## Growing Michigan aquarium and water garden retailers and hobbyists' knowledge of aquatic invasive species through the Reduce Invasive Pet and Plant Escapes program

Michigan State University Extension has been working in collaboration with state agencies to raise awareness of aquatic invasive species available in the aquarium and water garden industry. Non-native aquatic plants and animals introduced through trade pose a significant ecological and economic threat to Michigan waterways. To address this, we developed the research-based outreach program Reduce Invasive Pet and Plant Escapes (RIPPLE) to educate retailers and hobbyists about safe handling and disposal practices. Since 2015 over 125 pet and garden retailers, hobbyist clubs, nature centers, zoos and school districts have become RIPPLE partners. Partners receive aquatic invasive species identification and reporting resources as well as an outreach kit with materials for display and distribution. To ensure the program was meeting the needs of our primary target audience and to assess our outreach efforts we surveyed all independently owned pet and garden retailers in Michigan. The survey has been conducted twice, once in 2017 and again in 2022. The survey evaluated retailers' knowledge of aquatic invasive species, current behaviors, attitudes regarding their responsibility, and their willingness to participate in education programs like RIPPLE. Utilizing these survey results we are enhancing the RIPPLE program to empower our program partners and designing new outreach materials that align with their knowledge and behaviors.



## Paige Filice

Paige Filice is a natural resources educator with Michigan State University Extension and she promotes the wise use, protection, and restoration of Michigan's freshwater ecosystems through various partnerships and educational programs. Her main responsibilities include coordinating the aquatic invasive species education programs RIPPLE (Reduce Invasive Pet and Plant Escapes) and Clean Boats, Clean Waters, and she co-leads the Introduction to Lakes Online course. She has an M.S. in Fisheries and Wildlife from Michigan State University and a B.A. in Conservation Leadership from Lake Superior State University.