent wetland restorations in Hungary include: water retention in bog meadows, bog meadow habitat restoration, bog meadow vegetation control, water retention dam and water supply, flood plain restoration, ponds maintenance, wetland restoration by re-flooding to restore formerly flooded marshes. Another example is the implementation of projects, like for example the sustainable use and management rehabilitation of flood plain in the Middle Tisza District started in 2004 or the joint control of invasive species in wet meadows of the Hungarian Aggtelek National Park and the Slovak Karst National Park.

Water quality and quantity available to and required by wetlands are assessed by the water management directorates, in collaboration with the national park directorates on the basis of Article 18 (2) of the Act No. 53 of 1996 on Nature Conservation. If necessary, the national park directorate can also initiate this assessment. On the basis of Article 18 (1), the amount of water ecologically required by wetlands cannot be artificially withdrawn from natural and near-natural wetlands.

Since the Act came into force, this assessment has been general practice. An example is the assessment of ecological water supply needs of wetlands in the river system of Kis-Rába, a joint exercise between the Fertő-Hanság National Park Directorate and the regional water management directorate in 2003-2004. It identified the amount of water needed in the various wetlands, set out the goals to be reached and the implementation plan.

For the list of active management measures applied in important wetlands since 2002, see Appendix 7. Part 1.

Rehabilitation and restoration

3.7 Does your country have a policy for the identification, rehabilitation and restoration of wetlands important for species covered by the Agreement? Please provide examples of rehabilitation and restoration projects and initiatives undertaken.

Numerous wetland restoration projects have taken place in recent years. Some examples: at Kardoskút Ramsar site, 550 ha have been affected (former artificial drainage removed) and a 10 ha area is annually flooded by artificial means to create wet habitats. At the Biharugra Ramsar site, the Sző meadow and Ugrai meadow, an ecological water regulation project has been carried out (248 ha). Water retention to create wetland habitats has taken place at the Kivágási pasture (southeast Hungary). A major wetland restoration (re-flooding) took place at the Nyirkai Hany to restore a part of the formerly flooded Hanság marshes. Sites in the Béda-Karapanca area of the Danube-Dráva National Park are restored in a transboundary project with Croatia, supported by the Dutch government and coordinated by ECNC.

For the list of wetland restorations in 2003, see Appendix 7. Part 2.

Several LIFE projects have been launched for habitat restorations, especially wetland habitats, which also support numerous migratory species. For the list of these LIFE projects, see Appendix 7. Part 3.

In 2003 the Government had approved of the conceptual plan (Vásárhelyi Plan) of enhancing flood safety in the Tisza Valley. The Vásárhelyi Plan aims at the creation of a higher level of flood safety, the improvement of the living standards of the rural- and urban population in the region, the formulation and introduction of new types of agro-ecological land use in the area of the emergency flood retention reservoirs and the modernisation of the infrastructure in the settlements along the River Tisza. Many new waterbird habitats will be created once this plan is implemented. For summary of this plan, see Appendix 9.

4. Management of human activities

Hunting

4.1 Outline the main features of legislation or legal measures in your country to control hunting of the species covered by the Agreement (e.g. use of lead shot and poisoned baits, and to eliminate illegal taking).

For huntable species and hunting season, see Section 2.2.

Additionally, the prohibited taking methods of waterbirds are listed by the Act No. 55 of 1996 on game protection, game management and hunting, in accordance with the EU Birds Directive and the Bern Convention. These are as follows:

- Semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition,
- Nets,
- Traps,
- Artificial light sources, mirrors, device for illuminating targets,
- Sighting devices for night shooting,
- Snares, limes, hooks,
- Live birds which are blind or mutilated used as decoys,
- Tape recorders,
- Electrocuting devices,
- Cross bow, poisoned or explosion arrows,
- Aircraft, motor vehicles,
- Boats driven at a speed exceeding 5 kilometres per hour.

The use of poisoned or anaesthetic baits are also strictly prohibited in Hungary, although poisoned baits have never been used for waterbird taking in Hungary.

Hungary, when adopting AEWA undertook to ban hunting with leadshot on wetland habitats until 15th August, 2005 - at latest. Accordingly, in June, 2005 Ministerial Decree No. 56/2005 (VI.25.) FVM, amending the implementation decree of the Act on game protection, game management and hunting, has been adopted. In compliance with the regulation the use of leadshot is forbidden by force of law on wetlands from 15th August, 2005. The regulation lists 33 such wetland areas, among them all Ramsar areas, being important bird habitats. Moreover the competent regional hunting authority has to prohibit the use of leadshot in a case- by-case resolution, in consultation with the regional environmental, nature conservation and water management authorities, on the certain fishpond or wetland being continuously under water where waterbirds occur regularly. Around all areas, if reasoned, 100 m buffer zone can be designated as a maximum. The hunting with leadshot on the border of such areas can be pursued only in a way that the lead drops do not fall on the area in question.

The 33 areas where the use of leadshot is prohibited are:

- Sárvíz völgye [Valley of Sárvíz],
- certain wetland habitats in the Kiskunság National Park,
- Péter-tavi Madárrezervátum [Bird Sanctuary of Lake Péter],
- Baláta-tó [Lake Baláta],

- Montaj-tó [Lake Montaj],
- Kecskeri-puszta [Kecsker Plain] including the Dudás-fertő [Marsh of Dudás],
- Szabadkígyósi-puszták [Szabadkígyós Plains], Pitvarosi-puszták [Pitvaros Plains] and Cserebökényi-puszták [Cserebökény Plains],
- Nagybereki Fehér-víz [Lake Fehér at Nagyberék],
- Sárrét,
- Tiszavasvári Fehér szik [Alkaline Lake of Tiszavasvár] and its 100 m buffer zone,
- Dabasi Turjános [Sedge Marsh at Dabas],
- the Northern Balaton wetland habitats of the Balaton-Felvidéki National Park,
- Csaba-rét [Csaba meadow and its 100 m buffer zone],
- Kiskunsági szikes tavak [Alkaline Lakes of Kiskunság] and the Izsáki Kolontó [Lake Kolon at Izsák],
- Fertő-tó [Lake Fertő],
- Tatai Öreg-tó [Lake Öreg at Tata],
- Velence-tó, Dinnyési fertő [Lake Velence and Marsh of Dinnyés],
- Kis-Balaton,
- Balaton [Lake Balaton],
- Gemenc, and Béda-Karapanca,
- Ócsa Landscape Protection Area,
- Szegedi Fehér-tó [Lake Fehér at Szeged], Tisza labodári és saséri területe [Flood Plain of Tisza at Labodár and Sasér], Csaj-tó [Lake Csaj], Baksi nagylegelő [Pasture of Baks] and Büdösszék-tó [Lake Büdösszék] at Pusztaszer,
- Kardoskúti Fehér-tó [Lake Fehér at Kardoskút], Biharugrai halastavak [Biharugra Fishponds] and Begécsi halastavak [Begécs Fishponds], Ugrai-rét [Ugra Meadow], Csillaglaposi legelő [Pasture of Csillaglapos] and Sző-rét [Sző Meadow] with their 100 m buffer zone,
- Csongrád-Bokrosi Sós-tó [Lake Sós at Csongrádbokros],
- Szaporcai Ó-Dráva meder [Old Riverbed of Dráva at szaporca],
- Mártély,
- Rétszilasi-halastavak [Rétszilás Fishponds],
- Ipoly völgye [Valley of Ipoly],
- Felső-Tisza [Upper Tisza],
- the Ramsar areas of the Hortobágyi National with their 100 m buffer zone,
- Bodrogzug,
- Böddi-szék and Sóséri-puszta [Sósér Plain] with their 100 m buffer zone.

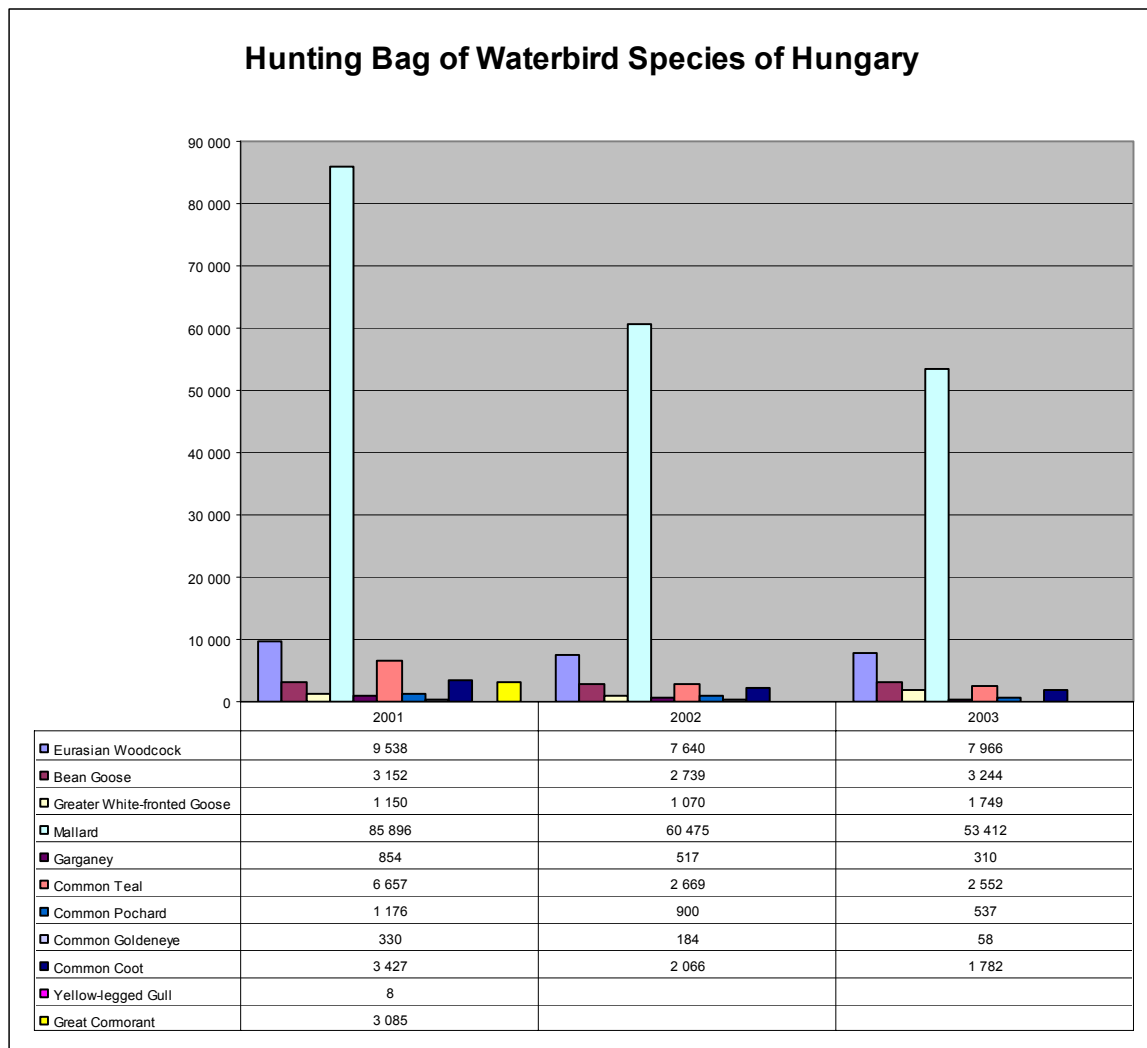
Concerning illegal bird shooting: on the basis of Act No. 55 of 1996 on game protection, game management and hunting, in the case of small game hunting (including wildfowl) the hunting organisations are obliged to inform the regional nature conservation authority in advance about the time and location of the hunting in order to secure the nature conservation inspectors to check the legality of the hunting. Preliminary reporting is also required in the case of commercial hunting or group hunting in protected areas. We compiled and published an information booklet in five languages in cooperation with the hunting authorities about the nature conservation and hunting rules in Hungary and every Italian hunter gets it in Italian language before hunting. Besides this, we contacted Mrs. Margaret Walström EU Commissioner and asked her to raise the issue within the EU – regarding the case is going against the provisions of Birds Directive and CITES - and to react towards Italian Authorities.

