

Dolly Varden

Salvelinus malma

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Conservation Status

Included in Section 7 Notice: No

Designated as Identified Wildlife: No

Federally Designated (COSEWIC): No

Species identified in Kamloops, Lillooet or Merritt SFMP: **Yes (Lillooet)**

Description

- Body elongate and trout-like (Length: 30-60cm).
- Back and sides are marked with yellow, orange or red spots (distinguishing characteristic). Spots are usually smaller than the pupil of the eye.
- Lower fins are white or creamy on the leading edge with a single thin black and thin red line behind.
- Large eye in relation to the head.
- Blunt snout.
- Tail broad, shallowly forked.
- Spawning: usually red or pink on the lower abdomen with bright red spots. Orange lower fins with a white leading edge and black stripe. Mature males can develop hooked jaws.



Photo: Larry Burning



Breeding male dolly varden.

Forest Districts

Chilliwack
Campbell River
Fort St. James
Kalum
North Coast
Nadina
North Island - Central Coast
Queen Charlotte Islands
Sunshine Coast
South Island
Squamish
Skeena Stikine - Bulkley component
Skeena Stikine - Cassiar component

BEC Zones

- BWBS
- CDF
- CWH
- ESSF
- ICH
- MH
- SBS

Elevation

Not available.

Important Habitat Features

- Cold water specialists (<15°C).
- Spawn in flowing water and show a preference for gravel and cobble sections in smaller, lower order rivers and streams.
- Spawning sites are characterized by low gradients (~1.0–1.5%); clean gravel <20 mm; water velocities of 0.03–0.80 m/s; and cover in the form of undercut banks, debris jams, pools, and overhanging vegetation.
- Stream Classification S1, S2, S3, S4.
- Mature to old stands that contain structural stages 5–7 provide canopy cover that shades streams to moderate water temperature fluctuations, and allow for the needed input of large

woody debris to facilitate habitat complexity.

Management Recommendations

Consult with a Registered Professional Biologist prior to implementing the following management recommendations because certain situations may require custom solutions based on specific site characteristics.

- Identify locations where this species is known to occur: For the most recent information about British Columbia lakes and streams and the fish in them, please refer to FishWizard, a database maintained by BC Fisheries and Fisheries and Oceans Canada at <http://pisces.env.gov.bc.ca>. Additionally, stream surveys are recommended for streams with characteristics outlined in this report to determine presence or absence of this species.

In areas where this species is identified:

- Establish a no harvest zone buffer on either side of the known spawning or aggregating site and extend along the stream course for the entire length of the spawning or aggregating area. The size of this buffer is dependent on site conditions and should be determined by a Registered Professional Biologist.
- Do not build stream crossings within the no harvest buffer zone. Where there is no alternative to road or trail development, close to public during staging and spawning times. Fully deactivate and rehabilitate roads as soon as possible. Ensure that roads constructed do not impact stream channel integrity, water quality, groundwater flow, substrate composition, cover, and natural temperature regimes.
- Prevent or minimize detrimental alterations to dolly varden habitat including sedimentation.
- Maintain important habitat features including cover, substrate quality, pool depth and volume, groundwater flow, water quality including temperature, channel structure, and hydrologic characteristics of the site.
- Ensure large woody debris recruitment based on life expectancy and decay periods of naturally occurring adjacent tree species.
- Maintain migration corridors.
- Maintain inter-gravel flow, stable incubation temperatures, a clean and undisturbed water supply, and natural stream hydrology.
- Do not use pesticides.

References:

Ministry of Fisheries. 1999. B.C. Fish Facts. Dolly Varden. 2pp.

Forrex. 2004. Species Summaries and Procedures for Managing Priority Wildlife in the Omineca Region. 86pp.