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## Great Lakes Victory Tour for Ocean Science Bowl Team

Dexter High School Science Team Discovers the Wonders in their Own Backyard

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Photos by Derek Parks

When the ocean science team from Dexter, Michigan learned their prize for taking 4<sup>th</sup> place in the 2008 [National Ocean Sciences Bowl](#) would be a four-day tour of their home state, the irony was not lost on them. However, it was quickly overshadowed by their excitement at having placed so highly in this prestigious national science competition.

This team of four boys and one girl from Dexter High were not expecting to make it this far. Despite being favorites at the regional competition in Ann Arbor, the competition from larger, coastal schools during the April finals in Seward, Alaska was stiff.



*Dexter High School's Ocean Sciences Bowl Team (from L to R): Will Grundler, Casey Hall, Chris Henes, Jon Wike (Assistant Coach), Justin Wike, James Priestley, and Team Coach Cheryl Wells at Lake Huron.*

Coming from an inland state, the Dexter students entered this competition as underdogs and they knew it. "I think the fact that we were not expecting to get very far kept us more relaxed than the other teams. They were putting a lot of pressure on themselves," said Dexter team member Will Grundler. "When we weren't competing, we were out exploring the natural areas around Seward. The other teams were getting together for last-minute cramming sessions. We kind of felt it was more important to enjoy ourselves."

The Dexter team earned the right to enjoy themselves at the finals. Over the past year, the team put in daily extra-curricular study time under the guidance of their Coach and science teacher, Cheryl Wells.

This wasn't Mrs. Wells' first time at the National Ocean Sciences Bowl, or NOSB, as it is known; she knew it would take a lot of work for her team to be successful. Mrs. Wells created sample tests and gathered background reading materials from books and the internet on subjects as varied as ocean and great lakes ecosystems, geology, biology, history, policy, and even literature.

“We started getting ready about a year before the competition,” said Mrs. Wells. “Whenever we couldn't answer a question, we went to the [National Oceanic and Atmospheric Administration \(NOAA\)](#) websites to get the answers and to find more background material. There is a whole bunch of good information on those sites.”

After the finals, the team returned home to finish out the school year, but the fruits of their labor continued. In July, the [Cooperative Institute for Limnology and Ecosystems Research \(CILER\)](#) and NOAA's [Great Lakes Environmental Research Laboratory \(GLERL\)](#) organized a four-day science-based tour of Michigan's Great Lakes to reward the Dexter team for their 4<sup>th</sup> place finish.

The trip started in Ann Arbor where the team boarded vans at GLERL for the first leg of the journey to the Thunder Bay Marine Sanctuary in Alpena, MI. The [Thunder Bay National Marine Sanctuary](#) was established to protect a nationally significant collection of over 100 shipwrecks, spanning over a century of Great Lakes shipping history. While at Thunder Bay, the team received a guided tour of the facility and their brand new shipwreck exhibit, where they learned about the history of Great Lakes shipwrecks and how the Thunder Bay Marine Sanctuary was created to preserve this valuable part of Great Lakes' history. The students were also fitted with wetsuits and snorkels for some chilly snorkeling over two of the shipwrecks located within the sanctuary.

### **National Ocean Sciences Bowl (NOSB)**

The Consortium for Ocean Leadership, representing leading oceanographic institutions universities and aquaria, manages a national academic competition for high schools on topics related to the study of the oceans -- the National Ocean Sciences Bowl (NOSB®). The NOSB was first conducted in the winter and spring of 1998 in honor of the International Year of the Ocean.

The NOSB provides an educational forum for students to excel in math and science and receive national recognition for their diligence and talents. The NOSB fosters collegiality and teamwork, competition, imaginative thinking and factual recollection. It also allows students to work side by side with experts in a wide variety of settings.

Of equal importance, NOSB excites and inspires our nation's teachers, providing them with new tools to capture the imagination of their students.

Approximately 2,000 students from over 300 high schools participated in the NOSB this year. Through this educational forum, the NOSB strives to encourage and support the next generation of marine scientists, policy makers, teachers, explorers, researchers, technicians, environmental advocates and informed citizens.



*Cathy Green (third from left), Education Coordinator for the Thunder Bay National Marine Sanctuary speaks to the Dexter High School Ocean Science Team.*



*Dexter science bowl students give the thumbs-up after snorkeling over a wreck on Lake Huron (left). The group also snorkeled over more remote shipwreck with NOAA diver Cathy Green (right).*

The group temporarily left the lakes to try their hand at canoeing and kayaking on the scenic Au Sable River in Grayling, Michigan. Although there was not much science involved, they learned valuable teamwork skills and even got in some fishing along the way.



*Casey Hall takes her first spin in a kayak while Will preps his line for some fly fishing on the Au Sable river near Grayling, Michigan.*

The last stop on the victory tour of Michigan's "Mitten" was Muskegon, where the team stayed at GLERL's Lake Michigan Field Station. While swimming in Lake Michigan, the bonfires and the s'mores were fun, the true highlight of the trip was the half day spent on a NOAA Green Ship, the R/V *Laurentian*, one of the first federal ships to operate fully on bio-based vegetable products. During the cruise, they assisted NOAA fisheries biologist Steve Pothoven, who gave them a first-hand lesson on how research is conducted on the Great Lakes.



*Dexter students on the NOAA R/V Laurentian on Lake Michigan.*

Pothoven demonstrated classic oceanographic sampling methods including sediment grabs, [zooplankton](#) net tows, [Secchi disk readings](#), and fish trawls. He showed the Dexter students how to identify fish and other small invertebrates in the water and on the lake floor and how NOAA analyzes these samples to better understand the ecology and health of the Great Lakes. In particular, the group learned how invasive species and pollution have affected the health of the lakes

After a week of driving around Michigan, living in research quarters, and dining on fast food, the students were tired, but happy. When asked about their favorite part of the trip, each student seemed to have their own personal preference. Casey Hall was happy she learned how to kayak, while the boys seemed to favor the snorkeling and digging zebra mussels from muddy lake bottom samples. The one thing they all learned, however, was to appreciate the wonders they had in their own backyard.

To learn more about the National Ocean Sciences Bowl, go to <http://www.nosb.org>. To learn more about the National Oceanic and Atmospheric Administration, go to <http://www.noaa.gov>.

#### Additional Resources:

- [Photo Gallery](#)