WWF Hungary has a special program for elimination of illegal bird crime.

4.2 Does your country monitor hunting levels? If so, how is this information collated and reported?

Act No. 55 of 1996 on game protection, game management and hunting contained the obligation to establish the national game management database. This has been fulfilled and the Szent István University is responsible for maintaining the database. All hunters have the obligation to yearly report the number of individuals /game species hunted on their hunting territory. In Hungary the annual bag of waterfowl has to be reported broken down into species from the year 1993.

Annual bag data of the last three years:



Futhermore 149,501 captive-bred and released mallards were shot in 2001, 148,748 in 2002, and 139,654 in 2003.

4.3 Describe action undertaken by hunting clubs and organisations to manage hunting

activity e.g. cooperative action, issuing of licences and proficiency testing of individual members.

Most of hungarian hunters are member of the Hungarian Hunters' National Chamber. They regularly compile, publish and send information booklets and annauls for members. These are also include the changing hunting regulation, consequently members get the newest informations.

Eco-tourism

4.4 What is the status of eco-tourism programmes or initiatives in your country? Please provide examples of projects with an indication of the significant outcomes.

National parks and other natural areas have lots of experience in awareness raising. Smaller visitor centres have operated long in the territory of each national park directorate. Their utilization level is quite good, not only in the 'high season' of the school year but they provide programmes of high standard throughout the whole year. The number of visitors of national park directorates is higher year by year, thanks to the increasing standard of nature conservation training and the improving efficiency of information providing.

Eco-tourism facilitating training and environmental education has accelerated in state-level nature conservation and the activities of NGOs. Nature trails can be found in large numbers in the territories of national park directorates. Some are managed by the directorates (about 70), and others are operated by the national directorates jointly with other organisations, but there are also ones maintained by external organisations. Their condition is unfortunately not sufficient in every case, which calls for their renewal and the creation of new trails.

The foundation stone of a new ecocentre (visitor/training centre with ecotourism facilities) was laid in 2004 in Poroszló, by Lake Tisza Ramsar site.

4.5 What social and economic benefits accrue to the local communities from the conservation of important waterbird sites?

Two Ramsar sites are also parts of the World Heritage in the cultural landscape category: Lake Fertő and the wetlands of the Hortobágy. Major developments for tourism have taken place since, promoting the recognition of social and cultural heritage of wetlands.

The Lake Fertő Ramsar site received World Heritage status in the cultural landscape category in 2002. The cultural monuments of the site are widely used to raise awareness for the natural heritage, as well, and visitors (ecotourists) appreciate both natural and cultural values. Whole communities depend mostly on eco-tourism in this area.

Another good example is Lake Öreg at Tata, lying in a beautiful medieval setting of the old town of Tata: the regular festivals contain information on both the cultural and the natural heritage. Visitors of cultural festivals can learn about wild geese and the other aspects of the Ramsar site, while visitors of the Wild Goose Festival also hear presentations about the cultural heritage of the town.

Traditional fishing practices have long been documented in Hungary. At Rétszilás Fish Ponds Ramsar site, the private manager of the site has established, with government support, the Museum of Hungarian Fishermen and Fishing, introducing visitors to the history and instruments of traditional fishing. Application of such knowledge (including traditional fishing, pollarding and wickerwork, etc.) is encouraged particularly in protected areas.

Cultural values of wetlands are taken into account during habitat restoration as well as maintenance.

On other hand, on approximately 40 per cent of protected areas some kind of agricultural production may take place because the natural assets of these areas may be maintained through extensive agriculture. The products produced as a result thereof have to be indicated and supplied with trademarks; consumers' attention this way may be called that

they buy healthy products. The products produced on protected natural areas fully take into consideration the aspects of conservation and sustainable use and they maximally comply with the food safety regulations.

Other human activities

4.6 Does your country carry out Environmental Impact Assessment (EIA) of activities potentially affecting protected sites or areas important for species covered by the Agreement? If yes, briefly describe the main features of your EIA policy and procedures.

Wetland conservation and wise use issues have been integrated into major projects as they are obliged by Environmental Impact Assessments. The key elements of Hungarian EIA policy:

a) In Hungary the overall regulation of environmental protection is ensured by the Act No. 53 of 1995, which declares that the preservation and protection of natural heritage and environmental assets as well as the improvement of their quality are prerequisites for the human health and quality of life and neglecting them threatens the health of present generations, the existence of future generations and the survival of many species. The Law introduced new instruments such as environmental impact assessment (EIA) and preliminary environmental state assessment (the Governmental Decree No. 20/2001. (II. 14.) on environmental impact assessment enlists the activities that must be subject to prior EIA). There are also other pieces of legislation that significantly contribute to achieving the objectives of the Convention. One of them being of key importance is the law on nature conservation, which progressively extends nature conservation concerns on the areas and landscapes not being under protection by ensuring protection by force of the law on certain natural territories (e.g. saline lakes, mires, caves, springs).

Governmental Decree No. 20/2001. (II. 14.) lays down the detailed rules on Environmental Impact Assessment in Hungary. The aim of the impact assessment is to determine, describe and evaluate the effects of various activities and development specified in the Annexes. Mainly those effects are considered that may influence humans, animals, plants, soil, water, atmosphere, climate and landscape. It is therefore a tool for applying the precautionary principle. The EIA report has to contain overall information on the impacts of any activity on the environment. In Hungary, the system of environmental impact assessment consists of two parts: a preliminary and a detailed one. There are 137 sorts of activities listed in the annexes that require EIAs.

Certain activities (which may negatively affect migratory waterbirds as well) are subject to obligatory detailed EIA, like the construction of motorways, highways, railways, public roads longer than 10 km, 220 kV power lines longer than 15 km. Other activities, like redistribution of land property (in case of protected areas, ecological corridors or lands larger than 300 hectares) , alteration of intensive agricultural land-use, amelioration, establishment of animal husbandry facilities in certain cases, construction of 120 kV power lines and 2 MW windturbines (200 kW in protected areas) may be subject to EIA – upon the decision of environmental authority.

The activities on protected natural areas and its buffer zones, on natural areas or on environmentally sensitive areas that require EIA are listed in the appendix of the decree.

b) Furthermore, according to Act No. 53 of 1996 on Nature Conservation if the commencement of any activity specified in statutory law is bound to environmental impact

assessment, an inventory of nature shall be carried out as a part of the assessment. The inventory of nature includes:

- a survey of the natural assets and their conditions in the area concerned;
- presentation of the activities that significantly influence, endanger or damage the natural assets, including the protected natural assets;
- the measures to reduce the effects of the changes resulting from the implementation of the planned activity (management), as well as the measures for the conservation of the natural assets and for the reduction of the unavoidable damage.

c) The second National Environmental Programme for the period 2003-2008 aims cooperation with relevant sectors to establish an appropriate regulatory system to avoid environmental damage. It states that the incorporation of environmental aspects into economic policy is the substantial precondition of the horizontal integration of environmental aspects. During the implementation of the NEP a set of instruments intended to promote the activities of the priority sectors should be elaborated with attention to the following substantive aspects:

- assessment of the environmental load caused by the sector;
- assessment of the related sectoral programmes; suggestion on how to reinforce their environmental aspects;
- elaboration of sectoral, environment focused policies, guidelines and planning aids;
- elaboration of subsectoral environment development strategies (e.g.: pharmaceutical industry, animal husbandry, public transport) with the involvement of the business sector, trade and non-governmental organizations concerned.

d) In 1997 Hungary ratified the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention). The Espoo (EIA) Convention stipulates the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

Hungary has also joined the Convention on Cooperation for the Protection and Sustainable Use of the Danube River and announced it in Government Decree No. 74/2000 (V. 31.).

e) Certain emergency surveillance systems work, e.g. mass dying (more than 10 specimens) of wild animal species, radioactive emission, pollution of waters.

4.7 Please describe the main features of your planning policy and provide examples of practical implementation (e.g. activities to minimising disturbance of species populations or limit the impact of species populations on crops or fisheries). Please summarize any land-use conflicts especially emphasising successful solutions to problems encountered in promoting the wise-use of waterbirds and their habitats.

The main examples of practical implementation:

a) Comprehensive studies were published in 2002 on the subject in a compilation by the Ministry of Environment, with the following titles:

- “The interactions of the natural and social environments in the example of oxbow management”
- “Fish farming and nature conservation”,

- “The interactions of the natural and social environments from the ecological point of view”.

Unfortunately, the studies only exist in Hungarian and there is presently no capacity for translation.

b) The agri-environmental measures of the National Rural Development Plan (NRDP) are developed to promote agricultural practices which are based on the conservation of biological diversity, the sustainable use of natural resources, and also to sustain the livelihood of local people and to create a liveable countryside. The programme for Environmentally Sensitive Areas within the agri-environmental measures particularly promotes positive impacts on biodiversity (farming with prescriptions for habitat development). For further information on ESA's, see Section 3.3.

c) There are also several activities that minimise or eliminate barriers or obstacles to bird migration (minimize the risk of electrocution and to take the interests of migratory birds into consideration in the planning process of windturbines)

In Hungary a length of 50 000 kms of medium-voltage power lines exist, which means 650 000 towers – according to the data given by the power suppliers. Five surveys were carried out on the mortality caused by electrocution: 4 regional and one covering the country. The latter was conducted in 2004, when 4 067 towers meaning 325 km-s of power lines were surveyed. 581 dead specimens were found from 33 bird species – from which 322 specimens were protected or strictly protected. The results show that the average is one dead bird/every 7th tower, and one raptor/every 18th tower (Demeter, Iván et al., 2004). Most frequently found waterbird species is the white stork (*Ciconia ciconia*), but rare species are also found occasionally.

BirdLife Hungary has been carrying out an insulation program since 1987 aiming to minimize the risk of electrocution by installing insulating coating on the towers. Since then – after the development and the manufacturing of the prototypes – several tens of thousands of such insulating coating have been installed.

