

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

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Forty-seventh meeting of the Standing Committee  
Santiago (Chile), 1-2 November 2002

Interpretation and implementation of the Convention

Significant trade in Appendix-II species

CASPIAN SEA STURGEONS

1. The Standing Committee, at its 45th meeting (Paris, June 2001), agreed a comprehensive range of actions concerning the conservation and management of and trade in specimens of sturgeons from the Caspian Sea (document SC45 Doc. 12.2). Three deadlines were established for the implementation of these actions by Azerbaijan, Kazakhstan, the Russian Federation and Turkmenistan.
2. The Secretariat already informed the Committee at its 46th meeting (Geneva, March 2002), that the relevant Parties have satisfactorily implemented the actions specified by the first two deadlines. In this document, the Secretariat provides its assessment of compliance with the remaining deadline (see the Annex).
3. As evident from the assessment provided in the Annex, the Secretariat has concluded that all four countries have substantially complied with the last deadline, although further refinements and improvements in a number of fields seem to be required. The Secretariat recommends to the Standing Committee to extend the deadline for the implementation of their external agency dependent recommendations by a further 12 months to allow for specialists' technical inputs to be made and to provide further incentives for the implementation of the priority actions concerning stock assessments and quotas outlined in paragraph 6 of the Annex.



Evaluation of compliance by Azerbaijan, Kazakhstan, the Russian Federation and Turkmenistan with actions to be implemented before 20 June 2002 pursuant to the Review of Significant Trade and decisions of the Standing Committee at its 45th meeting.

1. The following actions (in *italics*) had to be implemented before 20 June 2002 [see document SC45 Doc. 12.2, paragraph 1.e)]:

*Azerbaijan, Kazakhstan and the Russian Federation (and Turkmenistan where appropriate) have:*

- i) *established a long-term survey programme as the basis for future management of sturgeon stocks in the Caspian Sea, incorporating up-to-date technology and techniques, and taking account of advice from FAO and other bodies as appropriate;*

This action has been complied with.

Azerbaijan, Kazakhstan, the Russian Federation and Turkmenistan (hereinafter referred to as the littoral States) in coordination with the Islamic Republic of Iran (hereinafter referred to as Iran) conducted the first coordinated survey of the Caspian Sea in August-September 2001 and decided, at the 17th meeting of the Commission on Aquatic Bioresources of the Caspian Sea (hereinafter referred to as the Commission) in March 2002, to establish a long-term programme of such surveys. A subsequent survey in this series was conducted in May-June 2002, and the results from a third survey are currently being analyzed.

An attempt was made to use new technology in the 2001 survey, i.e. to use an advanced sonar system along with trawling, but this method was found to be unsatisfactory in most respects. Although the littoral States have sought advice from other sources concerning the design of surveys, other agencies have not been forthcoming with this assistance. The technical complexity associated with surveys of the Caspian and the target species makes it unlikely that a much-improved technology will emerge without external assistance. It nevertheless seems to be imperative that the current system of surveys be maintained until there is consensus on an alternative approach to be followed.

An aspect that can be improved considerably, however, is the analysis of information and the presentation of results, particularly with the international community in mind. This is an area where FAO has been asked to assist. A collaborative programme should be established whereby the range States analyse the survey data collectively before final reports are distributed. Such reports should then be open to comment from external experts.

Using the current method of stocks assessment as the basis for future management of sturgeons requires further consideration and advice from specialists. Surveys of pre-spawning adults at sea do not seem to be a sufficient basis for determining levels of offtake in individual spawning rivers and other measures seem to be needed, such as a more direct monitoring of spawning components of stocks and a fisheries management system designed to prevent the harvesting of a significant portion of the spawning stock.

The decision, and its implementation so far, to conduct annual cooperative surveys of the entire sea is a milestone, and further improvements in methodology can follow once technical inputs can be obtained from specialists. These inputs have been requested from FAO, which has not been in a position to respond positively due to a lack of resources. The proposed amendment to Resolution

Conf. 10.12 (Rev.) concerning the establishment of catch and export quotas will provide a sufficient incentive to maintain the current survey system, because such quotas will have to be based on the results of surveys. The opportunity exists, therefore, to include refinements at a later stage when all technical inputs have become available from organizations such as FAO, or technical assistance that the Secretariat may be in a position to make available. The extension of the technical assistance programme of the European Union to the CIS States (TACIS) regarding fisheries management in the Caspian Sea offers a real opportunity to obtain these inputs in the short term.

