

# Wildlife and Species at Risk (LPCs) DCR – Coast Mainland



<i>Category</i>	<i>Species</i>	<i>Habitat / Range</i>	<i>Defining Characteristics</i>	<i>Action Required</i>
Amphibians & Reptiles	<b>Northern Red-Legged Frog</b> <i>(Rana aurora)</i>	<ul style="list-style-type: none"> <li>• Mainland coast, Fraser Valley, Vancouver Island, and other small coastal islands.</li> <li>• Adults often found in damp wooded areas. During breeding season, winter to early spring, they may be found in ponds and streams.</li> <li>• Elevation 0-850m.</li> </ul>	<ul style="list-style-type: none"> <li>• Medium sized brown-reddish frog, with smooth skin and black 'freckles'.</li> <li>• Males are approximately 7 cm in length; females can be longer, approximately 10 cm.</li> <li>• Named after their long slender hind legs, with red colouring on the undersides.</li> <li>• Usually have a dark mask and upper jaw stripe running back to the shoulder.</li> <li>• Tadpoles: tan to brown color with specks throughout their body. Their bodies look short because they have a long tail that is at least as long as the length of their body. The tail has a dorsal fin with light spots on it. Mouth with 4 teeth rows on the bottom and 3 on the top. They reach a size of 2-7 cm before they metamorphose.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Notify BCTS:</b> <ul style="list-style-type: none"> <li>○ document location of verified breeding area.</li> <li>○ Consult qualified professional if necessary, to verify identification and breeding.</li> <li>○ Biologist will work with field team staff to design a riparian buffer</li> <li>○ Refer to BCTS TSG Protocol</li> </ul> </li> </ul>

<b>Category</b>	<b>Species</b>	<b>Habitat / Range</b>	<b>Defining Characteristics</b>	<b>Action Required</b>
Birds	<b>Great Blue Heron</b> ( <i>Ardea herodias fannini</i> )	<ul style="list-style-type: none"> <li>• Generally near sea level</li> <li>• Near rivers, lakes &amp; wetlands</li> <li>• Constructs stick nests 20-30m high in mature deciduous and coniferous forests</li> </ul>	<ul style="list-style-type: none"> <li>• Large size (1+m length)</li> <li>• Long rounded wings</li> <li>• Long bill</li> <li>• Short tail</li> <li>• S-shaped neck while flying</li> <li>• Blue-grey plumage with white head</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a nest or nesting colony is found:</b> <ul style="list-style-type: none"> <li>○ Stop work within 500m of nest site</li> <li>○ Document occupancy, location and flag the nest tree</li> <li>○ Notify BCTS</li> </ul> </li> </ul>
• Birds	<b>Marbled Murrelet</b> ( <i>Brachyram p-hus marmoratus</i> )	<ul style="list-style-type: none"> <li>• Nesting is widespread in suitable old growth stands on Vancouver Island and the mainland coast.</li> <li>• Nests up to 30-80 km inland.</li> <li>• Prefer old growth forest (Sitka spruce, with an abundance of mossy platforms for landing and nesting purposes)</li> <li>• Forage in coastal areas, mainly in saltwater within 2 km of shore, including bays and sounds, not uncommon up to 5 km offshore.</li> </ul>	<ul style="list-style-type: none"> <li>• A small (length 24-25cm, mass 190-270g) chunky seabird with a black bill and an entirely dark tail.</li> <li>• Breeding adult is dark brown above, heavily mottled below.</li> <li>• In winter, plumage is white below with white scapular streak on otherwise dark upperparts.</li> <li>• Solitary or in pairs, generally does not flock with other birds.</li> </ul>	<ul style="list-style-type: none"> <li>• Managed under higher level planning, FRPA, WHA's OGMA's etc.</li> </ul>

