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Sturgeons and the 14th meeting of the Conference of the Parties to CITES, The Hague, Netherlands, 2007

A TRAFFIC AND WWF BRIEFING DOCUMENT

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Credit: WWF-Canon/Thomas Neumann

Caviar, the renowned gourmet delicacy, is the unfertilised roe of sturgeons and paddlefish (Acipenseriformes), an ancient group of fish found in coastal and inland waters of 25 countries in Europe, Asia and North America. There are 27 species, 25 of them are included in the *2006 IUCN Red List of Threatened Species*, 17 classified as Endangered or Critically Endangered. Two species are listed in Appendix I of CITES; the remaining 25 are in Appendix II. As this suggests, many sturgeon stocks are seriously depleted, as a result of over-exploitation, illegal fishing and habitat degradation. In 2004, the total official catch of sturgeons in the Caspian Sea had decreased to 760 t, less than 5% of the total 20 years earlier (22 800 t).[1]

Credit: Caroline Raymakers/TRAFFIC

Caviar and sturgeon meat on sale in Baku, Azerbaijan, 1997

Stemming the black gold rush—sturgeons and paddlefish and the implementation of CITES *Resolution Conf. 12.7 (Rev. CoP13)*

Sturgeon and paddlefish conservation and trade has been discussed at every meeting of the Conference of the Parties to CITES (CoP) since all species were listed in the Appendices to CITES (1998) and, over the last nine years, CITES Parties have made some progress in strengthening control of trade and conservation of these species. However, there are concerns that CITES agreements for sturgeons and paddlefish are still not being implemented effectively, but it is vital that Parties show their commitment to these agreements, so that trade does not threaten the species' survival.

The key tool for the conservation of sturgeons in the CITES forum is *Resolution Conf. 12.7 (Rev. CoP13)* (see **Box 1** for summary of CITES decisions on sturgeons and paddlefish). This calls for scientifically assessed catch and export quotas for sturgeons, tighter regulation of trade in sturgeon products overall, and regional co-operation between countries to achieve these ends. It also stipulates a role for the CITES Secretariat in confirming that export quotas are agreed by all relevant range States, on the basis of stock assessments. At CoP14, this Resolution will again be up for discussion. The Russian Federation, and the Islamic Republic of Iran (on behalf of the CITES Standing Committee's working group on sturgeons), have submitted proposals to amend various aspects of the Resolution. TRAFFIC and WWF hope that the outcome of discussion of these proposals will be a reavowal of Parties' commitments to conserve sturgeons and paddlefish, followed by visible action. **Specifically, TRAFFIC and WWF believe (see shaded text):**

- **Independent verification of the scientific and legal basis of caviar export quotas** is necessary to ensure that these and sturgeon catch quotas reflect population trends and are sustainable. The important role of the CITES Secretariat in the process should be maintained.
- The stock assessment procedures and the catch and export quota-setting process would benefit from **greater transparency**, such that Parties, non-Parties and non-governmental organizations can assess the scientific basis for the quotas.
- Given the important quantities of caviar consumed on some **domestic markets and of caviar traded illegally**, it is essential that these **are taken into account** when determining export quotas.
- The current Resolution requires **range States to agree by consensus on catch and export quotas for shared stocks**. This requirement is important as a means to ensure sturgeon and paddlefish exports truly reflect population trends and are scientifically proven to be sustainable. However, if the Resolution is amended so that quotas can be decided on the basis of agreement among (a minimum of) two-thirds of the range States sharing the stock, then this amendment should be coupled with a recommendation that Parties do not accept exports from States proposing higher quotas than those agreed by the majority.

Justification: With the agreement of range States, rules on setting sturgeon and paddlefish quotas under CITES have become increasingly rigorous. However, despite these rules (which are set out in *Resolution Conf. 12.7 (Rev. CoP13)*), and despite the fact that recent CITES quotas have been adapted in response to declines in wild sturgeon and paddlefish stocks (**Table 1**), doubt clearly remains over the process for setting quotas, as testified to by the following.

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Sturgeons of the Caspian Sea produce what is regarded as the highest quality caviar and the countries bordering this sea (Azerbaijan, the Islamic Republic of Iran, Kazakhstan, the Russian Federation and Turkmenistan) have been the source of around 90% of the caviar in global trade in recent years. Other important sources are the Amur River and the Danube River basins, the Black Sea, the Sea of Azov and the Great Lakes of North America.