BirdLife Hungary has carried out another program to provide raised platforms for White storks. In the last four decades the nesting of white storks has changed and 80% of the white storks nest on electricity poles. BirdLife Hungary, co-operating with the power suppliers, developed a special stork nest platform, and ~6000 such platforms have been installed. In 2001 and in 2002 BirdLife Hungary surveyed the types and quality of the poles, and monitored the nests and consequently investigated the possible risk posed. They found that 32-33% of the nests are endangered. According to mortality data of the years 1994-1999, 95% of known mortality of anthropogenic origin is caused by electrocution.

Activities aiming to reduce the risk of electrocution are financed and carried out in co-operation among constructors, conservation organizations, the competent nature conservation authority and power suppliers. One of the five power suppliers in Hungary itself finances production of 'insulation slippers' and also developed new pole types in 2003.

In 2003 the Ministry of Environment and Water compiled and adopted the conception on the conditions for wind farm establishment in Hungary - taking the aspects of nature and landscape protection into account. The study determines areas not recommended for wind farm establishment from nature conservation aspects as followings:

- Any part of the ecological network: protected natural areas and their buffer zones, natural areas (areas protected by power of the Act on nature conservation, protected natural monuments and the surface area of protected subterranean natural monuments /caves/) as well as the ecological (green) corridors;

- The breeding, feeding, resting sites and migration routes of wild animals (with special regard to protected species);
- Habitats of protected plant species and plant communities;
- Areas designated under international convention and directives (Ramsar sites, Natura 2000 network, Biosphere Reserves);
- Landscape protection zones, areas around individual landscape features.

The study determines the impacts of wind farms on wildlife to be assessed in case of installation. These are loss of, or damage to, habitat resulting from wind turbines and associated infrastructure; collision mortality and disturbance leading to displacement or exclusion, including barriers to movement.

According to relevant regulations in Hungary the following permits are needed:

- Environmental permit over 2 MW total capacity, in protected natural areas over 200 kW total capacity;
- Building permit;
- Power station establishing permit (over 50 MW);
- Utilisation permit;
- Permit for connection to the mains electricity supply;
- Nature conservation permit in protected natural areas.

The nature conservation authority acts as a co-authority (gives or refuses consent to a permit issued by another authority) in the environmental, building and connection to mains permission procedures. The nature conservation permit is the competence of the nature conservation authority.

In Hungary, the state is obliged to buy electricity generated by renewable energy sources, at a higher price than in the case of other energy sources.

d) On the basis of Act 55 of 1996 on game protection, game management and hunting the following areas of important waterbirds' habitats have been designated, where hunting and nature conservation authorities may further restrict waterbird hunting (in many cases this means the total ban on hunting):

- Baláta-tó [Lake Baláta]
- Balaton [Lake Balaton]
- Biharugai-halastavak [Biharugra Fishponds],
- Böddi-szék
- Boronka-mellék
- Borsodi-Mezőség
- Csíkvarsai-rét [Csíkvarsa Meadow]
- Csongrád-Bokrosi Sós-tó [Lake Sós at Csongrád-Bokros]
- Felső-Tisza [Upper Tisza]
- Fertő-tó [Lake Fertő]
- Gátéri Fehér-tó [Lake Fehér at Gátér]
- Gemenc and Béda-Karapanca
- Hevesi Füves Puszták [Plains of Heves]
- Hortobágyi Nemzeti Park [Hortobágy National Park]
- Ipoly-völgy [Valley of Ipoly]
- Izsáki Kolon-tó [Lake Kolon at Izsák]
- Kardoskúti Fehér-tó [Lake Fehér at Kardoskút]
- Kecskeri-puszta [Kecskér Plain]
- Kesznyéten
- Kis-Balaton
- Kiskunsági szikes tavak [Alkaline Lakes of Kiskunság]

- Körös-Maros National Park including
 - Begécsi-halastavak [Begécs Fishponds],
 - Sző-rét [Sző Meadow],
 - Cserebökényi-puszták [Cserebökény Plains],
 - Pitvarosi-puszták [Pitvaros Plains],
- Közép-tiszai [Middle Tisza]
- Mártély
- Nagybereki Fehér-víz [Lake Fehér at Nagyberek]
- Ócsa
- Orgoványi rétek [Meadows of Orgovány]
- Pacsmagi-tavak [Pacsmag Fishponds]
- Pellérdi-halastavak [Pellérd Fishponds]
- Péter-tavi Madárrezervátum [Bird Sanctuary of Lake Péter]
- Pusztaszer including
 - Szegedi Fehér-tó [Lake Fehér at Szeged],
 - Tisza labodári és saséri területe [Flood Plain of Tisza at Labodár and Sasér],
 - Csaj-tó [Lake Csaj],
 - Baksi nagylegelő [Pasture of Baks],
 - Büdösszék-tó [Pasture of Büdösszék]
- Rácalmástól az országhatárig valamennyi Duna-zátony területe [all Danube shoals from Rácalmás till the border-line]
 - Rétszilas [Rétszilas Fishponds]
 - Sárosfői-halastavak [Sárosfő Fishponds]
 - Sárrét
 - Sárvíz völgye [Valley of Sárrét]
 - Sumonyi-halastavak [Sumony Fishponds]
 - Szabadkígyósi-puszták [Szabadkígyós Plains]
 - Szaporcai Ó-Dráva meder [Old Riverbed of Dráva at Szaporca]
 - Szatmár-Bereg
 - Szigetköz
 - Tatai Öreg-tó [Lake Öreg at Tata]
 - Tisza Alpár-Bokrosi ártéri öblözete [Flood Plain of Tisza at Alpár-Bokros]
 - Tiszadorogmai Göbe-erdő [Göbe Gallery Forest of Tiszadorogma]
 - Tiszatelek-Tiszaberceli Ártér [Flood Plain of Tiszatelek and Tiszabercel]
 - Tiszavasvári Fehér-szik [Alkaline Lake of Tiszavasvár]
 - Tokaj-Bodrogszeg
 - Velencei-tó és a Dinnyési Fertő [Lake Velence and Marsh of Dinnyés]

5. Research and monitoring

Status of research and monitoring programmes for species

5.1 How are priorities for research identified in your country? Please briefly describe your country's research programmes, including any bilateral or multilateral co-operative action, for wetland habitats and for species covered by the Agreement (e.g. studies into species population, ecology and migratory patterns). Please append a list of research activities initiated, ongoing or completed in the last three years.

In general, several research activities have been completed in relation to the national registration of biological diversity and its conservation and sustainable use as well as natural areas and assets already protected or planned for protection, their evaluative analysis, and ongoing detection of the phenomena and processes endangering these assets.

Hungarian scientists also regularly cooperate with researchers of developing countries to promote assessment and conservation of biodiversity in these countries.

The Hungarian Biodiversity Platform (HBP) is the national platform of the European Platform for Biodiversity Research Strategy. The main objective of the HBP is to promote important research projects and decisions that contribute to the conservation, restoration, sustainable use of components of biological diversity, and to reduce biodiversity loss. HBP bridges the gap between science and policy. More information: <http://www.biodivplatform.hu>.

Regular meetings also take place for hydrobiologists of national park directorates to inform each other on activities, especially in order to implement the Water Framework Directive in Hungary.

5.2 What monitoring activities does your country undertake, including any bilateral or multilateral cooperative action, of wetland areas and species covered by the Agreement (e.g. national monitoring schemes, International Waterfowl Census)? Please append a list of monitoring activities or programmes initiated, ongoing or completed in the last three years

The Hungarian Biodiversity Monitoring System (HBMS) is a national programme for observing biological diversity in Hungary, launched in 1996 and supervised by the Authority for Nature Conservation of the Ministry of Environment and Water. The monitoring takes place at the population, community and habitat level. More information is available here: <http://www.kvvm.hu/szakmai/biodiver/old/html/angol/index.htm>. For example, the Kis-Balaton monitoring has been implemented under this programme since 2000. Its main topics are the monitoring of zooplankton, periphyton, algae, macrozoobenton, invasive plant species, molluscs, Diptera, Northern Vole, colonial breeding birds and reed-dwelling birds.

Assessments of changes of wetland status are compiled and summarised by the Ministry of Environment and Water and its background institute, the National Directorate for Environment, Nature and Water; data are collected through standardised wetland monitoring exercises (Kis-Balaton, Drava River and Szigetköz area) as well as smaller scale surveys of wetland statuses carried out by national park directorates. Under the Water Framework Directive, Hungary plans to start monitoring the ecological character of 258 wetlands that form part of the Natura 2000 network. This includes the following Ramsar sites.

- Baradla [Baradla Cave System and related wetlands]
- Balaton [Lake Balaton]
- Kis-Balaton
- Bodrogzug
- Gemenc
- Béda-Karapanca
- Pacsmagi-halastavak [Pacsmag Fishponds]
- Tatai Öreg-tó [Lake Öreg at Tata]
- Velencei-tó és Dinnyési Fertő [Lake Velence and Marsh of Dinnyés]
- Ipoly völgye [Valley of Ipoly]
- Fertő-tó [Lake Fertő]
- Hortobágy
- Felső-Tisza [Upper Tisza]
- Kardoskúti fehér-tó [Lake Fehér at Kardoskút]
- Kiskunsági szikes tavak és Kolon-tó [Alkaline Lakes and Lake Kolon of Upper Kiskunság]
- Csongrád-Bokrosi Sós-tó [Lake Sós at Csongrád-Bokros]

The main monitoring programs of migratory waterbird species co-ordinated by Ministry of Environment and Water are the endangered species monitoring, the strictly protected and colonial bird species monitoring, the national waterfowl monitoring, etc. For the list of these monitoring programs, see Appendix 4.

The BirdLife Hungary (MME) also co-ordinates some Waterbird Monitoring Programs, for example: migratory waterbird monitoring, breeding population survey, rare and colonial nesting bird monitoring. For the list of these monitoring programs and for recent research projects, see also Appendix 4.

6. Education and information

Training and development programmes

6.1 Describe the status of training and development programmes which support waterbird conservation and implement the AEWA Action Plan.

Actions in this respect have taken place at Lake Öreg at Tata. CEPA activity initiated by an IUCN project, including the annual Wild Goose Festival (since 2001), as well as the establishment of a visitor centre by the local government of Tata to highlight cultural and natural values of the lake and the town.

In general, the management planning exercise includes the incorporation of cultural values, and this refers to the management planning of wetlands, as well. An IUCN initiated a successful communication project was carried out in the area of Lake Tisza Ramsar site. The goal was to involve local governments in wetland conservation issues.

The Environmental Education and Communication Programme Office (EECPO) is an interdepartmental institution of the Ministry of Environment and Water and the Ministry of Education coordinating environmental communication and environmental education policies in Hungary. The Office regularly reviews and evaluates CEPA programs.

World Wetlands Day is celebrated annually. The 2005 event was a great success.

The visitor centre at Anna-liget, by the headquarters of the Körös-Maros National Park Directorate, was inaugurated in 2003. It has a high-tech exhibition on the wetlands of the national park, as well as a 2 km nature trail introducing visitors to the natural beauty of a flood plain gallery woodland.

Numerous nature trails and birdwatching towers have been established recently, e.g. a 2 km nature trail at Lake Tisza, a 500 m nature trail at Lake Kelemen, towers and hides at the Hortobagy fishponds.

6.2 What bilateral or multilateral co-operative action is your country undertaking to develop training programmes and share examples of good practice?

