

OHIO SEA GRANT AND STONE LABORATORY

Ohio Sea Grant Aquatic Invasive Species Outreach Programs

Tory Gabriel, *Extension Program Leader & Fisheries Outreach Coordinator*
Ohio Sea Grant College Program

30 July 2015



Lake Erie Critical Issues Defined By Ohio Sea Grant

- Sedimentation
- Phosphorus and nutrient loading
- Harmful algal blooms
- Aquatic invasive species
- Dead zones
- Climate Change

Comprehensive Regional Outreach Campaign

- **Three grants secured by the Great Lakes Sea Grant Network and led by MNSG**
 - 1. Comprehensive Regional Outreach Campaign on AIS**
GLSGN (MN) from USFWS/GLRI: \$1,555,234
 - 2. Extending a Regional Outreach Campaign on AIS**
GLSGN (MN) from USEPA/GLRI: \$400,000
 - 3. Organisms in Trade Initiative – Research, Outreach and Education**
GLSGN (MN) from USEPA/GLRI: \$400,000

Comprehensive Regional Outreach Campaign

- Stop Aquatic Hitchhikers!; www.protectyourwaters.net
 - SAH targets outdoor recreationists including boaters, anglers, waterfowl hunters, recreational divers, sailors , personal watercraft users, etc.



STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net

When you leave a body of water:

- Remove any visible mud, plants, fish or animals before transporting equipment.
- Eliminate water from equipment before transporting.
- Clean and dry anything that comes into contact with water (boats, trailers, equipment, clothing, dogs, etc.).
- Never release plants, fish or animals into a body of water unless they came out of that body of water.

STOP AQUATIC HITCHHIKERS!™
Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net

Before launching and before leaving:
CLEAN, DRAIN, DRY!
Check your boat for aquatic invasive species:

Anchor and line, Bait bucket / live well, Transom well, Rollers and bunks, Axle, Lower unit

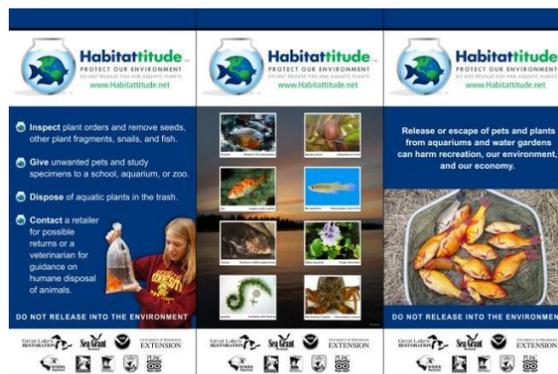
Zebra & Quagga Mussels, Hydrilla, Spiny Water Flea, Round Goby

- Remove mud, plants, fish and animals
- Eliminate water from equipment (e.g., bilge and live wells)
- Clean and dry anything that contacted water
- Never release plants, fish or animals (including bait) unless they came out of that body of water

NOAA, THE OHIO STATE UNIVERSITY, Sea Grant

Comprehensive Regional Outreach Campaign

- Habitattitude; www.habitattitude.net
 - Habitattitude targets aquarists and water gardeners, encouraging them not to release unwanted pets and plants into the environment
 - wise purchase and placement of water gardens,
 - inspection of shipments for unwanted hitchhikers,
 - rehoming of unwanted species
 - proper disposal of unwanted plants and animals.



Get Habitattitude!

Do right by your pet. Do right by our environment.

Water garden fish, snails and plants can become harmful if they escape to our lakes, rivers, ponds and wetlands.

How can you help?

- ✓ Build water gardens well away from other waters.
- ✓ Check aquatic plant orders for seeds, plant fragments, snails and fish.
- ✓ Give or trade unwanted pets and plants with another water gardener, environmental learning center, aquarium or zoo.
- ✓ Seal aquatic plants in a plastic bag and dispose in the trash.
- ✓ Contact a veterinarian or pet retailer for guidance on humane disposal of animals.



