

## **2022 NASPS Student Subunit Governing Board**

**Will Bugg – President**

**University of Manitoba**



My research involves the use of aquaculture and physiology as conservation tools, aiding the hatchery rearing and recovery of Lake Sturgeon populations in Manitoba, Canada. Specifically, research focuses on physiological responses to hatchery and environmentally relevant stressors including hatchery rearing techniques, cold and heat induced thermal stress, as well as immune responses of larval Lake Sturgeon. Measurements of transcriptional activity in addition to a variety of other physiological parameters are used to determine the effect of environmental stressors on molecular and phenotypic responses across northern and southern populations of Manitoba Lake Sturgeon.

**Madison Earhart – Vice President**

**University of British Columbia**



I'm a PhD candidate at UBC focused on the conservation of fish. During my masters, I studied the development of the stress response in larval Lake Sturgeon, a threatened species native to Manitoba. Now in my PhD, I am investigating how developmental environments influence genomic, transcriptomic and epigenetic responses as well as physiology of fish. Specifically, I am interested in the effects of domestication through hatchery-rearing, in multiple species of fish including Rainbow Trout, White Sturgeon and Coho Salmon. The goals of my PhD are 1) to identify the underlying genetic mechanisms driving the differences between domesticated and wild fish and 2) to make beneficial changes to hatcheries to ensure the success of released fish in a warming world.

**Jenna Drummond – Secretary**  
**University of Manitoba**



My name is Jenna Drummond and I am a master's student in Gary Anderson's lab at the University of Manitoba studying lake sturgeon gastrointestinal tract physiology. During 2021 I served as a Member at Large on the NASPS student subunit and enjoyed having a direct role in promoting the conservation and restoration of sturgeon and paddlefish species. Therefore, for 2022 I am running for the Secretary position in order to have an increase in responsibility on the student subunit. Organizational skills are valuable in this position to effectively keep track of what occurs during meetings and to keep up to date with member registration. I believe that I have the organizational skills required for the Secretary position along with the drive to take part in fostering the exchange of knowledge between sturgeon and paddlefish enthusiasts.

**Peter Johnson - Treasurer**

**University of California, Davis**



My name is Peter Johnson and I'm a PhD student at UC Davis interested in applying genetic techniques to wildlife conservation. My work pertains to the white sturgeon population the upper Columbia River, which has exhibited recruitment failure for the past several decades. A conservation program collects eggs and larvae from natural spawning events, rears them in captivity, and repatriates them as juveniles when survival is improved, restoring age class structure and preventing extirpation. To preserve the population's pool of heritable diversity, beyond what can be detected with current genetic resources, it is imperative that repatriation year classes represent high numbers of wild adults. To quantify this representation through time, I am estimating the number of spawners that produced recent year classes by delineating sibling groups within them, using SNP genotype data and the program Colony. As each sibling group represents two unique spawners, this method enables robust spawner count estimates.

**Kaitlynn Weisgerber – Member at Large**  
**University of Manitoba**



I am a MSc student at the University of Manitoba in the Anderson lab working on determining and manipulating ploidy in Lake Sturgeon. I am passionate about aquatic conservation and holding as many fish as possible in one lifetime. I am confident that my passion and academic excellence would continue to flourish on the student subunit and be an asset to my fellow members. While grad school affords many opportunities, serving on this board is one which I esteem most highly.

**Morgan Anderson – Member at Large**

**University of Manitoba**



I'm a first-year Masters student in the Anderson lab at the University of Manitoba, Canada. My background is in neuroscience but I've switched paths for my current project by using environmental DNA (eDNA) to track the spatial and temporal distribution of Lake Sturgeon. I hope to continue my eDNA Sturgeon research to develop methods for early gamete detection.

**Maxwell Kleinhans – Member at Large**

**University of Georgia**



My name is Max Kleinhans. I grew up in western Wisconsin near the Mississippi River where I was lucky enough to occasionally encounter a Lake Sturgeon or Paddlefish when out fishing or canoeing on the big river's tributaries. After a number of seasonal jobs in fisheries and aquatic invasive species following my undergraduate degree at UW-Madison, in 2017 I started working with the University of Georgia Sturgeon Lab as a technician. I've returned to the UGA's Sturgeon Lab a few times since, with a brief hiatus to chase salmonids for a season with Wyoming Game and Fish and a year or so with UGA's River Basin Center working with imperiled stream fishes and amphibians. I am currently in year two of a master's degree with the Warnell School at UGA studying Shortnose Sturgeon recruitment and how Atlantic Sturgeon catch varies with shifting water quality conditions in the Altamaha River estuary on the Georgia coast.

**Alaina Taylor – Member at Large**

**University of Manitoba**



I am pursuing my master's at the University of Manitoba where I study Lake Sturgeon fin ray microchemistry. I would love to join the NASPS Student Subunit so that I can connect with other students in the field. During undergrad, I was involved with various student organizations including the Bemidji American Fisheries Society Subunit (President), the Wildlife Society Subunit (Member) and the Natural Resources Club (Treasurer). I loved meeting with other students and volunteering with them. Some fun facts about me: I love identifying fish and invertebrates, listening to music, and reading.