



It's a Trout

Compare the life cycle of a trout in one of the



Behind Closed Doors

Most of the work of raising trout for PA anglers happens behind closed doors. It can take up to 15 months to raise a 7-inch trout. The Commission currently raises about 3.8 million trout at eight hatcheries across the state. The Commission raises and stocks trout in streams where they probably could not reproduce or where their survival rate is low.

From late August to early November, eggs are collected at Commission hatcheries. Rainbow trout are first to be spawned, then brook trout, and brown trout are last. Eggs are mixed with sperm. Fertilized eggs are placed into large egg jars or trays with

flowing water running over them to provide oxygen.

About 31 days after fertilization, rainbow trout eggs hatch (in 50-degree water).

About 44 days after fertilization, brook trout eggs hatch (in 50-degree water).

About 41 days after fertilization, brown trout eggs hatch (in 50-degree water).

For two to four weeks, the sac fry, fresh from the egg, are nourished from the yolk. Then they swim up from the bottom and



The Wild Life

Natural reproduction occurs in some streams across the state. Trout are especially sensitive to changes in water temperature, water quality and habitat. They also have strict requirements for spawning. That's why you'll find wild trout in only the state's highest-quality streams. In the wild, few trout reach adulthood mainly because of predators, weather changes and human affects. Mark a star at any stage on the time line where there is a threat to the wild trout's survival. You'll soon see why wild trout are such a valuable resource. Pennsylvania's wild trout can be a challenge to catch, but they're feisty fighters!

In September and October, brook trout females make their redds, or nests. From October into November, brown trout females make their redds. Using their tails, they clear a spot in the gravel bottom for their eggs. An average three-year-old female releases from 500 to 1,000 eggs. Fertilized eggs settle into the spaces around the gravel. Flowing water moves over the eggs and provides oxygen.

Water temperature must stay between 35 and 55 degrees for brook and brown trout eggs to survive. The eggs hatch from February to March. The actual hatch date depends on stream

Trout's Life

Commission's trout hatcheries to one in the wild.



are fed granular feed about the size of black pepper.

These "swim-up" fry are transferred to large, long tubs and fed six to 10 times each day for about eight to 10 weeks.

The trout are then called "fingerlings" (about the size of your finger). Some are transferred to raceways. Some are stocked in streams to grow to adults. Others are provided to the Commission's cooperative nurseries, where they grow to legal size and are stocked in public waters.

Fingerling trout that stay with the Commission are protected from bird predation by netting that covers the raceways.

It takes 12 to 14 months for the trout to grow to legal size (7 inches). During this time, trout are fed three to five times per day, and they grow quickly. Trout are graded and sorted by size in the raceways.

Trout are weighed, counted and loaded into stocking trucks. Each truck has a 1,200-gallon tank with an aeration and oxygen system. Each truck holds from 3,000 to 6,000 fish, depending on their size. These trout travel long distances to be stocked and to provide exciting fishing opportunities for anglers like you!



temperature.

Rainbow trout are spring spawners. Around March and April, the female creates her redd and releases eggs. Rainbow trout eggs don't survive when water temperature drops below 40 degrees. Hatching occurs in late spring or early summer.

The brook and brown trout are fry now. Sac fry, nourished by the yolk sac, live in and around the bottom gravel. When the yolk sac is used up (usually April through early May), the fry swim up out of the gravel. Now the young trout feed on plankton, microscopic animals in the stream.

Fingerling trout in the wild have strategies to avoid predators. Young trout spend time in shallow water, hiding under and around rocks. They eat small insects and plankton.

Even though most of all fertilized eggs hatch, nearly 90 percent of the wild trout fry die during the first year of life.

Wild trout growth varies from stream to stream. Water temperature and the food produced in the stream determines how fast or how large a wild trout can grow. Wild trout usually reach sexual maturity in two to three years and begin the cycle all over.