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Great Lakes 4H Fact Sheet – Brown Trout Michigan State University Cooperative Extension Service 4-H Club Bulletin Michael F. Masterson, Donald L. Garling, Shari L. McCarty, Fisheries and Wildlife Issued April 1986 2 pages

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caudal fin with few or no spots

GREAT LAKES FISHES 4-H FACT SHEET

Brown Trott Fremont, MI 49412 (616) 924-0500

Scientific name: Salmo trutta
Common names: Brown trout, brownie,
German trout,
spotted trout

Alara dorsal fin
light body
dark spots
adipose fin

## Description

he brown trout is a popular sport fish in the Great Lakes region. Adult brown trout living in streams average 12 to 13 inches long and weigh less than one pound. Brown trout of large lakes are usually 20 to 22 inches long and weigh 4 to 5 pounds, but they may grow to be 15 to 20 pounds.

The body of the brown trout is long and streamlined. The head is long, and the mouth extends back behind the eye. An inland brown trout is brown to olive-brown on its back and light brown to silver on its sides. This fish's sides have bright red spots with light borders. The **dorsal fin** (large fin on the back), back, and sides have large dark spots surrounded by a light ring or halo. The **adipose fin**, a small fleshy fin between the dorsal fin and tail, also has dark spots. The **caudal fin** (tail) has only faint spots. Brown trout of large lakes are usually silvery with an irregular pattern of dark crosses or checks on their back and sides. A lake-living brown trout has a white belly.

The brown trout is most similar to the rainbow trout. Both have light-colored bodies with dark spots. The brown trout's caudal fin either lacks spots or has irregular, faint spots. The rainbow trout has distinct rows of black spots on its tail.

# Life History

rown trout, which are native to central Europe and western Asia, were first brought to the United States in 1883 when they were stocked in the Pere Marquette River in northern Michigan. In streams, adult brown trout can be found in deep pools, around underwater plants, under sunken logs and undercut banks, and near large boulders. In larger lakes, this fish is found along the shore in shallow water (usually less than 50 feet deep).

Adult brown trout spawn (reproduce) from October to December in streams 6 inches to 2 feet deep. Brown trout living in Lakes Superior and Michigan may spawn in rocky reefs and shoals. After the female chooses the spawning site, she fans her tail to dig a shallow nest, or **redd**, in the gravel. The female and male move into the redd. The male fertilizes the eggs as they are released by the female. Depending on her size, the female may lay 400 to 2,000 eggs. The female then covers the redd with gravel. Water must be able to flow through the redd to bring oxygen to the eggs.

The young trout hatch in 2 to 4 months, depending on water temperature. The young fish, called **sac fry**, have a large yolk sac from which

they draw the nutrients they need to survive. When the fry have used most of their yolk sac, they are able to swim and leave the redd to begin to feed. Brown trout are mature and able to reproduce when they are 2 to 3 years old.

Adult brown trout eat aquatic and terrestrial (land) insects and their larvae (young), crayfish, snails, salamanders, frogs, and a wide variety of fishes. Even small snapping turtles and mice have been found in the stomachs of large brown trout. Smaller brown trout feed mainly on **zooplankton** (microscopic free-floating animals) and insects.

#### Fishery

he brown trout is found in all of the upper Great Lakes. It is also found in many streams and lakes that were stocked in the past. Between 1943 and 1955, brown trout were harvested as "Sebago salmon" by commercial fishermen in Lake Superior. Since then, they have been legal only for the recreationist.

The brown trout is one of the most difficult fish to catch. **Anglers** fishing in streams use dry flies in early morning, late afternoon, and evening. Anglers also use wet flies and other imitations of aquatic insects. Spinners and spoons are often used in the spring when the water is **turbid** (cloudy). Anglers fish for brown trout in deep pools; around underwater plants, logs, and boulders; and near undercut banks.

In large lakes, brown trout are taken by **trolling** (pulling a lure slowly behind a boat), still-fishing (sitting still in a boat or on a pier), or casting from shore. Spoons, spinners, and plugs (types of artificial lures) are used when trolling near shore. Trolling is done over weed patches, near underwater structures (such as trees and other sunken objects), and in areas near incoming streams.

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Issued in furtherance of Cooperative Extension work, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. W.J. Moline, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

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When still-fishing near the lakeshore, the best baits are nightcrawlers, wigglers, and spawn (egg) sacs. Anglers also wade along shore and cast out, or cast toward shore from a boat to catch brown trout. Shallow water fishing is done in water less than 15 feet deep with spoons, spinners, nightcrawlers, or spawn sacs.

Ice fishing for brown trout is also popular. These fish are usually found in water less than 30 feet deep at inlets and outlets where there is a current. Wigglers, minnows, salmon eggs, ice flies, small spoons, or spinners should be used within 6 feet of bottom.

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

Written by:

Michael F. Masterson, Graduate Assistant Donald L. Garling, Fisheries Specialist Shari L. McCarty, 4-H Youth Specialist Department of Fisheries and Wildlife Illustrations by:

Maureen Kay Hein

Partial funding for this project was provided by the U.S. Fish and Wildlife Service, U.S. Department of Interior.

### **Glossary**

Adipose fin—small fatty fin between dorsal and tail fins

**Angler**—one who fishes

Caudal fin-tail fin

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

Redd-gravel nest

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

**Trolling**—slowly pulling a fishing lure behind a boat **Turbid**—cloudy due to small soil particles and other materials in the water

**Zooplankton**—microscopic free-floating animals