

**SUSTAINABLE STURGEON FISHERIES
IN THE CASPIAN SEA**

**WILL A TRADE BAN CONTRIBUTE
TO ACHIEVING THIS OBJECTIVE?**

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-- Will a Trade Ban Contribute to Achieving this Objective?

Introduction & Background

The 10th meeting of the Conference of the Parties, held in Harare in 1997, adopted a proposal to include all members of the Family Acipenseriformes (sturgeons and paddlefish) in Appendix II of CITES, except those species already listed in Appendix I. This action was taken on the basis of numerous reports and extensive records, both historical and contemporary, confirming stocks of sturgeons have been seriously depleted. These declines are the result of the combined effects of loss of spawning habitat and over-fishing. Over-fishing and unregulated trade in caviar, the highly valued eggs of female sturgeons, were the principal factors motivating the inclusion of the species in Appendix II of the Convention. The Caspian Sea represents the most important and also most problematic present-day source of sturgeon and caviar in international trade.

The Appendix-II listing, which did not become effective until April 1998, was accompanied by the unprecedented action of also instructing the CITES Animals Committee to include all Acipenseriformes in its next phase of Appendix-II species considered under the Significant-Trade Review Process.

Despite these actions and numerous other subsequent initiatives, some non-government organizations are concerned that the situation in the Caspian Sea has continued to deteriorate. In one instance this concern has manifested itself into a campaign with the slogan, "Caviar Emptor – Let the Connoisseur Beware" being waged by a consortium of US-based NGOs, the Wildlife Conservation Society, Natural Resources Defense Council and SeaWeb. An accompanying campaign document entitled "Roe to Ruin", compiled by the consortium, elaborates the basis of their concerns, as well as advocating a suite of actions that are thought will remedy the situation in the Caspian Sea.

"Roe to Ruin" – Shortcomings and Flaws

The authors of the document "Roe to Ruin" have correctly identified the fundamental issues; however, there are some discrepancies and omissions in the information that has been presented. Although undoubtedly committed in their desire to conserve sturgeons, in formulating their suite of recommended actions, the authors unfortunately display a misunderstanding of the Convention and naiveté of (or disregard for) the social, economic and political characteristics of countries in the Caspian Region.

The present document has been prepared to highlight the shortcomings in the paper entitled "Roe to Ruin". It also advocates an alternative way forward that recognizes and builds upon the numerous initiatives already underway by the CITES Animals Committee, the Secretariat, other international organizations and the Caspian States to achieve a regional management regime that will lead to sustainable use of the resource in the Caspian Sea.

The document contains a series of recommendations, which, from the authors' standpoint, will conserve sturgeons in the Caspian Sea. Like most campaign propaganda, it appears that the three NGOs responsible for the document were agreed on its purpose and outcomes before

compiling the information. Rather than reviewing the issues objectively and in detail, the text of the document appears to have been constructed in an attempt to substantiate and justify each recommendation. As a result important aspects have been omitted, which compromise the integrity of the document.

Furthermore, the authors have been rather mischievous in their presentation of information. The document features a section entitled "literature cited" containing more than fifty publications relating to sturgeons. However, the text contains only one citation, that being a reference to the source of data presented in a table of numbers of spawning females in the Volga River. As a consequence, the scientific validity of the statements in the document is seriously flawed. The authors have cleverly manipulated the unsuspecting public, who are largely ignorant of the issues, into believing the contents of the document are underpinned by the results of extensive scientific research. It is disappointing to see such an unscientific approach by the sponsoring organizations, particularly the Wildlife Conservation Society, which prides itself in being a professional and ethical scientific entity.

