

Fauna & Flora International

13<sup>th</sup> April 2020

### **FFI's activities and the discovery of 2 Ship Sturgeons in the Rioni River, Georgia.**

Fauna & Flora International (FFI) is a wildlife conservation organisation working in over 40 countries worldwide. The Caucasus programme has FFI's only sturgeon conservation project. The project focusses on Georgia and covers the eastern Black Sea and the river holding the last reported spawning grounds in the region – the Rioni River. The project started in 2017 and it expected to be one of FFI's main conservation projects for the years to come.

Conservation activities are in line with the Pan European Action Plan for Sturgeon and include:

- training law enforcement authorities on CITES, illegal wildlife trade, SMART patrolling and sturgeon supply chains and identification;
- working with a team of 8 'FFI citizen inspectors' who patrol 92 kilometres of the Rioni River from the Black Sea until the spawning grounds;
- reporting any illegal equipment and activity to the authorities;
- offering support on the river to official inspectors of the Environmental Supervision Department of Georgia's Ministry of Environmental Protection and Agriculture to help detect and confiscate illegal equipment;
- working in close collaboration with river fishers to collect data on sturgeon and other fish species;
- training local students to become sturgeon scientists and conservationists;
- conducting research on sturgeon genetics, recruitment and ecology;
- monitoring illegal trade and report illegal activities;
- development of molecular markers to enable genetic identification of traded sturgeon meat;
- establishment of Youth River Council and River Council to raise awareness in the region, ensure regular information exchange, encourage the development of a sense of local ownership of the river and its resources;
- organising sturgeon festivals, citizen science projects, beach clean-ups with schoolchildren and local community members;
- advising the Ministry of Environmental Protection and Agriculture as well as international financial institutions on river management and economic development that impacts sturgeon;
- working with municipalities to encourage better river management;
- visiting fish farms to map sturgeon meat production and supply chains
- putting Georgian sturgeon conservation on the agenda of international Black Sea meetings.

Some of the work is done in collaboration with WWF Caucasus, which has been working on sturgeon conservation in Georgia for many years and which is lobbying for the inclusion of crucial sturgeon habitat in the network of Protected Areas of Georgia.

With the generous support of our donors and key sturgeon scientists such as Radu Suciu (formerly Danube Delta National Institute in Tulcea, Romania), Thomas Friedrich (BOKU Vienna, Austria), Leonardo Congiu (University of Padova, Italy) and Jörn Gessner (IGB Leibniz Institute of Freshwater

Ecology, Germany), who have trained our students and who are providing advice, we have been able to ensure that our project has quickly grown from a small project without any previous experience to a meaningful, visible project with competent staff members that is drawing attention in Georgia and abroad.

According to the literature, Georgian waters should hold six species of sturgeon, all Critically Endangered:

- *Huso huso* (Beluga)
- *Acipenser sturio* (European sturgeon)
- *Acipenser nudiventris* (Ship sturgeon)
- *Acipenser stellatus* (Stellate sturgeon)
- *Acipenser gueldenstaedtii* (Russian sturgeon)
- *Acipenser persicus colchicus* (Colchic sturgeon, taxonomic/genetic status under discussion and sometimes considered to be *A. gueldenstaedtii*)

Every now and then, the FFI team finds evidence of the presence of Beluga, Stellate, Russian, and Colchic sturgeons. Genetic samples, measurements and photographs are taken by our team members and supporters whenever possible. Coastal fishermen report findings of sturgeon to us and collect samples for genetics analysis.

So far, our team has never found any evidence for the presence of European sturgeon.

The Rioni River was the only river reported to still be a functional spawning river in the eastern Black Sea region; however, no scientific articles have been published on Rioni recruitment for decades and there was no evidence recruitment was still happening.

However, in 2018, the FFI team with students from Ilia State University (Tbilisi, Georgia) captured two Young of Year sturgeons in the Rioni River and another Young of Year was captured in 2019. The juveniles were captured using trammel nets in the lower Rioni and were tentatively identified as Stellate and Russian sturgeons (unpublished data, articles in preparation). Despite fishing activity with drift nets to collect sturgeon larvae and eggs, the team has so far been unsuccessful in detecting any larvae or eggs.

On 16<sup>th</sup> March 2020, the FFI team recorded a Ship sturgeon for the first time. The sturgeon was captured by a local fisher in the Rioni River, near the village Patara Poti, using a rod with a worm as bait. The fish was caught at 08:50 o'clock in the morning at a distance of 10-15 metres to the bank at an estimated depth of 2 metres. The Total Length reported was 32 centimetres and we estimate it to be approximately 2 years old (this can be debated).

The fisher called one of FFI's Citizen Inspectors, who took photographs and collected a fin clip. The fish was then released into the water. An [interview](#) with the fisher, FFI's sturgeon conservation officer Janeli Rogava, our citizen inspector, and our sturgeon scientist (PhD student Tamar Edisherashvili) attracted over 575,000 views on Facebook and Youtube in Georgia.

On 7<sup>th</sup> April 2020 we received another call from a fisher who had seen our video; he captured a young ship sturgeon as well and had recognised the fish as a ship sturgeon that he had seen in the video. The fish was caught with a rod and a worm as bait; at 5 metres from the bank at a depth of 4 metres, at the bottom of the Rioni River near the village of Chaladidi at 5 o'clock in the afternoon.

Total Length was 20 centimetres – estimated age approximately 1 year. Photos, videos, and a genetic sample were taken by an FFI supporter.

We are very excited about the discovery of these two specimens as none of our team members had ever found any evidence that the Critically Endangered species was still extant in the Rioni River. The presence of young specimens also indicates that the species is likely still spawning in the river.

For any questions regarding our conservation and research activities, our upcoming scientific publications, and our data, please contact Fleur Scheele, Programme Manager Caucasus for Fauna & Flora International, at [fleur.scheele\[at\]fauna-flora.org](mailto:fleur.scheele@fauna-flora.org)

Photograph 1.

*Acipenser nudiiventris* captured on 19<sup>th</sup> March 2020 in Patara Poti, Rioni River.



Photograph 2.

*Acipenser nudiiventris* captured on 7<sup>th</sup> April 2020 in Patara Poti, Rioni River.