Credit: Caroline Raymakers/TRAFFIC

Credit: WWF-Canon/Hartmut Jungius

Sturgeon (*balyk*) and caviar on sale at Astrakhan fish market, 2001 (top) and Caspian coastline

- The information recently provided by the sturgeon-exporting countries indicates that many of the sturgeon species in shared fishing grounds are still suffering serious population declines.[2]
- In 2006, the CITES Secretariat did not publish caviar quotas for four of the five Caspian sturgeon fisheries because the countries concerned (Azerbaijan, Kazakhstan, the Russian Federation and Turkmenistan) did not provide sufficient information about the sustainability of their sturgeon catch.
- For 2007, the States bordering the Caspian Sea agreed to reduce the combined catch quota for the Sea's six sturgeon species[3] by an average of 20% relative to the quotas for 2005. The combined CITES export quota for caviar from these sturgeons in 2007 is also lower than that for 2005, but only by 15%.
- For 2007, the Russian Federation established catch quotas for Beluga *Huso huso* and sturgeons from the Amur River (Kaluga *Huso dauricus* and Amur Sturgeon *Acipenser schrenckii*), solely for scientific and restocking purposes. These were set at 14 t (equivalent to about 1.12 t caviar[4]) for Kaluga and three tonnes (equivalent to about 0.3 t caviar[4]) for Amur Sturgeon. The CITES export quotas for 2007 are substantially higher than this, namely 2.56 t for Kaluga caviar and 1.9 t for Amur Sturgeon caviar, and it is unclear why commercial export quotas were published at all, given that catch quotas for these species were exclusively for scientific and restocking purposes.
- Although what little is known about the illegal caviar trade is often anecdotal or based on reported seizures and convictions, the black market in caviar is clearly thriving and smugglers use sophisticated methods, indicating the possibility of links with organized crime groups. According to estimates by experts from the Caspian region, the annual illegal catch of sturgeons 2004–2006 for all Caspian States was around 10 000–12 000 t and in the Russian Federation it is estimated that 2700 t of sturgeons were caught illegally in the Caspian Sea in 2004, equivalent to the production of around 550 t of caviar[5]. It is believed the majority of such caviar is absorbed by the domestic market rather than entering international trade. However, large seizures continue to take place in international trade: almost 14 t of illegal caviar was reported seized by European authorities, 2000–2005.[6]

- **The Resolution must not be altered to expand the period for caviar export beyond the end of the quota year** in which it was harvested and processed, as this could provide an avenue for laundering illegal caviar.

Justification: In recent years, all Caspian range States appear to have exceeded their annual export quotas for certain sturgeon species, according to reported caviar exports (highlighted in coloured type in **Table 1**). However, it is most likely that these excesses relate to caviar from one year being "carried over" into the following year and, if this is the case, the quotas have not been exceeded. Allowing caviar harvested in a given year to be exported in subsequent years makes it very difficult to monitor whether quotas have been respected or exceeded. It may also provide an avenue to launder illegal caviar, allegedly from previous years, because the size of caviar stocks held by sturgeon and paddlefish range States is not adequately reported. In addition, the fact that some sturgeon range States have not submitted data on their exports of caviar in recent years makes it impossible to monitor whether actual exports are within the export quotas.

To address this problem, CITES Parties at CoP13 decided to alter the conditions for caviar exports from range States such that, from 2006 onwards, range States have had to export caviar in the year in which it was harvested or processed and cannot export any caviar harvested or processed in previous years. Although this new stipulation has not yet been tested, as export quotas for many sturgeon range States were not published in 2006, the Russian Federation, and the Islamic Republic of Iran on behalf of the CITES Standing Committee's working group on sturgeons, have put in proposals for discussion at CoP14 to extend the deadline for caviar exports beyond the end of the year of harvest or processing.

- Range States need to ensure that **national legislation to control the harvest of sturgeons and paddlefish and domestic trade in their products is in place and adequately enforced** to reduce the illegal harvest and trade which are threatening sturgeons and paddlefish.

Justification: Besides caviar in international trade, considerable volumes are also consumed in the countries of origin. Although domestic trade is governed by national legislation in most Caspian Sea countries, in practice such legislation is often inadequately enforced[7]. TRAFFIC surveys undertaken in

the Russian Federation (1997–2001) indicated that significant volumes of the caviar offered for sale originated from illegal sources. For example, 80% of the shops visited in Moscow had caviar which appeared to be sold using forged documents.[7]

- **Implementation of the CITES universal labelling system and registration procedures in both importing and exporting countries needs to be improved**, to try to ensure that only legal trade in sturgeon and paddlefish products takes place, both internationally and domestically.