Another confusing aspect of the document concerns the values for legal and illegal caviar that are used. One ounce of caviar is stated (regrettably with no source referenced) to have a value of USD105. Based on this figure, the 130,000 lbs of caviar imported into the United States during the period of 1989 to 1997 would be valued substantially more than the quoted USD6.6 million. Its actual value exceeds USD218 million. Furthermore, the authors have been mischievously generalized in their treatment of sturgeon poaching and illegal trade in caviar. The document states that illegal trade in caviar is flourishing in the five countries bordering the Caspian Sea. Although there is undoubtedly a problem with poaching and illegal trade in caviar, all the evidence suggests that most of the illegal caviar, which the authors correctly indicate is valued considerably less than the legal product, is used domestically within the Russian Federation and CIS States. There is absolutely no evidence that illegal trade in caviar is "flourishing" in the Islamic Republic of Iran. Quite the contrary, all available information indicates that the Iranian Government has effective controls on its sturgeon fishery, caviar production and trade. Indeed, the authors' failure to acknowledge the management and regulatory achievements of the Islamic Republic of Iran, beyond a passing reference to restocking, reinforces the biased nature of the document.

The document contains passing general references to some of the actions taken by the CITES Conference of the Parties to address conservation and sustainable use of sturgeons. For reasons that remain unclear, the authors have chosen to overlook the numerous decisions relating to sturgeons that were taken by the Conference of the Parties at its eleventh meeting (Gigiri, 2000). Furthermore, various other important processes, currently underway to correct some of the identified problems, have also been overlooked. In accordance with the provisions of CITES Resolution Conf 10.12 (Rev) and Decision 11.95, nine Appendix-II sturgeons, including all those of particular significance from the Caspian Sea, have been reviewed by the CITES Animals Committee as part of the Significant Trade Review of Appendix-II species pursuant to CITES Resolution Conf 8.9 (Rev).

Specific problems have been identified and appropriate remedial actions have been transmitted to the Management Authorities of relevant range States. This process, which for sturgeon remains current, represents an important tool by which Article IV implementation can be monitored. The Significant Trade Review process enables a Party to develop and evolve more effective management of a resource that is also culturally more appropriate. To transfer a species back to Appendix II, after it has become listed in Appendix I, particularly in the case of

economically important species, often entails a Party being compelled to satisfy requirements that are often driven by external philosophies and perceptions.

Moreover, the document does not acknowledge the existence and work of important instruments such as the Convention on Migratory Species (CMS), the Caspian Bioresources Commission and the UNDP Caspian Environment Program (CEP). The Commission is a potentially valuable forum in which the Caspian countries are able to discuss issues and arrive at agreed strategies to achieve a Caspian-wide sustainable sturgeon fishery. The CEP has developed a proposal for an International Management System (IMS) that will enable the Caspian States, through the establishment of a Caspian Fisheries Commission, to achieve sustainable use of fisheries resources in the Caspian Sea.

More recently, in June 2001, at its Office for Europe in Geneva, UNEP hosted a meeting of officials from Caspian Sea countries to discuss the development of a regional management plan for restoring sturgeon populations to safe levels. The meeting considered implementation of various "action proposals" put forward by UNEP and its partners.

These processes must be allowed to proceed, in a coordinated manner, without the added complication of an Appendix-I listing for any species that is commercially important in the Caspian fishery in the mistaken belief that this will solve the problem. Quite the contrary, for reasons elaborated throughout this paper, there is every reason to believe an Appendix-I listing of *Huso huso*, because it fails to address the problems, would be counterproductive and exacerbate existing problems.

Each recommendation contained in the document "Roe to Ruin" has been reproduced below with an accompanying response. The views expressed and actions advocated are based on the previous involvement of the author in the issue, including a visit to the Caspian Region, and more than 9 years experience as chair of the CITES Animals Committee, collaborating with range States to address CITES implementation problems.

1. Prohibit international trade in caviar derived from beluga sturgeon (*Huso huso*) by including the species in Appendix I of CITES;

Response

Although there is little doubt that beluga sturgeon (*Huso huso*) stocks in the Caspian Sea are seriously depleted, the utility of a universal trade ban on beluga caviar is highly questionable. Authorities and individuals closely associated with the sturgeon fishery in the Caspian Sea agree that the immediate threat to the sturgeon fishery in the Caspian Sea are the following interrelated problems:

- i) The extent of illegal trade in caviar from fish harvested outside national management systems operating in each of the five Caspian States; and
- ii) The capacity of government agencies, particularly those of the Russian Federation and CIS States, to regulate the industry and control the illegal caviar trade, particularly at the local and national levels.

