CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Thirtieth meeting of the Animals Committee
Geneva (Switzerland), 16-21 July 2018

ANALYSIS OF STATUS AND SUSTAINABILITY OF USE OF EEL POPULATION *(ANGUILLA ANGUILLA)* IN BELARUS

This information document has been submitted by Belarus in relation to agenda item 18 on *Eels* (Anguilla *spp.*).[*]

[*] *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

**МІНІСТЭРСТВА
ПРЫРОДНЫХ РЭСУРСАЎ І АХОВЫ
НАВАКОЛЬНАГА АСЯРОДДЗЯ
РЭСПУБЛІКІ БЕЛАРУСЬ**

вул. Калектарная, 10, 220004, г. Мінск
тэл. (37517) 200 66 91; факс (37517) 200 55 83
E-mail: minproos@mail.belpak.by
р/р № 3604900000111 ААБ "Беларусбанк"
г. Мінск, код 795, УНП 100519825; АКПА 00012782

**МИНИСТЕРСТВО
ПРИРОДНЫХ РЕСУРСОВ И ОХРАНЫ
ОКРУЖАЮЩЕЙ СРЕДЫ
РЕСПУБЛИКИ БЕЛАРУСЬ**

ул. Коллекторная, 10, 220004, г. Минск
тел. (37517) 200 66 91; факс (37517) 200 55 83
E-mail: minproos@mail.belpak.by
р/с № 3604900000111 АСБ "Беларусбанк"
г. Минск, код 795, УНН 100519825; ОКПО 00012782

16.07.2018 № 3-1-12/124-исх

На №_____ ад _____

Секретариат СИТЕС
International Environment House
11 Chemin des Anémones
CH-1219 Châtelaine, Geneva
Switzerland

О препровождении информации об охране и рациональном использовании угря европейского в Беларуси

Министерство природных ресурсов и охраны окружающей среды Республики Беларусь свидетельствует свое уважение Секретариату Конвенции о международной торговле видами дикой фауны и флоры, находящимися под угрозой исчезновения и направляет информацию об охране и рациональном использовании угря европейского в Беларуси, в соответствии с договоренностью, достигнутой в ходе 11 встречи Бюро и Междисциплинарного совета экспертов межправительственной научно-политической платформы по биоразнообразию и экосистемным услугам (г. Бонн, Германия, 25-29 июня).

Мы любезно просим рассмотреть данную информацию в ходе 30-го заседания Комитета по контролю оборота объектов животного мира, которое пройдет 16-21 июля 2018 года в Женеве.

Министерство природных ресурсов и охраны окружающей среды Республики Беларусь пользуется случаем, чтобы возобновить Секретариату Конвенции о международной торговле видами дикой фауны и флоры, находящимися под угрозой исчезновения уверения в своем весьма высоком уважении.

Министр А.П.Худык

3-1 Козакевич 2007454

Unofficial translation//

CITES Secretariat
International Environment House
11 Chemin des Anémones
CH-1219 Châtelaine, Geneva
Switzerland

On analysis of status and sustainability of use of Eel population in Belarus

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus presents its compliments to the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and transmit herewith Analysis of status and of sustainability of use of Eel population (Anguilla anguilla) in Belarus, in accordance with the agreement reached during the 11th Meeting of the Bureau and Multidisciplinary Expert Panel of the The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (25 to 29 June 2018, Bonn, Germany).

We kindly ask you to o review this information within the 30th meeting of the Animals Committee, Geneva, Switzerland 16-21 July 2018.

The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus takes this opportunity to renew to the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora the assurances of its highest consideration.

