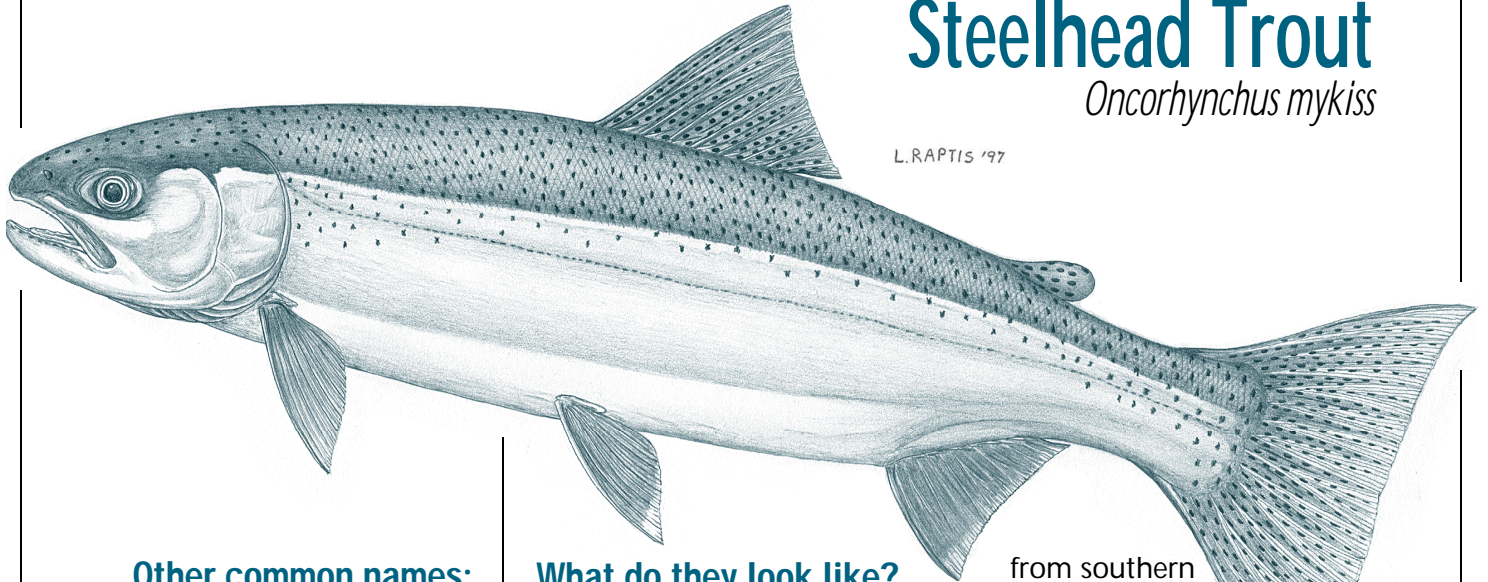


B.C. Fish facts

Steelhead Trout

Oncorhynchus mykiss

L. RAPTIS '97



Other common names:

Historically they were called steelhead-salmon, salmon-trout or in some areas, hardhead. For more information on the species see the rainbow trout fact sheet.

Typical range in length range for adults:

50 — 85 cm

Maximum length 120 cm

Typical range in weight for adults

1.4 - 6.8 kg

Maximum weight: 21 kg

What do they look like?

The steelhead has the same general appearance as other rainbow trout, particularly when young. Sea-running (anadromy) occurs in both the coastal and interior forms of rainbow trout. The adult has a more streamlined, torpedo-like body shape than the resident rainbow. The male's jaw lengthens at maturity and forms a 'kype' or knob on the tip, similar to Pacific salmon. When fresh from the sea, they are usually very bright and silvery. As they approach spawning a pink to red lateral line appears that extends over the gill covers then gradually they darken to a dull grey or brown.

Where do they live?

Steelhead can be found in rivers and streams draining to the Pacific Ocean all the way

from southern California to the Alaska Peninsula. The steelhead is a rainbow trout that spends some of its youth in fresh water, migrates to the sea, then returns to fresh water to spawn. Steelhead make long marine migrations into the North Pacific and the Gulf of Alaska. The exact distribution is controlled by cooler ocean temperatures, north of the 15°C isotherm.

What do they eat?

Young steelhead eat invertebrates: crustaceans and insects, such as mayflies, caddis flies and black flies. Steelhead will also eat salmon eggs when available. At sea, they feed primarily on fish, squid and amphipods.

What is their life cycle like?

Spawning occurs in the spring, in clean gravel with swift water flowing through it, often at the tail of a pool, just where it breaks into a riffle. Not all steelhead die after they spawn; many return to the sea; some even make it back to spawn again. Eggs hatch into alevins after four to seven weeks, depending on water temperature. It takes three to seven days for the alevins to absorb the remaining yolk and become fry. Free-swimming fry emerge from the gravel during the summer. The time spent in fresh water varies from one to five years, depending on stream temperature and food availability. Smolts begin to migrate downstream in May and disperse offshore immediately upon entering salt water. Time spent at sea varies from a few months to four years. Few steelhead live longer than nine years.

There are different life-history forms, named for the season they return from the sea to

spawn. They are broadly referred to as the summer-run and winter-run steelhead. The first to return are the summer-runs, which enter fresh water from early spring to late fall of the year prior to spawning. Winter-runs enter the river from late fall to early spring. Summer-run fish enter the river while still immature and reach full maturity while holding in fresh water. Later winter-runs are fully mature when they arrive. Run timing is genetically determined, making summer- and winter-run fish distinct races. In most systems, fish returning to upper tributaries are summer-run, while those returning to spawning areas near the coast are winter-run. Different runs of steelhead as well as resident rainbow can occur in the same river.

How are they doing?

As a species, the rainbow trout is yellow-listed, which means that it is not at risk in British Columbia. However, many steelhead populations have suffered declines and even extinction as a result of habitat damage or over-fishing.

Summer-run fish, in particular, are doing poorly. The timing of their return home overlaps with salmon species, and many are taken in the commercial or food fisheries before they can return to spawn.

How you can help:

- It is important to obey angling regulations and habitat protection bylaws, guidelines and regulations, since they were designed to protect the fish and their habitat. You should also Observe, Record and Report violations of the regulations by phoning 1-800-663-9453.
- They are also highly vulnerable to human activities which alter stream flow, increase sedimentation and water temperature, or reduces cover. If you own property bordering a stream, try to protect the streamside vegetation, which provides shade and prevents the bank from eroding.
- Form a group of water stewards and volunteer to monitor local water quality.
- Be aware that what you dump into your septic tank or roadside storm drain may find its way into streams or lakes. Help keep water quality high by using detergents and soaps minimally and do not dump harsh chemicals, such as bleach, paint thinner or antifreeze, into drains.

No kidding!

- The largest steelhead ever caught had an estimated weight of well over 20 kg.
- Some steelhead may live longer than 13 years.

