

Pennsylvania • League • of • Angling • Youth

SUPERHEROE OF SUMMER

Summer is a time when people enjoy being outdoors in Pennsylvania, and the warm weather of summer makes being outdoors even more enjoyable. This summer, we hope you get outside and enjoy all of the excitement, beauty, and fun that nature provides.

If you like being outdoors, chances are you would also like to do your part to protect our waterways and the wildlife that live in and around it. In this issue, you will learn some ways that you can be a superhero of summer by doing your part to be a good **steward** of our waterways and the fish, reptiles, amphibians, and other critters found in and around the water.

Vocabulary (watch for these words!)

- **Barb** small, triangle-shaped metal at the sharp end of a hook, pointing in the opposite direction of the sharp end
- **Invertebrate** an animal that does not have a backbone
- Non-venomous an animal that does not have venom (venom is a toxic substance from a venomous animal's bite)

Rock Bass

- Population a group of individuals of the same species that live in a particular area
- **Steward** a person who responsibly uses and protects a resource

Fishing and Boating

Don't Be a Litterbug

Do your part in keeping our waterways and nearby land clean by not only picking up your own trash, but also what others left behind.

- Reuse a shopping bag to hold the trash you pick up until you can dispose of it properly.
- Be careful when picking up hooks or broken glass. Get an adult to help with sharp items.





Fishing line is dangerous to all kinds of wildlife.

Look for fishing line collection tubes. Only put fishing line inside the tubes, not trash. The collected fishing line goes to a recycling program.

Don't Spread Aquatic Invasive Species (AIS)

Aquatic Invasive Species (AIS) are plants or animals that were introduced into waterways where they do not live naturally. AIS have harmful effects on the habitat and people's use of the waterways. These aquatic invasive species may even be harmful to people's health.

AIS can travel on fishing gear, boats, life jackets, clothing, and shoes. Some species can live out of the water on damp items for days or even weeks. Some AIS are so small that the invasive species cannot be seen without a microscope.



New Zealand Mudsnail

Some Ways You Can Help

- Check your gear before leaving any body of water. Inspect every inch of your boat, trailer, and fishing gear. Remove and leave behind plants, mud, and aquatic life.
- Do not transport any potential hitchhiker, even back to your home. Remove and leave hitchhikers at the site you visited.
- Put unwanted fishing bait in the trash.

Handle with Care

Good anglers only keep the fish that they use and follow regulations of seasons, sizes, and daily limits. Give fish the best chance to live another day by practicing catch and release.

- Keep the fish in the water as much as possible. Remember, fish cannot breathe while out of water.
- Handle the fish as little as possible.

If the fish doesn't swim off when you release it, you may try giving it "fish CPR." Hold the fish upright and gently move it back and forth, front to back, in the water.

- Drain water from all equipment before leaving the area you are visiting.
- Wash your gear with hot water or with a highpressure spray. Or, allow gear to dry, then wait another 48 hours before entering new waters.
 CLEAN YOUR GEAR Check Drain Clean Dry
- Wet your hands.
- Pinch down the **barb** on your hook or buy barbless hooks. Barbless hooks are much easier to remove.
- If the fish swallows the hook deeply, cut the line as close to the mouth as possible.
- Release the fish gently back into the water. Do not throw it.

Releasing the fish this way will pass water over the fish's gills and give an extra boost of oxygen.



Reptiles and Amphibians

Reptiles (snakes, turtles, and lizards) and amphibians (frogs, toads, and salamanders) are most active in warm weather. If you spend time outdoors in the summer, you will eventually come across a reptile or amphibian. Some people find these animal encounters to be pleasant while others may find these critters scary. Either way, we need to respect all animals including reptiles and amphibians.



Northern Spring Peeper

Keep Them Wild

- It is best to observe wildlife when you find it. Watch the animal at a comfortable distance. Take some photos or make some sketches and notes about its appearance and behavior. Some people like to keep a nature journal.
- Wild animals typically do not make good pets. It is difficult to provide the food and habitat that wild animals need. It also affects the animal's **population** in the wild. Even taking just one reptile or amphibian can be harmful to the local population.
- It is illegal to take or keep many reptiles and amphibians. Check the current *Pennsylvania Fishing Summary* or visit www.fishandboat.com for regulations.



Eastern Red-backed Salamander

Turtle Crossing

Turtles may be seen crossing roads in the summer. Ask an adult to help the turtle cross, but only if it is safe to do so. Do not go on the road by yourself. This should only be done by an adult. Be sure the adult puts the turtle to the side of the road in the direction it was heading. Extra caution must be taken with a Snapping Turtle due to its strong bite. Only pick a Snapping Turtle up at the back half of its shell or scoot it with a broom or other long object.



Woodland Box Turtle



Snake Encounters

While most snakes in Pennsylvania are **non-venomous**, it is best not to pick up snakes. Many snakes in Pennsylvania are not aggressive unless threatened. Snakes will often try to flee first before striking. Remember, snakes are an important part of nature and should not be harmed.

Be a Citizen Scientist

Help scientists better understand reptile and amphibian populations in Pennsylvania by reporting your sightings to the Pennsylvania Amphibian & Reptile Survey. When people submit their sightings, it helps scientists better understand the animal's status and locations within Pennsylvania. Visit **www.paherpsurvey.org** for more information.



Check Out a "Live Stream"

When people refer to a "live stream," they are usually describing a video playing online at the same time it is being recorded. But, check out a real live stream. Streams are full of life. Summer is a great time to explore a stream. Just be sure to have an adult with you before getting your feet wet. Moving water is powerful and can be dangerous.



Some animals found in a stream or creek include fish, salamanders, crayfish, freshwater mussels, and insects. Many insects start in the water and later become adults with wings, such as dragonflies, damselflies, mayflies, stoneflies, and caddisflies. A great place to look for aquatic insects and other **invertebrates** is on the underside of rocks. Here are some tips to follow when exploring a stream or creek:

• Do not remove or stack rocks. The rocks provide habitat for salamanders, crayfish, insects, plants, and algae, and also provide a place for fish to lay eggs.

- Replace rocks where found. It is important to keep the habitat in place for all wildlife.
- Place critters in a small container with water for a closer look. Use a hand lens to see close-up. Then, return the critters to the same area.
- Use a small paintbrush to gently lift fragile critters off the rock for further investigation.

 Do not keep the critters out of the stream for long. Invertebrates need cold water and the oxygen it provides.
Salamander eggs on a stream rock.

Young Scientist



Take a photo, video, or make sketches and notes in a nature journal. To identify these animals, visit www.fishandboat.com/ LearningCenter/Documents/ pondstream.pdf or www.macroinvertebrates.org. Produced by: the Bureau of Outreach, Education & Marketing Written by: Miranda Smith Editor: Spring Gearhart Design and illustrations: Andrea Feeney Photos: Miranda Smith and PFBC archives © Pennsylvania Fish & Boat Commission

SUPERHERO BINGO

Cross off the squares of this bingo sheet to earn your "Superhero Status!"

Pick up trash while fishing or boating.	Observe a creek critter, and take a photo, video, or make sketches and notes in a nature journal.	Fish with a barbless hook.
Wet your hands before touching a fish.	FREE SPACE	Take time to observe a reptile or amphibian in the wild.
Report an amphibian or reptile sighting to www.paherpsurvey.org .	Check your gear before leaving the water, and remove any plants, mud, or aquatic life.	Find and identify 3 different creek critters.

Cut out this certificate when you complete Superhero Bingo.

superhero of Summer Certificate		
l	Presented to	
	Date Superhero	