An Appendix-I listing of *Huso huso*, or any other commercially fished species of sturgeon, will only impact on the presently legal trade in caviar. An Appendix-I listing will **not** have any material influence on the illegal trade which, by its nature, operates outside the regulatory

framework of the Convention. Clearly, if the present Appendix-II listing, with all that this entails, has not reduced the level of illegal trade in caviar, an Appendix-I listing will not alter the *status quo* with respect to illegal trade in caviar. Indeed, it is highly likely that an Appendix-I listing of *Huso huso*, or any other species, at this time is likely to lead to an increase in illegal fishing and more extensive illegal trade in caviar.

When economically important species become listed in Appendix II of CITES, experience has shown that development and implementation of harvesting and trade regimes that are sustainable, both in themselves and by the wild resource, take time to develop. In the case of sturgeons, which are distributed and harvested in numerous countries in North America and Asia, this task becomes extremely complex and time consuming.

2. List beluga sturgeon as endangered under the US Endangered Species Act;

Response

The manner in which beluga sturgeon, or any other wild species, is classified under domestic US legislation is clearly a matter for determination by the US Government. Article XIV of the Convention enables any Party to adopt domestic measures that are stricter than those imposed for trade in a species under the Convention. However, it is extremely doubtful whether a reduction in the volume of imports of beluga caviar into the United States would, as stated by the authors, automatically lead to a reduction in demand for caviar of the species. It should be remembered that until recently and for reasons unrelated to the conservation of sturgeons in the Caspian Sea, all imports into the United States of caviar from the Islamic Republic of Iran were banned. This policy had no significant affect on the global trade in caviar, including that derived from beluga sturgeon.

Furthermore, analyses of listings of foreign species under the US legislation (Edwards, 1995) suggest that rarely has the US Endangered Species Act made a significant contribution to improving the conservation status of the species. Indeed, there are examples (e.g. commercially harvested species of kangaroos in Australia), where listings under the US Endangered Species Act were based on perceptions and vigorous public lobbying rather than reality. Such listings may actually have a negative impact on conservation of the species concerned by diverting limited funds available for wildlife conservation in the affected range States to providing extensive and time-consuming documentation in order to have the species reclassified under US legislation and restore exports onto the US market.

3. Fund key programs and initiatives to protect and restore all sturgeon species in the Caspian Sea.

Response

With the exception of the recommendation to ban open-water fishing for sturgeon in the Caspian Sea, the actions identified are key elements of an overall conservation strategy for sturgeons in the Caspian Sea. However, although some are a matter for each country to address in an appropriate manner, the effective implementation of others requires careful planning and coordination among the participating Caspian countries. This will take time and although international funding, such as the Caspian Environment Programme, may be available to catalyze activities of this nature, the long-term sustainability of any regional programme will depend on funding becoming internalized within the Region. The integrity of the sturgeon fishery must be maintained in order for it to operate both as an economic incentive to stimulate

political commitment as well as being the principal source of funding to sustain regional programmes, e.g. the production of fingerlings for restocking.

The five countries that border the Caspian Sea, particularly those that comprised the former Soviet Union, are clearly democracies in transition. Although to varying degrees, the administrative and enforcement capacities of each require strengthening. Any measure, unilateral or otherwise, to restrict existing export markets would be counterproductive and will only serve to destabilize and weaken administrative and regulatory agencies in the Caspian Region.

The authors have overlooked an important consideration. At the time of the 1997 decision to include the Acipenseriformes in Appendix II of CITES, only two of the five Caspian countries were Parties to the Convention (the Russian Federation and the Islamic Republic of Iran). The three former Soviet Republics, Azerbaijan, Kazakhstan and Turkmenistan were non-Parties and had little, or no understanding of CITES and its implementation. Even in April 1998, when the Appendix-II listing came into force, these countries were yet to accede to the Convention. Azerbaijan became a Party in February 1999. Kazakhstan became a Party in April 2000 – more than two years after sturgeons were included in Appendix II. Turkmenistan remains a non-Party. It is unrealistic to expect, or require, these countries to develop and establish administrative capacities that are capable of implementing CITES effectively over the short time period in which they have become aware of the Convention.