Habitattitude™

PROTECT OUR ENVIRONMENT
DO NOT RELEASE FISH AND AQUATIC PLANTS

PLJAC • U.S. FISH & WILDLIFE SERVICE • NOAA'S SEA GRANT

www.Habitattitude.net

For more information, visit:
www.seagrants.umn.edu/ais



Comprehensive Regional Outreach Campaign

- Nab the Aquatic Invader!; <http://www.iiseagrant.org/nabinvader/>
 - Teacher training and resource program which provides teachers and educators with resources to teach students about how to prevent the spread of AIS
 - Attack Packs and Teacher Workshops



Comprehensive Regional Outreach Campaign

- AIS-Hazard Analysis and Critical Control Points



- Can be applied to a variety of audiences including baitfish industries, hatcheries, fisheries management, water quality monitoring, environmental consulting, shoreland restoration, etc.
- Workshops offered periodically through OHSG
- <https://ohioseagrant.osu.edu/news/calendar/2015/08/17/81i21/ais-haccp-workshop>

Comprehensive Regional Outreach Campaign

- **Great Lakes BIOTIC Symposium (Briefs on Invasive Organisms Traded in Commerce)**

- Advance knowledge and understanding of OIT pathways
- Identify research gaps
- Facilitate efficient transfer of information to agencies, academia, industries, and non-profits



GREAT LAKES
Briefs on Invasive Organisms Traded
in Commerce (BIOTIC) Symposium

Milwaukee, WI

June 3 and 4, 2014



Synthesis papers:

- Aquaculture
- Live bait
- Specimen release
- Aquarium release
- Pathogens/disease

Presentations:

- Regulations
- Risk assessment
- Industry perspectives
- Outreach

Field Trips:

- Germantown Red Swamp Crayfish Infestation
- Mequon Nature Preserve

Comprehensive Regional Outreach Campaign

- Since 2010, 21.2 M impressions generated
- 670 talks & booths @ 270,000
- 130 products @ 1.6 M exposures
- 500 partners supported
- 1,100 social & mass media @ 17.4 M exposures
- 14 HACCP training/events @ 390 taught
- 200 Nab events taught 7,900 teachers, 37,600 youth, 17,000 service learning and 42,000 web hits @ 104,700
- Every survey and post event assessment (25+) showed raised awareness and behavior change

Clean Boats, Clean Tournaments

- Two grants secured by the Great Lakes Sea Grant Network and led by WISG
 1. Fishing tournament organizers and professional anglers: Preventing the spread of AIS
 2. Train local groups to inspect and wash fishing tourney boats

