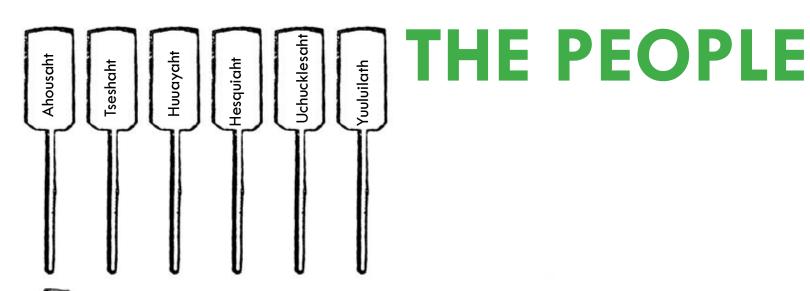
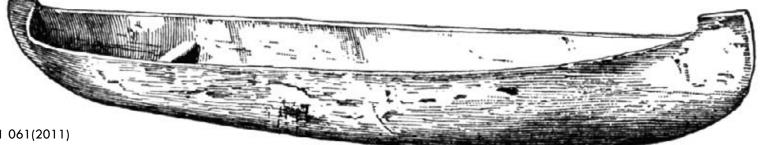
# **Appendix D - Community Profile**







POPULATION: 31 061(2011)

GROWTH RATE: 1.3 % (2006-2011)

