

AGREEMENT

Between
Fisheries and CITES Management Authorities
from
Republic of BULGARIA,
ROMANIA,
SERBIA AND MONTENEGRO
and
UKRAINE

Concerning
the Regional Strategy
for the Conservation and Sustainable Management of Sturgeon Populations
Of the N-W Black Sea and Lower Danube River in accordance with CITES

NOTING that The Republic of Bulgaria, Romania, Serbia and Montenegro and Ukraine are parties of The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);

FURTHER NOTING that all sturgeon species of the N-W Black Sea and Lower Danube River are included in the Appendices of CITES;

RECALLING Resolution Conf.12.7, adopted by the Conference of the Parties at its 12th Meeting (Santiago, 2002) on conservation of and trade in sturgeons and paddlefish, which *urges range States of species of Order Acipenseriformes to promote regional agreements aiming at proper management and sustainable utilization of these species;*


CITES Management Authorities and Fisheries Management Authorities of The Republic of Bulgaria, Romania, Serbia and Montenegro and Ukraine **agree to implement the Regional Strategy for the Conservation and Sustainable Management of Sturgeon Populations of the N-W Black Sea and Lower Danube River in accordance with CITES (Annex 1)**, as discussed, amended and adopted during the Meeting held in Tulcea from 24 to 27 November 2003, and to request the CITES Secretariat to provide assistance with securing the necessary financial resources.

THIS AGREEMENT shall take effect on the date of signature by the four countries. It will remain in force unless terminated by 90 day's written notice by one of the signatories submitted to the other signatories, or replaced by other agreement. It may be amended by written mutual agreement of the signatories.

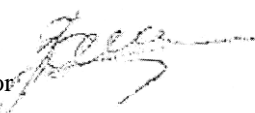
One duly signed copy of this Agreement will be forwarded to the CITES Secretariat.

For Republic of BULGARIA:

CITES Management Authority
Ministry of Environment and Water


Dr. Hristo Bojinov,
Director NNPS

Fisheries Management Authority
National Agency of Fisheries and Aquaculture
Ministry of Agriculture and Forestry,


Erman Zankov,
Executive Director

Date: 19.05.2004

For ROMANIA:

CITES Management Authority


Adriana BAZ,
Director

Fisheries Management Authorities
Danube Delta Biosphere
Reserve Authority
National Fisheries
Management Company


Virgil MUNTEANU,
Governor


Valentin BUKSZ,
General Director

Date:

19 05 2004

For SERBIA AND MONTENEGRO:

CITES Management Authority
Ministry of Science and Environmental Protection
Directorate for the Environmental Protection



Dr. Miroslav Nikčević
Director

Fisheries Management Authority
Ministry of Science and Environmental Protection
Directorate for the Environmental Protection



Dr. Miroslav Nikčević
Director

Date: 18. 01. 2005.

For UKRAINE :

CITES Management Authority

Fisheries Management Authority

Date:

Regional Strategy *
for the Conservation and Sustainable Management
of Sturgeon Populations of the N-W Black Sea and Lower Danube River
in accordance with CITES

(October 2003)

1.Strategy Objectives and Management Recommendations

The recommendations listed below for each objective have been given a priority order (I - III) by being assigned to one of following three categories: **(I)** in 1 – 2 years, **(II)** in 3 - 5 years, **(III)** in 5 –10 years.

1.1 Sturgeon Population and Life History Information Needs

Objectives: 1.1.1 Develop and implement standardized population assessments on all existing populations

1.1.2 Conduct life history research / assessments where needed

- Recommendations:**
- a. Develop as standardized collection techniques as possible to conduct population studies (estimates, age / growth, size structure, etc.) **(I)**
 - b. Establish river / sea zones that need life history research / assessment work **(I)**
 - c. Assess homing and imprinting behavior **(II)**
 - d. Assess early life stage behavior in each species and population **(II)**

1.2 Protection of essential habitats

Objectives: 1.2.1 Identify critical habitats and habitat requirements for various life stages

1.2.2 Identify barriers and other factors within the Lower Danube River System negatively affecting populations of different sturgeon species

