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## Cultus Pygmy Sculpin | "Dwarf" Coastrange Sculpin

*Cottus sp. 2*

This diminutive member of the family Cottidae (“sculpins”), sometimes referred to as “bullheads” is part of a group of fishes usually associated with freshwater or marine benthic (substrate) habitats. Cultus Pygmy Sculpin, also referred to as “Cultus Lake” Sculpin has been classified as a dwarf version of the more common Coastrange Sculpin (*C. aleuticus*), but recent DNA work suggests it is likely a separate species.



Adult Sylvia Letay



Adult Sylvia Letay



Adult Sylvia Letay



Adult Sylvia Letay



Pygmy versus Costrange species  
Patricia Woodruff

## Characteristics

*Length 2.9-4.5 cm (maximum 5 cm).* As with other sculpin species, Cultus Pygmy Sculpin have a large flat head, large fan-like pectoral fins, and a tapering body with small pelvic fins. The anal and dorsal fins are long, the segmented dorsal fin rays (cartilaginous, or bony, dermal rods which form the skeleton of the fins), along the back becoming erect when the fish is excited or stressed. Colouration is subtle, with the dorsal area being brown to grey, lightening to a white ventral area. Larvae and juveniles lack pigmentation on the fins, which become barred as the fish matures. Some enhanced colouration occurs during spawning, with males having an orange band on the first dorsal fin. Both sexes have 1-3 dark saddle-like blotches below the second dorsal fin. Sculpin lack a swim bladder which prevents them from rising vertically in the water column as other fish species can. This tends to restrict them to a benthic existence where their flat heads, streamlined bodies and broad pelvic fins allow for them to remain stationary in the streambeds of the often fast flowing waters they inhabit. The pygmy lake form however has evolved a number of adaptive features to an open water existence including lower bone density, high levels of subsurface fat to provide buoyancy and enlarged sensory pores on the head to assist in sensing the location of prey. These adaptations allow the pygmy lake form to pursue plankton food sources throughout the water column of the deeper, open waters of Cultus Lake.

## Status

<b>Global Status:</b>	G1G2
<b>Provincial Status:</b>	S1S2
<b>SARA Status:</b>	Threatened
<b>BC List Status:</b>	Red (Candidates for- Extirpated, Endangered, or Threatened status)

## Resources

### A GENETIC AND BEHAVIOURAL ANALYSIS OF THE DISTINCTIVENESS OF THE CULTUS PYGMY SCULPIN (COTTUS ALEUTICUS)

#### IMPLICATIONS FOR ITS CONSERVATION

#### Spatiotemporal nutrient loading in Cultus Lake:

Context for eutrophication and implications for integrated watershed-lake management

## **For further information see**

### **Aquatic Species at Risk - Cultus Pygmy Sculpin**

#### **CULTUS LAKE AQUATIC STEWARDSHIP STRATEGY**

#### **BC Species and Ecosystems Explorer: Species and Ecosystems Search**

A source for authoritative conservation information on thousands of plants and animals and hundreds of ecological communities in BC. From here connect to all provincial and federal recovery plans (including the SARA Registry), COSEWIC (Committee on the Status of Endangered Wildlife in Canada), Identified Wildlife guidance and conservation requirements for specific species and ecological communities of conservation concern impacted by forestry activities) and links to E-Flora and E-Fauna (the Electronic Atlas of the Plants and Wildlife of British Columbia).

#### **British Columbia's Coast Region Species & Ecosystems of Conservation Concern**

A joint venture resource providing comprehensive information on a range of species and ecological communities specific to the Coast Region of BC (including the South, Central and North Coast, Vancouver Island and Haida Gwaii).

#### **Develop With Care Guidelines (see Lower Mainland Region section)**

Environmental guidelines for urban and rural land development in BC.

#### **Species at Risk & Local Governments a Primer for BC**

Learn what species are at risk in your area, search by name, habitat type, regional district and forest district.

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**Source URL:** <http://sccp.ca/species-habitat/cultus-pygmy-sculpin-dwarf-coastrange-sculpin>

#### **Links**

[1] [http://www.dfo-mpo.gc.ca/species-especes/species-especes/cultus\\_pygmy\\_sculpin-chabot\\_pygmee-eng.htm](http://www.dfo-mpo.gc.ca/species-especes/species-especes/cultus_pygmy_sculpin-chabot_pygmee-eng.htm)

[2] <http://cultusstewards.shawbiz.ca/>

[3] <http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/species-and-ecosystems-explorer>

[4] <http://www.geog.ubc.ca/biodiversity/factsheets/>

[5] [http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop\\_with\\_care\\_intro.html](http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop_with_care_intro.html)

[6] <http://www.speciesatrisk.bc.ca/>