

CLEAN YOUR GEAR!

Preventing the Spread of Aquatic Invasive Species in Pennsylvania



STOP AQUATIC HITCHHIKERS!™

Prevent the transport of aquatic invasive species. Clean all recreational equipment.

www.ProtectYourWaters.net

TIPS FOR BAIT DEALERS

Bait shop owners and staff are on the front lines in the battle to stop the spread of aquatic invasive species (AIS). Because their opinions are valued by their customers, bait shops can provide important tools and information on AIS prevention that can help protect local waterways and preserve the recreational and commercial fishing economy in the Commonwealth.

Aquatic invasive species (AIS) are non-native plants, animals, or pathogens that cause harm to the environment, the economy, and human or animal health. Preventing the spread of AIS is important because once introduced, these species disrupt ecosystems, reduce biodiversity, and cost communities huge amounts of time, money, resources, and lost revenue.

Many young-of-year invasive species, such as round gobies, tubenose gobies, and Asian carp, can resemble small bait fish, and can easily get mixed in with native bait for sale. Fragments of invasive plants like Hydrilla and Eurasian watermilfoil, and microscopic zebra mussel larvae can be transported in water as shipments of bait are moved around. Crayfish have also been used as bait in Pennsylvania and live release has allowed species like the rusty crayfish and red swamp crayfish to establish in Pennsylvania waters. These species can have detrimental effects by competing with native populations for food, reducing spawning habitat, impacting water quality, and ultimately damaging the ecosystem and the fisheries it supports.

Knowing how to recognize and remove AIS that hitchhike into live bait tanks is a key control point for ensuring invasive species aren't sold and released with bait. Bait shops are a stop for many anglers on their way to a lake or river, and research shows that bait shop owners are an important source for fishing-related information. Therefore, bait shop owners and employees are in an excellent position to communicate with their customers about the importance of AIS prevention. By displaying educational materials such as posters, brochures, and fact sheets at shops, and having conversations with anglers, bait shop owners and employees can help provide valuable AIS prevention information to anglers before they enjoy Pennsylvania waters.



Photo courtesy of Ontario CBC.



Photo courtesy of Jerde & Mahon, Notre Dame University and Central Michigan University.



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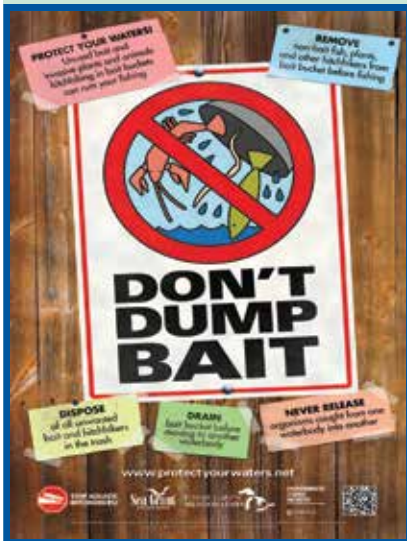


Photo courtesy of Illinois-Indiana Sea Grant.



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Bait shop owners and employees can help prevent the spread of AIS
by asking their customers to:

INSPECT

their boats, trailers, and equipment.

REMOVE

all plants, animals, and mud from boats, trailers,
gear and equipment *before leaving water access.*

DRAIN

water from watercraft, motor, bilge, bladder tanks, livewell
and portable bait containers *before leaving water access.*

DISPOSE

of unwanted bait, fish parts, and packing materials in
the trash; do not dump them in the water or on land.

DRY

everything *five days* or more.

*In addition, knowing the answers to some commonly asked questions can help better
prepare staff and management for talking about AIS prevention with their customers.
Commonly asked questions may include:*

■ **Why are Aquatic Invasive Species so hard to control?**

Aquatic invasive species often do not have the same predators and competitors that they have in their natural environments. Because of this, they are able to reproduce rapidly and overtake native species. Once established, invasive species can have a negative impact on the function and economic value of lakes and streams.

■ **I've heard that some invasive species may actually be beneficial to the lakes, why should I be concerned?**

While it is true that some invasive species like Eurasian watermilfoil (EWM) can provide habitat for fish, and that zebra and quagga mussels clear the water, the long-term effects of infestation are harmful. EWM can overtake bodies of water and make it unusable by boaters and anglers. EWM can also replace native species, which upsets the natural diversity of lakes. The “clearing” of the water facilitated by invasive mussels is actually their filter feeding behavior as they remove valuable food resources and leave nothing for native fish and organisms. In addition, the excess clearing of the water can lead to smelly harmful algal blooms, oxygen depletion, and fish kills.

■ **What AIS regulations are in place that I need to follow?**

The Pennsylvania Fish and Boat Commission prohibits the sale, barter, possession, or transportation of ten species of AIS in Pennsylvania (bighead, black and silver carp, European rudd, zebra and quagga mussels, round and tubenose goby, and all snakehead species). In addition, Pennsylvania now restricts the sale, possession, introduction, transportation, and culture of all live native and nonnative crayfishes in the Commonwealth. Therefore, crayfish heads must be removed before they can be used as bait. Anglers should also be aware that it is unlawful to transport VHS-susceptible species, such as emerald shiners, out of the Lake Erie watershed.

References and Links to more information:

Wisconsin Sea Grant's Baitshop Toolkit: <https://uwlscais.wordpress.com/bait-shop-toolkit/>
 Pennsylvania Fish and Boat Commission: www.fishandboat.com
 Wildlife forever: www.wildlifeforever.org/

Where to report new invasive species infestations:

Pennsylvania Fish and Boat Commission Online Reporting form: <http://fishandboat.com/ais-reporting.htm>

Aquatic Invasive Species in Pennsylvania:

Pennsylvania Sea Grant AIS fact sheets: http://www.paseagrant.org/fact_sheet_group/invasive-species/

Aquatic Invasive Species mapping in Pennsylvania:

iMAP Invasives: www.imapinvasives.org