Hungary receives also foreign participants in various educational programmes and training camps and the country joined the GLOBE international environmental and educational network in 1999, today some 25 schools participate in the programme.

Hungary established good technical and scientific cooperation and collaborative exchange of information on biodiversity related research, education, training, surveillance, etc., with several countries. The aim is to maintain and improve this cooperation according to the requirements of partners.

Raising public awareness

6.3 Describe activities to raise public awareness of the objectives of the AEWA Action Plan. Please outline any particular successes generating public interest in, and securing support

for, waterbird and wetland conservation (e.g. campaigns, information notes or other initiatives)?

Awareness-raising is a lasting activity in the country: its elements are partly in the acts on the media, on public education, on environmental protection and nature conservation, in concepts on public health, family policy and youth policy and are drafted in connection with our accession to international conventions (Aarhus Convention) on the access to information. CEPA was incorporated into some sectoral policies (e.g. National Environmental Programme, Vásárhelyi plan) aiming at raising awareness of natural values and services.

The draft National Environmental Education Programme has been elaborated but the finalization of the document is under way.

The National Core Curriculum sets that environmental education as a basic requirement but biodiversity conservation and nature-oriented education is still at insufficient level in the public education.

Agreements have been made between the Ministry of Environment and Water and the Ministry of Education, which have given a new momentum to training in nature conservation. As a result of this, the “forest school network” is gradually and significantly developing and an increasing number of children have access to programmes outside educational institutions that provide nature conservation training and education. The EECPO is an interdepartmental institution of the Ministry of Environment and Water and the Ministry of Education coordinating environmental communication and environmental education policies in Hungary. The Office regularly reviews and evaluates CEPA programs. The scope of activity of environmental education covers the whole society and it affects every age group. However, one of its most significant stage is the public, vocational, adult and higher education.

Visitor centres operate in the territory of each national park directorate, many of them focus on wetland issues, and they provide programmes of high standard throughout the whole year.

The website of the Ministry of Environment and Water and Hungary's CHM is used for public awareness purposes, and for making available information on legislation, policy, status and trends, news etc. In addition to this, there are several good 'green' websites accessible also from the Hungarian CHM.

Information on biodiversity-related issues are also accessible through various publications of the Ministry of Environment, National Park Directorates, NGOs, etc.

Media activities somewhat relapsed recently. There are some 'green' programmes in the media but biodiversity is not an everyday and significant issue in the media.

No especial support for biodiversity awareness raising but included into environmental education programmes and activities supported by the government and local governments and main organisers are communication centres, national parks, NGOs, schools.

7. Final comments

7.1 General comments on the implementation of the AEWA Action Plan

The Hungarian Parliament has approved the resolution on the National Environmental Programme for 2003-2008. Within this frame exists the National Nature Conservation Master Plan containing the obligation of implementation of the AEWA Action Plan. Numerous provisions serve the protection of waterbird species e.g. designation of protected areas, wildlife protection, landscape protection sections.

The objectives of the National Biodiversity Strategy and Action Plan help the conservation and sustainable use of migratory waterbird species and their habitats, but there is no specific strategic objective on this issue. The objectives focusing on species and habitats include migratory species as well. All sectoral chapters (mining; forestry and forest management; fisheries management, fishing, angling; agriculture; regional development and tourism; land use; hunting; water management; molecular biology methods and biodiversity) of the National Biodiversity Strategy and Action Plan help indirectly the above mentioned objective.

Hungary joined the European Union in May 2004, thus the Birds Directive and Habitats Directive apply in the country. Implementation began in October 2004 when the Special Protection Areas were designated by the Government and the proposed Sites of Conservation Interest were submitted to the EU Commission.

Beside this, naturally, Hungary implements all obligations and tasks laid down in national nature protection legislation, in management plans for protected areas and in species action plans. The ban of lead shot hunting on wetland habitats and the enforcement of this prohibition is a new task for Hungary.

7.2 Observations concerning the functions and services of the various AEWA bodies

- a. The Agreement Secretariat*
- b. International organisations*
- c. AEWA NGO partners*

The co-operation, the exchange of information between the Secretariat and Hungary is very well and useful.

7.3 How might the Action Plan be further developed as a practical aid for national and international conservation of migratory waterbirds?

The damage of nature caused by foreign hunters is a continuous, permanent problem in the Central-Eastern European region. There is a need for more effective international co-operation against illegal hunting and illegal trade with such killed specimens.

8. Progress to implement Resolutions and Recommendations of the Meeting of the Parties

During the Second Session of the Meeting of the Parties, which took place from 25-27 September 2002 in Bonn, Germany 13 resolutions and 1 recommendation were adopted.

Res. 2.1 AMENDMENTS TO THE ANNEXES TO THE AGREEMENT

Adopted by Act No. 33. of 2003 on the AEWA.

Res. 2.2 PHASING OUT LEAD SHOT FOR HUNTING IN WETLANDS

See Section 4.1.

Res. 2.3 CONSERVATION GUIDELINES

See Section 2 and 3.

Res. 2.4 – 2. 12.

Not applicable to the Parties.

Res. 2.13 INTERNATIONAL ACTION PLANS ON THE SOCIABLE PLOVER, THE BLACKWINGED PRATINCOLE AND THE GREAT SNIPE

Not applicable to Hungary. All of them is a very rare wanderer in Hungary, although the blackwinged pratincole bred sometimes.

Recommendation 2.1 INTERNATIONAL ACTION PLAN ON THE DARK-BELLIED BRENT GOOSE

Not applicable to Hungary. The dark-bellied brant goose is only a vagrant in Hungary.

9. OPTIONAL SECTION – Planned and future actions

Contracting Parties are invited to outline below any further information regarding the aims of the Agreement, for example, planned actions or other informative examples.

1. Species conservation
2. Habitat conservation
3. Management of human activities
4. Research and monitoring
5. Education and information

List of abbreviations and acronyms used in the report

AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
Bern Convention	Convention on the Conservation of European Wildlife and Natural Habitats
CBD	Convention on Biological Diversity
CEPA	Communication, Education and Public Awareness
CHM	Clearing House Mechanism
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
ECNC	European Centre for Nature Conservation
EECPO	Environmental Education and Communication Programme Office
EIA	Environmental Impact Assessment
ESA	Environmentally Sensitive Area
Esppo Convention	Convention on Environmental Impact Assessment in a Transboundary Context
EU	European Union
GEF	Global Environmental Facility
HBMS	Hungarian Biodiversity Monitoring System
HBP	Hungarian Biodiversity Platform
HUF	Hungarian forint
IBA	Important Bird Area
IUCN	International Union for the Conservation of Nature and Natural Resources
KHT	Non-profit Co.
KÖTIKÖVIZIG	Middle Tisa Environmental and Water Management Authority
MME	BirdLife Hungary
NEP	National Environmental Programme
NGO	non-governmental organisation
NRDP	National Rural Development Plan
PEBLDS	Pan-European Biological and Landscape Diversity Strategy
pSCI	Proposed Site of Community Importance (of the Habitats Directive)
Ramsar Convention	Convention on Wetlands of International Importance Especially as Waterfowl Habitat
SPA	Special Protection Area (of the Birds Directive)
WWF	World Wide Fund for Nature

References

Laws and regulations:

Law Decree No. 6/1986 on CMS

Act No. 53 of 1995 on environmental protection.

Act No. 53 of 1996 on Nature Conservation

Act No. 55 of 1996 on Game protection, Game management and Hunting

Act No. 33. of 2003 on AEWA.

Government Decree No. 8/1998 (I. 23.) about the detailed regulation of protection, keeping, display and utilization of protected species

Government Decree No. 74/2000 (V. 31.) on Convention on Cooperation for the Protection and Sustainable Use of the Danube River

Government Decree No. 20/2001. (II. 14.) on detailed rules on Environmental Impact Assessment

Ministerial Decree No. 13/2001 (V. 9.) KöM on the protected and strictly protected species of flora and fauna, determination of the range of strictly protected caves furthermore species of nature conservation significance of European Community

Ministerial Decree No. 30/2001 (XII.28.) KöM on nature conservation management plans

Ministerial Decree No. 56/2005 (VI.25.) FVM, amending the implementation decree of the Act on Game protection, Game management and Hunting

The Second National Environmental Programme for 2003-2008 in a Parliament resolution No. 132/2003. (XII. 11.), including National Nature Conservation Master Plan (2003-2008) – promulgated

National Biodiversity Strategic Action Plan – yet adopted by the Ministry of Environment and

Water and planning to be adopted by the Government

National Rural Development Plan, 2004.

National Environmental Education Programme (in preparation)

(all in Hungarian)

National Reports for other Conventions.

National Report on Implementation of the Convention on the Conservation of Migratory Species of Wild Animals – 2005

National Report on Implementation of the Convention on Wetlands of International Importance Especially as Waterfowl Habitat - 2005

3rd National Report on Implementation of the Convention on Biological Diversity - 2005

Other Publications:

BirdLife International (2004): Birds in Europe: population estimates, trends and conservation status. Wageningen, The Netherlands: BirdLife International (BirdLife Conservation Series No. 12.)

Kovács, A.; Lovászi, P.; Magyar, G.; Nagy, K.; Szabó, B.; Szilvácsku, Zs. (2002): *Javasolt különleges madárvédelmi területek Magyarországon* [Proposed Special Protection Areas of Birds and their Habitats in Hungary], MME Publication, Budapest (in Hungarian)

Nagy, S & Crockford, N (2004) *Implementation in the European Union of species action plans for 23 of Europe's most threatened birds*. BirdLife International, Wageningen, The Netherlands.

Nagy, Sz. (1998): *Fontos madárelőhelyek Magyarországon* [Important Bird Areas in Hungary], MME Publication No.15., Budapest (in Hungarian)

Waliczky, Z. (1992): *Európai jelentőségű madárelőhelyek Magyarországon* [European Important Bird Areas in Hungary], MME Publication No.4., Budapest (in Hungarian)

Appendices

Appendix 1: Status of Single Species Action Plans

For the following species, the International Action Plan is being implemented:

- Pygmy cormorant – *Phalacrocorax pygmeus*,
- Lesser whitefronted goose – *Anser erythropus*,
- Red-breasted goose – *Branta ruficollis*,
- White-headed duck – *Oxyura leucocephala*,
- Corncrake – *Crex crex*,
- Slender-billed curlew – *Numenius tenuirostris*.

For the following species, National Action Plans are prepared by BirdLife Hungary, not yet endorsed by Ministry of Environment and Water

- Black stork – *Ciconia nigra*,
- White stork – *Ciconia ciconia*,
- Ferruginous duck – *Aythya nyroca*,
- Corncrake – *Crex crex*,
- Kentish plover – *Charadrius alexandrinus*.

