

WILD STURGEONS AND THEIR CAVIAR – ENDANGERED TREASURES

Not so long ago, sturgeons were still numerous and an important mainstay for many fishing communities. But these days are over. Because of persistent overfishing, sturgeons are on the brink of extinction.

The main reason for overfishing these once abundant species is the demand for their caviar - the salted roe, which has become the preferred food of gourmets around the world and an epitome of luxury food. Beluga, Oscietra, Sevruga and other types of caviar rank among the most expensive wildlife products, fetching very high prices. In 2011, caviar worth an estimated 28 million Euro was imported into the EU.

The demand for caviar has led to the proliferation of illegal caviar trade. Continuing seizures of caviar indicate that there is a thriving black market. Illegal caviar trade is considered to be well-organised and to have strong links with organized crime.

It must be in the natural interest of all sturgeon breeders and caviar producers, processors and traders as well as consumers to ensure that their caviar is legally sourced and traded and that harm to wild sturgeons is eliminated.

WHAT'S SO SPECIAL ABOUT STURGEONS

- STURGEONS ORIGINATED ABOUT 200 MILLION YEARS AGO AND ARE AS ANCIENT AS THE DINOSAURS.
- STURGEONS CAN GET MORE THAN 100 YEARS OLD AND MORE THAN 6 METERS LONG.
- STURGEONS REACH THEIR REPRODUCTIVE AGES AT 5-15 YEARS AND MOST SPECIES DO NOT SPAWN ANNUALLY. THIS MAKES THEM ESPECIALLY VULNERABLE TO OVERFISHING. STURGEON STOCKS TAKE MANY YEARS TO RECOVER.
- IN THE EU, ROMANIA AND BULGARIA ARE THE ONLY COUNTRIES WITH VIABLE POPULATIONS OF WILD STURGEONS. THE LOWER DANUBE AND THE BLACK SEA ARE AMONG THE LAST REMAINING SPAWNING GROUNDS WORLDWIDE.
- DESPITE STRICT INTERNATIONAL AND DOMESTIC REGULATIONS, OVERFISHING LEGAL OR ILLEGAL AND UNSUSTAINABLE TRADE IN CAVIAR FROM WILD STOCKS STILL ARE THE MAJOR DIRECT THREATS TO THE SURVIVAL OF STURGEONS.



SUSTAINABLE CAVIAR TRADE

As a measure to ensure sustainable caviar trade, all sturgeons and the closely related paddlefish are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the EU Wildlife Trade Regulations. Regardless if the

sturgeons are wild caught or captive bred, international trade is based on a compulsory system of CITES documents. This includes live and dead specimens as well as all parts and products, including caviar, meat, fingerlings, fertilized eggs, etc.

CHTES

Any international shipment of any sturgeon or sturgeon product must always be accompanied by the appropriate CITES permits or certificates, issued by the relevant national CITES Management Authorities. In general, import or (re)export of sturgeon caviar without a valid CITES permit is an offence.

PERSONAL ÚSE

People are allowed to import up to 125 grams of sturgeon caviar per person without the special CITES permit. The caviar must be:

LEGALLY ACQUIRED AND STILL HAVE THE MANDATORY CITES LABEL

CARRIED IN PERSONAL BAGGAGE

PERSONALLY OWNED FOR NON-COMMERCIAL PURPOSES

CAVIAR TRADE WITHIN THE EU

Shipments of sturgeon caviar produced within the EU do not require CITES permits or certificates as the EU is a common market and trade is therefore considered as domestic. However, the caviar does require CITES labels and business operators must be able to distinguish the legal from illegal supply.

PRODUCING, PROCESSING, (RE-)PACKAGING AND EXPORTING

All caviar processing and (re-)packaging plants, including caviar producing aquaculture operations, as well as exporters need to be licensed by the Management Authority of CITES member countries in order to be allowed to process, (re-)package or

export caviar. A unique registration code must be attributed to each processing or (re-)packaging plant by that Management Authority. This registration code is part of the mandatory CITES caviar labels. The licensed companies are required to maintain adequate records of the quantities of caviar imported, exported, produced, stored, etc.

The register of licensed exporters and of processing and repackaging plants for specimens of sturgeon and paddlefish species are held on the CITES website:

www.cites.org -> Resources -> CITES
registers -> Register of caviar exporters (for each country
in alphabetical order)

QUOTAS FOR TRADE IN CAVIAR FROM WILD STURGEONS

For wild sturgeon species from shared stocks - such as the Caspian Sea - yearly export quotas need to be set. Since 2011, there have been zero global export quotas for caviar and meat from wild sturgeons. A zero export quota means that no international trade in caviar or meat from wild sturgeons from shared stocks is allowed.