FIRST NATIONS COMMUNITIES: 10

**DWELLINGS OCCUPIED: 13 339** 

### **URBAN POPULATIONS:**

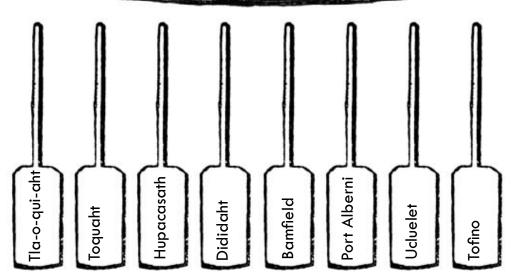
Bamfield: 155

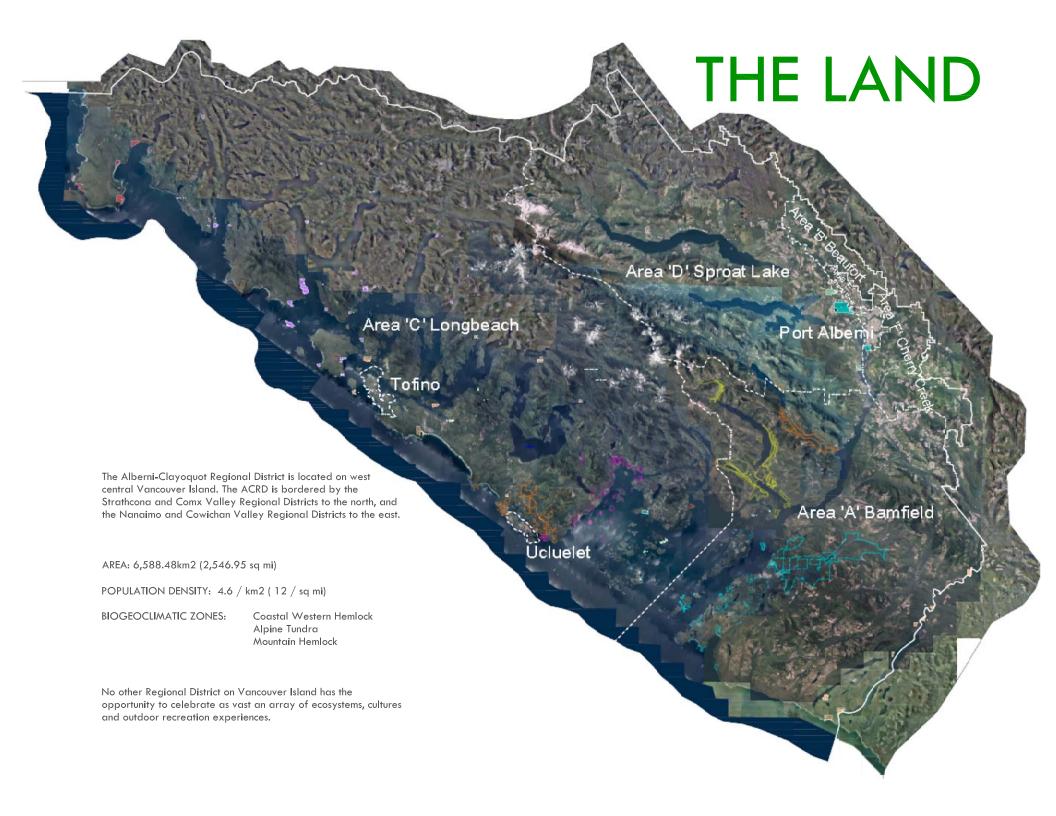
• Tofino: 1876

Ucluelet: 1627

Port Alberni: 17743

bcstats.gov.bc.ca





# THE ECONOMY



The Alberni Valley's forests consist primarily of Douglas Fir, Hemlock, Yellow Cedar and Western Red Cedar. Most of the old growth forests have been logged with current logging coming from second growth forests. A large paper mill, Catalyst Paper, Port Alberni Division sits on the edge of the Alberni Inlet. There is also a lumber mill, Alberni Pacific Division, that also sits on the inlet. Several smaller sawmills exist throughout the valley. Farming is also practised in the valley.

Port Alberni also serves as a hub for those travelling to the West Coast of Vancouver Island, including Ucluelet, Tofino and Pacific Rim National Park, As commodities tend to be much pricier in these remote areas, campers and travellers often do their shopping in Port Alberni before continuing their journey. This has resulted in development along the Johnston Road (Highway 4) corridor. including several big box retailers, arocery stores and strip mall developments. Previously, eco-tourism companies have set up shop in the Alberni Valley, taking advantage of the city's location on the fringe of wilderness yet proximate location to Vancouver and Victoria. For example, there's a kayaking, ATV touring, a windsurfing and a glider company. (L. Avis)



**Tofino** consists of approximately 1,876 residents on the west coast of Vancouver Island, in British Columbia, Canada, located at the western terminus of Highway 4, on the tip of the Esowista Peninsula, at the southern edge of Clayoquot Sound. The settlement of Tofino took place in 1909, in honour of 1792 Spanish commanders Galiano and Valdés, cartography instructor Admiral Vicente Tofiño.

A popular tourist destination in the summer, Tofino's population swells to many times its winter size. It attracts surfers, nature lovers, campers, whale watchers, fishermen, or anyone just looking to be close to nature. In the winter it is not as bustling, although many people visit Tofino and the west coast to watch storms on the water. Close to Tofino is Long Beach, a scenic and popular year-round destination, at the Pacific Rim National Park Reserve.

As a resort community, Tofino has a number of festivals including; the Pacific Rim Whale Festival, Tofino Shorebird Festival, Tofino Food and Wine Festival, Tofino Lantern Festival, "Art in the Gardens," and the O'Neill Coldwater Surf Classic. The highlight of November is the Clayoquot Oyster Festival.



Tranquil **Ucluelet** has dramatic backdrop for working, living, and recreating. The town of Ucluelet offers beaches, multi-use sports fields, community parks, waterfront promenades, restaurants, unique shops and galleries, a mini aquarium and a range of accommodation choices. The motto of Ucluelet is "Living on the Edge" due in part to its location on a peninsula surrounded by water.

Located beside Long Beach in BC's Pacific Rim National Park Reserve, people come to Ucluelet for surfing, hiking, kayaking, fishing, diving, camping, whale and bear watching, beachcombing and storm watching.

The Wild Pacific Trail is becoming the focus of many Ucluelet vacations, with its unique shoreline trails and ocean vistas. The Pacific Rim National Park Reserve offers long sandy beaches for picnicking, hiking, surfing, and other water activities. The Kwisitis Visitor Centre has educational programs and activities. The Broken Group Islands, a unit of the Pacific Rim National Park Reserve, is accessible from Ucluelet and offers world class kayaking and diving opportunities. The town of Ucluelet itself offers spas, shops and galleries, as well as a waterfront promenade along the inner side of the Ucluth Peninsula.