Appendix 2: List of sites of international importance

The following sites are of particular interest for waterbirds from the list of Special Protection Areas under the Birds Directive (the list includes all Ramsar sites, except for one subterranean Ramsar site):

Alsó-Tiszavölgy [Lower Tisza Valley]
Balaton [Lake Balaton]
Balatoni berkek [Swamp Area of Lake Balaton]
Béda-Karapanca
Belső-Somogy [Inner Somogy]
Bodrozug – Kopasz-hegy – Taktaköz
Csongrád-Bokrosi Sós-tó [Lake Sós of Csongrád-Bokros]
Felső-Kiskunsági szikes puszták és turjánvidék [Alkaline Plains and Sedge Marsh of Upper Kiskunság]
Felső-Tisza [Upper Tisza]
Fertő-tó [Lake Fertő]
Gátéri Fehér-tó [Lake Fehér at Gátér]
Gemenc
Hortobágy
Ipoly völgye [Valley of Ipoly]
Izsáki Kolon-tó [Lake Kolon at Izsák]
Kesznyéten
Kígyósi-puszta [Kígyós Plain]
Kis-Balaton
Kiskunsági szikes tavak és az őrjegi turjánvidék [Alkaline Lakes of Kiskunság and Sedge Marsh of Órjeg]
Kis-Sárrét
Közép-Tisza [Middle Tisza]
Mórichelyi-halastavak [Mórichely Fishponds]
Nyugat-Dráva [West Dráva]
Pacsmagi-tavak [Pacsmag Fishponds]
Sárvíz völgye [Valley of Sárvíz]
Szaporcai Ó-Dráva meder [Old Riverbed of Dráva at Szaporca]
Szigetköz
Tatai Öreg-tó [Lake Öreg at Tata]
Tisza Alpár-Bokrosi ártéri öblözete [Flood Plain of Tisza at Alpár-Bokros]
Vásárhelyi- és Csanádi puszták [Plains at Vásárhely and Csanád]
Velencei-tó és Dinnyési Fertő [Lake Velence and Marsh of Dinnyés]

Appendix 3: Status of management plans for sites of international importance

The international important wetlands with management plans or strategies in place and being fully applied:

- Lake Velence and Marsh of Dinnyés,
- Lake Fertő,
- Hortobágy,
- Ócsa,
- Pacsmag Fishponds,
- Lake Kolon at Izsák,
- Alkaline Lakes with Lake Böddi of Upper Kiskunság,
- Mártély,
- Pusztaszer Landscape Protection Area,
- Upper Tisza covered by the Szatmár-Bereg Landscape Protection Area.

The international important wetlands with management plans or strategies being prepared:

- Lake Fehér at Kardoskút,
- Biharugra Fishponds

The international important wetlands with management plans or strategies being revised or updated:

- Lake Velence and Marsh of Dinnyés,
- Lake Fertő,
- Hortobágy.

Appendix 4: List of research and monitoring programmes and projects

The main monitoring programs of migratory waterbird species, are co-ordinated by Ministry of Environment and Water:

- endangered species monitoring (including species still abundant, but threatened, like White Stork – *Ciconia ciconia*, Corncrake – *Crex crex*),
- strictly protected and colonial bird species monitoring (running from 2000 aiming to create a scientific basis to the species protection programs and to trace population trends. The results of these surveys give the basis for international reporting obligation of Hungary),
- national waterfowl monitoring (carried out 8 months a year aiming to detect the dynamics of breeding birds and migratory birds and carrying out synchronic censuses on Ramsar and important migratory sites. Since 1997/1998, waterbirds (a total of 51 species) have been monitored monthly between August and April at 49 major wetland units throughout the country),
- monitoring of the effectiveness of nature conservation programs,
- monitoring nature conservation activities,
- monitoring utilized species.

Waterbird Monitoring Programs of BirdLife Hungary (MME):

- Migratory Waterbird Monitoring: Monthly birdcounts of main wetland sites. The census happen more than 50 sites, which are Ramsar sites, IBA's, or Natura 2000 sites. All participants count all the waterbirds species in every month at same time. Lots of volunteers participate in this program.
- Breeding population survey: BirdLife Hungary organizing this program to estimate the breeding population of all waterbirds primarily ducks, shorebirds etc.
- Rare and Colonial Nesting Bird Monitoring: The primary aim to estimate the rare and colonial nesting bird populations and its change in long-term period for example: cormorants and herons.
- Common Bird Monitoring. This measurement aim to detect the changes in the common birds populations. Hundreds of volunteers participate in this succesful action.

Recent research projects:

Szabó Balázs (ed., 2000): A cigányréce (*Aythya nyroca*) hazai elterjedése és az állomány változása 1995-1999. között. MME. [The distribution and population changes of the Ferruginous Duck in Hungary between 1995-1999]. (In Hungarian)

Horváth Jenő (2001): A Balaton és Kis-Balaton bütykös hattyú költő állománya és annak természetvédelmi jelentősége. [The breeding population of Mute Swans in Lake Balaton and in the Kis-Balaton, as well as their conservation aspects.] (In Hungarian)

Appendix 5 and 6: List of national institutions involved in migratory waterbird conservation and and their Wide Web addresses

Governmental Organisations:

Department of International Treaties on Nature Conservation of the Hungarian Ministry of Environment and Water	http://www.kvvvm.hu http://biodiv.kvvm.hu
Office for Nature Conservation - Ministry of Environment and Water	http://www.termeszetvedelem.hu
National Directorate for Environment, Nature and Water	http://www.ovf.hu
10 National Park Directorate	http://www.anp.hu http://www.bfnpi.hu http://www.bukkinemzetipark.hu http://www.ddnp.hu http://www.dinpi.hu http://www.ferto-hansag.hu http://www.hnp.hu http://www.knp.hu http://www.kmnp.hu http://www.orseginpi.hu
National Chief Inspectorate for Environmental, Nature and Water	http://www.orszagoszoldhatosag.gov.hu
12 Inspectorates for Environment, Nature and Water	http://www.adukofe.hu http://atiktvf.zoldhatosag.hu http://ddktvf.zoldhatosag.hu http://edktvf.zoldhatosag.hu http://emiktvf.zoldhatosag.hu http://ftvktvf.zoldhatosag.hu http://kvktvf.zoldhatosag.hu http://kdtktvf.zoldhatosag.hu http://kdvktvf.zoldhatosag.hu http://ktvktvf.zoldhatosag.hu http://nydtktfv.zoldhatosag.hu http://www.tikofe.hu

NGOs:

MME / BirdLife Hungary	http://www.c3.hu/~mme/english/ http://mme.hu
Hungarian Natural History Museum	http://www.nhmus.hu
VITUKI (Scientific and Research Centre for Water Management)	http://www.vituki.hu/
The Environmental Education and Communication Programme Office (EECPO)	http://www.konkomp.hu/indexa.htm
University of West Hungary	http://www.uniwest.hu/ http://www.mtk.nyme.hu/eng/
WWF Hungary	http://www.wwf.hu/

Appendix 7: List of relevant migratory waterbird and habitat conservation projects initiated, ongoing or completed in the last three years

Part 1.: Active management measures applied in important wetlands since 2002:

- Small-scale habitat restorations at Lake Kolon at Izsák and at Alkaline Lakes of Upper Kiskunság
- Elimination of invasive tree species at Lake Öreg at Tata
- Grazing livestock numbers increased to level required by conservation purposes at Lake Fehér of Kardoskút
- 2003-2004: Wetland restorations at Gemenc, e.g. Decsi Nagy-Holt Duna (Danube) water supply measures (500 ha) and Vén-Duna (Danube branch) restoration (700 ha)
- 2003-2004: Drying bog meadow vegetation control at Ócsa (35 ha)
- 2003: Water retention dam and water governing measures at Ócsa, Nagy-Turján (200 ha)
- 2003: Szőce bog meadow vegetation control (2 ha)
- 2003: Wetland restoration at Béda (oxbows) (30 ha)
- 2003-2004: major wetland restoration at Béda-Karapanca (GEF project)
- 2003: A major wetland restoration (re-flooding) continued at the Nyirkai Hany to restore a part (423 ha flooded) of the formerly flooded Hanság marshes.
- 2003: Mekszikópuszta alkaline lake (150 ha)
- 2003: Dredging of canal system to supply water to reedbeds of Lake Fertő (2500 m)
- 2003-2004: Restoration of grasslands and alkaline marshes to govern surface waters (Angyalháza, Szelencés, Malomháza, Zám, Pentezug, Kónyai pond) (8000 ha)

Part 2. Lists of wetland restorations in 2003 (2004 data are not yet complete):

- 2003-2004: Groundwater retention and monitoring of groundwater level at Sásdi-rét (70 ha)
- 2003-2004: Water retention in a bog meadow (Vörös János-séd) (15 ha)
- 2004: Bog meadow habitat restoration at Balatonederics and Szigliget (470 ha)
- 2003-2004: Wetland restoration in the Borsodi Mezőség Landscape Protection Area (6000 ha)
- 2003: Ipolytarnóc paleontological site Gyurtyánkő ponds wetland restoration (2 ha)
- 2004: Wetland restoration at Pély-Ludas
- 2003-2004: Drying bog meadow vegetation control at Ócsa (35 ha)
- 2003: Water retention dam and water governing measures at Ócsa, Nagy-Turján (200 ha)
- 2003: Water retention and water supply in the Hajta Valley (1000 ha)
- 2003: Szőce bog meadow vegetation control (2 ha)
- 2003: Farkasfa Fekete pond and Szentgotthárd Ördög pond, two *Sphagnum* bogs vegetation control (0.2+0.2 ha)
- 2003-2004: Major flood plain restoration along the river Rába
- 2003-2004: Vén-Duna (Danube branch) restoration (700 ha)
- 2003: Wetland restoration at Béda (oxbows) (30 ha)
- 2003: Decsi nagy-Holt Duna (Danube) water supply measures (500 ha)
- 2003: Rigóci ponds maintenance (15 ha)
- 2003: Kistápé bog meadow vegetation control (5 ha)

2003: Tengelic bog restoration (4 ha)
 2003-2004: major wetland restoration at Béda-Karapancsa (GEF project)
 2003: A major wetland restoration (re-flooding) continued at the Nyirkai Hany to restore a part (423 ha flooded) of the formerly flooded Hanság marshes.
 2003: Mekszikópuszta alkaline lake (150 ha)
 2003: Dredging of canal system to supply water to reedbeds of Lake Fertő (2500 m)
 2004-2005: Oslí-Hany-Királytó bog and marsh restoration (1362 ha)
 2003-2004: Restoration of grasslands and alkaline marshes to govern surface waters (Angyalháza, Szelencés, Malomháza, Zám, Pentezug, Kónyai pond) (8000 ha)
 2003: Bagamér grassland and bog meadow restoration (100 ha)
 2003: Water supply to Apaj ponds (153 ha)
 2003: Water supply to Felső-Szúnyogi meadows (80 ha)
 2003: Water supply to Bugac marsh (5 ha)
 2003: Water supply to Miklapuszta alkaline marsh (160 ha)
 2003: Water supply to Tömörkény fishponds (80 ha)
 2003: Water supply to Szelidi lake (180 ha)
 2003: Water supply to Dávod, Földvári fishponds (50 ha)
 2003: Water retention in two oxbows of the Körös flood plain (20 ha + 40 ha)
 2003: Wetland creation in navy pits along the river Maros (a total of 17 ha)

Part 3.: LIFE projects have been launched for wetland habitats, which support migratory waterbirds:

