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Great Lakes 4H Fact Sheet – Brook Trout

Michigan State University Cooperative Extension Service

4-H Club Bulletin

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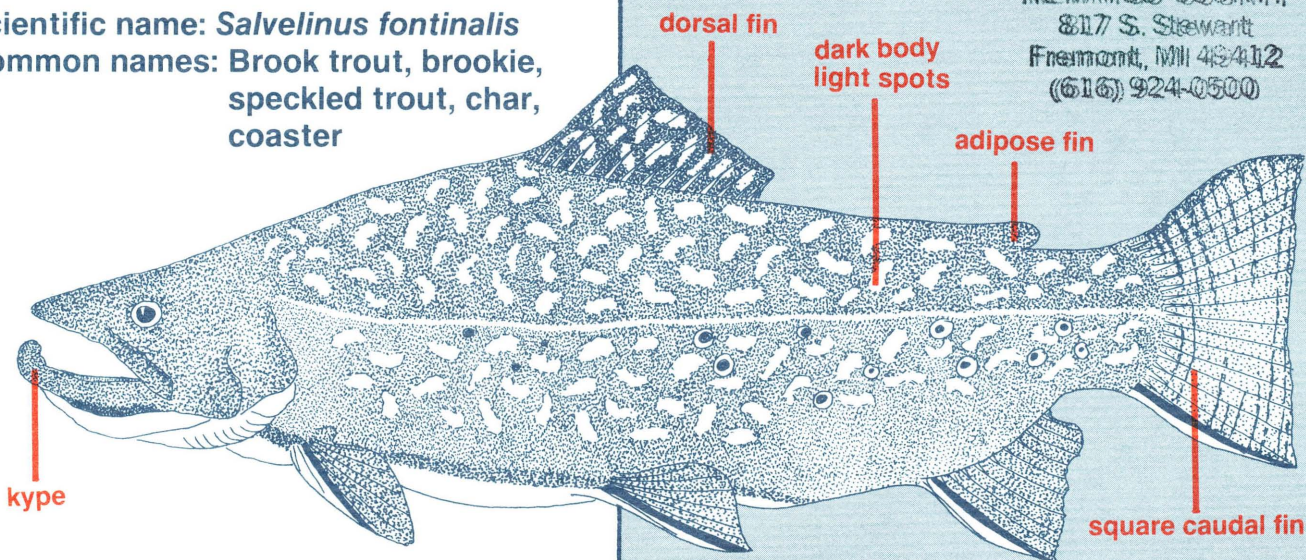
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Brook Trout

Scientific name: *Salvelinus fontinalis*
Common names: Brook trout, brookie,
speckled trout, char,
coaster



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Description

The brook trout is one trout which has always been present in the Great Lakes region. Brook trout generally weigh 2 to 3 pounds and are short-lived. Brook trout living in streams are 7 to 9 inches long. Brook trout of Lakes Michigan and Superior (called **coasters**) average 12 to 14 inches. The largest brook trout, weighing 14½ pounds, was caught in Ontario, Canada, in 1915. A young brook trout has 7 to 9 brown **parr marks** (square or oval markings) along each side and a dark brown line along the tip of its chin.

The brook trout has a long, streamlined body. Its mouth extends back past the eye. A breeding male may develop a "hook" (or **kype**) at the lower jaw. This fish is olive green to dark brown above and silvery white below. There are light-colored, worm-like markings (called **vermiculations**) on the top of its head and on its back. These markings blend into spots on the sides. Some spots on the back and sides are bright red surrounded by bluish halos. The **dorsal fin**, located on the trout's back, has dark wavy lines. The fins on the lower body are reddish and have a white front edge bordered by a black stripe.

All colors become very bright at spawning (breeding) time. The belly of a breeding male becomes bright orange-red with black on either side. Coasters are more silvery over the head and body and are less colorful. Only red spots are visible on their sides.

A brook trout's **caudal fin** (tail) is usually square, although it may be slightly forked in some brook trout. This feature best distinguishes the brook trout from the lake trout, which has a deeply forked tail. Both brookies and lakers have dark bodies with light-colored spots.