Bamfield was populated by Huu-ay-aht of the Nuu-chah-nulth, the local indigenous people. Bamfield was named after the first government agent of the area, William Eddy Banfield. In 1902, the Bamfield cable station was constructed as the western terminus of a worldwide undersea telegraph cable called by some the All Red Line as it passed only through countries and territories controlled by the British Empire, which were coloured red on the map.

A Marine and Fisheries lifesavina station on the Pacific coast was established at Bamfield in 1907. It was the first lifesaving station on Canada's Pacific Coast. In 1953 the cable was extended up the Alberni Inlet to Port Alberni and the local station was closed on June 20, 1959. The Bamfield Marine Sciences Centre began operations by the end of 1972. It became the largest employer in the community since. Commercial fishing was based in Bamfield up to the mid-1980s. Bamfield is also the northern terminus of the West Coast Trail, a hiking trail built in 1907 along the west coast of Vancouver Island to help survivors of the area's many shipwrecks find their way back to civilization. The trail runs 77 km (48 mi) kilometres along extremely rugged terrain.

Today Bamfield is primarily a tourist destination, either for the West Coast Trail, ocean kayaking or sport fishing. The research activities at the Bamfield Marine Sciences Centre attracts hundreds of researchers every year and offers credited university courses through its five associated universities.

# **BIOGEOCLIMATIC ZONES**

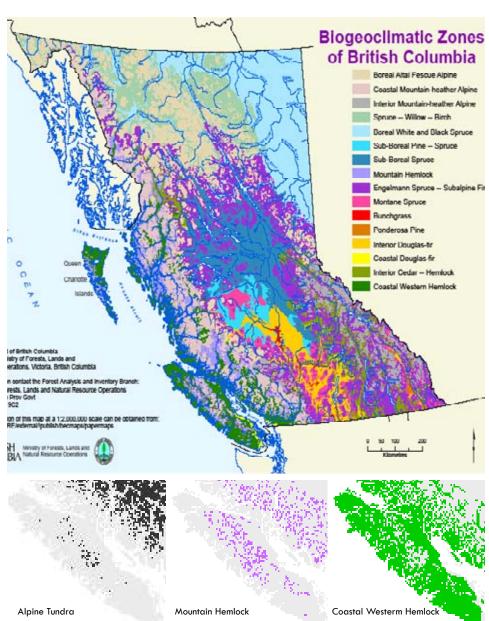
Biogeoclimatic zones are defined as "a geographic area having similar patterns of energy flow, vegetation and soils as a result of a broadly homogenous macroclimate."(for.gov.bc.ca) Biogeoclimatic zones support a wide variety of wildlife, vegetation and tree species. The ACRD hosts several biogeoclimatic zones, making it one of the most ecologically diverse regional districts in the province. Of the 14 zones represented in BC, three are found in the ACRD.

#### Alpine Tundra

This zone is the harshest and least-populated biozone in the Province. It occupies the high elevations of mountainous areas, and is especially common in the Coast Range. The terrain in this zone is dominated by ice, snow, rock, and glaciers. Climate is a major barrier to life; the growing season is extremely short. Mean average temperature usually ranges from 0 °C (32 °F) to 4 °C (39 °F), and even in summer the average temperature does not exceed 10 °C (50 °F). The zone sees heavy precipitation, usually in the form of snow. Trees are rarely found in this zone, and when they do grow, they take the low, sprawling Krummholz form. Shrubs are common, especially dwarf evergreen species. Grasses, heath, and sedges are also present. Wetter areas see a larger variety of plant species. Higher elevations are exclusively the realm of the lichens. Due to its harsh winters, few animals live in the zone year-round. However, in the spring, summer, and fall, many species are found.