1.2.3 Enhance habitat where possible

- Recommendations:**
- a. Identify critical seasonal habitats and habitat improvement opportunity **(I)**
 - b. Assess behavior of migrant adults bellow Iron Gates I & II dams **(I)**
 - c. Study the possibility and feasibility to construct fish passes at Iron Gates I & II dams **(II)**
 - d. Evaluate implemented habitat protection and improvement projects **(II)**
 - e. Determine habitat needs for different (sub-) populations **(III)**

1.3. Genetics, Propagation and Restocking / Reintroduction

Objectives: 1.3.1 Define existing sub-populations / populations and role of genetics in management, rehabilitation and reintroduction of species

1.3.2 Ensure regionwide coordination of all propagation activities for supportive stocking (rehabilitation) or reintroduction

* Based on :

Staras, M., *et al.* (2000) Management Strategy of Sturgeons Stocks of Lower Danube River System. Final Report, GEF / WB / DDBRA Tulcea: 48 p

Wisconsin Department of Natural Resources Bureau of Fisheries Management and Habitat Protection (2000) Wisconsin' s Lake Sturgeon Management Plan, 12 p

- 1.3.3 Maximize genetic variability in hatchery reared fish used for rehabilitation or reintroduction, following internationally recognized guidelines (e.g. guidelines of the US Atlantic State Fisheries Commission for the Atlantic sturgeon) (**Annex A**)
- 1.3.4 Establish best technical criteria and protocol for maximum quality assurance in propagation efforts

- Recommendations:**
- a. Conduct a regional study to identify sub-population of sturgeon species spawning in the Lower Danube River (**I**)
 - b. All stocking and reintroduction proposals be reviewed by a regional Sturgeon Restocking Expert Panel assisted by the Black Sea Sturgeon Management Action Group - BSSMAG (**I**)
 - c. Use only breeders from Danube River native (sub-) population (**I**)
 - d. Form a Regional Committee to establish genetic hatchery guidelines, standards and technical criteria for propagation of Danube River Sturgeons (**I**)
 - e. Acclimate fish to water body prior to release (**I**)
 - f. Reintroduction efforts should be directed towards ship sturgeon (*Acipenser nudriventis*) (**II**)

1.4 Harvest and Fisheries Information Needs

- Objectives:**
- 1.4.1 Develop and implement standardized exploitation assessments at regional level
 - 1.4.2 Develop and implement a real time (online) registration / information system to register each sturgeon captured in the region

- Recommendations:**
- a. Improve the actual Regional Monitoring System (RMS) of sturgeon fisheries and stocks, adopted by BSSMAG in 2002, in order to make it fully implementable in all countries of the region (**I**)
 - b. Determine incidental catch and harvest of sturgeons in other commercial fisheries (not licensed for sturgeons) that may be reduced or closed in future (**I**)
 - c. Design and launch a webpage on which to register in real time (max. 2-3 days) each sturgeon captured in the region (**I**)
 - d. Conduct literature review on exploitation of sturgeon fisheries, similar to those organized by the International Danube Research Association (Reinartz, 2002)¹ and, more recently, the American Fisheries Society (Fisher & Burroughs, 2003)² (**III**)

1.5 Stocks of different sturgeon species

- Objectives:**
- 1.5.1 Manage sub-populations / populations of sturgeons in the region with biologically and conservationally sound goals.
 - 1.5.2 Clarify distinction between sturgeon populations of Azov Sea and N–W Black Sea
 - 1.5.3 Base fishery exploitation on scientific evaluation of sturgeon stocks.

