



# OHIO SEA GRANT



February 2018

Ohio Sea Grant is one of 33 Sea Grant college programs and is based at the Ohio State University.



A harmful algal bloom contaminated the water outside Stone Laboratory in 2015. Credit: Justin Chaffin, Ohio Sea Grant

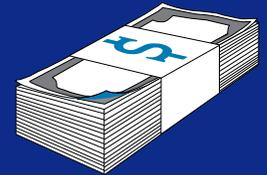
### Ohio Sea Grant researchers develop low-cost sensor to improve harmful algal bloom detection

The presence of cyanotoxins in water is an indicator for a potential harmful algal bloom. In 2016, Ohio Sea Grant researchers successfully developed a low-cost sensor that can be used by water treatment utilities to promote better water quality and provide early warning capabilities to areas prone to the damaging effects of harmful algal blooms. In 2014, a harmful algal bloom left 500,000 residents in Toledo without drinking water. Today, Ohio Sea Grant researchers continue to develop new ways to keep algal toxins out of drinking water.

[ohioseagrant.osu.edu/research/collaborations/habs](http://ohioseagrant.osu.edu/research/collaborations/habs)

## \$40.3 M

Economic benefit



## 37,000

K-12 Students reached

## 1,100

Jobs created or sustained



Metrics reported to National Sea Grant Office in June 2017 for work completed Feb 2016 to Jan 2017



RESEARCH

EXTENSION

EDUCATION

## Ohio Sea Grant conference boosts charter boat industry operations and profits



Participants in the 2015 Governor's Fish Ohio Day fishing tournament show off their catch.  
Credit: Jeff Reutter, Ohio Sea Grant

Ohio has the largest charter fishing fleet on the Great Lakes with almost 700 captains. Ohio Sea Grant organizes the annual Ohio Charter Captains Conference, which is designed to support regional economies through the charter industry while enhancing stewardship of the lake. Topics include marketing, business tips, marine technology, marine laws and regulations. In 2016, The Ohio Charter Captains Conference attracted 175 attendees, with 90% of captains improving their operation and 40% reporting increased profitability based on information learned at the conference.

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**“We have learned new information about the lake and the quality of our water and fishery thanks to Ohio Sea Grant. We appreciate all of the work it does to educate the public about these important environmental issues. A lot of people rely on that data and information, and they come to the lake and fish accordingly.”**

- Dave Spangler, Vice President of the Lake Erie Charter Boat Association

### Preventing the Next Water Crisis



Ohio Sea Grant is co-leading a \$5 million state-funded initiative to solve harmful algal blooms (HABs) in Lake Erie. Responding to a 2014 drinking water advisory, 30 Ohio research teams have worked to assess health risks, clean drinking water and reduce nutrient inputs, directly helping agencies prevent and manage blooms and positioning Ohio as a leader in understanding this emerging global threat.

### Slowing the Spread of Invasive Species



Over 185 aquatic invasive species (AIS) are documented in the Great Lakes, many burdening the region with tremendous economic costs. In 2016, Ohio Sea Grant educators reached about 10,000 individuals providing information on AIS and methods to help stop further spreading. Survey responders reported an increased awareness of AIS, with 93% intending to modify activities to prevent further spread.

### Shrink-Wrap Recycling Program



Every winter, boats are wrapped with a protective shrink-wrap plastic cover that is then removed and discarded in the spring. Ohio Sea Grant coordinates a shrink-wrap recycling collection in Ohio that keeps the plastic out of landfills and also reduces dumpster costs at marinas. In 2016, more than 4,000 pounds of boat shrink-wrap was recycled from Ohio marinas.