- ii) requested FAO to provide advice concerning the operations of regional fisheries management organizations, the management of shared fish resources and dealing with unregulated fisheries;*

The littoral States have complied with this action and requested assistance from FAO. The response from FAO was that resources were not available to provide input at this stage, although FAO, in principle, will support such activities. This element has also been identified as an issue to be considered in the development of an MoU between CITES and FAO.

- iii) adopted a collaborative basin-level management system for sturgeon fisheries in the Caspian Sea as the basis for sustainable commercial exports of sturgeons, taking into account the advice referred to in subparagraph e) ii);*

The littoral States and Iran have established a forum for collaboration and decision-making on the management of sturgeon fisheries. There now exists a collective approach to stock assessments, consultations on quotas and for the exchange of information. An example of the positive role of such an approach is the collective decision in 2002 to establish a voluntary moratorium on the harvesting of *Acipenser nudiiventris*. This approach nevertheless requires further strengthening and refinement in a number of areas. However, in the absence of external pressure, steps to improve the management of the sturgeon fisheries may be resisted by the Parties concerned. On the other hand, too much external pressure could lead to a collapse of the collective approach.

An intergovernmental framework agreement on the management of the sturgeon resource in the Caspian Sea has been developed. This draft agreement appears to be a suitable mechanism for consolidating intergovernmental cooperation, and should lead to the development of specific action plans and technical protocols for the key elements that are needed in order to manage the resource sustainably. It is important that such action plans and protocols be made available to the public in order to ensure transparency and to promote technical inputs from the fisheries management and conservation communities. It seems necessary to build consensus on the range of subsequent steps needed, also to capitalize on external funding that will shortly be earmarked for priority action through the next phase of the TACIS programme.

- iv) significantly increased efforts to combat illegal harvesting and trade, and to regulate domestic trade;*

The Secretariat has undertaken enforcement-needs assessment missions, with assistance from police or Customs officers of other countries (Belgium, New Zealand, Tunisia), in Azerbaijan, Kazakhstan and the Russian Federation. Increased efforts in law enforcement were confirmed during these missions. Confidential mission reports shared with each littoral State visited have identified ways of strengthening national legislation and enforcement efforts. The Russian Federation has made a commitment to implement these proposed actions in order to more efficiently regulate international and domestic trade, and is considering amendments to strengthen legislation in this regard. Feedback from Azerbaijan on the recommendations of the mission is still to be received, and work concerning the mission to Kazakhstan is still in progress. Missions will be organized in 2003 to Iran and Turkmenistan. It must be stressed that the regulation of domestic

markets in particular remains a considerable challenge for the littoral States. The Secretariat is convinced that unregulated domestic markets pose the greatest threat to the recovery of sturgeon populations. Without engagement through CITES and the incentives of maintaining access to international markets, it is very unlikely that the situation will improve.

The Secretariat notes that some significant successes have been achieved in targeting illicit trade in caviar in importing, re-exporting and transit countries. However, it has received very little information to demonstrate that the sources of such illegal caviar in the Caspian Sea region have been targeted in a similar fashion, despite information relating to possible sources having been supplied to some of the littoral States by the Secretariat. The Secretariat believes there is scope for improvement and trusts its missions will help achieve this. The Secretariat expects that, once it has completed its assessment missions, it will be in a position to make recommendations to improve regional coordination of enforcement and also to improve liaison with other enforcement agencies at the international level.

- v) made samples of sturgeon specimens available for DNA testing and established priorities for further research on the identification of sturgeon stocks and specimens in trade;*

All of the littoral States and Iran have offered to make samples available, and have requested the Animals Committee, in consultation with the Secretariat, to coordinate further work on DNA-based identification techniques. There is currently no international consensus on the way to analyze such samples (i.e. which DNA markers should be used) and the outcome of discussions under the auspices of the Animals Committee is therefore important in this regard.

- vi) submitted a funding proposal to the Global Environmental Fund, or other donors as appropriate, for the rehabilitation of sturgeon stocks, hatcheries and restocking programmes, and support for stock assessments, marking systems, identification of specimens in trade, public awareness and enforcement;*

Funding proposals have been developed for submission to the GEF, and the Secretariat has liaised with GEF concerning these proposals.