Project title	Year of start	Applicant	EU support (euros)	Ratio of EU support (%)
Habitat management of Hortobágy eco-region for bird protection, wetland and steppe restoration at Nagy-Vókonya	2003	Hortobágy Nature Conservation Society	622 151	75
Restoration of pannonic steppes and marshes of Hortobágy National Park	2003	Hortobágy National Park Directorate	546 521	70
Complex habitat rehabilitation of the Central Bereg Plain, Northeast Hungary – Restoration and preparation for long term maintenance of active raised bogs, mires, fens, grasslands and parkland meadows		Hortobágy National Park Directorate	700 302	67
Grassland restoration and marsh protection in Egyek-Pusztakócs	2005	Hortobágy National Park Directorate	858 325	70
Management of floodplains on the Middle Tisza (WWF Tisza LIFE project – officially submitted by WWF Austria, but running entirely	2001	WWF Implementing partner: WWF Hungary	187 190	43

in Hungary, Middle-Tisza region)				
Integrated (Multi-level inundation) water management system solving flood-protection, nature conservation and rural employment challenges in Upper Tisza	2004	Tisza-Szamos KHT	257 358	30
Sustainable use and management rehabilitation of flood plain in the Middle Tisza District	2004	KÖTIKÖVIZIG	691 508	50
Grassland restoration and marsh protection in Egyek-Pusztakócs	2004	Hortobágy National Park Directorate	700 302	67
Complex habitat rehabilitation of the Central Bereg Plain, Northeast Hungary – Restoration and preparation for long term maintenance of active raised bogs, mires, fens, grasslands and parkland meadows	2004	Hortobágy National Park Directorate	858 325	70

Appendix 8. Waterbird species that occur in Hungary and to which this Agreement applies

Scientific name	English name	Status	Legal status
GAVIIDAE			
<i>Gavia stellata</i>	Red-throated Diver	Transient and winter visitor.	Protected
<i>Gavia arctica</i>	Black-throated Diver	Transient and winter visitor.	Protected
<i>Gavia immer</i>	Great Northern Diver	Vagrant.	Protected
PODICIPEDIDAE			
<i>Tachybaptus ruficollis</i>	Little Grebe	Breeder 9,000-10,000 pairs. Stable.	Protected
<i>Podiceps cristatus</i>	Great Crested Grebe	Breeder 7,000-9,000 pairs. Stable.	Protected
<i>Podiceps grisegena</i>	Red-necked Grebe	Breeder 80-150 pairs. Stable.	Protected
<i>Podiceps auritus</i>	Slavonian Grebe	Rare transient.	Protected
<i>Podiceps nigricollis</i>	Black-necked Grebe	Breeder 600-1,000 pairs. Declining.	Protected
PELECANIDAE			
<i>Pelecanus onocrotalus</i>	Great White Pelican	Vagrant. Formerly bred (until 19th century)	Strictly protected
<i>Pelecanus crispus</i>	Dalmatian Pelican	Vagrant. Formerly bred (until 19th century)	Strictly protected
PHALACROCORACIDAE			
<i>Phalacrocorax pygmeus</i>	Pygmy Cormorant	Breeder 80-190 pairs. Strongly increasing.	Strictly protected
<i>Phalacrocorax carbo</i>	Great Cormorant	Breeder 1,800-3,000 pairs. Strongly increasing.	Listed as a „species of nature conservation

significance of European Community.”

ARDEIDAE

<i>Egretta garzetta</i>	Little Egret	Breeder 600-1,000 pairs. Increasing.	Strictly protected
<i>Egretta gularis</i>	Western Reef Egret	Vagrant.	Protected
<i>Ardea cinerea</i>	Grey Heron	Breeder 2,500-3,500 pairs. Stable.	Protected
<i>Ardea purpurea</i>	Purple Heron	Breeder 900-1,500 pairs. Stable.	Strictly protected
<i>Casmerodius albus</i>	Great Egret	Breeder 1,800-3,000 pairs. Strongly increasing.	Strictly protected
<i>Bubulcus ibis</i>	Cattle Egret	Vagrant.	Protected
<i>Ardeola ralloides</i>	Squacco Heron	Breeder 300-410 pairs. Stable.	Strictly protected
<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron	Breeder 2,400-3,600 pairs. Stable.	Strictly protected
<i>Ixobrychus minutus</i>	Little Bittern	Breeder 4,000-6,000 pairs. Stable.	Strictly protected
<i>Botaurus stellaris</i>	Great Bittern	Breeder 700-1,000 pairs. Stable.	Strictly protected

CICONIIDAE

<i>Ciconia nigra</i>	Black Stork	Breeder 210-280 pairs. Increasing.	Strictly protected
<i>Ciconia ciconia</i>	White Stork	Breeder 4,800-5,600 pairs. Stable.	Strictly protected

THRESKIORNITHIDAE

<i>Plegadis falcinellus</i>	Glossy Ibis	Very rare breeder. 5-20 pairs. Fluctuating.	Strictly protected
<i>Platalea leucorodia</i>	Eurasian Spoonbill	Breeder 850-1,200 pairs. Increasing.	Strictly protected

PHOENICOPTERIDAE

<i>Phoenicopterus ruber</i>	Greater Flamingo	Vagrant.	Protected
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ANATIDAE

<i>Oxyura leucocephala</i>	White-headed Duck	Vagrant. Formerly bred. Last breeding record: 1960.	Strictly protected
<i>Cygnus olor</i>	Mute Swan	Breeder 220-250 pairs. Increasing.	Listed as a „species of nature conservation significance of European Community.”
<i>Cygnus cygnus</i>	Whooper Swan	Rare winter visitor. First breeding record: 2005.	Protected
<i>Cygnus columbianus</i>	Bewick's Swan	Vagrant.	Protected
<i>Anser brachyrhynchus</i>	Pink-footed Goose	Vagrant.	Protected
<i>Anser fabalis</i>	Bean Goose	Transient and winter visitor.	Huntable
<i>Anser albifrons</i>	Greater White-fronted Goose	Transient and winter visitor.	Huntable
<i>Anser erythropus</i>	Lesser White-fronted Goose	Transient and winter visitor in declining number. Endangered.	Strictly protected
<i>Anser anser</i>	Greylag Goose	Breeder 2,000-2,500 pairs. Increasing.	Protected
<i>Branta leucopsis</i>	Barnacle Goose	Rare, but annual visitor.	Protected
<i>Branta bernicla</i>	Brent Goose	Vagrant.	Protected
<i>Branta ruficollis</i>	Red-breasted Goose	Rare transient and winter visitor.	Strictly protected
<i>Alopochen aegyptiacus</i>	Egyptian Goose	Vagrant. One accepted record in Category D.	Not protected
<i>Tadorna ferruginea</i>	Ruddy Shelduck	Vagrant.	Protected
<i>Tadorna tadorna</i>	Common Shelduck	New breeding bird. 0-5 pairs.	Protected
<i>Anas penelope</i>	Eurasian Wigeon	Transient.	Protected
<i>Anas strepera</i>	Gadwall	Breeder 200-300 pairs. Slightly increasing.	Protected
<i>Anas crecca</i>	Common Teal	Transient. Very rare breeder. 5-15 pairs.	Huntable
<i>Anas platyrhynchos</i>	Mallard	Breeder 100,000-150,000 pairs. Slightly declining.	Huntable
<i>Anas acuta</i>	Northern Pintail	Breeder	Protected

<i>Anas querquedula</i>	Garganey	30-50 pairs. Stable? Breeder 1,200-1,500 pairs. Stable?	Huntable
<i>Anas clypeata</i>	Northern Shoveler	Breeder 500-600 pairs. Stable?	Protected
<i>Marmaronetta angustirostris</i>	Marbled Teal	Vagrant.	Strictly protected
<i>Netta rufina</i>	Red-crested Pochard	Breeder 20-50 pairs. Stable.	Protected
<i>Aythya ferina</i>	Common Pochard	Breeder 5,000-10,000 pairs. Stable.	Huntable
<i>Aythya nyroca</i>	Ferruginous Pochard	Breeder 550-1,000 pairs. Stable.	Strictly protected
<i>Aythya fuligula</i>	Tufted Duck	Breeder 30-70 pairs. Stable.	Protected
<i>Aythya marila</i>	Greater Scaup	Rare winter visitor.	Protected
<i>Somateria mollissima</i>	Common Eider	Occasional winter visitor.	Protected
<i>Somateria spectabilis</i>	King Eider	Vagrant.	Protected
<i>Polysticta stelleri</i>	Steller's Eider	Vagrant.	Currently listed as a „species of nature conservation significance of European Community.” The species will be listed as a protected bird in the near future.
<i>Clangula hyemalis</i>	Long-tailed Duck	Very rare, but annual winter visitor.	Protected
<i>Melanitta nigra</i>	Common Scoter	Very rare, but annual winter visitor.	Protected
<i>Melanitta fusca</i>	Velvet Scoter	Very rare, but annual winter visitor.	Protected
<i>Bucephala clangula</i>	Common Goldeneye	Transient and winter visitor. First breeding record: 2003.	Huntable
<i>Mergellus albellus</i>	Smew	Transient and winter visitor.	Protected
<i>Mergus serrator</i>	Red-breasted Merganser	Very rare, but annual winter visitor.	Protected
<i>Mergus merganser</i>	Goosander	Transient and winter visitor.	Protected

First breeding record:
2004.

GRUIDAE

<i>Grus virgo</i>	Demoiselle Crane	Vagrant. Four accepted record.	Protected
<i>Grus grus</i>	Common Crane	Transient The Hortobágy has become one of the most important stop-over sites of the European population. Formerly bred, until 1910's.	Protected

RALLIDAE

<i>Rallus aquaticus</i>	Water Rail	Breeder 10,000-20,000 pairs. Stable.	Protected
<i>Crex crex</i>	Corncrake	Breeder 500-1,200 pairs. Fluctuating.	Strictly protected
<i>Porzana parva</i>	Little Crane	Breeder 3,000-5,000 pairs. Stable.	Protected
<i>Porzana pusilla</i>	Baillon's Crane	Breeder 10-40 pairs. Stable.	Strictly protected
<i>Porzana porzana</i>	Spotted Crane	Breeder 500-600 pairs. Stable.	Protected
<i>Gallinula chloropus</i>	Common Moorhen	Breeder 6,000-12,000 pairs. Stable.	Protected
<i>Fulica atra</i>	Common Coot	Breeder 80,000-120,000 pairs. Declining.	Huntable

HAEMATOPODIDAE

<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	Rare, but annual visitor.	Protected
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RECURVIROSTRIDAE

<i>Himantopus himantopus</i>	Black-winged Stilt	Breeder 180-400 pairs. Stable.	Strictly protected
<i>Recurvirostra avosetta</i>	Pied Avocet	Breeder 400-800 pairs. Stable.	Strictly protected

GLAREOLIDAE

<i>Glareola pratincola</i>	Collared Pratincole	Breeder 20-90 pairs. Declining, endangered.	Strictly protected
<i>Glareola nordmanni</i>	Black-winged Pratincole	Occasional breeder. 0-1 pairs. Last breeding record: 1995.	Strictly protected

