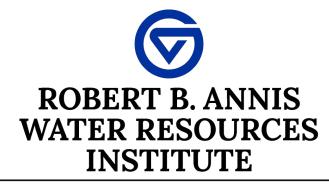


## Freshwater Outreach Program

Research & Education Vessel Use Report 2025

Founded in 1986, the Robert B. Annis
Water Resources Institute (AWRI) has
a mission to integrate research,
education, and outreach to enhance
and preserve freshwater ecosystems.
The outreach program has been key to
fulfilling that mission.



**GRAND VALLEY STATE UNIVERSITY®** 

# 2025 by the Numbers

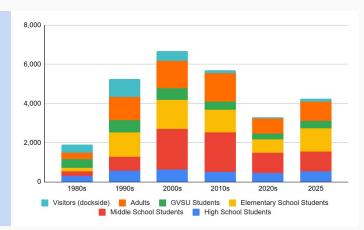
The outreach program offered **205 cruises** in 2025. **Over 4000 visitors from 101 groups** experienced aquatic science on the *D.J. Angus and W.G. Jackson*.

Groups on the vessel included public, private, charter, and parochial schools, as well as homeschool co-ops and informal learning groups like camps and scouts. Colleges and universities also participated, including **7 GVSU courses**, 3 additional GVSU departments and events, and 5 other regional institutions of higher learning.

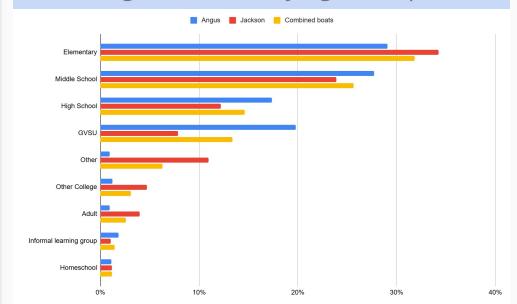
Groups visited the vessels from 13 Michigan counties. We also welcomed 2 statewide groups and 2 international groups.

For more detailed information about the outreach program's reach, please contact:
Christina Catanese, AWRI Education Specialist, at <a href="mailto:catanesc@gvsu.edu">catanesc@gvsu.edu</a>

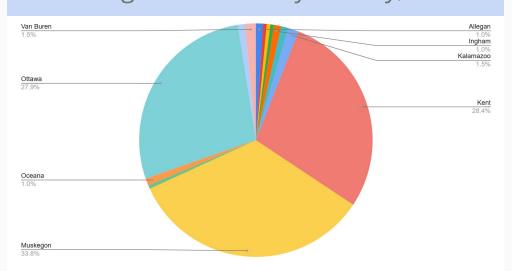
2025 Total Passengers on Cruises, compared to decade averages



#### Percentage of Visitors by Age Group, 2025



#### Percentage of Cruises by County, 2025



Feedback from 2025 cruise participants: "Thank you for making science come alive!" "Love the hands-on. Gets more kids interested in science." "Students learn a lot in a small amount of time." "Combines both 'learning by doing' and very detailed lectures exploring core concepts...an unparalleled opportunity for learning!" "Our students used math, science, and team building skills to critically think of systemic problems in our community and the causes and effects, enabling them to be agents for positive change."



### Program Highlights

The outreach program reached a big milestone this year: 200,000 passengers since AWRI started offering aquatic science cruises in 1986! The lucky group containing the 200,000th passenger was Fruitport Middle School. These sixth graders were welcomed back to the dock by AWRI staff with prizes to celebrate. Fruitport has brought students to AWRI nearly every year since 2006. Here's to the next 200,000 people onboard!



We continued to grow the science career connections made during our programs. Every landside program included a visit from an AWRI scientist, allowing many students to meet a real scientist for the first time. 16 individual scientists from 9 AWRI labs participated. Faculty, lab staff, and graduate students created many ways to bring their work to life for the students (such as an activity from the Jones lab using legos to explore limiting resources in lakes) and shared insights on what being a scientist is like.



The W.G. Jackson visited the Michigan Maritime Museum in South Haven this summer, a new partnership for AWRI. The Museum offers tall ship and boat cruises with a historical focus. AWRI was their first visiting research vessel offering a science angle to maritime history and careers.



AWRI Science Instructors took a field trip to the Hammond Bay Biological Research Station in Alpena, MI. They learned more about research efforts to control the invasive sea lamprey. On all cruises, we discuss the devastating effects of this invasive species on the Great Lakes food web, but with this field trip, our team experienced the lamprey's parasitization of lake trout first hand!

Thanks to a grant from NASA's GLOBE program, we upgraded the water monitoring and learning supplies used in our landside programs and at offsite community events. We cast aquatic macroinvertebrate specimens in resin, giving students a unique up-close look at these important water quality indicator species. The transportation grant for Muskegon schools from the Howmet Foundation was also renewed for another two school years.



"Personal stories linked to learning objectives." "The vessels are an invaluable contribution to the next generation of professional scientists in Michigan." "This trip connects to many of our classroom lessons and brings them to life." "Love that they get to be real scientists contributing to data collection." "Demonstrated the invaluable nature of long-term data." "Loved tying in history, geography, ecology and other fields of study." "What an incredible experience for our students to see how science is applied in the real world."

## Annis Water Resources Institute Aquatic Science Field Trips

Over 200,000 people reached since 1986



Our programs connect people in West Michigan with local waters through experiential learning.

Offered onboard GVSU's research vessels *D.J. Angus* (docked in Grand Haven) and *W.G. Jackson* (docked in Muskegon), the program serves classes, youth groups, and other organizations.

Boat trips for 4th grade through adults run from April to October. Land-based programming is also available in Muskegon for kindergarten and above.

For school groups, these experiences are easily integrated with science curricula to meet state standards.

Visit our website to learn more and find out how to schedule a trip!

https://www.gvsu.edu/wri/education/