- vii) implemented the caviar labelling system established in Resolution Conf. 11.13 for all exports;*

Azerbaijan, Kazakhstan, the Russian Federation and Iran have implemented labelling systems in accordance with Resolution Conf. 11.13.

- viii) fully implemented all other recommendations of the Animals Committee made through the Review of Significant Trade.*

The following secondary recommendations were made by the Animals Committee to each of the littoral States (see document SC45 Doc. 12):

Regarding exports and export quotas:

*Management Authorities should:*

- a) develop adequate, science-based stock assessment and monitoring systems, as well as a mechanism to identify and regulate exports of legally obtained specimens of [the relevant sturgeon species in trade from each country]:*

See comments under subparagraph i) above.

- b) *develop and implement adequate control measures and inspection procedures to combat illegal harvesting of and trade in specimens of [the relevant sturgeon species in trade from each country];*

See comments under subparagraph iv) above.

- c) *base all catch and export quotas for [the relevant sturgeon species in trade from each country] on scientific stock assessments and monitoring systems using recognized methodologies;*

See comments under subparagraph i) above.

- d) *implement from 2001 onwards the recommended universal caviar labelling system as outlined in Resolution Conf. 11.13 for all exports and re-exports of specimens of [the relevant sturgeon species in trade from each country]; and*

See comments under subparagraph vii) above.

- e) *participate in the development of regional conservation strategies and action plans for the management and conservation of Acipenseriformes species that will include provisions to ensure that all aspects of harvesting and trade are controlled over the long term. Such plans should inter alia cover the scientific basis for catch and export quotas, habitat conditions (including seasonal water flows), other fisheries with a by-catch of Acipenseriformes species; impact of pollution on sturgeon metabolism and reproduction rate; sturgeon restocking programmes; standardized methodology for the monitoring of populations and the recording of catches; collection of data on population composition (sex ratio, age, etc.); revision of existing fisheries regulations e.g. size limits, fishing seasons and grounds, and establishment of new regulations where needed; licensing of sturgeon fisheries and marketing of catch at landing sites; and level of the domestic market of sturgeon products and its regulation.*

All of the littoral States have indicated their willingness to participate in the development of a conservation strategy and action plan, and further recommendations in this regard have also been made in document CoP12 Doc. 42.1. External assistance will be needed, however, and the IUCN/SSC Sturgeon Specialist Group has indicated its willingness to assist. For the purposes of CITES, it is also possible to regard the current system of stock management through catch and export quotas as the most essential aspect of a conservation strategy. It will nevertheless be in the interest of the countries concerned to formally document a consensual strategy and action plan concerning this aspect, but also other elements outlined in the recommendation of the Animals Committee. Aspects of the draft agreement referred to in the comments under subparagraph iii) can be expected to facilitate the further development of a conservation strategy and action plan.

Regarding aquaculture:

*In recognition of the importance of aquaculture for the production of Acipenseriformes species for international trade and the recovery of populations, the [relevant Management Authorities] should:*

- a) *provide the Secretariat with detailed information on aquaculture operations involving [the relevant sturgeon species] in their territories, namely:*

- i) *measures in place to ensure ongoing production and release of fingerlings from aquaculture operations for international trade, including information on the funding of aquaculture operations through exports;*

All littoral States (and Iran) have expressed a strong commitment to maintain or expand their stock enhancement programmes and in particular to increase the releases of beluga, and to release larger specimens than previously. In all of the littoral States (and Iran), the revenue from international trade in caviar is used to support stock enhancement or provides the justification for government expenditure on such programmes.

- ii) *the number, names and location of approved or registered aquaculture operations and the annual production per operation;*

Azerbaijan, Kazakhstan and the Russian Federation provided detailed information on aquaculture operations and the species and quantities produced during the missions to each country. Iran provided similar information to the Secretariat.

- iii) *number and size (expressed as weight class) of fingerlings released per species per site per year;*

The number and size (weight) of fingerlings released were provided.

- iv) *research and monitoring systems to assess the success of introductions;*

In the past, released fingerlings were not marked, thereby making any monitoring of success difficult. Scientists in the Russian Federation have used the incidence of a nasal deformity with a high frequency of occurrence in aquaculture-produced specimens as an indication of the proportion of adults breeding in the Volga River that derived from aquaculture. At least one major aquaculture operation in the Russian Federation has begun inserting transponder tags in a percentage of released fingerlings. Returns are not expected until the fish reach maturity and return to the Volga. Similar research is conducted in Iran.