CHARADRIIDAE

<i>Pluvialis apricaria</i>	Eurasian Golden Plover	Transient.	Protected
<i>Pluvialis fulva</i>	Pacific Golden Plover	Vagrant.	Protected
<i>Pluvialis squatarola</i>	Grey Plover	Transient.	Protected
<i>Charadrius hiaticula</i>	Common Ringed Plover	Transient.	Protected
<i>Charadrius dubius</i>	Little Ringed Plover	Breeder 1,600-2,300 pairs. Stable.	Protected
<i>Charadrius alexandrinus</i>	Kentish Plover	Breeder 15-30 pairs. Strongly declining, critically endangered.	Strictly protected
<i>Charadrius leschenaultii</i>	Greater Sandplover	Vagrant.	Protected
<i>Eudromias morinellus</i>	Eurasian Dotterel	Transient.	Protected
<i>Vanellus vanellus</i>	Northern Lapwing	Breeder 93,000-150,000 pairs. Declining.	Protected
<i>Vanellus spinosus</i>	Spur-winged Plover	Vagrant.	Protected
<i>Vanellus gregarius</i>	Sociable Plover	Vagrant.	Strictly protected
<i>Vanellus leucurus</i>	White-tailed Plover	Vagrant.	Protected

SCOLOPACIDAE

<i>Scolopax rusticola</i>	Eurasian Woodcock	Transient and rare breeder 10-60 pairs. Fluctuating.	Huntable
<i>Gallinago media</i>	Great Snipe	Rare, but annual visitor.	Strictly protected
<i>Gallinago gallinago</i>	Common Snipe	Breeder 650-1,200 pairs. Stable.	Protected
<i>Lymnocyptes minimus</i>	Jack Snipe	Transient.	Protected
<i>Limosa limosa</i>	Black-tailed Godwit	Breeder 400-1,500 pairs. Declining.	Strictly protected
<i>Limosa lapponica</i>	Bar-tailed Godwit	Rare, but annual visitor.	Protected
<i>Numenius phaeopus</i>	Whimbrel	Transient.	Protected

<i>Numenius tenuirostris</i>	Slender-billed Curlew	Now only a very rare visitor. Last, yet unverified record from 2001. Critically endangered.	Strictly protected
<i>Numenius arquata</i>	Eurasian Curlew	Breeder 20-60 pairs. Declining.	Strictly protected
<i>Tringa erythropus</i>	Spotted Redshank	Transient.	Protected
<i>Tringa totanus</i>	Common Redshank	Breeder 600-800 pairs. Declining.	Strictly protected
<i>Tringa stagnatilis</i>	Marsh Sandpiper	Rare transient. Formerly bred, last breeding record: 1958.	Strictly protected
<i>Tringa nebularia</i>	Common Greenshank	Transient.	Protected
<i>Tringa ochropus</i>	Green Sandpiper	Transient.	Protected
<i>Tringa glareola</i>	Wood Sandpiper	Transient.	Protected
<i>Tringa cinerea</i>	Terek Sandpiper	Vagrant.	Protected
<i>Tringa hypoleucos</i>	Common Sandpiper	Breeder 150-180 pairs. Stable.	Protected
<i>Arenaria interpres</i>	Ruddy Turnstone	Rare, but annual visitor.	Protected
<i>Calidris canutus</i>	Red Knot	Rare, but annual visitor.	Protected
<i>Calidris alba</i>	Sanderling	Rare, but annual visitor.	Protected
<i>Calidris minuta</i>	Little Stint	Transient.	Protected
<i>Calidris temminckii</i>	Temminck's Stint	Transient.	Protected
<i>Calidris maritima</i>	Purple Sandpiper	Vagrant.	Protected
<i>Calidris alpina</i>	Dunlin	Transient.	Protected
<i>Calidris ferruginea</i>	Curlew Sandpiper	Transient.	Protected
<i>Limicola falcinellus</i>	Broad-billed Sandpiper	Rare, but annual visitor.	Protected
<i>Philomachus pugnax</i>	Ruff	Transient. Formerly regularly bred, until 1940's. Last breeding record: 1992.	Protected
<i>Phalaropus lobatus</i>	Red-necked Phalarope	Rare, but annual visitor.	Protected
<i>Phalaropus fulicaria</i>	Grey Phalarope	Vagrant.	Protected
LARIDAE			
<i>Larus canus</i>	Common Gull	Winter visitor and very rare new breeder 1-4 pairs.	Protected
<i>Larus marinus</i>	Great Black-backed Gull	Rare, but annual visitor.	Protected

<i>Larus hyperboreus</i>	Glaucous Gull	Vagrant.	Protected
<i>Larus glaucooides</i>	Iceland Gull	Vagrant.	Protected
<i>Larus argentatus</i>	Herring Gull	Transient.	Protected
<i>Larus heuglini</i>	Heuglin's Gull	Vagrant,	Protected as <i>Larus fuscus heuglini</i> .
<i>Larus cachinnans</i>	Yellow-legged Gull	Transient and winter visitor. Very rare new breeder. 3-9 pairs.	Listed as a „species of nature conservation significance of European Community.”
<i>Larus fuscus</i>	Lesser Black-backed Gull	Transient.	Protected
<i>Larus ichthyaetus</i>	Great Black-headed Gull	Rare, but annual visitor.	Protected
<i>Larus ridibundus</i>	Common Black-headed Gull	Breeder 7,000-15,000 pairs. Declining.	Protected
<i>Larus genei</i>	Slender-billed Gull	Vagrant.	Protected
<i>Larus melanocephalus</i>	Mediterranean Gull	Breeder 110-230 pairs. Increasing.	Protected
<i>Larus minutus</i>	Little Gull	Transient.	Protected
<i>Xema sabini</i>	Sabine's Gull	Vagrant.	Protected
<i>Sterna nilotica</i>	Gull-billed Tern	Rare, but annual visitor. Has bred occasionally.	Protected
<i>Sterna caspia</i>	Caspian Tern	Transient.	Protected
<i>Sterna sandvicensis</i>	Sandwich Tern	Vagrant.	Protected
<i>Sterna hirundo</i>	Common Tern	Breeder 700-1,200 pairs. Stable.	Protected
<i>Sterna paradisaea</i>	Arctic Tern	Vagrant.	Protected
<i>Sterna albifrons</i>	Little Tern	Very rare breeder 5-10 pairs. Fluctuating.	Strictly protected
<i>Chlidonias hybridus</i>	Whiskered Tern	Breeder 1,600-3,800 pairs. Fluctuating.	Strictly protected
<i>Chlidonias leucopterus</i>	White-winged Tern	Breeder 50-2,000 pairs. Fluctuating.	Strictly protected
<i>Chlidonias niger</i>	Black Tern	Breeder 400-1,000 pairs. Declining.	Strictly protected

Appendix 9: Summary of the Vásárhelyi Plan

During the 1998 to 2000 period four abnormal flood waves have passed down the River Tisza. The total costs of flood fighting, emergency measures and reconstruction have amounted to some HUF 120 billion (thousand million). Both public awareness of the hazard potential and the demand for a higher level of safety have grown in the wake thereof.

The government, at its special meeting on the 26th of February, 2003, at Szolnok, had approved of the conceptual plan of enhancing flood safety in the Tisza Valley and obliged the competent ministries to elaborate detailed plans for Stage I of the development program by the 30th of September. The plans were duly submitted to the government by the deadline prescribed.

The development proposal comprises a complex program, which covers beyond the creation of a higher level of flood safety, the improvement of the living standards of the rural- and urban population in the region, the formulation and introduction of new types of agro-ecological land use in the area of the emergency flood retention reservoirs and the modernisation of the infrastructure in the settlements along the River Tisza.

In Stage I, which covers the years 2004 to 2007, the proposed flood safety enhancement measures include the restoration of the flow conveying capacity of the flood bed, the conservation oriented revitalisation thereof along the Tivadar section of the river, as well as along that between Szolnok town and the southern national boundary. Work will also be started on the emergency retention reservoirs, of which six are contemplated at strategic sites.

Agreement has been reached on the principles according to which a) the reservoir sites are selected and their area secured, b) the compensation to the farmers is awarded when they make available their fields temporarily for the purpose of flood storage, and c) the methods of subsequent farming are decided upon.

The costs of the first four years have been estimated at HUF 130 billion, one-half thereof devoted to flood control measures, the other to rural development, agro-ecological farming and infrastructure modernisation projects. Of this total HUF 8 billions have been earmarked for flood control projects. EU support is expected to cover approximately one-fourth of the total costs of the program.

Progress towards program implementation has been achieved according to schedule. Preparatory activities so far have included surveys on the potential reservoir sites for ecological and archaeological values. The findings have revealed no obstacles to further designing work. The Strategic Environmental Assessment has been completed to EU standards, the rural- and regional development opportunities related to the program have been explored together with the demands for intensifying economy and improving the infrastructure.

Complying with EU requirements, the preparatory phase of the planning process was an open, transparent one, at public hearings with large audiences all potential stakeholders were given opportunity to voice their opinion. Over one-hundred village meetings and eighty other consultations have been organised.

The tasks carried out in 2004 include the environmental impact assessments, the preparation of the permit drawings, the procurement of official permits for the structures designed, the preparation of the detailed rural and regional development programs and the selection of contractors by an open tendering procedure.

Continuous and outstanding care has been devoted to providing detailed information to the communities concerned and to obtaining public approval to the implementation of the program.

Work on the first reservoirs and on clearing the high-water bed has been scheduled to start in 2005.

Parallel to the implementation of Stage I of the program, the scientific and professional foundations of the subsequent Stage II will be prepared by the middle of 2005.

Appendix 10: List of Ramsar sites in Hungary.

Hortobágy: 1979; 23,121 ha; Biosphere Reserve; National Park, Nature Protection Area. Four separate sectors of the extensive Hortobágy Steppe include a system of artificial fishponds; a reconstructed swamp system; a part of a dam, islands, woodland and mudflats; and extensive grassland, marshland and swamp areas. Ramsar site no. 189. All sectors support extensive reed and *Nymphaea* beds. The area is important for breeding, wintering and staging important numbers of many species of migratory waterbirds. Human activities include intensive, large-scale fish production and reed harvesting. Public access is strictly controlled. There are a field research station and several observation hides available.

Velencei-tó, Dinnyési Fertő [Lake Velence and Marsh of Dinnyés]: 1979; 965 ha; Nature Conservation Area. Ramsar site no. 183. The site is composed of a lake area and an alkaline marshland with surrounding meadows supporting extensive reed and *Scirpus* beds. The area is important for breeding, wintering and staging numerous species of waterbirds. The site is also important botanically, supporting several notable plant species. Human activities include reed harvesting, wild boar (*Sus scrofa*) hunting, and recreation. Severe drought has caused problems. There are strict controls on public access and a visitor's centre and research facility are available.

Kardoskúti Fehértó [Lake Fehér at Kardoskút]: 1979; 488 ha; 46°28'N 020°37'E. Nature Conservation Area. Ramsar site no. 184. A saline lake with adjacent saline *Festuca* grassland and reedbeds. The lake dries out completely during the summer. The site is important for staging and breeding various species of waterbirds and supports several endemic plants. Human activities include reed harvesting. There is an ornithological field station and public access is strictly controlled.