Minister Andrei P. Khudyk

Especially for a 30th meeting of the Animals Committee, Geneva, Switzerland 16-21 July 2018

Analysis of status and of sustainability of use of Eel population (*Anguilla anguilla*) in Belarus

Developed by Laboratory of Ichthyology of the Scientific and Practical Centre for Bioresources of the National Academy of Sciences of Belarus, Akademicheskaja str., 27, 220072 Minsk, Belarus. E-mail: zoo@biobel.bas-net.by

1. Distribution of the European eel in Belarus

The European eel is one of the most interesting in its biology representative of native fish fauna of Belarus. Inland water reservoirs of Belarus are part of trophic eel areal where it came in a natural way up to 50s of the XX century from the Baltic Sea upward the Western Dvina (Daugava) and Neman (Nemunas) Rivers and its feeders up to its damming.

At present the main eel capture fisheries are concentrated in Naroch (Neman river basin) and Braslav (Western Dvina river basin) lake groups, i.e. water basins, into which the juvenile eel was quite regularly and intensively released. The eel fattens here in natural environment and migrates from these basins when reaches life stage which corresponds to downstream-migrant stage (silver eel).

From the water basins of Naroch lakes group the eel migrates down the rivers Narochanka and Stracha flowing into the river Vilija (Neris) and into Neman then lower the dam of Kaunas hydro power plant. Its natural return is possible by Vilija river.

The eel migration from the water basins of Braslav lakes group takes place down the rivers Druyka and Drisvyatka), flowing into the river Western Dvina (Daugava). Unfortunately, at the moment the downstream eel migration down the river Western Dvina is limited, as the river is regulated by three large hydroelectric dams on the territory of Latvia - Riga, Ķegums and Pļaviņas hydro power plants. For that very reason return of eel juveniles into its natural habitats in Belarus is not possible by this river (Fig. 1).

2. Scientific investigation of eel in Belarus, achievements

The study of the European eel biology in Belarus has deep roots. The works were started in the early 50s of the XX century by the leading specialist in eel-breeding Dr. S.V. Kokhnenko. A team of researchers, engaged in the research of various aspects of this fish species biology was formed. Thanks to their efforts European eel larva was obtained in laboratory conditions for the first time ever.

Up to the present time, the number of migrating of silver eel from Belarus main eel lakes to transboundary river basins for the purpose of migration to spawning grounds, as well as the mechanism for the pass have not been known. In 2014-2015 at the initiative of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus the research project "Estimate the amount of

annual European eel downstream migration from Belarus water basins to transboundary river basins with a view to sustainable use of eel resources" was carried out by the State Scientific and Production Amalgamation "The Scientific and Practical Center for Bioresources of the National Academy of Sciences of Belarus".

It was found, that in general in 2014, out of water basins and watercourses of Naroch and Braslav lakes groups 5,341.9 kg of eel was captured and 6,7 thous. fish units with a total weight of 9,050 kg had a downstream migration. Fish capture out of other Belarus water basins, depending on the year, ranges from 9,11 to 33,27% of the total eel capture (in average - 16.4%). Thus, downstream migration of silver eel out of water basins of Belarus in 2014 yielded not less than 50% from the total quantity of migrating eel. It should be noted that the calculations provide data only on the European eel females, as the fish males are not normally captured by the applicable fishing gear (they are smaller than the commercial measure) and they easily migrate down to transboundary watercourses.

3. Seeding and fishing

Due to the damming, the migration of the juvenile eel in the boundaries of Belarus has significantly decreased and now is only possible down the River Vilija into the Naroch lake group. In this regard, the eel farming in inland water basins of Belarus is based mainly on the stocking of water basins with the eel breeding material and the population status (commercial stocks) and eel resources are determined mainly by the frequency and volumes of water basins' stocking. Currently, in Belarus water basins there are commercial fish populations, consisting mainly of the fish released into them as breeding material over the period of 2003-2008.

The commercial fishing of eel is currently performed only by tenants (users) of fishing areas (economic entities with a separate legal identity). In accordance with the legislation of the Republic of Belarus the commercial fishing of migratory eel is carried out only in spring time (from 1 April to 8 June) in places strictly defined in the annual Decree of the Ministry of Natural Resources and Environmental Protection. In autumn target migratory eel fishing is not carried out. In accordance with the existing rules, the amateur fishing of eel is not allowed.