Justification: Governments agreed at CoP11 in 2000 to introduce a standardized labelling system for all legal caviar exports, a system since extended, in 2002 and 2004. (A detailed description of caviar labelling requirements can be found in CITES *Resolution Conf. 12.7 (Rev. CoP13)*). Of the Caspian countries, only Azerbaijan, Kazakhstan and the Islamic Republic of Iran have notified the CITES Secretariat of the design of their caviar labels, although they have not given details of when the labels were introduced or whether they are to be used for domestic markets and/or international trade. The Russian Federation has not yet sent information on the design of its labels. According to the CITES register of licensed legal exporters, processing and repackaging plants of Acipenseriformes, there is a single registered company that exports and processes caviar in the Islamic Republic of Iran, a single exporter in Kazakhstan and four exporters in Azerbaijan. Nine processing/repackaging plants are registered in the Russian Federation but there are no registered exporters, despite caviar export quotas having been published for this country.

Amongst the major caviar consumer markets, the European Union (EU) is the first to have published legislation to implement fully the universal caviar labelling requirements. Since June 2006, all caviar containers on the EU market, including caviar from aquaculture, and regardless of whether they are destined for domestic trade or re-export, are required to bear a CITES label. It is hoped that other important consumer markets, such as Japan, Switzerland and the USA will follow suit.

Box 1: History of sturgeons and paddlefish in CITES over the last 10 years

1998 (CoP10)	All Acipenseriformes not already listed in the CITES Appendices are listed in Appendix II. *Resolution Conf. 10.12 Conservation of sturgeons* is adopted.
2000 (CoP11)	Ten Appendix-II species of Acipenseriformes are included in the Review of Significant Trade. *Resolution Conf. 11.13* establishing a universal labelling system for caviar is adopted.
2001	Caspian range States Azerbaijan, Kazakhstan, the Russian Federation and Turkmenistan commit to strengthening measures for sturgeon conservation as part of the *Paris Agreement* at the 45th meeting of the CITES Standing Committee.
2002 (CoP12)	*Resolution Conf. 12.7 Conservation of and trade in sturgeons and paddlefish*, which replaces and builds on the two previous Resolutions, is adopted. As part of this Resolution, the universal labelling system is expanded to apply to all caviar containers in trade.
2004 (CoP13)	The strength and scope of *Resolution Conf. 12.7* is strengthened and broadened.
2006	The CITES Secretariat does not publish sturgeon export quotas for the majority of range States, concerned that those proposed did not fully reflect reductions in stocks or make sufficient allowance for illegal fishing. The EU publishes legislation on caviar labelling and registration based on the provisions of *Resolution Conf. 12.7 (Rev CoP13).*
2007	The CITES Secretariat publishes quotas for caviar from the Caspian Sea and the Amur River.

Credit: Dr Georgy Ruban

Russian Sturgeon *Acipenser gueldenstaedtii* at a Caspian hatchery: fingerling production for restocking, the main source of young sturgeons for the Caspian Sea at present, has almost halved over the last 25 years in the Russian Federation[1]

Credit: WWF-Canon/Edward Parker

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Over the past decade, caviar prices have risen as wild-origin caviar has become scarcer. Globally, the highest-priced wild caviar is beluga (with an average internet retail price in importing countries of USD445/100g), followed by oscietra (USD340/100g), generally from Russian Sturgeons *Acipenser gueldenstaedtii* or Persian Sturgeons *A. persicus*, and sevruga (USD250/100g), from Sevruga (or Stellate Sturgeons) *A. stellatus*.

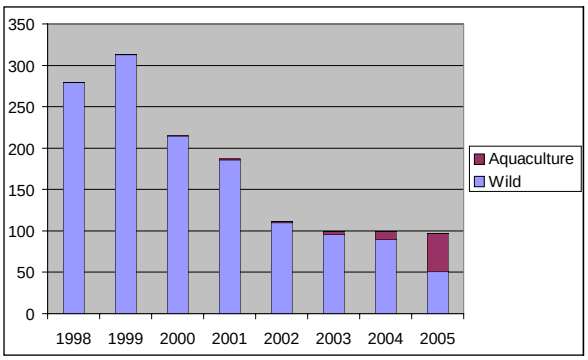
Credit: Caroline Raymakers/TRAFFIC

Credit: Caroline Raymakers/TRAFFIC

Caviar on offer at airports worldwide (all photos above)

Background information and supporting facts and figures

Graph 1: Global CITES-reported trade (tonnes) in caviar (wild and aquaculture)



Source: CITES trade (importers') data 1998–2005

According to CITES data from importers, the largest caviar importers during the period 1998–2005 were: the EU (636 t, of which Germany imported 247 t and France 229 t); USA (326 t); Switzerland (181 t); and Japan (155 t). The largest caviar exporters for the same period were: Iran (498 t); the Russian Federation (211 t); Kazakhstan (108 t); Azerbaijan (35 t); China (31 t); Romania (26 t); and Bulgaria (13 t). Volumes are totals for the period.