- Recommendations:**
- a. Elaborate separate management plans for main sub-populations (identified at 1.3.1) of each sturgeon species (**II**)

¹ Reinartz, R. - 2002 - Sturgeons in the Danube River. Biology, Status, Conservation. Literature Study. **IAD, Bezirk Oberpfalz, Landesfischereiverband Bayern**, 15 p

² Fisher, W.L., Burroughs, J.P. 2003 - Stream Fisheries Management in the United States : A Survey of State Agency Programs. **Fisheries**, vol. 28 : 10 - 18

- b. Conduct genetic study to distinguish between sturgeon population of Azov Sea, N–W Black Sea and Lower Danube River (I)
- c. Conduct research to develop stock assessment system of diadromous sturgeon species of the N–W Black Sea and the Lower Danube River. (II)

1.6 Regulations and Enforcement

- Objectives:**
- 1.6.1 Maintain strong enforcement of sturgeon regulations, regionally co-ordinated in time and space.
 - 1.6.2 Extend CITES labeling and control system of sturgeon products (including caviar) to the domestic / internal market, implementing Resolution Conf. 12.7.
 - 1.6.3 Develop a regional information system on cases of violation of regulations.

- Recommendations:**
- a. Extend prohibition period to 1.5 - 2 month / zone for a better correlation with the biology of species. (I)
 - b. Superpose as much as possible prohibition periods for Pontic Shad (*Alosa pontica*) and sturgeons in the different sectors of Danube River. (I)
 - c. Restrict / eliminate the practice of catching wild broodfish for hatchery purposes during the prohibition period. (I)
 - d. Organize a regional webpage on reporting of cases of violation of regulations. (I)
 - e. Amend national law to enforce CITES labeling and control system of sturgeon products (including caviar) to the domestic / internal market, implementing Resolution Conf. 12.7. (I)

1.7 Adaptive Management under CITES

- Objectives:**
- 1.7.1 Implementation of Resolution Conf. 12.7 in all countries of the Lower Danube River region.
 - 1.7.2 Implement consistently the adaptive management system until a scientific stock assessment of sturgeon stocks of the region will be available, in accordance with the Conclusions of the Sofia Meeting.
 - 1.7.3 Adopt by consensus non-detrimental catch quotas for each species based on results of Regional Monitoring System.

- Recommendations:**
- a. Improve national law system to enable implementation of Resolution Conf. 12.7. (I)
 - b. Keep the BSSMAG as consultative and coordinative body for developing regional protocols including monitoring and assessment of the status of stocks and natural reproduction of sturgeons in the region. (I)
 - c. Organise twice a year national workshops on management of sturgeon stocks under CITES. (I)
 - d. Negotiate annually in BSSMAG non-detrimental catch quotas for each species based on results of current monitoring of sturgeon populations and fisheries (RMS).
 - e. Organise a regional data base on the management of sturgeon stocks, hosted by a webpage maintained by BSSMAG. (II)

2. Management Plans

- Objectives:**
- 2.1 Develop, implement and update, as needed national management plans for each country of the region.

- Recommendations:**
- a. Develop and implement national sturgeon management plan for each country. (I)
 - b. Ensure management recommendations are addressed in national management plan. (I)

c. The National Sturgeon Management Assessment Team of each country should meet annually to assess implementation of Plan and conduct updates when necessary (I)

d. BSSMAG should act as regional liaison and oversee the implementation of the national management Plan, coordinating activities of the National Sturgeon Management Assessment Team. (II)

Annex A

Effective breeding number (N_e)

of sturgeons [of one endangered sub-population / population] to be used
in all propagation activities for supportive stocking (rehabilitation) or reintroduction
when producing the progeny generation for one year-class
(to achieve a generational effective population size $N_{e(GEN)}= 100$ and
an inbreeding rate / generation $\Delta F \text{ max} = 0,50 \%$)
(after ASMFC, 1996)

Species	Average age of first spawning females [years]	Effective Breeding number N_e	N_e / generation	No. females / No. of males* captured in the same zone of Danube River recommended to be used / year for artificial spawning
Beluga sturgeon	14	100	7	5 / 3 3 / 5 3 / 4 4 / 3
Russian sturgeon	12	100	8	4 / 4 6 / 3 3 / 6
Stellate sturgeon	8	100	12	6 / 6 8 / 5 5 / 8
Sterlet	5	100	20	10 / 10 11 / 9 9 / 11
Ship sturgeon	12	100	8	4 / 4 6 / 3 3 / 6

* Sperm from multiple male donors should not be mixed for artificial fertilisation.