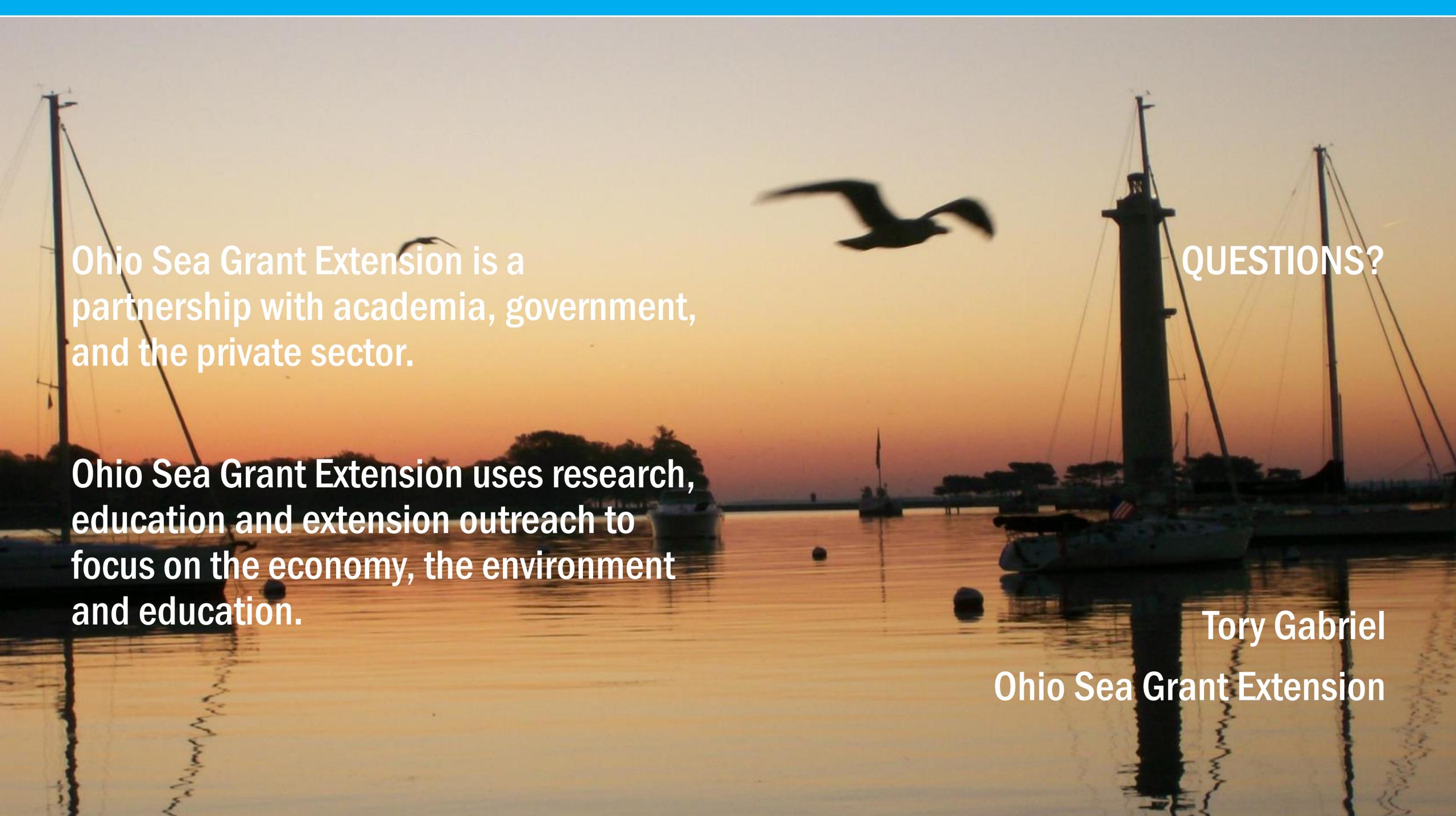


GOOD	BETTER	BEST
Clean, Drain	Clean, Drain, Dry	Clean, Drain, Disinfect
<ul style="list-style-type: none">✓ Clean off all visible mud, vegetation and other debris✓ Pull and store the Drain plug, lower your outboard to drain standing water and drain live wells before leaving the launch	<p>In addition to cleaning and draining:</p> <ul style="list-style-type: none">✓ Dry your boat and equipment in hot or sunny weather for 2-7 days before transporting them to another body of water	<ul style="list-style-type: none">✓ Use a pressure washer to spray off your boat and trailer (250psi) OR rinse off your boat and trailer with hot water (greater than 50°C)✓ To prevent the spread of VHS, rinse live wells with 10% household bleach/water solution (i.e. 100ml of bleach to 1L water). Rinse well with water to remove any residual chlorine



Sea Grant Outreach Events

- Stone Lab
- Aquatic Visitors Center
- Boat and sport shows
- Fairs
- School outreach events
- Clean Marinas Program



Ohio Sea Grant Extension is a partnership with academia, government, and the private sector.

Ohio Sea Grant Extension uses research, education and extension outreach to focus on the economy, the environment and education.

QUESTIONS?

Tory Gabriel

Ohio Sea Grant Extension