

## **MSU Extension Publication Archive**

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Great Lakes 4H Fact Sheet – Rainbow 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

The PDF file was provided courtesy of the Michigan State University Library

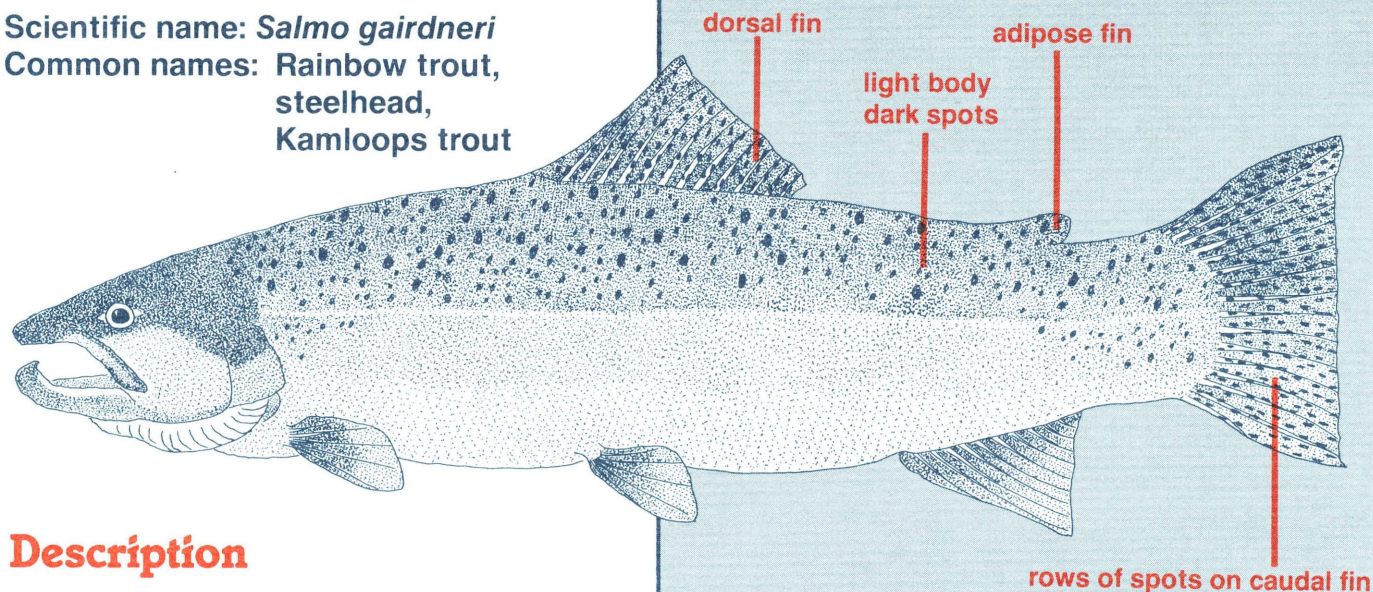
**Scroll down to view the publication.**



M.S.U. EXTENSION  
NEWAYGO COUNTY  
817 S. Stewart  
Fremont, MI 49412  
(616) 924-0500

# Rainbow Trout

**Scientific name:** *Salmo gairdneri*  
**Common names:** Rainbow trout,  
steelhead,  
Kamloops trout



## Description

**T**he rainbow trout is a popular, colorful game fish of the Great Lakes region. Its body is long and streamlined. The large mouth extends back behind the eye. Rainbow trout in streams are 8 to 10 inches long or longer. Rainbow trout living in the Great Lakes (called **steelhead**) are 20 to 24 inches long and weigh 5 to 10 pounds. A few steelhead weigh more than 20 pounds.

Adult rainbow trout are blue, blue-green, or brown on the back and upper sides, with silver or gray sides and a gray or white belly. The back and sides have small dark spots. The **dorsal fin** (large back fin) and **caudal fin** (tail) have rows of dark spots. Sometimes there is a stripe ranging in color from pink to brown along the side of the fish. Rainbow trout living in streams have darker, more intense colors; this is also true of all rainbows during the breeding season. Steelhead are usually lighter, brighter, and more silvery.

Like all trout and salmon, the rainbow trout has an **adipose fin**, a small fleshy fin between the dorsal fin and tail. The rainbow trout is most like the brown trout. Both have light-colored bodies with dark spots. To tell the rainbow from the brown trout, look for the rows of black spots on the rainbow's tail. A brown trout's tail lacks distinct tail spots.

