



Sturgeons and wildlife crime



Evidence for trafficking of critically endangered sturgeon
in the Lower Danube Region

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Sturgeons are more critically endangered than any other group of species

- Destruction of important habitats
- Blocking of migration routes
- Overfishing and illegal trade





Trade in sturgeons

- All sturgeon species listed in CITES (mainly in App II, few species in App I) - international trade is strictly regulated (zero trade quota for wild sturgeons from shared stocks)
- Special regulations for caviar - universal labelling system to allow identification of source:
 - for wild-sourced & farmed caviar, in international & domestic trade
 - label must seal container (or other visual evidence of any opening)
 - label must be non-reusable (not removed undamaged or put on other tin)
 - label must provide a minimum amount of information (CITES code)

Trade in sturgeons - caviar labelling





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Poaching and illegal trade

- Sturgeon fishing is banned in key source areas (Caspian Sea, Black Sea & Danube,...)
- Production from aquaculture increased (> 90% of legal sturgeon trade)
- Mainly just anecdotal information, substantiated data missing
 - > largely unknown & probably underestimated threat





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LIFE project: Sustainable protection of lower Danube sturgeons by preventing and counteracting poaching and illegal wildlife trade

2016-2020

Lower Danube and
NW Black Sea coast

- Serbia
- Bulgaria
- Romania
- Ukraine





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Poaching and illegal trade - market survey

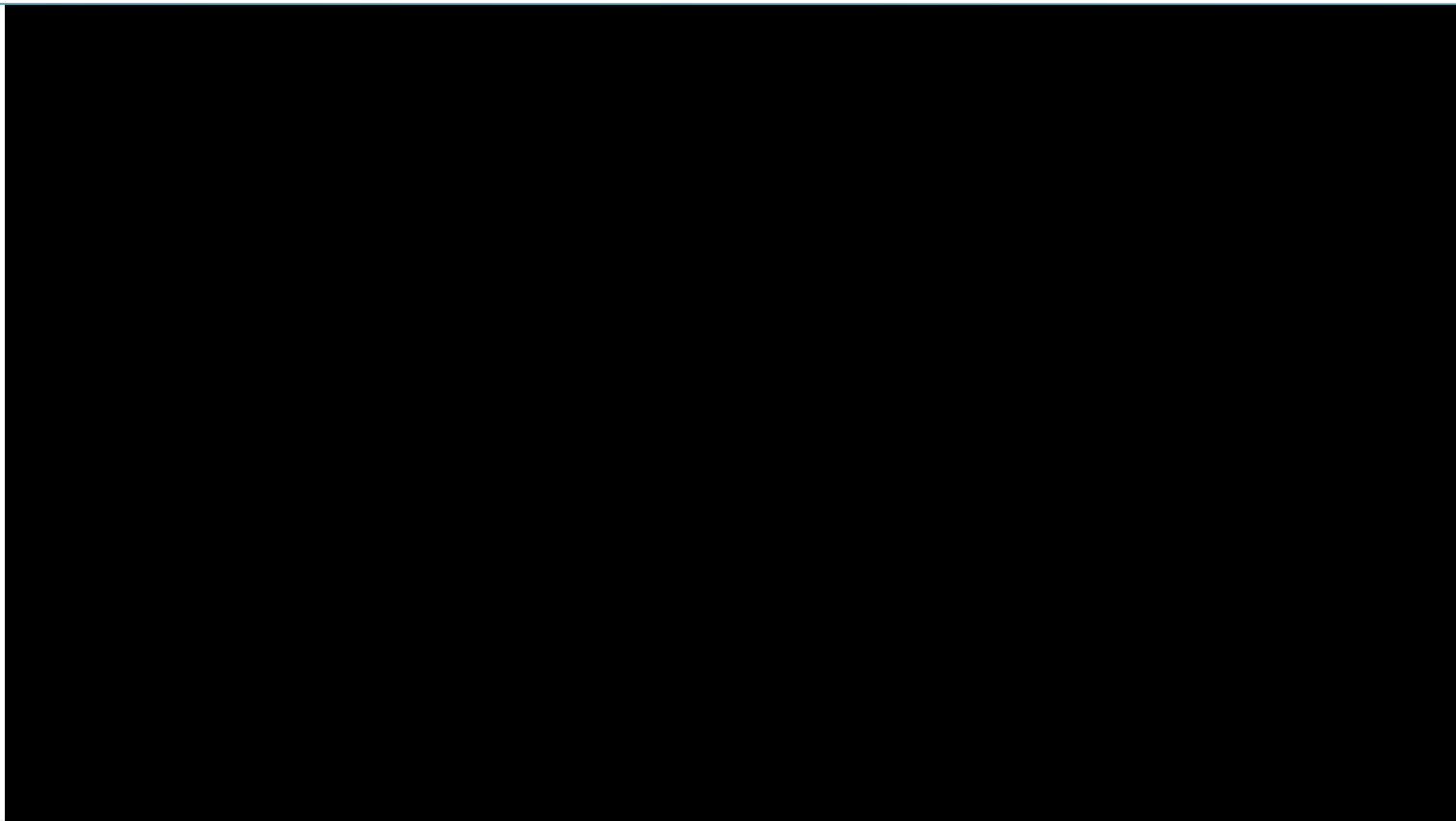
- 145 sturgeon meat & caviar samples
- Collected in an undercover approach
- From markets, shops, restaurants, street vendors, online trade, etc.
- In Serbia, Bulgaria, Romania and Ukraine (+ 3 samples of Bulgarian caviar bought in London, Brussels and Geneva)