Pusztaszer: 1979; 4,721 ha; National Park, Landscape Protection Area, Nature Conservation Area. Ramsar site no. 188. The site is composed of artificial fishponds, marshlands, a seasonally flooded saline lake, flooded woodland, and an oxbow lake. The area is important for staging numerous species of waterbirds and supports several species of notable or endemic plants. A research station and an information centre are available, and there are several observation hides.

Kis-Balaton: 1979; 14,745 ha; Landscape Protection Area; Nature Reserve. Located within the delta of the Zala River, the site includes a large artificial lake system and associated marshland, reedbeds, islands and softwood gallery forest. Ramsar site no. 185. The area is important for breeding waterbirds and for staging internationally important numbers of Anser. Human activities include reed harvesting and intensive fishing. Increasing use of agricultural fertilizers in the surroundings poses a threat through nutrient-enrichment.

Felső Kiskunsági tavak [Lakes of Upper Kiskunság]: 1979; 6,637 ha; Biosphere Reserve; National Park. Located between the Danube and Tisza rivers, the site includes five saline lakes and an associated mosaic of saline marshes, meadows, reedbeds and arable land. Ramsar site no. 187. The lakes are filled seasonally by groundwater and precipitation. The site is important for breeding and staging several species of waterbirds. Several notable or endemic plant species occur. Severe droughts have adversely affected the site's ecology.

Mártély: 1979; 2,232 ha; Landscape Protection Area, Nature Protection Area. A section of the Tisza River floodplain featuring oxbow lakes, wet meadows, arable land, scrub, and woodland. Ramsar site no. 186. The site supports a large population of the otter (*Lutra lutra*) and is an important breeding area for various species of waterbirds. Human activities include recreation. The site supports commercial fisheries and a research centre.

Szaporcai Ó-Dráva meder [Old Riverbed of Dráva at Szaporca]: 1979; 257 ha; Nature Reserve. An oxbow lake formed by the Dráva River, supporting gallery forests, wet meadows, reedbeds, agricultural land and marshes. Ramsar site no. 182. The site is

important for numerous species of breeding waterbirds. It is also an important botanical area. Hunting and fishing are regulated.

Tatai Öreg-tó [Lake Öreg at Tata]: 1989; 270 ha; An artificial, nutrient-rich, freshwater lake. Ramsar site no. 419. The site is an internationally important wintering area for bean geese (*Anser fabalis*), holding 12-13% of the European population. Various other waterbirds use the site for wintering or staging. The site is intensively used for recreational activities. Commercial fisheries are located around the lake and inflow from the Által stream is causing nutrient-enrichment.

Ócsa: 1989; 1,078 ha; Landscape Protection Area. A peatland area located in the Great Hungarian Plain supporting reed and Scirpus beds, bogs, pools, grassland, arable land, and woodland. Ramsar site no. 418. The area is important for several species of breeding waterbirds. The site supports several endemic species of Lepidoptera, the otter (*Lutra lutra*), and several notable plant species. There are restrictions on hunting and public access is strictly controlled. An ornithological field station is located at the site.

Bodrogzug: 1989; 4,073 ha; Landscape Protection Area. Ramsar site no. 422.

A floodplain area including several lakes at the confluence of two rivers, with grassland, marshland, lakes, reedbeds, willow scrub and areas of woodland on higher ground. The area is important for breeding and staging numerous species of waterbirds. Several notable plants are supported.

Fertő-tó [Lake Fertő]: 1989; 8,432 ha; Biosphere Reserve; National Park. The Hungarian part of Europe's largest lake, estimated to be 20,000 years old. Ramsar site no. 420. The site comprises a portion of Lake Fertő and the region of lakes Herlakni and Oberlakni. Both sectors support extensive reedbeds, saline grassland, marshland and open water areas. The area is important for breeding, wintering and staging several species of waterbirds. Human activities include recreational and commercial fishing and reed harvesting. In ceremonies held on 24 April 1994, a single transboundary national park, called Neusiedl-Fertő, was created in co-management with Austria.

Balaton [Lake Balaton]: 1989; 59,800 ha; Landscape Protection Areas, Nature Conservation Areas. Ramsar site no. 421. The largest lake in Central Europe and estimated to be 22,000 years old. Extensive reedbeds fringe the shoreline. The site is an important staging site for large numbers of various species of waterbirds and supports about 2,000 species of algae. The lake is the most important recreation area in Hungary; other activities include tourism, fishing and reed harvesting.

Biharugrai halastavak [Biharugra Fishponds]: 1997; 2,791 ha; Landscape Protection Area. Ramsar site no. 903. Intensively used lakes near the Romanian border, supporting a characteristic steppe vegetation, wet meadows and forests. The site provides resting, breeding, feeding and staging areas for numerous endangered and protected waterfowls and waders. The "kunhalom", an elevated hill probably used for burial purposes 1100 years ago, is archaeologically important. Human activities include intensive fishing, cattle and sheep breeding, farming and hunting.

Izsáki Kolon-tó [Lake Kolon at Izsák]: 1997; 2,962 ha; National Park, Biosphere Reserve; Nature Reserve. Ramsar site no. 902. An artificially regulated lake supporting extensive reedbeds, wet meadows, patches of willow, and small open water bodies. The eight heron species of Hungary breed at the site in large numbers. Human activities include reed cutting and in the surroundings, vineyards and orchards are cultivated. The area is closed to the public.

Pacsmagi tavak [Pacsmag Fishponds]: 1997; 485 ha; Nature Reserve. Situated in the valley of a meandering stream, the site consists of fishponds established by damming the watercourse. The large waterbodies, marshland, meadows and reedbeds attract thousands of waterfowl during migration and are considered one of the most significant waterfowl resting and feeding sites in Western Hungary. Ramsar site no. 904. The area provides

excellent nesting habitat for several protected and endangered bird species and breeding areas for the strictly protected otter. The site supports several species of protected plants. Human activities consist of an intensive fishery, cattle grazing, mowing and farming.

Rétszilasi tavak [Rétszilás Fishponds]: 1997; 1,508 ha; Nature Reserve. A complex of numerous fishponds and the remnants of marshy river beds created at the turn of the 20th century. Ramsar site no. 899. Characteristic vegetation includes reedbeds, sedge communities, and sodic pastures. One of the most significant waterbird habitats in Western Hungary, the site provides excellent nesting habitat for several protected and endangered bird species and large numbers of various species of herons. 113 bird species use the site. The site supports numerous endangered and protected plants, notably a significant orchid community. Human activities include a fishery, cattle grazing, mowing and farming. A bird-ringing survey is carried out.

Gemenc, Béda-Karapancsa: 1997; 18,023 ha; Landscape Protection Area, National Park, Nature Reserve. Ramsar site no. 900-901. The site consists of various floodplain habitats along the Danube River. The undisturbed forests, branches, tributaries, oxbow lakes, marshland, meadows, reedbeds, and hard and softwood gallery forests support a high diversity and density of endangered species. The site supports various endemic and rare plants and two protected mammal species. Large numbers of migrating and wintering waterbirds are supported and various nesting birds use the site. Human activities include recreation, forestry, hunting and fishing.

Baradla [Baradla Cave System and related wetlands]: 2001; 2,075 ha; National Park, MAB Biosphere Reserve, World Heritage site. The site is integral with Slovakia's Domica Ramsar site (designated January 2001) and part of a single 'Caves of Aggtelek Karst and Slovak Karst' World Heritage site since 1995. Ramsar site no. 1092.

Ipoly-völgy [Ipoly Valley]: 2001; 2,228 ha; National Park. Ramsar site no. 1093. A long, flat, and narrow valley containing oxbow lakes as well as shrub and alder bogs which serve to minimize risks of flood damage. Seasonally flooded meadows are partly grazed by cattle and partly mowed, and groundwater recharge supplies drinking water to the population. The site is an important stopover for migratory waterbirds and offers habitat to a significant number of fish species, some of them endangered, though its role as an important fish spawning ground has declined. Few serious threats to the site are foreseen, though increased overgrazing and greater use of artificial fertilizers would not be welcome. Expanded recreational and eco-tourism for the Budapest region may bring benefits, and a return to traditional, sustainable fishing methods is contemplated. The site is ecologically integral with the Slovak Republic's Poiplie Ramsar site (1998), and unique ethnographic and cultural character binds the sites, as evidenced by the Csadó-tanya prehistoric settlement remains.

Csongrád-Bokrosi Sós-tó [Lake Sós of Csongrád]: 2003; 770 ha; Nature Reserve. Composed of two seasonal saline lakes, Nagy Sós-tó of 100 ha and Kis Sós-tó of 10 ha and including saline marshes, saline meadows, a mosaic of loess meadows on high embankments, and agricultural areas of different sizes in between the ponds. Ramsar site no. 1409. The site is home to rare, endemic and threatened communities and species including Ferruginous Duck (*Aythya nyroca*), Glossy Ibis (*Plegadis falcinellus*), and Great Bustard (*Otis tarda*). It is part of the migration route along the Tisza river valley and supports more than 20,000 waterfowl seasonally, playing an important role as a resting, feeding and breeding site. Waterbirds regularly using the site include Pintail (*Anas acuta*), Shoveler (*Anas clypeata*), Teal (*Anas crecca*), Wigeon (*Anas penelope*), Mallard (*Anas platyrhynchos*), Garganey (*Anas querquedula*), White-fronted Goose (*Anser albifrons*), Greylag Goose (*Anser anser*), Bean Goose (*Anser fabalis*) and the globally threatened Lesser White-fronted Goose (*Anser erythropus*). Past measures in the catchment area decreased the extent of wetlands through lowering the groundwater table. A potential threat to the site is

the acceleration of the eutrophication process caused by nutrients coming from the arable lands.

Felső-Tisza [Upper Tisza]: 2003; 22,311 ha; Reserve, Landscape Protection Area. Ramsar site no. 1410. The site covers the entire active floodplain along a 215 km section of the river Tisza in northeastern Hungary, adjacent to the Bodrogzug Ramsar site; it meets the Ukrainian and Slovakian borders to the east and north, and the catchment is also shared with Romania. Felső-Tisza is a typical floodplain with dikes constructed in the late 19th-early 20th centuries. The natural and near-natural habitats consist of large patches of softwood (*Salicetum albae-fragilis*) and hardwood riverside forests (*Querco-Ulmetum*), oxbow lakes, filled-in meanders with rich natural flora and fauna, extensively managed or abandoned orchards and plough-lands. The site supports many vulnerable animal species such as Corncrake (*Crex crex*), otter (*Lutra lutra*), Danube salmon (*Hucho hucho*), Zingel (*Zingel zingel*) and is an important migration route notably for the fish Nase (*Chondrostoma nasus*), Barbel (*Barbus barbus*), and Sterlet (*Acipenser ruthenus*). The oxbows perform important ecological functions such as spawning, rearing, feeding, resting and staging, aquifer recharge, aquatic species "banks", and habitat connectivity. Dry periods in recent years have led to eutrophication and decreased habitat extent. Tourism, fishing, and intensification of forestry are adversely affecting the ecological character. A special program identifying the most important sites along the river has been implemented. A transboundary Ramsar site designated in conjunction with "Tisa River" in the Slovak Republic.