

Silviya Ivanova - AFS-OC President-Elect Candidate



Silviya inherited the love and desire to care for the natural world from her mother and took the curiosity to explore, ask questions, and seek answers from her father. Working on a passenger cruise ship in the Caribbean Sea in 2001, she developed keen interest in the ecology of aquatic animals. After a career in print media, Silviya returned to school in 2011 to chase a dream and in 2014 completed an Honours BSc with a double major in Biological Sciences and Communications, Media, and Film at the University of Windsor. During her Master's studies with Dr. Aaron Fisk, at the University of Windsor, she discovered her passion for research and went on to complete a PhD in Environmental Science in 2021, with both Dr. Fisk and Dr. Tim Johnson, Ontario Ministry of Natural Resources and Forestry.

For her Master's degree, Silviya worked with members from the indigenous community of Resolute Bay, Nunavut, in the Canadian high Arctic to address their concerns of the effects shipping vessels have on fish, and thus their subsistence hunting and fishing. Silviya also spearheaded the effort of improving communication and working relationships between indigenous community members and non-resident scientists. Silviya was able to establish meaningful relationships based on trust and respect through participation in day-to-day life and cultural activities in the community. She involved residents in her research and led workshops at the school for all ages. Those relationships were instrumental for the year-round collection of data on ice conditions and shipping traffic that involved regular maintenance of the equipment. Furthermore, as part of her thesis, Silviya led the production of a documentary film which incorporated Inuit Traditional Ecological Knowledge and aimed to communicate the research findings to a broader audience. She was responsible for all aspects of the production (e.g., planning, scripting, budgeting, scheduling, videography, editing), including leading a team of cinematographers and animators to complete the project alongside the scientific research.

Upon her thesis completion, Silviya helped organize and coordinate the Lake Erie Millennium Network conference in 2017. This allowed her immersion in Great Lakes research and issues and led to her dissertation concerned with ecosystem health. For this research, Silviya explored the causes (i.e., species interactions, fish energy budgets and changing climate) that may be limiting a species under rehabilitation from establishing self-sustaining populations. Silviya once again involved the public through a tag-return program that included a media campaign to raise awareness and gain attention and cooperation.

Overall, Silviya has a strong background in spatial and temporal ecology of fish and has worked with a number of fish species in the Arctic, the Great Lakes, and the Azores Islands. Her research interests span anthropogenic influences, species and ecosystem management, behaviour, species interactions, bioenergetics, patterns and mechanisms of evolution, telemetry, and machine learning modelling techniques. Silviya is currently a Postdoctoral Researcher at the University of Windsor and has undertaken a large fish telemetry data synthesis project that includes US and Canadian partners from both academia (Carlton University, Trent University, University of Windsor) and government (OMNRF, USGS, USFWS, DFO). The results of this project will inform both applied and theoretical science.

Outside of work, Silviya spends most of her free time paddleboarding, snorkelling and skiing with her daughter Isabelle and/or friends.