Species at a Glance
While similar in appearance to its saltwater relative, the freshwater jellyfish is actually considered a member of the hydra family, and not a “true” jellyfish. It is widespread around the world and has been in the United States since the early 1900’s. Even though this jellyfish uses stinging cells to capture prey, these stingers are too small to penetrate human skin and are not considered a threat to people.

Species Description
The freshwater jellyfish exists in two main forms throughout its life. In the juvenile phase, it is a small, 1 mm long gelatinous polyp that lacks tentacles. In this phase the jellyfish attaches to hard surfaces and forms colonies. The freshwater jellyfish is most easily identified in its adult phase, as it has many of the characteristics of a true jellyfish such as a small, bell-shaped transparent body that is 5-25 mm in diameter. A whorl of string-like tentacles surround the circular edge of the body in sets of three to seven. The tentacles contain hundreds of specialized stinging cells that aid in capturing prey and protecting against predators.

Native & Introduced Ranges
Originally from the Yangtze River valley in China, the freshwater jellyfish can now be found on all continents worldwide. It was first reported in the United States in the early 1900’s, presumably introduced with the transport of stocked fish and aquatic plants. Sightings are mostly concentrated in the eastern United States, but nearly all states have reported jellyfish sightings, with the exception of North Dakota, South Dakota, Montana, and Wyoming. In Pennsylvania, the first recorded report was in 1957 in Columbia County in a quarry near Bloomsburg Pennsylvania. This species is now widespread throughout the Commonwealth.

Biology & Spread
The most dominant form of the freshwater jellyfish’s life cycle is the polyp form which is able to persist throughout the year. Other stages, such as the adult medusa and the resting body occur in response to specific environmental conditions. In favorable conditions, the polyp will form the medusa. In unfavorable conditions, such as low water temperature or prolonged starvation, the polyp contracts into a solid mass called a resting body that redevelops into the polyp when more favorable conditions resume.
Habitat

While it prefers small, calm bodies of water such as open lakes, ponds, reservoirs, water-filled gravel pits, man-made impoundments, and recreational boating and fishing areas, the freshwater jellyfish has also been found in larger river systems. The familiar medusa form is mostly seen during the summer and fall months when warm water temperatures create an abundance of food.

Impacts

Threat to Biodiversity

The impact of the freshwater jellyfish is unclear and more research is needed. There is currently no evidence to suggest that the freshwater jellyfish is negatively impacting Pennsylvania’s ecosystems.

Health Risks

While the freshwater jellyfish has stinging cells, unlike other jellyfish, they are unable to penetrate human skin and are therefore unable to produce the painful sting caused by most marine jellyfish.

Prevention & Control

The best way to reduce possible impacts from non-native species like the freshwater jellyfish is to prevent their introduction and spread into new waters.

- Learn to identify the freshwater jellyfish.
- Always check for and remove any plants, mud, and debris from boats, trailers, clothing, and equipment before leaving a water body.
- Eliminate water from all equipment before transporting, and dispose of unwanted live bait in the trash.
- Clean gear and equipment with either hot water (140°F or 40°C), or salt water, OR let boats and equipment dry for at least five days before entering a new water body.

References:


