Pint-sized Solutions

to Aquatic Invasive Species

Can we drink our problems away?

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Erie, Pennsylvania





Pennsylvania



To promote the sustainability of Pennsylvania's ecological and economic coastal and watershed resources through science-based research, education, and outreach.













Project Team



















Data collection

Percentage of people in each age group that say they drank craft beer weekly in the United States during 2019.

•21 to 34 years: **49**%

•35-44 years: **52**%

•45 to 54 years: **44**%

•55 to 64 years: **36%**

•65 and older: **31%**

- •Highest percentage of craft beer drinkers in the 21 to 44-year-old age range.
- •What does this age group make on average? \$75,000 to \$99,000 annually.
- •Being a local brewery is especially important to craft beer drinkers. With 62% of them saying they buy local.



UNIVARIATED DEAD OR ALIVE INVASIVE SPECIES DRAFT SERIES







Mystery Snail Ale Launch

August 21, 2021







Launch Party Saturday, August 21, 1-4 p.m.

© Erie Brewing Company, Knowledge Park

What is a mysterysnail?

The mustery snail originates in Asia but has found its way to Lake Erie where it invades habitats, out-competes native species, and causes harm to other wildlife through the parasites it carries.

You can't miss the musterusnail - it can grow to be nearly 3 inches long!

Learn more about aquatic invasive species at seagrant.psu.edu





Download the PA Aquatic Invasive Species App!







A large freshwater snail commonly sold for freshwater aquariums and garden ponds. When released into the wild, it can trasmit parasites and diseases, clog water intakes, and compete with native snails for food and resources.



When moving between waterways, ALWAYS clean and remove any aquatic plants, animals, and mud from boots, boats, and gear.

> CLEAN off any visible plants, mud, and aquatic life from all equipment before transporting.

CRAIN water from all equipment before transporting elsewhere.

everything for five days or more or SPRAY/RINSE recreation equipment with high pressure and/or hot water (120°F/50°C or higher).

If decontamination is not possible, restrict equipment to a single waterway.

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Snail Races

- Snailvester
 Shellone
- Escar-goinggoing-gone
- Mi'Shell
- Shellraiser
- Operculator







#9 Mi'Shell

This fashion-forward snail may not have actual racing experience, but her spire game is ON POINT yall. What Mi'Shell lacks in experience, she makes up for with over 1.4 million followers on TikTok. After the race, she plans to enjoy a long crawl on the shoreline sipping her favorite vegan algae latte.





Round Goby Rye Launch December 4, 2021











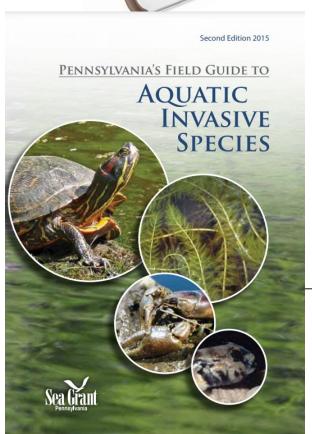


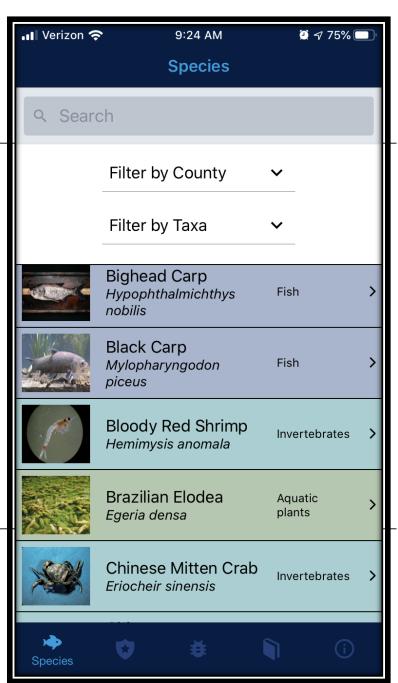
Evaluation



- 69% Somewhat or not at all Aware of Invasive Species Issues
- 89% Said the event raised their awareness of AIS a large or moderate amount
- 49% said before the event they never took actions to prevent the spread of AIS
- 83% said they will "always" or "very often" take action to prevent the spread of AIS



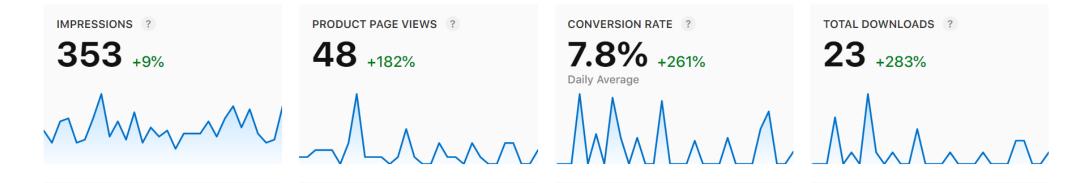




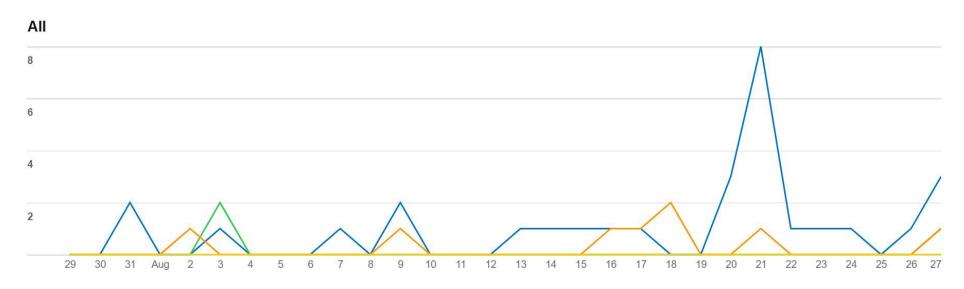
Apple AIS Field Guide Smartphone App

Search: "PA AIS"





