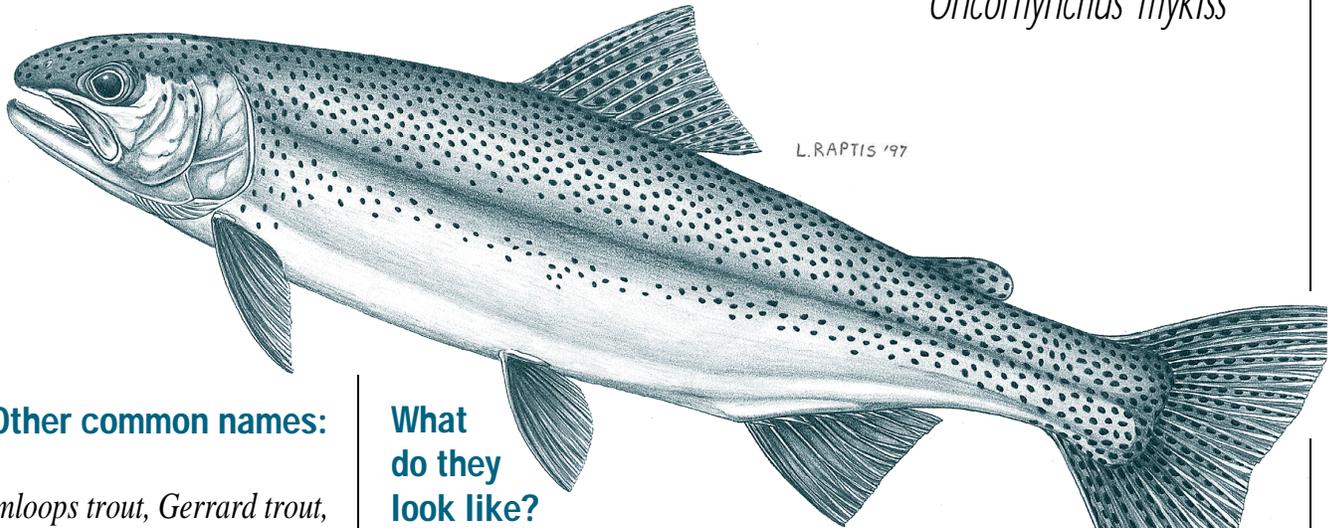


# B.C. Fish facts



## Rainbow Trout

*Oncorhynchus mykiss*



### Other common names:

*Kamloops trout, Gerrard trout, silver trout, redband trout and steelhead (see separate fact sheet for more information on steelhead).*

Typical range in length  
for adults: 30 - 75 cm  
Maximum length: 90 cm

Typical range in weight  
for adults: 1 - 7 kg  
Maximum weight: 9 kg

### What do they look like?

Rainbow trout vary greatly in appearance, depending on where they are found and their age. Generally, rainbows have small heads with well-developed teeth on the roof of the mouth and no teeth at the base of the tongue. They have an adipose fin, a small, soft, fleshy fin on the back behind the dorsal fin. There are black spots present on the back, sides and fins. The adipose fin also has spots, often forming a black border around its edge. Young and dwarf adults have parr marks on their sides. Their colour is silvery overall, often with an iridescent pink to reddish band along the lateral line. The tail is slightly forked, but more forked in juveniles. In spawning condition the red stripe on their sides becomes more pronounced and their bodies darken to a smoky-grey hue.

British Columbia's rainbow trout are descended from two ancient lines, and can be

divided into two types: the coastal rainbow trout and the interior red-band trout. The coastal rainbow is heavily spotted with irregularly-shaped spots above and below the lateral line; a rose-red lateral line is present at some stage of the life-cycle, and parr marks are rounded. In the red-band, the spots are larger; many individuals have yellow and orange tints on the body, a slight cutthroat mark (a faint streak under the lower jaw) and light coloured tips on the dorsal, anal and pelvic fins; the parr marks are more oval than round.

