marina ocampo

From: Liina Eek-Piirsoo [Liina.Eek-Piirsoo@ekm.envir.ee]
Sent: October 6, 2000 8:19 AM
To: secretariat@biodiv.org
Subject: Estonian thematic report on alien soecies

thematic_alien-species.doc

Mr Hamdallah Zedan
Executive Secretary
Secretariat of the Convention on Biological Diversity

Dear Mr Zedan

Herewith I send You the thematic report on alien species togeher with case studies in alien species in Estonia (see list attached). I send You the case studies by mail only.

Yours sincerely,

Liina Eek
NFP of CBD

List of case-studies

Maran, T. 1991. Folia Theriologica Estonica. Distribution of the European
mink, Mustela lutreola, in Estonia: an historical review. Tartu.

Maran, T., Macdonald, D-W. , Kruuk, H., Sidorovich V. and Rozhnov, V.. The
continuing decline of the Eyropean mink Mustela lutreola: evidence for the intraguild aggression hypothesis. In: Behaviour and Ecology of Riparian Mammals. Ed. N. Dunstone and M.L. Gorman. Cambridge, University Press, pp. 297 - 321.

Ojaveer, E. and Lumberg, A. 1995. On the role of Cercopagis pengoi (Ostroumov) in Pärnu bay and the NE part of the Gulf of Riga ecosystem. Proc. Estonian Acad. Sci. Biol. Ecol. 5: 20-25.

Kotta, J. and Kotta, I. 1998. Distribution and invasion ecology of Marenzelleria viridis in the Estonian coastal waters. Proc. Estonian Acad. Sci. Biol. Ecol. 47: 212-220.

Kotta, J., Orav., H. and Kotta, I. 1998. Distribution and filtration activity of
the zebra mussel, Dreissena polymorpha, in the Gulf of Riga and Gulf of Finland. Proc. Estonian Acad. Sci. Biol. Ecol. 47: 32-41.

Ojaveer, H., Lankov, A., Eero, M., Kotta, J., Kotta, I. And Lumberg, A. 1999.
Changes in the ecosystem of the Gulf of Riga from the 1970s to the 1990s. ICES Journal of Marine Science. 56: 33-40.

Kotta, J. 2000. First record of the talitrid amphipod Orcestia cavimana in the
northern Baltic sea. Proc. Estonian Acad. Sci. Biol. Ecol, 49: 221-224.

Ojaveer, H., Simm, M., Lankov. A and Lumberg, A. 2000. Consequences of

invasion of a predatory cladoceran. Raport for International Council for the Exploration of the Sea.

Contracting Party	Estonia
National Focal Point	
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Submission	
Signature of officer responsible for submitting national report:	
Date of submission:	6 October 2000

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report

Methodology for preparation of the detailed thematic report on alien species

To get the necessary information for the report the following activities were performed:

- review and compilation of existing documentation *,
- telephone interviews or meetings to key stakeholders **,
- meeting in the Ministry of the Environment.

* First National Report to the Convention on Biological Diversity. 1998.Tallinn.

Estonian Biodiversity Strategy and Action Plan. 1999. Tallinn – Tartu .

N. Mikelsaar. 1984. Eesti NSV kalad. Tallinn. (in Estonian, The Fish of Estonian SSR)

J. Tuusti, T. Taugbol, J. Skrudal and L. Kukk. 1998. Freshwater Crayfish in Estonia. Ostlandsforskning.

T. Kukk. 1999. Eesti taimestik. Tartu-Tallinn. (in Estonian, Flora of Estonia)

Maran, T. 1991. Distribution of the European mink, Mustela lutreola, in Estonia: A historical review. - Folia Theriol. Estonica 1:1-17.

Ojaveer, E. and Lumberg, A. 1995. On the role o*f Cercopagis pengoi* (Ostroumov) in Pärnu bay and theE part of the Gulf of Riga ecosystem. Proc. Estonian Acad. Sci. Biol. Ecol. 5: 20-25.

Kotta, J. and Kotta, I. 1998. Distribution and invasion ecology of *Marenzelleria viridis* in the Estonian coastal waters. Proc. Estonian Acad. Sci. Biol. Ecol. 47: 212-220.