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Poaching and illegal trade - Zemun market, Belgrade, 2018





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Poaching and illegal trade - forensic analysis

- Analyses of isotope composition to determine
 - source (wild <-> captive-bred): Carbon, Sulphur, Nitrogen
 - geographic region of origin: Hydrogen, Oxygen
- Analyses of genetics to determine sturgeon species or hybrid (+ if sturgeon)





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Poaching and illegal trade - results I

44 samples were sold illegally - 30% of all samples

27 samples from wild-caught sturgeons - 19% (in all 4 countries; 2 caviar, 25 meat - incl. the undersized Sterlets from Serbia)

17 samples of caviar violating CITES Regulations (smuggled, without CITES labels, mislabelled) - 12% of all samples,
29% of all caviar

Fraud (caviar imitations, wrong species of sturgeon,
other fish...)





Falsely declared products misleading consumers – results II

- **3 tins with fake “caviar”, 3 meat samples from “sturgeon soup” were European Catfish or Nile Perch**
- 20 samples were sold as wrong sturgeon species (e.g. sold as Beluga but in fact Russian sturgeon – but also vice versa)
- „white-washing“: **1 sample** sold as farmed was determined as from wild-caught sturgeon
- „black-washing“: 25 samples sold as wild were determined as farmed



Poaching and illegal trade – official seizure data from authorities

- Romania, Bulgaria and Ukraine
- 2016-2020:
 - At least 214 further cases of illegality reported
 - Bulgaria: 594 pieces of illegal hook lines, adding to > 23,5 km!
 - Minimum of 602 individual sturgeon
- 2021: 57 cases (incl. seizure of a minimum of 178 individual sturgeon and 154 illegal hook lines)
- Completeness & type of data varied but results underline the significance of the threat





Recommendations & urgent needs

- Further market surveys in range states, producer and consumer countries
- More controls along the whole trade chain
- Both isotope and DNA testing - source and species
- Increased law enforcement - resources, capacity, forensic technology, cooperation
- Caviar labelling system enhanced and applied on domestic markets





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Biggest successes

- Good cooperation with fishermen, law enforcement agencies & market actors established
- 1st time estimate of amount and types of illegal trade
- Policy:
 - Sterlet catch ban in Serbia
 - Customs in Ukraine started CITES controls
 - Permanent catch ban in Romania, 10 yrs extention in Bulgaria
- Fishermen report and release sturgeon bycatch





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More information

- LIFE project, activities, information material & results: danube-sturgeons.org
- Sturgeon trafficking survey: <https://danube-sturgeons.org/wp-content/uploads/2021/04/Market-survey-web.pdf>
- Caviar labelling: <https://danube-sturgeons.org/wp-content/uploads/2018/11/Brochure-Caviar-Labeling.pdf>
- Legal framework for sturgeon protection: <https://danube-sturgeons.org/wp-content/uploads/2020/10/Brochure-Legal-Framework-for-Sturgeon-Protection-1.pdf>