Field Guide App Analytics



INVASIVE SPECIES CHEATSHEET



Zebra Mussels are fingernail-sized and can be identified by the black zebra-striped pattern on its shell. It attaches to substrates such as docks. boats, water intake pipes, and even hard-shelled water creatures. The zebra mussel has quickly spread to become one of the most costly and prolific invaders in the Great Lakes.

Rusty Crayfish is a large and agressive crayfish, invasive to the Lake Erie watershed. It impacts the Lake Erie ecosystem by outcompeting native crayfish for food and shelter, and destroying native plants with its large appetite. It can be identified by the rusty red spots on each side of the body and black bands around its claws.

Hydrilla is known as "nature's perfect weed." It spreads at an extremely fast rate, smothering water bodies, choking out native plants, and restricting boating, fishing, and swimming.

Sea Lamprey is an eel-like, parasitic fish that uses its suction cup-like mouth to latch onto a host. Adults feed on bodily fluids of other fish, killing on average 40 lbs of gamefish per year.

*To prevent the spread of invasive species, always clean, drain, and dru boats and equipment!



The Pennsylvania Sea Grant mission is to enhance the practical use and conservation of natural resources in order to create a sustainable economy and environment.



KNOWLEDGE CHECK

Q1 - Which aquatic invasive species (AIS) did you learn about today?

Q2 - Had you heard of any of these species prior to the event?

Q3 - List one way AIS negatively impact water bodies.

Q4 - List one or more ways to help prevent the spread of AIS.

Please provide your contact information Name:

Email:



- 1. Answer the questions above
- 2. Turn your paper in at the bar
- 3. Be entered in to win a gift card from Erie Brewing Company!





UNIQUE (?) TOTAL (?) 89 83 MONTHLY (?) YOU 65 0

5.3% ABV

No IBU



78 Ratings



Blog

Top Rated

Insiders

Help

Store



Mark C. is drinking a Hazy Hydrilla by Erie Brewing Company



Interesting notes of strawberry with green dye for St Pats





Earned the Cheers to Independent U.S. Craft Breweries (Level 84) badge!

10 Apr 22 View Detailed Check-in



sandy is drinking a Hazy Hydrilla by Erie Brewing Company at Erie Brewing Co.



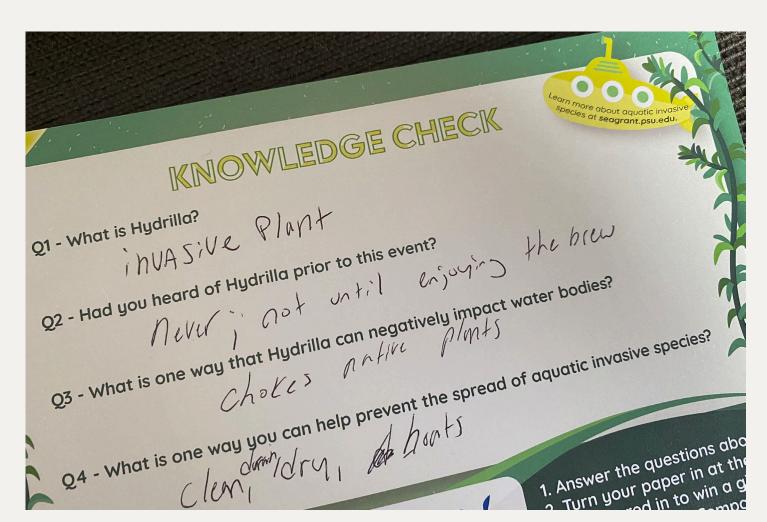
Good, great taste







Knowledge Check Results



- 78 cards returned
- Had you heard of Hydrilla prior to this event?
 - 77% said "NO"



LAUCH PARTY MAY 7, 2022 I - 4 P.M. EBC KNOWLEDGE PARK



Coordination with the Lake Erie Ale Trail

- Lavery Brewing: Sea Lamprey Lager
- Brewery at Union Station: Rusty
 Crayfish Red Ale
- Erie Brewing Company: Zebra Mussel Maibock





First 40 participants
 received gift bags

Multiple vendors

About 150 participants



May 7, 2022



Capture each of the aquatic invasive suspects by visiting each educational booth and learning how you can prevent their spread!

AQUATIC INVASIVE SPECIES DRAFT SERIES seagrant.psu.edu/AIS









Get \$1 off any invasive species draft beer!









September 24, 2022







Up Next





"Pint-Sized Solutions"
 Journal of Extension
 Article

2023 Saint Patrick's Day
 Hazy Hydrilla Relaunch at
 Erie Brewing Company

CAN we make CANS work?

Yes, you can take our work!

Folders

Rame

Rame

Rought Series Collaborative

Beer Posters

Coloring sheets

Dollar off cards

Folders

Folders

Pint Glass designs

Snail races

Stickers

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