



## FRESHWATER FISH OF AMERICA

# NORTHERN PIKE

*Esox Lucius (Linneaus, 1758)*



Northern pike. Photo credit: Kletr/Adobe Stock

### *Natural History*

Spawning adults will begin to move upstream into shallow streams or inshore to flooded marsh areas to spawn as soon as the ice begins to break up or thaw in late winter to early spring. Though spawning seasons vary depending on location, northern pike in the Great Lakes region tend to spawn in April or May after winter ice leaves. Spawning generally occurs during daylight hours. Spawning females seek vegetation and randomly broadcast up to 75,000 eggs which are fertilized by several individual males. The fertilized eggs are sticky and adhere readily to the surrounding submerged vegetation. Soon after spawning is completed, the adults move out of the nursery areas to deeper water habitat.

The northern pike eggs hatch after 10 to 14 days depending, on water temperature. Once the newly hatched fry have used up their egg sac (self-sustaining nutrient supply) they begin to move about and feed on (microscopic aquatic animals) known as zooplankton, and soon after become piscivorous (switching to a diet of small fishes). The fry remain in their nursery areas until they are about two to three inches long.

In an effort to avoid cannibalism in the nursery habitat and to begin the search for larger prey items, fingerling northern pike move to deeper water habitat. They then spend much of their time evading other predators such as birds, mammals, and other fishes. Those surviving this gauntlet of predators, will grow quickly in their first two years. Once they grow to adult size (sometimes up to 48 inches) northern pike become voracious predators and rarely encounter any serious threats other than humans and larger northern pike.

## FACTS AT A GLANCE

**Size:** Northern pike can attain lengths up to 4.5 feet and weigh up to 63 lbs. They usually live between 7 to 15 years in natural environments but have been known to live for more than 20 years.

**Range:** These pike are distributed between the Arctic portions of North America, Europe, Asia, and Siberia. Most populations of northern pike are north of latitude 40. The range of northern pike in North America extends from Alaska through Canada to the upper mid-western portion of the United States. Northern pike have been widely introduced and transplanted throughout Europe. In some cases, several countries have reported adverse ecological effects resulting from these northern pike introductions.

**Habitat:** Northern pike inhabit freshwater and can be found in waters as deep as 100 feet. These fish occur in clear, vegetated lakes, quiet pools, and the backwaters of creeks, small to large rivers, lakes and reservoirs.

**Diet:** Northern pike are opportunistic feeders and can be best described as carnivorous, feeding primarily on fishes, invertebrates and amphibians. But, pike have been known to prey upon snakes, small mammals such as mice and voles, and even waterfowl.

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## Conservation

Northern pike are a prized recreational fish in the United States and an important commercial fish in Canada. In the state of Alaska they also comprise an important subsistence fishery.

Restoration and protection of wetlands and marsh areas and employment of best management practices in watersheds and riparian zones are central to conserving northern pike habitat. Depending upon the desired outcome, additional tools are often employed to achieve conservation goals.

These tools may include stocking the fish, a combination of regulations such as bag or harvest limits and size limits, and season closures.



Northern pike. Photo credit: Brett Billings/USFWS