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** Experts of the Ministry of the Environment
Estonian Teriological Society
Estonian Ornithological Society
University of Tartu
Pedagogical University of Tallinn
Agricultural University
Estonian Marine Institute

Article 8h Alien species

1. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium		c) Low	X

2. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

3. Has your country identified alien species introduced?	
a) no	
b) only major species of concern	X[1]
c) a comprehensive system tracks introductions	
4. Has your country developed national policies for addressing issues related to alien invasive species?	
a) no	
b) yes – as part of a national biodiversity strategy (please give details below)	X[2]
c) yes – as a separate strategy (please give details below)	
5. Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?	
a) no	
b) only some alien species of concern have been assessed	X[3]
c) most alien species have been assessed	
6. Has your country undertaken measures to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species?	
a) no measures	
b) some measures in place	X[4]
c) potential measures under review	
d) comprehensive measures in place	

Decision IV/1 Report and recommendations of the third meeting of SBSTTA

7. Is your country collaborating in the development of projects at national, regional, sub-regional and international levels to address the issue of alien species?	
a) little or no action	X
b) discussion on potential projects under way	
c) active development of new projects	

8. Does your national strategy and action plan address the issue of alien species?	
a) no	
b) yes – limited extent	X[2]
c) yes – significant extent	

Case-studies

9. Has your country submitted case-studies on the prevention of introduction, control, and eradication of alien species that threaten ecosystems, habitats or species, in response to the call by the fourth meeting of SBSTTA?	
a) no – please indicate below whether this is due to a lack of available case-studies or for other reasons	X[5]
b) yes – please give below any views you may have on the usefulness of the preparation of case-studies for developing a better biological understanding of the problem and/or better management responses.	
10. How many case-studies are available that could be used to gain a better understanding of the issues surrounding alien species in your country?	
a) none	
b) 1-2 – limited understanding	X[6]
c) >2 – significant information available	

Transboundary issues

11. Are known alien invasive species in your country also a problem in neighbouring or biogeographically-similar countries?	
a) not known	
b) none	
c) a few – but in general alien invasive species problems are specific	
d) more than a few - in general we share common problems with other countries	X[7]
12. Is your country collaborating in the development of policies and programmes at regional, sub-regional or international levels to harmonise measures for prevention and control of alien invasive species?	
a) little or no action	X
b) discussion on potential collaboration underway	
c) development of collaborative approaches for a limited number of species	
d) consistent approach and strategy used for all common problems	

Further comments

[1] Toomas Kukk (Institute of Zoology and Botany, Tartu) has given an overview of alien species in Estonian flora (book in Estonian "Eesti taimestik", 1999). No special studies have been conducted concerning alien species.

Tõnu Ploompuu (Pedagogical University of Tallinn) has conducted a study about alien species in gardens of Tallinn. He has also a draft database of flora around railways and dumps (this database includs also information about alien species).

According to Estonian Teriological Society and Ornithological Society Estonia has fairly good overview about alien animal and bird species.

Although Estonia has some information about introduced fish species, there is a sharp lack of overview of alien aquatic species in Estonia. Some work has been done concerning couple of species (for example predatory cladoceran *Cercopagis pengoi* and polychaete *Marenzelleria viridis*).

Henn Ojaveer (Estonian Marine Institute) et al has prepeared a manuscript "The Baltic- a sea of invaders", it will be submitted for publication in Canadian Journal of Fisheries and Aquatic Sciences. There is compiled data about alien species in Baltic sea.

[2]Alien species is not a separate issue in Estonian NBSAP. It is included to many issues: Fisheries, Border Control and Nature Conservation.

Fisheries: Necessary activities forseen in Action Plan for years 2000-2005:

1. Sanctions and penalty fines for introduction of alien species and forms,
2. Modernization of fish farming to avoid the escape of reared specimens,
3. A publication about alien species in Estonian waters, spread of alien species in Estonian water bodies and their impact on local ecosystems;

Nature Conservation: Necessary activities forseen in Action Plan for years 2000-2005:
Analysis of the ecological and economic influences of non-native species along with assessment of future distribution and possible control measures.

Border Control
Fulfillment of CITES is to some extent connected to the issue of alien species. (Nethetheless, the border control in relation of species other than CITES species is very weak (possible problem for future: *Pacifastacus leniusculus*, see below).)

NBSAP does not cover all the issue of alien species!
As NBSAP is not yet approved by the Government, there is no money forseen for implementation of these activities!

[3] ***There is a lack of systematic approach to the issue of alien species.***

Fauna
The risks of American mink (*Mustela vison*) (especially threats to native species European mink *Mustela lutreola*) is profoundly assessed by Tiit Maran (foundation Lutreola, Tallinn Zoo).

There are some information about risks of raccoon-dog (*Nyztereutes procyonoides*).