#### **Coastal Western Hemlock**

The Western Hemlock, Tsuga heterophylla, is the dominant species on the west coast of North America. A large tree, it usually grows up to 70 meters tall and 2.5 meters in diameter. The Western Hemlock can be found readily throughout the forests in Alberta, British Columbia, Alaska, Montana, Idaho, Washington, Oregon and California between the sea level and up to 2000 m elevation in coastal to sub-alpine forests. It is the dominant species within this range. In low elevation coastal forests on the west coast of North America, it shares dominance with the Spruce; in the slightly drier western Cascade Range it shares dominance with the Douglas-fir.

The climate of the region where Western Hemlocks are located is characterized by long, mild, and wet winters, and relatively sunny and dry summers. During winter time the hemlock experience the most growth. Especially on the coast, where winds can reach sustained speeds of above 100km/hour, the Hemlock have an advantage over the other shorter, weaker trees by being able to better withstand the more extreme climates. The mean average temperature throughout Western Hemlock's range in BC is around 3-5 degrees celsius.

#### **Mountain Hemlock**

The Mountain Hemlock, Tsuga mertensiana, is a close relative of the more dominant Western Hemlock. A medium-sized tree, it usually grows up to 50 meters tall and 1.5 meters in diameter at the base. Native to the west coast of North America, the bark of the mountain hemlock is thin and gray in color. Its crown is in a conic shape in young trees and gradually taking on a cylindrical shape as the tree grows. Its needles are soft, blunt-tipped, and slightly flattened. The cones are small but long. The mountain hemlock prefers open conditions with sufficient light, and it can tolerate severe, cold weather better than many other species. The mountain hemlock is well adapted to deal with heavy snow fall and ice formations. The Mountain Hemlock shares much territory with the Western Hemlock. In BC, mountain hemlocks can be found from sea level up to about 1000 m of elevation. As the mountain hemlock grows to the treeline on the coastal mountain slopes, the best place to find its picturesque qualities are in the high mountain areas.





# **SPECIES AT RISK**

Based on data received from Species at Risk, BC the following species are listed as of concern, threatened, endangered. http://www.speciesatrisk.bc.ca/advancedsearch/?district=ACRD

Pearson, Mike and Healey, M.C.2012. Species at Risk and Local Government: a Primer for BC. Stewardship Centre of British Columbia, Courtenay BC.

#### **SUMMARY LIST FOR ACRD**

| Number of Species | 169 |
|-------------------|-----|
| Mammals           | 16  |
| Birds             | 4   |
| Breeding Birds    | 21  |
| Reptiles          | 2   |
| Amphibians        | 3   |
| Fishes            | 10  |
| Insects           | 13  |
| Molluscs          | 13  |
| Vascular Plants   | 66  |
| Mosses            | 10  |
| Fungus            | 1   |

| BC Red List             | 17  |
|-------------------------|-----|
| DC Ked Lisi             | 4/  |
| BC Blue List            | 110 |
| Identified Wildlife     | 14  |
| COSEWIC Endangered      | 12  |
| COSEWIC Threatened      | 16  |
| COSEWIC Special Concern | 21  |
| SARA Schedule 1         | 40  |
| Extirpated fom BC       | 0   |
| Extinct                 | 0   |

#### **MAMMALS**

| English Name                |
|-----------------------------|
| Grey Whale                  |
| Harbour Porpoise            |
| Killer Whale                |
| Steller Sea Lion            |
| Vancouver Island            |
| Wolverine                   |
| Killer Whale                |
| Killer Whale                |
| Humpback Whale              |
| Northern Fur Seal           |
| Townsend's Big-eared Bat    |
| American Water Shrew        |
| Keen's Myotis               |
| Roosevelt Elk               |
| Wolverine                   |
| Ermine, Anguinae Subspecies |