A quota year starts on 1st March and ends on the last day of February of the following year. All caviar subject to export quotas should be exported before the end of the quota year in which it was harvested and processed. States should not import caviar harvested or processed in the preceding quota year.

Quotas need to be set for caviar and meat only. International trade in specimens born or bred in captivity is not subject to the CITES export quota system, such quotas are purely voluntary. The same holds true for quotas for fingerlings, fertilized eggs, etc.

More on CITES:

www.cites.org/eng/prog/sturgeon/index.shtml

EU Wildlife Trade Regulations:

http://ec.europa.eu/environment/cites/legislation_en.htm

TRADE IN STURGEONS AND STURGEON PRODUCTS

CAVIAR

Caviar is the unfertilized roe of sturgeons. It is usually harvested from freshly killed female sturgeons before the eggs get ripe (ripe eggs bust easily, forming a smeary mass). It is hardly possible to determine the species of origin by simply looking at the caviar, as grain sizes and colours vary with age and within species. For determination of - at least the maternal - species, DNA analysis is clearly the method of choice.

Mixing of caviar from different species

Caviar from different sturgeon species may not be mixed into a primary container, except in the case of "pressed caviar" (a dense salty paste composed of damaged sturgeon roe).

Caviar substitutes and counterfeit caviar

Eggs from other fish species (lumpfish, salmon, herring, etc.) are often sold as "caviar". As this roe derives from species not listed in CITES it is not subject to wildlife trade regulations. However, caviar

substitute is often fraudulently sold as originating from sturgeons, deceiving customers. Counterfeit caviar is usually dyed, which means that it loses colour (e.g. when rubbed between fingertips) and can be made from anything - from waste products from sturgeon to algae.

OTHER STURGEON PRODUCTS

Sturgeon meat is sold fresh, smoked, frozen or dried, as a whole or in parts, fillets, terrines, canned, etc. Other products from sturgeons that are traded include skins and handicrafts made from sturgeon leather, glue made from swim bladders ("isinglass"), stuffed specimens, caviar extract for luxury facial creams (with a strong increase of imports to the EU, worth 2,7 Billion EUR in 2011).

Live specimens are traded, too, both for aquaculture (mainly fingerlings and fertilized eggs) as well as for ornamental purposes.

All these products are subject to CITES and EU Wildlife Trade Regulations.

STURGEONS IN AQUACULTURE

Since wild caviar has got increasingly rare and international trade from all major stocks has been suspended since 2011, demand is more and more met by caviar from farmed sturgeons.

Sturgeon farming is a fast growing sector in global aquaculture. In 2011, an estimated 142 tons of captive bred sturgeon caviar were produced worldwide - an annual volume that has certainly increased since - and 97% of the value of caviar imported into the EU originated from aquaculture.

Operating in accordance with nature conservation, this industry can be very positive for both wild sturgeons and local communities, satisfying on the one hand the demand for caviar and sturgeon meat

without depleting diminished natural stocks, while also growing local economy.

Yet the aquaculture industry may also pose risks to wild sturgeons. In recent years concerns have been expressed that aquaculture operations may be involved in "laundering" wild sturgeons and caviar. There are allegations that illegally sourced sturgeons are kept as broodstock and that illegally harvested caviar from wild sturgeons is offered as produced from aquaculture. A differentiation between caviar from wild and from farmed sturgeons is technically possible (through determination of isotope or fatty acid compositions) but not yet available as standard methodology.

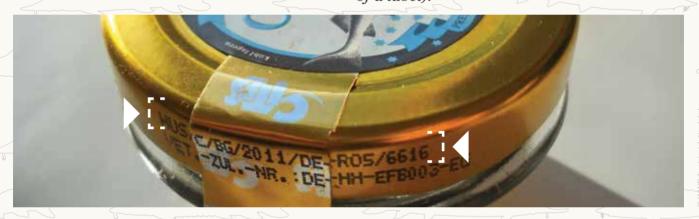
HOW TO DISTINGUISH LEGAL FROM ILLEGAL CAVIAR

An obligatory caviar labelling system has been introduced to help consumers, traders and authorities distinguish legal caviar from illegal caviar. It aims to ensure that all caviar entering the market is from legal sources. The label allows the authorities to trace the origin of the caviar and it is a legal requirement for the caviar industry and food operators.

All primary sturgeon caviar containers (the containers in direct contact with the caviar, such as tins, jars or boxes), regardless of their size, have to bear a CITES label with details about the source of the caviar.

