Species at a Glance
The northern snakehead is a freshwater fish nicknamed “Frankenfish” because of its intimidating appearance and voracious appetite. An air bladder that works like a primitive lung lets this species survive out of the water in moist locations and wriggle over land to new bodies of water. These adaptations give the snakehead a competitive edge in securing habitat and expanding its range.

Identification
These cylindrical fish can grow over 84 cm (33 in) long. As the name implies, the scaled head of the fish looks like a snake. They have a large mouth with sharp teeth, a truncate, not rounded tail, and are easily identified by dark irregular blotches along their sides. Snakeheads also possess relatively long dorsal and anal fins.
Environmental Impacts

With no natural enemies, northern snakeheads can devastate populations of native fish and wildlife. They compete directly with native fish, altering feeding habits, food availability, and behaviors of other members of the ecosystem.

Similar Species

The native bowfin (Amia calva) is often mistaken for the northern snakehead. Bowfin are distinguished by their rounded tail, scaleless head, and an eyespot near the tail in males. The burbot (Lota lota) looks somewhat similar but can be distinguished by its split dorsal fin and a single barbel on the lower jaw. The dorsal and anal fins of the bowfin and burbot are also very short in comparison to snakeheads.

Habitat

These fish prefer stagnant shallow ponds, swamps, and slow streams with mud or vegetated substrate. Temperature range is from 0-30°C (32-86°F), and they can survive in waters that are covered in ice. As juveniles, northern snakeheads eat zooplankton, insect larvae, small crustaceans, and young fish. As adults, they become voracious predators, feeding on other fish, crustaceans, frogs, small reptiles, and even birds and mammals.

Spread

Before their threat was fully appreciated, live snakeheads were sold in the United States in pet shops and live fish markets. Uninformed pet owners may have released them into the wild when they grew too big for aquarium tanks, or as part of religious or cultural practices. In 2002, the import and interstate transport of the northern snakehead was banned without a permit from the U.S. Fish and Wildlife Service.

Distribution

Native to China, Russia, and Korea, the first reported breeding population in the United States was discovered in a pond in Crofton, Maryland in May 2002. In July 2004, northern snakeheads were found in a lake in FDR Park in Philadelphia, Pennsylvania. Since then, additional infestations have spanned into southeast and south central Pennsylvania watersheds. In 2019, a northern snakehead was caught in the Monongahela River in Allegheny County, making it the first occurrence in western Pennsylvania. And in 2020, twenty-one northern snakeheads were observed passing through the Conowingo dam and into the Lower Susquehanna River.

Adapted from the Pennsylvania AIS Field Guide - online at https://seagrant.psu.edu