The planned stocking of Belarus water basins with the juvenile eel, imported from France and England was launched in 1956. This significantly improved the eel population and allowed to form commercial populations in the Western Dvina and Neman River water basins.

Over the period of 1956-2008, 48 water basins were stocked in the territory of Belarus with the total area of 49.64 thousand hectares. The total volume of stocking was 58.9 million units, including 685 thousand units of grown-up fingerling with the average weight of 0,5-5g per unit (Table 1). Since 2008 the deliveries of eel (the breeding material) to Belarus have been discontinued in connection with the Resolution of the EU Council of 18.09.2007 № 1100/2007.

4. Protective measures

- normative legal provision for protection and use of eel resources. The eel inhabits mainly in the lakes on the territory of National Parks what guarantees additional protection;
- strict state and departmental protection of eel resources in the management of commercial and recreational fisheries, including prohibiting of eel fishing by amateurs;
- introduction of licensing for the management and conduct of target eel fishery for fishing enterprises (tenants of fishing grounds);
- setting quotas for the eel capture and the rules governing the management of its fishery;
- taking actions on reduction of eel mortality in the areas of the hydrotechical facilities' location on the fishery water basins and watercourses;
- interstate (interagency) agreements (Belarus-Latvia and Belarus-Lithuania) on the conservation of eel resources within the "eel" river basins (the Western Dvina River and the Neman River);
- improving environmental conditions (water quality) in fish ponds;
- updating the system of ichthyopathologic control measures;
- facilitating support European eel world population by means of passing not less that 50% of migrating eel to its spawning grounds (monitoring of compliance with a 40% downstream migration value of migrating eel to its spawning grounds).

In addition, in the near future the development of eel resources monitoring program and its inclusion in the National Environmental Monitoring System have been planned to be implemented.

It should be noted that in Belarus there are technical capacities enabling to increase the survival of the breeding material by keeping it for a longer period and rearing of glass eel fish on specialized fish-breeding farms (there are 5 such fish-breeding farms in Belarus).

Currently, a calendar plan for the implementation of Eel Recourse Management Plan for the period up to 2020 has been developed in the Republic of Belarus and, in case of lifting a ban on the supply of glass eel larvae, Belarus is ready to start its implementation.

It should be noted that Belarus has an additional resource of natural eel water basins, which are not currently used as feeding water basins due to the shortage of breeding material. Lifting a ban on the supply and the increase in the glass eel stocking of Belarus natural water basins would allow to ensure the recruitment (replenishment) of the European eel world population due to brood-fishes migrating for spawning from Belarus water basins.

Considering the above, the Republic of Belarus fully complies with the EU Council Regulation dated 18.09.2007 № 1100/2007 for the recovery of the stock of European eel, including compliance with measure on the pass to the routes of the spawning migration of at least 40% of the fish, which in size and physiological condition of the gonads corresponds to the downstream migration state

CONCLUSIONS:

1. The European eel is representative of native fish fauna of Belarus.
2. Natural return of eel juveniles into its trophic areal in Belarus essentially limited for reasons beyond country control.
3. Support of natural eel population in Belarus is possible mainly by the stocking of water basins with the eel breeding material.
4. Scientific school on eel investigation exists in Belarus with vast practical experience.
5. Complex system of measures was developed and under implementation in Belarus on protection and recovery of the stock of European eel, including measures on implementation of EU Council Regulation dated 18.09.2007 № 1100/2007.
6. Belarus has an additional resource of natural eel water basins, which are not currently used as feeding water basins due to the shortage of breeding material.
7. Maintaining a ban on the supply of the breeding material to the Republic of Belarus may result in the fact that in the next decade the global population of the European eel will lose part of its brood-fishes migrating for spawning from this fishing area.

In case questions, please contact with:

Ruslan Novitsky
Chief of SA CITES (Belarus)
Scientific and practical centre for bioresources of National academy of sciences of Belarus, Akademicheskaja str., 27, 220072 Minsk, Belarus, mob. +375 29 6112368, e-mail: nramphi@mail.ru