- v) *measures to prevent unauthorized releases of captive bred specimens or live imports;*

The Secretariat has been informed that it is against the national policy in all littoral States to release sturgeon hybrids or to introduce species from other basins and rivers in the Caspian Sea.

- vi) *measures to prevent unauthorized hybridization of Acipenseriformes species in captivity; and*

See comments under subparagraph v) above.

- b) *should request assistance from the United Nations Food and Agriculture Organization concerning the management of hatcheries, where appropriate.*

See comments under subparagraph 3 ii) above.

*Regarding the identification of stocks and specimens in trade:*

*In recognition of the importance of identifying stocks and specimens in trade for the sustainable management of stocks as well as enforcement, the [relevant Management Authority] should participate, in consultation with the Secretariat, in the development of a universal DNA-based*

*system for the identification of Acipenseriformes species which may include the collection of specimens from all stocks of Acipenseriformes species in its territory.*

See comments under subparagraph 3 v) above.

#### Conclusions and recommendations

2. The CITES Management Authorities are on a path that will lead to long-term improvements in the management of sturgeon fisheries, but their momentum seems to be dependent on the degree of pressure from the international community and the threat of trade suspensions. These factors, along with the prospect of continuing access to export markets, serve as powerful incentives for reform. Excessive or unilateral pressure is likely to be counterproductive however.
3. It is advisable to maintain international engagement through the processes of CITES. Although the Standing Committee established specific deadlines for the completion of a range of activities, the Standing Committee, or the Secretariat, could not have foreseen that such limited success would have been achieved in obtaining external technical and financial support for improving aspects of fisheries management in the region. This support was seen as an integral part of the reforms that had to be implemented, but a part that was not, and still is not, under the control of the countries concerned. It is not appropriate to penalize the littoral States for failing to make complex and expensive technical improvements to modernize their management programmes on their own, when these improvements could only have been achieved through inputs that were not available to them.
4. A new opportunity to provide external support has materialized in the past few months, with the extension of the TACIS programme. This funding will make it possible for the international community (specifically the European Union, possibly through CITES and FAO) to provide the specific expertise needed to establish a reliable and internationally acceptable system of fisheries management, principally stock assessments and deriving sustainable harvest quotas from stock assessment data. The three organizations mentioned have strengthened their ties over the past year and basically share the same objectives concerning the Caspian region. The conditions for providing coordinated support to the Caspian region have therefore improved considerably. Further consultation with these partner organizations, as well as the littoral States and Iran, is however essential to establish a common view on priority actions, and to capitalize on external funding that will shortly be earmarked for priority action through the next phase of the TACIS programme. It seems reasonable to expect that such priorities can be established relatively easily, perhaps at a single meeting of the relevant countries and the three organizations (TACIS, FAO, CITES).
5. From the perspective of CITES, priority issues remain the improvement of the methodology for and the analysis of stock assessments, and confirmation of the validity of the method of deriving catch (and export) quotas from these assessments. Secondary priorities are the development of fisheries-independent stock monitoring techniques; collaboration concerning the combating of illegal fishing and trade; strengthening and harmonization of relevant national legislation; continuing development of the institutional mechanisms set forth in the agreement; maintaining the equitable involvement of all littoral States in activities and decisions; attention paid to socioeconomic factors, particularly local communities dependent on the resource; national plans that complement the regional plan; the regulation of internal markets for sturgeon resources and a better understanding of the role of stock enhancement programmes and their ecological and economic impacts.
6. The most appropriate actions therefore seem to be to:

- a) urge TACIS to direct funding within the next 12 months at the key aspects of the fisheries management system outlined above, and specifically to provide funding for specialist technical input from, or in collaboration with, FAO;
- b) arrange, in collaboration with TACIS, a meeting of the five Caspian States and FAO, TACIS and CITES, to agree on the following priority actions and on an action plan for their implementation:
  - i) the development of an internationally acceptable stock assessment and monitoring system;
  - ii) the development of a transparent, robust and internationally acceptable method for deriving catch and export quotas from stock monitoring data;
- c) continue having the CITES Secretariat review catch and export quotas before they are made public; and

d) recommend to the Standing Committee to extend the deadline for the implementation of their external agency dependent recommendations by a further 12 months to allow for specialist technical inputs to be made and to provide further incentives for the implementation of the priority actions outlined in subparagraph b) above.