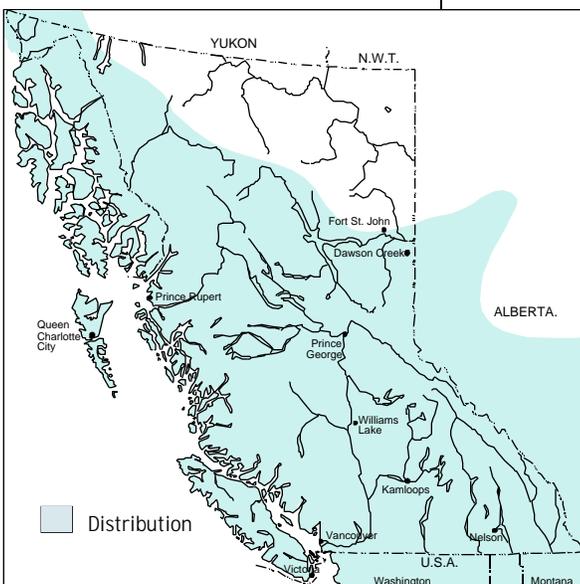
### Where do they live?

The native range of the rainbow trout lies west of the Rocky Mountains from northwest Mexico to the Kuskokwim River, Alaska, and the Peace and possibly the Athabasca river east of the Rocky

Mountains. In B.C., the native coastal type is found throughout our coastal drainage systems, while the native red-band is found in the Interior: in the Columbia basin; the Fraser system above Hell's Gate, and in the headwaters of the Liard and Peace river systems.

The rainbow trout has been widely introduced outside its natural range and can now be found across Canada and all around the world. The typical hatchery rainbow in B.C. is a red-band of Pennask Lake origin. In other parts of the world it is often a descendant of a coastal stock.

Rainbows occupy many different types of ecosystems: the large rivers and lakes of lower valleys, the tributary streams and small lakes found in rolling hills at mid-elevation, and mountain streams and alpine lakes of the high country. Stream-dwelling rainbow trout are usually found in small to moderately large, but shallow, rivers with gravel bottoms and pool-riffle habitats. Lake-resident rainbow trout are usually found in deeper, cool lakes with adequate shallows and vegetation for good food production. There must be a gravelly tributary to the lake with adequate flows for spawning.



## What do they eat?

Rainbow trout mainly eat leeches, crustaceans, molluscs, and insects such as caddis flies and black flies, but they also eat salmon eggs when available. Most often it is those rainbow trout that eat fish (piscivorous) or run to the sea (steelhead), that reach a large size.

## What is their life cycle like?

Rainbow trout usually spawn for the first time in their third or fourth year. In the larger piscivorous fish, maturity is delayed. If food and other factors are suitable, most mature individuals spawn every year. They enter their spawning streams in the spring to lay their eggs in redds, gravel nests built by the female. They usually spawn in clean gravel in a riffle at the tail of a pool. 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 to become fry. Free-swimming fry emerge from the gravel during the summer. The fry of lake-resident spawners may move into the lake immediately, or, when there is sufficient stream flow, they may spend up to three years in the stream to avoid lake predators.

## 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 populations have suffered declines and even extinction as a result of habitat damage or over fishing. Maintenance of natural genetic diversity and the many life-history forms is a conservation concern.

## 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.
- Rainbow trout are highly vulnerable to human activities, which alter stream flow, increase sedimentation, reduce cover or raise water temperature. If you own property bordering a stream or lake, try to protect or plant trees and shrubs beside the water to provide food and shade, and prevent the banks from eroding.
- Form a group of water stewards and volunteer to monitor local water quality or restore natural streamside vegetation.
- 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!

- Some people consider the red-band trout a different species or subspecies. Detailed genetic studies may help to clear up this question.
- The largest rainbow trout ever caught in B.C. weighed almost 24 kg and came from Jewel Lake.

