

B.C. Fish facts

Burbot *Lota lota*



Other common names:

It has a variety of names across North America. In B.C. it is often called ling or freshwater cod.

Sometimes it is incorrectly referred to as ling cod; ling cod is a saltwater fish unrelated to the burbot.

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?

This fish looks like a ling cod, with a long body tapering to the rounded tail. The head is flattened with a long snout and a large mouth. It has a whisker-like appendage, called a barbel, on its chin and at each nostril, and two fins on its back. The base of the fin behind the head is quite short; the other is at least six times longer. Burbot can vary in colour from very pale to very dark, but are usually olive-coloured with mottled, darkish markings on the back and sides and a yellowish or dusky-coloured belly. Large fins are mottled and have a dark border. It is protected by a heavy covering of mucus which gives it a smooth and slippery feel when handled.

Where do they live?

This fish is widespread in cold, freshwater habitats in Europe, Siberia and North America. In British Columbia, burbot are found in lakes and rivers throughout the Columbia,

Fraser, Skeena, St. Kine, Alsek, Nass, Peace, Liard and Yukon systems. This fish usually spends its time on the bottom in the deep, cool areas of lakes and rivers. They have been caught as deep as 210 m. Young burbot can be found along rocky lake shores and in weedy areas, or hiding between the rocks in tributary streams.

What do they eat?

Like many other fish species, burbot are predators. They are able to swallow fish nearly their own size. For example, there is one report of a 38 cm burbot whose stomach contained a 30 cm walleye. As one of the top predators, it has an important role to play in the fish community. Their diet includes whitefish, kokanee, juvenile salmon, suckers, stickleback and perch, as well as crayfish and fish eggs in streams. They will also eat Mysis shrimp. Younger fish feed on aquatic insects.

What is their life cycle like?

The burbot is one of the few Canadian freshwater fish that spawns in mid-winter under the ice. January through March is their spawning period. They spawn at night, in shallow water up to 1.25 metres deep, over sand or gravel. Spawning is usually in lakes but they occasionally move into rivers to spawn. They are weaker swimmers than trout or char and need slower water to make their spawning migrations. Ten to twelve adult burbot usually spawn together in a squirming ball about 60 cm in diameter which moves over the bottom shedding milt and tiny eggs. This species does not make a nest and gives its offspring no parental care. The eggs hatch after about 30 days. Burbot are one of the few freshwater fishes, in the province, that go through a larval stage before growing into a fry. In Canada, burbot live to a maximum age of about 23 years.

How are they doing?

Burbot is yellow-listed, which means that the species is not at risk in British Columbia. It is quite common in some areas of the province and most populations appear to be doing well. However, some populations have declined drastically. For example the populations in the Kootenay River between Kootenay Lake and Lake Kookanus; and the Columbia River downstream of Hugh Keenleyside Dam, which have been affected by changes in riverflows as a result of dam construction.

How you can help:

- It is important to obey angling regulations and habitat protection bylaws, guidelines and regulations, since they are 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.
- Never transport live fish or other organisms from one body of water to another.

This could transfer diseases and parasites from one ecosystem to another, or upset the natural balance in the ecosystem where they are released.

- Be aware that what you dump down the sink or into sewers may find its way into streams.

Help keep water quality high by using detergents and soaps minimally and do not dump harsh chemicals, such as bleach, paint thinners or antifreeze, into drains.

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

No kidding!

- Female burbot can carry more than a million eggs.
- As they grow larger, they tend to eat bigger fish, not more fish.
- Burbot hunt at night, by ambush locating their prey first by smell, then by vibrations as the prey nears. Finally, when the prey is close enough, they make a rapid, close-range attack.
- Like saltwater cod, the burbot's liver contains large amounts of vitamins A and D.
- Many anglers have discovered that burbot are excellent for fish and chips.

