

OHIO SEA GRANT AND STONE LABORATORY

# Updates on AIS Prevention from the Recreational Boating Industry

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- Recreational Boating Industry Updates
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# NMMA and ABYC

## National Marine Manufacturers Association (NMMA)

- Nation's leading trade association representing boat, marine engine and accessory manufacturers
- NMMA members manufacture an estimated 80% of marine products used in North America.



## American Boat and Yacht Council (ABYC)

- Non-profit member organization that develops voluntary global safety standards for the design, construction, maintenance, and repair of recreational boats
- 90% of boats on the water are built to ABYC standards



# NMMA Position Paper on AIS

## NMMA Working to Promote:

- Changes in boat design
- Boater education programs
- Federal, state, and local decontamination and inspection programs

## Position:

- *“Focus on developing innovative ways to prevent AIS proliferation that still allow boaters to move their boats from one water body to another”*

<http://www.nmma.org/assets/cabinets/Cabinet521/NMMA%20AIS%20Position%20Paper.pdf>

# NMMA Position Paper on AIS

## Actions:

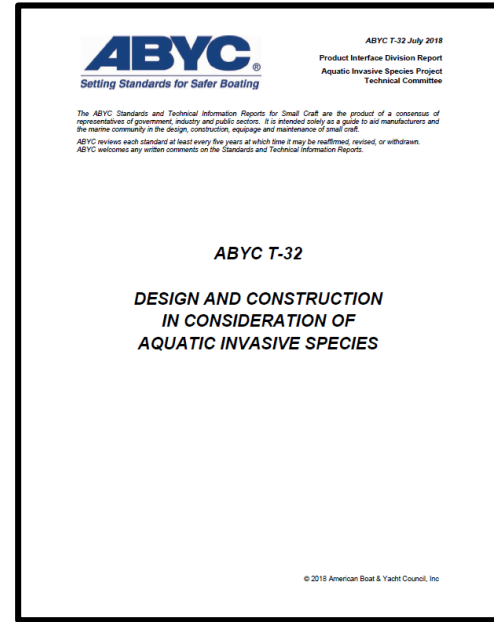
- Serving on ANSTF
- Updated their “You and Your Trailer” manual to include significant amount of AIS prevention information
- ABYC first organization to consider how changes to boat/engine/trailer design can help fight the spread of AIS



# ABYC T-32: Design and Construction in Consideration of Aquatic Invasive Species

- Design and construction standard to improve cleaning, draining, drying, inspection, and decontamination processes for watercraft and accessory manufacturers
- These procedures are intended to cover most AIS threats and represent the worst case scenarios that a boat may be exposed to in the field.

<https://abycinc.org/store/ViewProduct.aspx?id=12011631>



# Hull Considerations

- Applies to:
  - Exterior surfaces and structures at and below waterline



Large drains to remove water

- Best Practices
  - Improve visual and physical access to areas subject to inspection and decontamination
  - Design wells and other areas for complete drainage
  - Implement external flushing ports
  - Seal strakes, keels, ribs, and other structural components
  - Design bilges to prevent water-trapping features
  - Select materials to allow complete drainage
  - Design features that facilitate inspection without the use of tools
  - Provide methods of identifying the location and function of through-hull fittings

# System/Component Considerations

- Applies to:

- Interior Areas (live-well, bilge, ballast tank, storage areas, etc.)
- Equipment (anchors, PFDs, gear, dock lines, etc.)



- Best Practices

- Design systems and components for complete drainage
- Utilize universal flush inlet fittings
- Provide methods to identify the location and function of through-hull fittings
- Consider filtration devices for raw water systems
- Select materials and coatings with consideration to the maximum temperatures that may result during decontamination



# Propulsion System Considerations

- Applies to:
  - Propulsion system (lower unit, trolling motor, prop, engine housings, paddles and oars, etc.)
- Best Practices:
  - Include AIS supplements in owner's manuals
  - Standardize flush connections (e.g., common garden hose)
  - Utilize external flush adaptors or integrated flushing technologies
  - Utilize closed cooling systems (sterndrive/inboard)
  - Design easily drained raw water systems
  - Test engines to current decontamination procedures for adverse effects



# Trailer Considerations

- Applies to:
  - Trailer areas (rollers/bunks, wheels/tires, axles, fenders, etc.)