Table 1: CITES export quotas (Q) and reported exports (*E*) of caviar from the Caspian States (2003–2007)

	2003		2004		2005		2006#	2007#
	Q	***E***	**Q**	***E***	**Q**	***E***	**Q**	**Q**
Azerbaijan								
Russian Sturgeon	4.2	3.69	3.78	4.78	3.78	5.7	NP	3.36
Stellate Sturgeon	4.5	3.51	2.7	4.84	2.7	3.7	NP	3
Beluga	0.4	0.56	0.25	0.29	0.25	0.37	NP	0.3
Sub-total	**9.1**	**7.77**	**6.73**	**9.91**	**6.73**	**9.77***	-	**6.66**
Iran								
Russian Sturgeon	1.95	2.13	1.76	1.03	1.6	0.25	NP	1
Persian Sturgeon	63	36.6	56.7	32.9	51	11.7	44.37	38
Stellate Sturgeon	11.7	7.31	7.02	4.21	6.3	1.38	NP	3.2
Beluga	2.13	2.42	1.07	0.97	1.07	0.68	NP	1
Sub-total	**78.78**	**48.46**	**66.54**	**39.12**	**59.97**	**14.02**	**44.37**	**43.2**
Kazakhstan								
Russian Sturgeon	4.62	1.76	3.2	1.25	3.1	4.02	NP	3.27
Stellate Sturgeon	26.23	6.84	11.01	3.71	10.49	13.91	NP	10.64
Beluga	8.53	1.08	2.4	0.21	2.6	4.61	NP	1.76
Sub-total	**41.19**	**9.68**	**16.61**	**5.17**	**16.19**	**22.54**	-	**15.63**
Russian Federation								
Russian Sturgeon	17.2	3.65	14.58	2.41	14	0	NP	20
Stellate Sturgeon	13.8	0.69	8.28	3.23	8	0	NP	3.5
Sterlet *Acipenser ruthenus*	0.1	0	0.1	0	0.1	0	NP	0
Beluga	1.6	0.67	0.8	0.27	0.6	0	NP	0.7
Siberian Sturgeon *A. baerii*	0.5	0	NP	0	0	0	0	0
Amur Sturgeon	0.35	0.06	NP	0.5	NP	0	NP	1.9
Kaluga	1	0.19	NP	0.57	NP	0.65	NP	2.56
Sub-total	**34.55**	**5.26**	**24.03**	**6.98**	**22.7**	**0.65**	**0**	**28.66**
TOTAL	**163.62**	**71.17**	**113.91**	**61.18**	**105.59**	**46.98**	**44.37**	**84.85**

Notes: NP = not published. Coloured type indicates that quota appears to have been exceeded. * According to information received from Azerbaijan, actual exports in 2005, which included caviar produced in 2004, amounted to 9.10 t. # Reported exports for 2006 and 2007 have not yet been published.

Source: Quotas are published on the CITES website (www.cites.org) and trade data come from the CITES Trade Database. Reported trade according to exporters was used except for countries/years where this was not available and importer data were used instead.

[1] Pourkazemi, M. (2006). Caspian Sea sturgeon conservation and fisheries: past, present, future. In: *Proceedings of the 5th International Symposium on Sturgeons, Ramsar, Iran, May 9–13, 2006.*

[2] CITES Secretariat press release, 3 January 2006. Exporters to strengthen controls and promote sustainable fishing before CITES can publish 2006 export quotas. Viewed at www.cites.org/eng/news/press/2006/060103.shtml, 22 May 2007.

[3] Russian Sturgeon *Acipenser gueldenstaedtii*, Ship Sturgeon *A. nudiventris*, Persian Sturgeon *A. persicus*, Sterlet *A. ruthenus*, Sevruga (or Stellate Sturgeon) *A. stellatus* and Beluga *Huso huso*.

[4] Based on an average gonad-somatic index of 16% for Kaluga and of 20% for Amur Sturgeon. Taken from Kazansky, B.N. (1979). *The Ecological-evolutionary Principles of Organizing Sturgeon Fishing in the Basin of the Southern Seas of the USSR. Collection 'Biological Foundations for the Development of Sturgeon Fishing in the Water Bodies of the USSR'*. Moscow, Nauka. Pp. 22-33.

[5] Based on data from the Caspian Research Institute of Fisheries, Astrakhan, Russian Federation.

[6] Based on seizures data reported by European governments to EU-TWIX (European Union Trade in Wildlife Information Exchange).

[7] Vaisman, A. and Raymakers, C. (2001). The status of sturgeon resources in Russia. *TRAFFIC Bulletin 19 (1)*: 33–44.

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TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

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- ensuring that the use of renewable natural resources is sustainable;
- promoting the reduction of pollution and wasteful consumption.

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