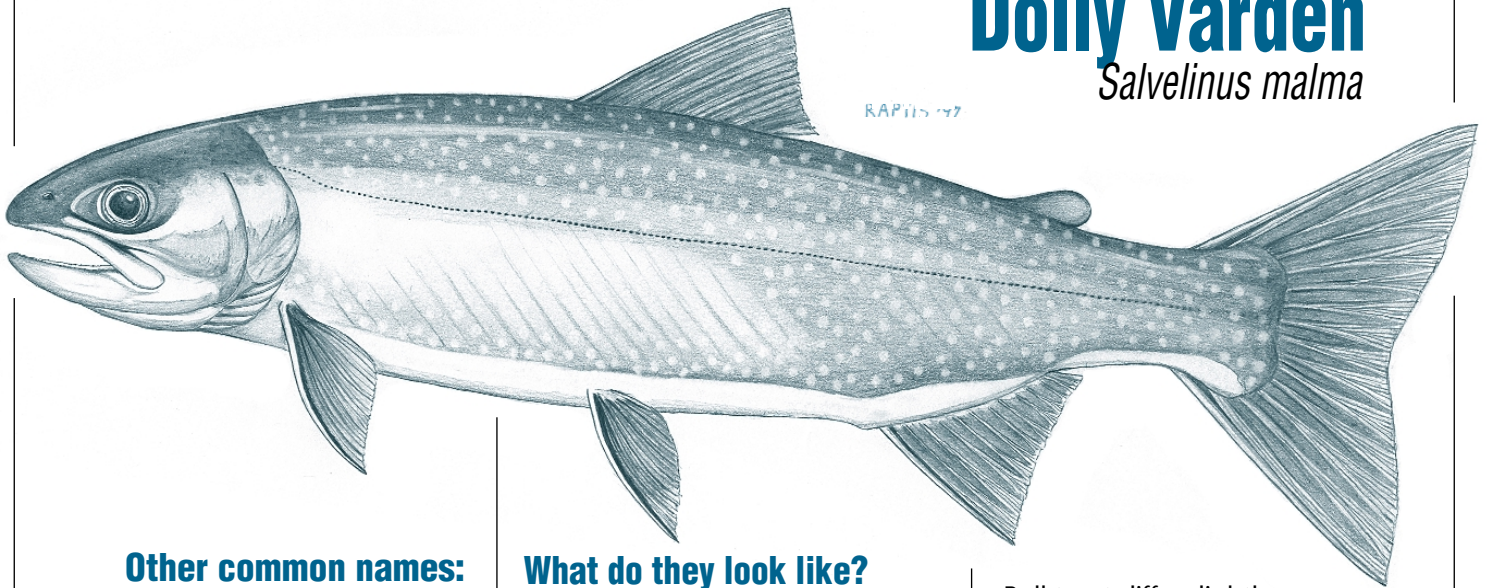


B.C. Fish facts

Dolly Varden *Salvelinus malma*

RAPIDS 197



Other common names:

Dollies, sometimes bull trout. They are often confused with bull trout, since these two different species of char are very similar looking. Until recently (the late 1980s and early '90s) they were believed to be the same species.

Length range for resident adults: 7 — 45 cm
Maximum weight for resident fish 1 kg

Length range for anadromous adults: 30 — 60 cm
Maximum weight for anadromous fish 2.3 kg

What do they look like?

Dolly Varden have a trout-like body. Like other char, when viewed from the side, the body is covered with light speckles on a darker background. (Real trout have dark speckles on a light background.) Sea-run (anadromous) fish are dark blue on their back, upper head and upper sides, but the belly is silver to white. Freshwater fish are olive-green to brown on the back and upper sides, the sides are paler in colour and the belly is white to dusky. The sides are marked with yellow, pale pink or orange spots, which are much harder to see on anadromous fish. These colours become stronger and brighter during spawning season. The fin on their backs has no spots or other markings. The lower fins are white or creamy on the leading edge with a single thin black and thin red line behind. There are well developed teeth on both jaws. Mature males can develop hooked jaws, called 'kypes'.

Bull trout differ slightly in appearance: the upper jaw curves downward; the snout is more pointed and the spots on the back are larger and farther apart. Also, in general appearance a Dolly looks flattened from side to side, while a bull trout looks slightly squashed, as though pressure has been applied to its back.

Where do they live?

Dolly Varden are found in fresh and salt water of eastern Asia and in western North America from just south of the Canadian border to at least the Seward Peninsula in Alaska. Their distribution does not extend far inland, although they are found in the very headwaters of the Fraser Liard and Peace river systems. They extend farthest inland in the Skeena and Fraser River drainage systems. They are not found in the Columbia river system. Freshwater residents may remain in streams or move into lakes. Anadromous Dolly Varden

spend time in the ocean as well as in rivers and streams; they do not seem to move out into the open ocean, but remain close to river mouths and the shore. Resident fish can be found in very steep, small streams (with slopes well above 20%).

What do they eat?

Dolly Varden eat aquatic insects, sometimes fish eggs, and smaller fish. Not very long ago this predatory behaviour was despised.

What is their life cycle like?

Adults are usually sexually mature between three and six years of age; after this age they may spawn every year in the fall. In northerly areas, they may spawn only every other year. They spawn earlier in the season in the north and later in the south. Females make a gravel nest (a redd) for the eggs in the stream bottom. The eggs hatch in the spring and the alevins emerge from the gravel in late April to mid-May, when they are about 20 — 25 mm long.

Both anadromous and freshwater forms remain in fresh water for the first three to four years. Anadromous forms migrate to the ocean to feed in coastal water. They will occasionally move

upstream again to take advantage of seasonal feeding opportunities. They may migrate up a stream that leads to a lake to overwinter and in the spring go back to sea. This back-and-forth migration continues for a few years until it is time to spawn, when they seek out the river in which they were born.

Different migratory forms (stream-resident, river-migratory, lake-migratory and anadromous) can live in the same river system.

How are they doing?

Dolly Varden is blue-listed, which means that this species is considered vulnerable in British Columbia. They are sensitive to habitat changes, including disruption of migration routes, sedimentation and increasing water temperature. Many populations have declined as a result of urbanization, dam construction, industrial activity, road building or over-fishing (including poaching).

How you can help:

- Be fish aware ... don't think those small, steep, cold streams do not contain fish. That's Dolly or bull trout habitat!
- It is important to obey regulations, habitat protection bylaws, and guidelines, since

they were designed to protect the fish and their habitat. You should also Observe, Record and Report violations of regulations by phoning 1-800-663-9453.

- Since Dolly Varden are vulnerable to over-harvest, using a barbless hook and practicing catch and release are recommended.
- Fish are vulnerable to shrub- and tree-cutting, which

increases sedimentation, reduces cover and raises water temperature. If you own property bordering a stream, try to protect the streamside vegetation which provides shade and prevents the bank from eroding.

- 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.
- Form a group of water stewards and volunteer to monitor local water quality.

No kidding!

- Dolly Varden once had a bad reputation, since it sometimes feeds on the eggs and young of salmon. Alaska, at one time, had a bounty of 2.5 cents per fish and thousands were killed after being caught in traps and weirs. They are now recognized for their own beauty and value as a native sport fish.
- In Alaska they can live to be 12 years of age.
- The Dolly Varden is the only fish in B.C. with a first and last name ... like you. That's why both names are capitalized. It is believed to be named after a flashy dresser in Charles Dickens' novel "Barnaby Rudge" (or, perhaps, a once-popular calico print, with pink spots on a grey background, that was named after this character).