- Best Practices
  - Incorporate labeled AIS flush ports or openings
  - Add standardized hose fitting at flush opening (i.e., garden hose)
  - Where possible, avoid square edges; rounded designs prevent corners that may trap organic material
  - Utilize open frame construction or self-draining tubular design
  - Components that are immersed in water during the normal launch and retrieval process, such as trailer lighting systems, should be self-draining or submersible
  - Components that are not normally immersed but which may come into contact with the high water temperatures and pressures of the decontamination process should be watertight and capable of withstanding exposure to 140°F
  - Incorporate a message to “Clean, drain, and dry the boat, trailer and equipment, removing any attached plant material or debris”

# Owner's Manual and Collateral Literature

*“Owners’ manuals should include a section on Aquatic Invasive Species that includes some background information on the issue, why preventing the spread is important, examples of AIS of concern, and an explanation of Clean Drain Dry® and a reference to the Stop Aquatic Hitchhikers® website. Owner’s manuals should also have specific information and diagrams on places within the watercraft, trailer, engine, or systems that boaters should inspect, clean, or drain (e.g., ballast tanks).”*



# ABYC AIS Summit – 2018

- Mission:
  - To engage major stakeholders in an in-depth dialogue regarding prevention, inspection and decontamination of boats
- Follow up to Summit in 2015
- Participants from
  - Federal, state, local agencies
  - Industry
  - NGOs



# ABYC AIS Summit

## Research and AIS Updates

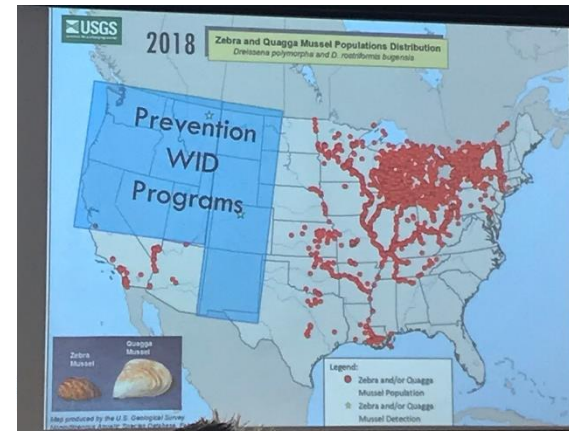
- Camphor Shoot Beetle
- Residual Water Study
- Ballast System Study
- Outboard Engine Testing
- Antifreeze Study
- Decon Equipment Testing
- Raw Water Pump Testing



Fig. 1. Plastic gasoline storage container (25 L) with numerous holes created by *Nauphotho cinctus* beetles. White areas indicate untreated holes; black areas indicate treated holes (black and white photo of untreated holes).

## Prevention Efforts

- Western states focused on prevention with WID (watercraft inspection and decontamination programs), claim successfully prevented ZM/QM in states with WID programs



# Next Steps – “where do we go from here”

## NMMA

- Disseminating design standard to industry, improving boater education publications (on labels, manuals, etc.), advocacy

## Manufacturers

- Lot of research has been done since 2015, now that more information is out there, more opportunity for change.
- Challenge is ROI has not been actualized. Best way to achieve change in manufacturing is to change the voice of the customer – is there a market for an “AIS safe boat”?

## Agencies

- Have to figure out a way to standardize training and support
- How do we educate and incentivize boaters for using “AIS-safe” products?



# Ohio Clean Marinas Program Updates

## Boat Bottom Washing Regulation

- 2018 – marinas no longer allowed to discharge boat wash wastewater
- OCMP working to help find alternatives for discharge
- Opportunity for boat wash station for AIS at marinas with boat ramp?
- <http://www.sobaus.org/pdf/Best-Management-Practices.pdf>



## Non-Motorized Watercraft Education

- OCMP working with groups on incorporating clean boating education (including Clean, Drain, Dry messaging) into safe boating programs



# Ohio Clean Marinas Program

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## FIND OUT MORE

[ohioseagrant.osu.edu/clean](http://ohioseagrant.osu.edu/clean)

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