Several species of *Acipenser sp.* have been introduced to Esonian waterbodies during the time when

Estonia belonged to USSR. Rainbow trout (*Salmo gaidneri* Richardson) and *Acipenser sp* are found in Estonian waters. These species give very seldom offspring in Estonia and ichtyologists say that these species are not problematic for native fauna/flora.

Studying of the alien aquatic species began in the second half on 80-ies, but there is scarce lack of financial resources. The fact that there is no control over the species in ballast waters of ships makes the situation more complicated.

A comprehensive study has been conducted by Marine Institute concerning *Cercopagis pengoi* and *Marenzelleria viridis*. The former originates from Pronto-Caspian region, first time found from Estonian waters in Baltic Sea in 1992. The latter originates from North-America, first time found from the Baltic Sea in 1985. Both of the species have caused decline of abundance of several native species and changes in marine ecosystem. No specific risk assessment has been conducted concerning these species.

Flora:

According to Toomas Kukk (Institute of Zoology and Botany) there is little knowledge about the potential threats of alien species to native flora. The spread of alien species into native communities in Estonia is unsufficiently studied. There are couple of studies from the 30-ies about *Impatiens parviflora* and *Elodea canadensis*. *I. parviflora* and *Chamomilla suveolens* were initially grown in Tartu botanical garden and they escaped from there. *Heracleum sosnowski* has escaped from garden of Institute of Zoology and Botany and it is very widely spread now in Estonia. This species as well as *Galega orientalis* has caused many problems in many regions during last years. *H. sosnowski* could be dangerous to human health – it can cause blisters.

The most dangerous species are *H. sosnowski, Galega orientalis, Petasites hybridus, Rosa rugosa, Elodea canadensis, Lactuca serriola, Lupinus polyphyllus, Saponaria officinalis* and *Sambucus racemosa.*

[4] Legal acts dealing with alien species:
Act on Protected Natural Objects and *Act on Protection and Management of Fauna* prohibit the release of any alien species to the territory of Estonia. Re-introduction of species can be undertaken on scientific bases and only after the issuance of the permit from the Ministry of the Environment. The same is established by the *Fisheries Act* in relation of any alien species of fish or other aquatic organisms and their fertilized roe.
The problem is that this scheme does not function in reality.
One example. There are couple of pheasant farms in Estonia. Hunters breed them and then release into the wood and hunt them later. Actually they should apply for a permit from Ministry of the Environment for that (as there is always a possibility that not all of the birds will be captured and some of them could stay to the woods) but until now no permits have been applied for.

[5]This is due to a lack of available case-studies.

[6] Case studies:

About *Mustela vison*: Maran, T. 1991. Distribution of the European mink, *Mustela lutreola*, in Estonia: A historical review. - Folia Theriol. Estonica 1:1-17.

Ojaveer, E. and Lumberg, A. 1995. On the role of *Cercopagis pengoi* (Ostroumov) in Pärnu bay and the NE part of the Gulf of Riga ecosystem. Proc. Estonian Acad. Sci. Biol. Ecol. 5: 20-25.

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[7] In general Estonia shares common problems with other countries, this is especially obvious in Baltic sea.

Some examples:

The round goby *Neogobius melanostomus* occurs in waters of Poland (near Gdansk) and it is suggested that this species has been introduced there with the ballast water of ships. Until now this species has not yet reached to Estonia, but it could happen in future.

One company dealing with fishery in the eastern part of the Gulf of Finland has calculated that they lost 50 000 USD during 3 years due to *Cercopagis pengoi* as the species clogged the nets. It could also happen in Estonia.

Canadian beaver (*Castor canadensis*) is found in Finland and this species is outcompeting native beaver (*Castor fiber*). The same could happen if Canadian beaver would reach to Estonia.

Very big problems could be caused by *Pacifastacus leniusculus*. This species distributes crayfish plague, very dangerous deasease that is lethal for our native species noble crayfish (*Astacus astacus*). At the moment *Pacifastacus leniusculus* has not yet reached to Estonia, the nearest place where is occurs is the northern part of Latvia (so – very close already!). Sweden has already big problems with this speceis as it dispalaces native crayfish. The problem is that according to the agreement of free trade it is allowed to introduce this species, but it would be necessary to have some provisions restricting the import of living specimen.

Another problematic species is spinecheek crayfish (*Orconectes viridis*) that occurs already in Lithuania. This species is aggressive and spreads quickly, it could displace our noble crayfish if it would reach to Estonia.