4. Strengthen US enforcement of international trade restrictions

Response

The enforcement capacity of the United States is the envy of many countries. However, it would seem that the authors, rather than congratulating their government on some notable recent prosecutions, are critical because they view the present resources as inadequate. The authors have omitted, perhaps an over-sight, to mention enforcement activities of US Fish and Wildlife agents are assisted by officials of other agencies such as Customs and Quarantine. In addition to these Federal Government officials, there are numerous State agency enforcement personnel with whom USFWS agents collaborate when necessary. Experience has shown that the resources required for enforcing a ban on trading in a commodity for which a demand persists often exceed the ability of governments to provide. Even when government is able to allocate sufficient enforcement resources, effective prohibition, relative to well regulated trade, is rarely achieved.

5. Promote environmentally sound aquacultured caviar as an alternative to Caspian Sea caviar.

Response

The production of caviar from aquaculture will **not** solve the problems presently facing the Caspian Sea sturgeon fishery. In focusing on promoting use of sturgeon caviar derived from commercial aquaculture operations, the authors have disregarded completely the real value of sturgeon aquaculture as a management tool for achieving a sustainable fishery in the Caspian Sea. This pre-occupation with commercial captive propagation as an alternative to harvesting the wild resource is characteristic of many Anglo-Saxon societies. Historically, the “domestication” of wild species for commercial purposes has resulted in the wild resource becoming economically devalued. Until relatively recently, there has been little interest in

conserving the wild resource. As a consequence, the wild types of many domesticated species are either extinct or critically endangered.

Managed appropriately, the Caspian Sea sturgeon fishery represents an economically important renewable natural resource that exceeds the finite deposits of oil in the Region. An escalation of commercial sturgeon aquaculture and shift towards international trade in aquacultured caviar, as advocated by the campaign document, has potentially negative conservation outcomes. Implementing this policy is likely to result in a shift away from managing sturgeon populations in the Caspian Sea, thereby producing the same results as allowing the fishery to deplete sturgeon populations in the Caspian Sea to levels that are not able to support a commercial fishery. Not only is there a risk of aquaculture operations becoming established in non-range States, but also relatively few individuals will benefit economically from aquaculture. Many thousands of rural people, presently employed in the fishery in the five countries that border the Sea will lose their livelihoods.

The real benefit of aquaculture lies in its application as a management tool for restocking wild populations of sturgeons in the Caspian Sea. In order to ensure the long-term survival of any industry that is based on the regular removal of the reproductive component of a population, it must be developed and implemented with caution. Management must incorporate adequate safeguards to ensure the ability of the resource to renew itself is not compromised. In this regard there is little doubt that this has not been the case for the sturgeon fisheries. Sturgeon populations generally, and those inhabiting the Caspian Sea in particular, have been severely depleted as a result of excessive fishing. The decline in abundance of sturgeons in the Caspian Sea, as well as elsewhere, has been further compounded by the systematic loss of suitable riverine spawning habitat – thereby seriously impairing successful recruitment.

The sturgeon fishery, as presently practiced in the Caspian Sea, can be defined as a compensatory harvest in which a restocking programme, based on aquaculture is an integral element. Some Caspian States, most notably the Russian Federation, Azerbaijan and the Islamic Republic of Iran, operate a restocking programme as a component of their national sturgeon fishery. The Islamic Republic of Iran has been operating an aquaculture-based restocking programme, with an emphasis on the relatively more sedentary species *Acipenser persicus*, for more than 30 years. The success (and importance) of this restocking programme is evidenced by the increased annual catch of *A. persicus* by the Iranian fishery in recent years in real terms as well as relative to the other four more wide-ranging species of sturgeon.

6. Strengthen management of US species of sturgeons

Response

As stated previously, the principal purpose of this commentary is to provide an alternative scenario for achieving a sustainable Caspian Sea sturgeon fishery. Management and commercial use of sturgeons in the United States is a matter for the relevant State and Federal authorities to determine. Whether or not the problems identified by the authors of the campaign document are real or perceived should be resolved domestically between the authors and the responsible government authorities in accordance with applicable administrative procedures in place in the United States.