Life History

Brook trout are native to North America. They live in cool, clear, spring-fed streams and pools. Brook trout are found under cover such as rocks, logs, and undercut banks. Larger brook trout are found in deep holes and move into shallow water only to feed.

Adult brook trout spawn (reproduce) in October or November in small streams (**tributaries**), main streams, or ponds. Coasters spawn over gravel beds near the shores of lakes. Spawning areas must have spring seepage or medium-swift currents which bring oxygen to eggs. The female

digs a shallow nest (or **redd**) by fanning the bottom with her tail. When the redd is finished, it is 1 to 2 feet in diameter and up to 6 inches deep. During this time, a nearby male chases off intruding males. The eggs are released into the redd and fertilized. The female may lay 100 to 4,000 eggs, depending on her size. The female then covers the eggs with gravel.

The eggs hatch in 2 to 3 months, depending on water temperature. The young fish (called **sac fry**) remain in the gravel. During this time they do not feed. They obtain the nutrients needed to grow from the yolk sac. When the yolk sac is gone and the sac fry are about 1½ inches long, they leave the redd to begin feeding. Brook trout are mature in 2 to 3 years and rarely live past 6 years.

Brook trout eat aquatic insects, terrestrial (land) insects, **zooplankton** (microscopic free-floating animals), worms, and other fish. Brook trout usually feed on whatever is available, but they prefer insects.

Fishery

The brook trout is one of the most important and popular game fishes. It is easy to catch and tasty to eat. Spring is the best time to fish for brook trout because they begin feeding more actively as the water temperature rises.

Anglers use many different types of bait and artificial lures to catch brook trout. Worms, crickets, and grasshoppers on a small hook are the most popular live baits. Dry and wet flies are used in early morning, late afternoon, and evening. During a fly hatch, however, anytime of the day is a good time to fly-fish for brookies. Large brook trout can be taken with spinners or spoons.

There are many ways to fish for brook trout. Fly-fishing in pools, **riffles** (rocky underwater

areas), or near cover (such as large rocks, sunken logs, or undercut banks) is best. Anglers can take larger brook trout from deep pools by casting with a small spinner or spoon. When fishing with live bait, anglers cast upstream and let the bait drift down through or past the features the brook trout prefers. All of these techniques are also used to catch brook trout from ponds.

Check fishing regulations, available anywhere licenses are sold, before seeking this fish or any other fish.

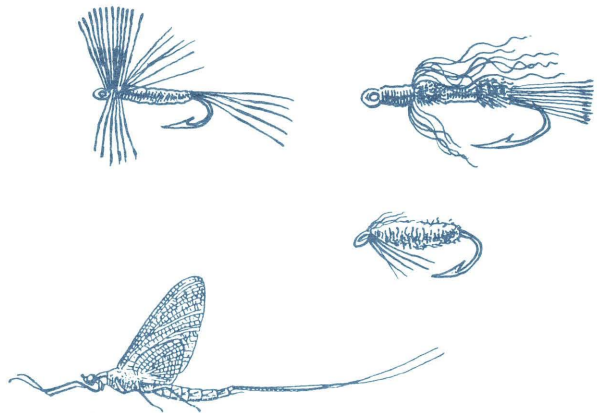
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Glossary

Angler—a person who fishes

Caudal fin—tail

Coaster—brook trout of Lake Michigan or Lake Superior

Dorsal fin—a fin on the back, usually central in position, with rays or spines

Kype—a “hook” which develops in the lower jaw of a breeding male brook trout

Parr marks—large, dark-colored square or oval markings on the sides of a young fish (parr)

Redd—gravel nest

Riffle—a rocky shoal or sandbar underwater

Sac fry—a young fish that still has a yolk sac from which it draws its nutrients

Tributary—a small stream which drains into a larger, main stream or into a river

Vermiculations—worm-like markings on the top of the head and back of brook trout

Zooplankton—microscopic free-floating animals

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