This applies to packaging and re-packaging

caviar from all sturgeon species (including hybrids), from wild as well as farmed origin, to commercial as well as non-commercial purposes, and to domestic as well as international trade. The non-reusable label is to be affixed by a processing or (re-)packaging plant. The label must either seal the container or the caviar must be packaged in such a manner as to permit visual evidence of any opening of the container, and it must not be possible to remove it undamaged or transfer it to another container. There are no requirements as to how labels should look visually, but they must contain the information outlined below (the following picture shows a good example of a label).



THE LABEL FOR CAVIAR CONTAINERS MUST INCLUDE THE FOLLOWING INFORMATION:

- STANDARD SPECIES CODE (THREE-LETTER CODE FOR THE IDENTIFICATION OF STURGEON SPECIES, HYBRIDS AND MIXED SPECIES;
- SOURCE CODE OF THE CAVIAR OR SPECIMEN ("W" FOR STURGEON HARVESTED FROM THE WILD; "C" FOR CAPTIVE-BRED STURGEON; "F" FOR CAVIAR PRODUCED FROM A FEMALE BORN IN CAPTIVITY AND WHERE AT LEAST ONE PARENT ORIGINATED IN THE WILD);
- CODE FOR THE COUNTRY OF ORIGIN (TWO-LETTER ISO CODE);
- YEAR OF HARVEST OR REPACKAGING;
- OFFICIAL REGISTRATION CODE OF THE PROCESSING OR REPACKAGING PLANT (ISSUED BY THE NATIONAL CITES MANAGEMENT AUTHORITY; FOR REPACKAGING, THIS CODE INCORPORATES THE ISO TWO-LETTER CODE OF THE COUNTRY OF REPACKAGING IF DIFFERENT FROM THE COUNTRY OF ORIGIN);
- LOT IDENTIFICATION NUMBER (CAVIAR TRACKING SYSTEM USED BY THE PROCESSING OR (RE-)PACKAGING PLANT), OR CITES EXPORT PERMIT OR RE-EXPORT CERTIFICATE NUMBER.

If a primary container of sturgeon caviar does not carry a CITES label, or the label does not contain the above information, the caviar is illegal and may be seized by relevant law enforcement authorities.

There is evidence that labelling requirements

(non-reusable; sealing the container or allowing visual evidence of any opening) are not always met and cases of forged labels have been reported repeatedly. The use of DNA analysis has shown that considerable amounts of mislabelled and mixed caviar have been available for purchase.

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CITES SPECIES CODES FOR ALL STURGEON SPECIES

CITES SPECIES CODE	SCIENTIFIC NAME	ENGLISH NAME
BAE	Acipenser baerii	Siberian sturgeon
BAI	Acipenser baerii baicalensis	Baikal sturgeon
BVI	Acipenser brevirostrum	Shortnose Sturgeon
DAB	Acipenser dabryanus	Yangtze Sturgeon
FUL	Acipenser fulvescens	Lake Sturgeon
GUE	Acipenser gueldenstaedtii	Russian Sturgeon
MED	Acipenser medirostris	Green Sturgeon
MIK	Acipenser mikadoi	Sakhalin Sturgeon
NAC	Acipenser naccarii	Adriatic Sturgeon
NUD	Acipenser nudiventris	Ship Sturgeon
OXY	Acipenser oxyrhynchus	Atlantic Sturgeon
DES	Acipenser oxyrhynchus desotoi	Gulf Sturgeon
PER	Acipenser persicus	Persian Sturgeon
RUT	Acipenser ruthenus	Sterlet
SCH	Acipenser schrenckii	Amur Sturgeon
SIN	Acipenser sinensis	Chinese Sturgeon
STE	Acipenser stellatus	Stellate Sturgeon
STU	Acipenser sturio	European Sturgeon
TRA	Acipenser transmontanus	White Sturgeon
DAU	Huso dauricus	Kaluga Sturgeon
HUS	Huso huso	Beluga Sturgeon
SPA	Polyodon spathula	American Paddlefish
GLA	Psephurus gladius	Chinese Paddlefish
FED	Pseudoscaphirhynchus fedtschenkoi	Syr-darya Shovelnose Sturgeon
HER	Pseudoscaphirhynchus hermanni	Small Amu-dar Shovelnose or Dwarf Sturgeon
KAU	Pseudoscaphirhynchus kaufmanni	Large Amu-dar or False Shovelnose Sturgeon
ALB	Scaphirhynchus albus	Pallid Sturgeon
PLA	Scaphirhynchus platorynchus	Shovelnose Sturgeon
SUS	Scaphirhynchus suttkusi	Alabama Sturgeon
MIX	Mixed species (for 'pressed' caviar exclusively)	
YYYxXXX	Hybrid specimens: code for the species of the male x code for the species of the female	



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature

danube-sturgeons.org

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