Management is an iterative process and can always be improved. In this regard, it is interesting to note that, at the 45th meeting of the CITES Standing Committee in Paris, it appears the EU

has maintained its suspension of import of paddlefish specimens from the US because the EU believes that quotas are not based on scientific data.

Conclusions

1. The inclusion of *Huso huso*, or any other commercially fished species of sturgeon, in Appendix I of CITES will **not** solve the problem of illegal trade, and may even result in increased illegal activities, especially at the national level, exacerbating enforcement and compliance issues.
2. The sturgeon fishery in the Caspian Sea should be managed by the participating Caspian countries as a coordinated compensatory wild harvest, based on restocking fingerlings derived from aquaculture.
3. A restocking programme for Caspian Sea sturgeons should be approached strategically and fully coordinated among all the Caspian countries, having due regard for preserving the integrity of any genetic differences exhibited by sturgeon species in the Sea.
4. The production of fingerlings by aquaculture for restocking the wild populations of sturgeons should be determined on the basis of the species' conservation status and annual harvest levels recorded by each country.
5. Because commercial production of caviar from aquaculture has the potential to devalue the wild resource – thereby removing political interest to invest in managing and conserving the wild resource, Caspian countries should **not** give a high priority to commercial aquaculture as a replacement to the present sturgeon fisheries.
6. The long-term sustainability of the Caspian Sea sturgeon fisheries will not be achieved until the magnitude of fish poaching and illegal trade in caviar is reduced to acceptable levels that do not impact negatively on the managed fisheries.
7. The Caspian States, most notably the Russian Federation, Azerbaijan, Kazakhstan and Turkmenistan, should explore management and regulatory systems that attempt to “decriminalize” the present illegal fishery and integrate it with the State-managed fisheries.
8. The governments of Caspian States that operate privatized sturgeon fisheries and caviar processing facilities should seek donor agency funding to undertake a comprehensive socio-economic study of the fishery with a view to restructuring the industry by “decriminalizing” presently illegal operations and, where possible, integrating the participants into the managed fishery.
9. Parties should restrict imports of caviar to material produced by export and re-export companies that satisfy certain standards (to be established) for accreditation by the CITES Secretariat. The Secretariat should maintain a register of such companies and regularly notify Parties the names, addresses and other relevant information (to be determined) of these companies.
10. The Secretariat, in consultation with range States and enforcement agencies, should compile a register of countries that are known to receive illegal caviar. Parties should be requested to **not** accept documentation for caviar from these re-export countries.

11. The universal labeling system for caviar, as outlined in CITES Resolution Conf 11.3, represents another important tool for controlling international trade in the commodity. However, in its present form this resolution fails to adequately address re-exports by requiring all re-exports to be appropriately labeled in a manner that enables them to be correlated with and linked to exports of caviar from the range States. An amendment that addresses this aspect of caviar labeling will substantially assist in reducing the level of illegal caviar entering international trade as “legal” re-exports (or exports) from third countries.
12. The present collaboration between the Caspian States, the CITES Secretariat and the Animals Committee in relation to the Significant Trade Review (as well as other initiatives), should be allowed to continue without the unnecessary complication of an Appendix-I listing of one (or more) species in the near future.
13. The range States from the Caspian Sea should implement the recommendations adopted by the CITES Standing Committee at its 45th meeting in Paris (18-22 June 2001) and to make every effort, with external assistance where appropriate, to achieve their commitments within the agreed time limits.
14. During the period of re-organization, the Secretariat should function as a clearing-house to receive copies of export permits or re-export certificates for sturgeon specimens for validation **before** importing countries authorize actual imports.

Literature Cited

Edwards, S.R., (1995) – Conserving Biodiversity, Resources for our Future, Chapter 7 in The True State of the Planet, Ed. R. Bailey, Competitive Enterprise Institute. Free Press, NY, pp. 121-165.