## Life History

**T**he rainbow trout is native to the western United States and Canada. It has been so widely introduced throughout North America that it now occurs in almost all suitable habitats. The rainbow trout is found in fast, white water sections of cool streams, in deep inland lakes, and in the Great Lakes. It can tolerate a wide range of water temperatures.

Rainbow trout and steelhead spawn (reproduce) in streams from late March through early June, depending on weather and water temperature. Most adult steelhead begin to migrate toward streams when the ice breaks up on their home lake, although some enter the streams the previous fall or winter. The spawning site is a bed of fine gravel in fast water just above a pool. The female digs the nest, or **redd**, by fanning the stream bottom with her tail. The male and female go through a **courtship ritual**. They nudge each other and the male hovers over the female. The female releases 500 to 10,000 eggs, depending on her size and health, and they are fertilized by the male. The eggs fall into spaces in the gravel. The female then covers the eggs with the gravel.



The young trout hatch in 20 to 80 days, depending on water temperature. The **fry** (young fish) have a large yolk sac and remain in the gravel for 2 to 3 weeks. During this time, they do not feed. The fry absorb all their nutrients from the yolk sac. They begin feeding shortly after emerging from the gravel. Juvenile rainbow trout will mature in 2 to 3 years in streams, then remain there throughout their lives.

Young steelhead remain in the streams for 1 to 2 years before migrating downstream into one of the Great Lakes. These fish become adults 4 to 5 years after hatching and reenter the streams to spawn. Unlike salmon, trout spawn more than once. After they spawn, the adult steelhead migrate back to the lake. Rainbow trout and steelhead can live 7 to 11 years but few live longer than 6 or 7 years.

The rainbow trout's choice of food depends on what is most available. They eat aquatic insects, terrestrial (land) insects, **zooplankton** (microscopic free-floating animals), and fish. They also eat **crustaceans** (hard-shelled animals such as crayfish), snails, and salmon or trout eggs. Young rainbow trout feed mainly on zooplankton and insects.

## Fishery

**A**lmost all suitable streams and lakes in the Great Lakes region contain rainbow trout. Steelhead are found in all five of the Great Lakes. The rainbow trout is one of the five most popular sport fishes in North America.

**Anglers** catch rainbow trout with both natural and artificial baits. In streams, rainbow trout take dry and wet flies, spinners, and spoons. Rainbow trout prefer swift moving water and can sometimes be found in **riffles** (rocky shoals or sandbars) above a pool. Live bait such as night-crawlers, grasshoppers, crickets, and salmon eggs work well in a stream. While fishing for rainbow trout on lakes, anglers **troll** (slowly pull the

lure behind a boat) or cast using artificial lures. Anglers also still-fish with worms, minnows, or salmon eggs on lakes.

Steelhead are great fighters. When they come in to spawn, they can be caught with salmon eggs, worms, minnows, or shiny spoons and spinners. Still-fishing with spawn (egg) sacs, worms, and minnows is done near the mouth of a stream. Fishing for steelhead from shore, a dock, or a pier with shiny spoons and spinners is also popular. In the Great Lakes, steelhead are usually found within a mile of shore in water less than 50 feet deep. Anglers troll for steelhead with spoons, spinners, streamers, or plugs near areas where a stream enters the lake, near peninsulas, and near steep drop-offs.

Ice fishing for rainbow trout and steelhead is a popular activity. These fish are usually found near inlets or outlets where there is a current and in water less than 30 feet deep. They can be caught with a small flashy ice spoon with a grub or minnow on it, or with wigglers, minnows, or salmon eggs on bright ice flies, teardrops, or plain hooks.

Check fishing regulations, available anywhere licenses are sold, before seeking this fish 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

### Illustration 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**—a fleshy fin on the back behind the dorsal fin

**Angler**—one who fishes

**Caudal fin**—tail fin

**Courtship ritual**—a set of instinctive behaviors before breeding

**Crustacean**—a hard-shelled, joint-legged animal that breathes with gills

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

**Fry**—young fish

**Redd**—a gravel nest

**Riffle**—a rocky shoal or sand bar underwater

**Steelhead**—rainbow trout which live as adults in the Great Lakes and migrate upstream to spawn

**Troll**—to slowly pull a fishing lure behind a boat

**Zooplankton**—microscopic free-floating animals

**G**MSU is an Affirmative Action/Equal Opportunity Institution. Michigan 4-H — Youth educational programs and all other Cooperative Extension programs are available to all without regard to race, color, national origin, sex, or handicap.

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.

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.