| Scientific Name              | COSEWIC               | SARA       | BC Status |
|------------------------------|-----------------------|------------|-----------|
| Eschrichtius robustus        | Special Concern       | Schedule 1 | Blue      |
| Phocoena phocoena            | Special Concern       | Schedule 1 | Blue      |
| Orcinus orca pop. 5          | Endangered            | Schedule 1 | Red       |
| Eumetopias jubatus           | Special Concern       | Schedule 1 | Blue      |
| Marmot Marmota vancouvere    | nsis Endangered       | Schedule 1 | Red       |
| Gulo gulo vancouverensis     | Special Concern       | None       | Red       |
| Orcinus orca pop. 6          | Threatened            | Schedule 1 | Red       |
| Orcinus orca pop. 3          | Threatened            | Schedule 1 | Red       |
| Megaptera novaeangliae       | Special Concern       | Schedule 1 | Blue      |
| Callorhinus ursinus          | Threatened            | None       | Red       |
| Corynorhinus townsendii      | None                  | None       | Blue      |
| Sorex palustris brooksi      | None                  | None       | Red       |
| Myotis keenii                | <b>Data Deficient</b> | Schedule 3 | Red       |
| Cervus canadensis roosevelti | None                  | None       | Blue      |
| Gulo gulo                    | Special Concern       | None       | None      |
| Mustela erminea anguinae     | None                  | None       | Blue      |



Killer Whale photo: bing.com



Keen's Myotis photo: bing.com



Northern Fur Seal photo: bing.com



| BIRDS  |
|--------|
| Englis |

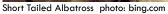
English Name
Pink-footed Shearwater
Short-tailed Albatross
Black-footed Albatross
Laysan Albatross

Scientific Name
Puffinus creatopus
Phoebastria albatrus
Phoebastria nigripes
Phoebastria immutabilis

COSEWIC
Threatened
Threatened
Special Concern
None

SARA
Schedule 1
Schedule 1
Schedule 1
None

BC Status
Blue
Red
Blue
Red









Common Murre photo: bing.com



Green Sturgeon photo: bing.com

#### **BREEDING BIRDS**

| English Name           | Scientific Name                   | COSEWIC               | SARA       | BC Status |
|------------------------|-----------------------------------|-----------------------|------------|-----------|
| Great Blue Heron       | Ardea herodias fannini            | Special Concern       | Schedule 1 | Blue      |
| Marbled Murrelet       | Brachyramphus marmoratus          | Threatened            | Schedule 1 | Blue      |
| Northern Goshawk       | Accipiter gentilis laingi         | Threatened            | Schedule 1 | Red       |
| Western Screech Owl    | Megascops kennicottii kennicottii | Threatened            | Schedule 1 | Blue      |
| Red Knot               | Calidris canutus                  | Endangered            | Schedule 1 | Red       |
| Peregrine Falcon       | Falco peregrinus pealei           | Special Concern       | Schedule 1 | Blue      |
| Common Nighthawk       | Chordeiles minor                  | Threatened            | Schedule 1 | Yellow    |
| Caspian Tern           | Hydroprogne caspia                | Not at Risk           | None       | Blue      |
| Barn Swallow           | Hirundo rustica                   | Threatened            | None       | Blue      |
| Olive-sided flycatcher | Contopus cooperi                  | Threatened            | Schedule 1 | Blue      |
| Band-tailed pigeon     | Patagioenas fasciata              | Special Concern       | Schedule 1 | Blue      |
| Green Heron            | Butorides virescens               | None                  | None       | Blue      |
| Brandt's Cormorant     | Phalacrocorax penicillatus        | None                  | None       | Red       |
| Northern Pygmy-Owl     | Glaucidium gnoma swarthi          | None                  | None       | Blue      |
| Sooty Grouse           | Dendragapus fuliginosus           | None                  | None       | Blue      |
| Tufted Puffin          | Fratercula cirrhata               | None                  | None       | Blue      |
| White-tailed Ptarmigan | Lagopus leucura saxatilis         | None                  | None       | Blue      |
| Cassin's Auklet        | Ptychoramphus aleuticus           | Candidate for Listing | None       | Blue      |
| Common Murre           | Uria aalge                        | None                  | None       | Red       |

#### **REPTILES**

| English Name           | Scientific Name        | COSEWIC    | SARA       | BC Status |
|------------------------|------------------------|------------|------------|-----------|
| Western Painted Turtle | Chrysemys picta pop. 1 | Endangered | Schedule 1 | Red       |
| Leatherback Turtle     | Dermochelys coriacea   | Endangered | Schedule 1 | Red       |
|                        |                        |            |            |           |

