

Interspecific Hybridization in Natural Sturgeon Populations of the Eastern Black Sea: The Consequence of Drastic Population Decline

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Abstract : The eastern part of the Black Sea and its tributaries are suitable habitats for several sturgeon species, among which *Acipenser gueldenstaedtii*, *A. stellatus*, *A. nudiventris*, *A. persicus*, *A. sturio*, and *H. huso* are well documented. However, different threats have led these species to a dramatic decline; all of them are currently listed as Critically Endangered and some Locally Extinct in that area. We tested 94 wild sturgeon samples from the Black Sea and Rioni River by analyzing the mitochondrial Control Region and nuclear markers for hybrid identification. The data analyses (1) assessed mitochondrial diversity among samples, (2) identified their species, as well as (3) indicated instances of hybridization. The data collected, besides confirming a sharp decrease of catches of Beluga and Stellate sturgeon in recent years, also revealed four juvenile hybrids between Russian and Stellate sturgeon, providing the first evidence of natural interspecific hybridization in the Rioni. The present communication raises concerns about the status of sturgeon species in this area and underlines the urgent need for conservation programs to restore self-sustaining populations.

Keywords : black sea, sturgeon, Rioni river, interspecific hybridization

Conference Title : ICBECME 2022 : International Conference on Biodiversity, Ecology and Conservation of Marine Ecosystems

Conference Location : London, United Kingdom

Conference Dates : March 11-12, 2022