

## Using animal behavior to engage the public in a conversation about ocean literacy

Moorhead Minnesota is positioned in the center of the North American continent, at least 2000 km in any direction from the ocean. The Minnesota State University Moorhead (MSUM) Oceanarium is a living marine laboratory that serves as a resource for a variety of biology courses at MSUM

(<https://www.facebook.com/MSUMOceanarium>).



Post-covid, we began to expand and market it as an outreach facility for local and regional K12 communities and the general public. The response has been very strong. Each year we host thousands of people of all ages and walks of life interested in experiencing marine life and learning about oceans.

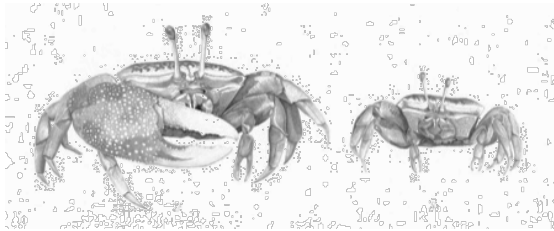


We started a summer program for area youth aged 9-14 called Junior Aquarist Camp for Kids (JACK). JACK is the most popular program in MSUM's summer College for Kids.



The MSUM Oceanarium is funded through proceeds from tours, JACK, and fundraising. The facility is maintained by MSUM students supervised by the Oceanarium Facility Coordinator, Katie Hanson. We created an internship program for college credit and a Marine Aquarist Certificate to allow students in our region with an interest in a career in the marine sciences to start at MSUM without having to move to one of the coasts for their undergraduate degree.

The next phase of our growth (and the subject of our ABS Outreach Grant Proposal) is to expand on passive outreach to K12 students who visit MSUM, to now include active outreach where MSUM students travel to local schools to present curricula about ocean literacy. The star of this effort will be the fiddler crab (*Uca spp.*) because they are hardy, and highly engaging creatures.



We are working to adapt an undergraduate lab from the Animal Behavior course taught at MSUM to K12 teaching standards in Minnesota and neighboring North Dakota. Our goal is to engage K12 students in concepts such as sexual selection, how to quantify behavior to test a question, how the behavior of fiddler crabs is adapted to the environment where they live, and to increase general awareness of marine habitats to a population of people who rarely have direct access to oceans.

This project is a collaboration among Brian Wisenden (MSUM), Sekhar MA (North Dakota State University) and Katie Hanson (MSUM).