# **AMPHIBIANS**

| English Name             | Scientific Name | COSEWIC         | SARA       | BC Status |
|--------------------------|-----------------|-----------------|------------|-----------|
| Northern Red-legged Frog | Rana aurora     | Special Concern | Schedule 1 | Blue      |
| Western Toad             | Anaxyrus boreas | Special Concern | Schedule 1 | Blue      |
| Wandering Salamander     | Aneides vagrans | None            | None       | Blue      |

#### **FISHES**

| English Name                        | Scientific Name                  | COSEWIC         | SARA       | BC Status |
|-------------------------------------|----------------------------------|-----------------|------------|-----------|
| Green Sturgeon                      | Acipenser medirostris            | Special Concern | Schedule 1 | Red       |
| <b>Coho Salmon (interior Fraser</b> | populations)Oncorhynchus kisutch | Endangered      | None       | Yellow    |
| Basking Shark                       | Cetorhinus maximus               | Endangered      | Schedule 1 | None      |
| Rougheye rockfish                   | Sebastes aleutianus              | Special Concern | Schedule 1 | None      |
| Yelloweye Rockfish                  | Sebastes ruberrimus              | Special Concern | None       | None      |

#### Insects

| English Name             | Scientific Name                  | COSEWIC               | SARA       |
|--------------------------|----------------------------------|-----------------------|------------|
| Dun Skipper              | Euphyes vestris                  | Threatened            | Schedule 1 |
| Monarch                  | Danaus plexippus                 | Special Concern       | Schedule 1 |
| Blue Dasher              | Pachydiplax longipennis          | None                  | None       |
| Autumn Meadowhawk        | Sympetrum vicinum                | None                  | None       |
| Edwards' Beach Moth      | Anarta edwardsii                 | Endangered            | Schedule 1 |
| Quatsino Cave Amphipod   | Stygobromus quatsinensis         | None                  | None       |
| Western Pine Elfin,      | Callophrys eryphon sheltonensis  | None                  | None       |
| Johnson's Hairstreak     | Callophrys johnsoni              | None                  | None       |
| Common Woodnymph,        | Cercyonis pegala incana          | None                  | None       |
| Western Branded Skipper, | Hesperia colorado oregonia       | Candidate for Listing | None       |
| Phoebus' Parnassian,     | Parnassius smintheus olympiannus | None                  | None       |
| Boisduval's Blue,        | Plebejus icarioides blackmorei   | None                  | None       |
| Zerene Fritillary,       | Speyeria zerene bremnerii        | None                  | None       |

### Molluscs

| English Name            | Scientific Name           | COSEWIC               | SARA       | BC Status |
|-------------------------|---------------------------|-----------------------|------------|-----------|
| Dromedary Jumping-slug  | Hemphillia dromedarius    | Threatened            | Schedule 1 | Red       |
| Northern Abalone        | Haliotis kamtschatkana    | Threatened            | Schedule 1 | Red       |
| Olympia Oyster          | Ostrea conchaphila        | Special Concern       | Schedule 1 | Blue      |
| Warty Jumping-slug      | Hemphillia glandulosa     | Special Concern       | Schedule 1 | Blue      |
| Broadwhorl Tightcoil    | Pristiloma johnsoni       | None                  | None       | Blue      |
| Scarletback Taildropper | Prophysaon vanattae       | None                  | None       | Blue      |
| Western Thorn           | Carychium occidentale     | None                  | None       | Blue      |
| Pacific Sideband        | Monadenia fidelis         | None                  | None       | Blue      |
| Black Gloss             | Zonitoides nitidus        | None                  | None       | Blue      |
| Fossaria Species 1      | Fossaria vancouverensis   | None                  | None       | Red       |
| Evening Fieldslug       | Deroceras hesperium       | <b>Data Deficient</b> | None       | Red       |
| Threaded Vertigo        | Nearctula sp. 1           | Special Concern       | Schedule 1 | Red       |
| Umbilicate Sprite       | Promenetus umbilicatellus | None                  | None       | Blue      |

## **Vascular Plants**

| English Name        | Scientific Name                         | COSEWIC         | SARA       | BC Status |
|---------------------|---|-----------------|------------|-----------|
| •                   | • | COSEWIC         | *******    |           |
| Short-tailed rush   | Juncus brevicaudatus                    | None            | None       | Red       |
| Knotgrass           | Paspalum                                | None            | None       | Red       |
| Pink Sand-verbena   | Abronia umbellata var. breviflora       | Endangered      | Schedule 1 | Red       |
| White Meconella     | Meconella oregana                       | Endangered      | Schedule 1 | Red       |
| White-top Aster     | Sericocarpus rigidus                    | Special Concern | Schedule 1 | Red       |
| Tall Woolly-heads   | Psilocarphus elatior                    | Endangered      | Schedule 1 | Red       |
| Cup Clover          | Trifolium Cyathifernum                  | None            | None       | Red       |
| Angled Bitter Cress | Cardamine angulata                      | None            | None       | Blue      |



BC Status
Blue
Blue
Blue
Blue
Blue
Red
Blue
Blue
Blue

Red Blue Blue Blue Red

Common Woodnymph photo: bing.com



Dromedary Jumping Slug photo: bing.com



Northern Abalone photo: bing.com



White Meconella photo: bing.com

| Small Headed Tarweed    | Hemizonella minima        | None | None | Red  |
|-------------------------|---------------------------|------|------|------|
| White Lip Rein Orchid   | Piperia candida           | None | None | Red  |
| Owyhee Mudwort          | Limosella acaulis         | None | None | Red  |
| Chairmaker's Bulrush    | Schoenoplectus americanus | None | None | Red  |
| California Wax-myrtle   | Myrica californica        | None | None | Blue |
| Waterwort Water-milfoil | Myriophyllum quitense     | None | None | Blue |
| Northern Adder's-tongue | Ophioglossum pusillum     | None | None | Blue |
| Redwood Sorrel          | Oxalis oregana            | None | None | Blue |
| Fringed Pinesap         | Pleuricospora fimbriolata | None | None | Red  |
| Black Knotweed          | Polygonum paronychia      | None | None | Blue |
| Smith's Fairybells      | Prosartes smithii         | None | None | Blue |
| Oregon Selaginella      | Selaginella oregana       | None | None | Red  |
| Graceful Arrow-grass    | Triglochin concinna       | None | None | Red  |
| Howell's Violet         | Viola howellii            | None | None | Blue |
|                         |                           |      |      |      |

## Mosses

| English Name        | Scientific Name            | COSEWIC | SARA | BC Status |
|---------------------|----------------------------|---------|------|-----------|
| Lacks a Common Name | Dicranodontium asperulum   | None    | None | Blue      |
| Lacks a Common Name | Diphyscium foliosum        | None    | None | Blue      |
| Lacks a Common Name | Ditrichum schimperi        | None    | None | Blue      |
| Lacks a Common Name | Epipterygium tozeri        | None    | None | Blue      |
| Lacks a Common Name | Orthotrichum rivulare      | None    | None | Blue      |
| Lacks a Common Name | Platyhypnidium riparioides | None    | None | Blue      |
| Lacks a Common Name | Pohlia pacifica            | None    | None | Red       |
| Lacks a Common Name | Pohlia sphagnicola         | None    | None | Blue      |
| Lacks a Common Name | Sphagnum subobesum         | None    | None | Blue      |
| Lacks a Common Name | Trichostomum crispulum     | None    | None | Blue      |

# Fungus

| English Name | Scientific Name      | COSEWIC | SARA | <b>BC Status</b> |
|--------------|----------------------|---------|------|------------------|
| Felted elf   | Leioderma sorediatum | None    | None | Blue             |



Fringed pinesap photo: bing.com



Oregon Selaginella photo: bing.com



Pink Sand verbena photo: bing.com



Pohlia Pacifica photo: bing.com