<b>Category</b>	<b>Species</b>	<b>Habitat / Range</b>	<b>Defining Characteristics</b>	<b>Action Required</b>
Birds	<b>Osprey</b> ( <i>Pandion haliaetus</i> )	<ul style="list-style-type: none"> <li>Primarily found along rivers, lakes, reservoir and seacoasts</li> <li>They typically build large stick nests on living or dead trees and also use numerous man-made structures such as utility poles, wharf pilings, windmills, microwave towers, chimneys, and channel markers.</li> <li>Nests are usually near or above water.</li> </ul>	<ul style="list-style-type: none"> <li>Ospreys have long narrow wings, dark brown upper parts, white underparts, a white head with a prominent dark eye streak, and dark wrist patches (visible in flight) on the underside of the wings.</li> <li>Immatures have pale buff edging on the dark feathers of the upper surface.</li> <li>Average length 56-64 cm, wingspan 147-183 cm.</li> <li>Similar Species <ul style="list-style-type: none"> <li>Superficial similarity to adult Northern Goshawk</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>If a nest is found:</b> <ul style="list-style-type: none"> <li>Retain the nest tree (protected under the Wildlife Act)</li> <li>Default 200m vegetative buffer around nest location</li> <li>A Qualified Professional may be able to recommend alternative buffers on a case by case basis</li> <li>Notify BCTS, document, flag the location of the nest tree and occupation status</li> <li>Contact a qualified professional if you are uncertain about occupancy.</li> </ul> </li> </ul>
Birds	<b>Peregrine falcon</b> ( <i>Falco peregrinus anatum, pealei</i> )	<ul style="list-style-type: none"> <li><i>Anatum</i> subspecies: Southwest coast of BC (CR, SI Forest Districts).</li> <li><i>Pealei</i> subspecies: Pacific Coast; Aleutian Islands to Oregon (CR, SI Forest Districts).</li> <li>Nests are usually located on cliffs, 4-335m in elevation, often with overhanging cover. Must be near foraging areas (i.e. lake, ocean, river valleys).</li> </ul>	<ul style="list-style-type: none"> <li>Medium to large (crow-sized) falcon; Males are 36-49cm and 650g, females 45-58cm and 950g.</li> <li>Adults have blue-grey or darker plumage on upperparts, and underparts are pale, white-grey with dark spotting/barring.</li> <li>Have dark "hood" on crown of head with extended malar stripes ("sideburns").</li> <li>Immatures have pale, slate or chocolate brown upperparts, and underparts buffy with dark streaks.</li> <li>Clinal differences: darker in wet areas, paler in dry, larger in south and west, smaller in north extent of range.</li> <li>Similar Species: Gyrfalcon: larger, with pointed and broader wings and a larger tail, lack dark hood and malar stripes.</li> </ul>	<ul style="list-style-type: none"> <li><b>Notify BCTS:</b> <ul style="list-style-type: none"> <li>document occupancy, location and flag the nest tree</li> <li>Contact a qualified professional to verify the species and recommend reserve design and timing restrictions</li> </ul> </li> </ul>

<b>Category</b>	<b>Species</b>	<b>Habitat / Range</b>	<b>Defining Characteristics</b>	<b>Action Required</b>
Birds	<b>Northern Goshawk</b> ( <i>Accipiter gentilis laingi</i> )	<ul style="list-style-type: none"> <li>• Sea level to 900m</li> <li>• Mature forest</li> <li>• Structurally diverse area with large trees</li> <li>• Nests generally on lower 2/3 of slopes &lt;40%</li> <li>• Stick nests built on lateral branches against tree in lower portion of main canopy</li> </ul>	<ul style="list-style-type: none"> <li>• Raven sized bird of prey</li> <li>• Broad, short wings</li> <li>• Long tail</li> <li>• Bold white stripe above eyes</li> <li>• Blackish grey and sometimes mottled white mask</li> <li>• Adult call loud <i>kyke kyke kyke</i></li> <li>• Aggressively defends nest</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a bird is seen on worksite:</b> <ul style="list-style-type: none"> <li>○ notify BCTS</li> </ul> </li> <li>• <b>If a nest is found:</b> <ul style="list-style-type: none"> <li>○ Stop work within 500m of nest tree</li> <li>○ Document occupancy, location and flag the nest tree</li> <li>○ Notify BCTS</li> </ul> </li> </ul>
Birds	<b>Vancouver Island Northern Pygmy Owl</b> ( <i>Glaucidium gnoma swarthi</i> )	<ul style="list-style-type: none"> <li>• Nests usually between 450-1200m</li> <li>• Most frequently along forest edges or in disturbed areas.</li> <li>• Swarthi subspecies widely but sparsely distributed on Vancouver Island and Gulf adjacent islands.</li> <li>• Secondary cavity nester, often in snags or 'danger trees' previously used by woodpeckers</li> </ul>	<ul style="list-style-type: none"> <li>• Very small (&lt;17cm in length)</li> <li>• No ear tufts, long tail</li> <li>• A pair of black patches on nape</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a nest is found:</b> <ul style="list-style-type: none"> <li>○ stop work within 200m of nest tree</li> <li>○ Document occupancy, location and flag the nest tree</li> <li>○ Notify BCTS</li> </ul> </li> </ul>
Birds	<b>Western Screech Owl</b> ( <i>Megascops kennicotti kennicotti</i> )	<ul style="list-style-type: none"> <li>• Throughout Vancouver Island and Coast Mainland</li> <li>• Found at low elevation in variety of coniferous/ mixed forests</li> <li>• Nest in tree cavities</li> <li>• Often associated with riparian zones</li> </ul>	<ul style="list-style-type: none"> <li>• Small, streaked owl with yellow eyes</li> <li>• Tufts over the ears</li> <li>• Approx. 21cm (8-9") long with wingspan of 55cm (21")</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a nest is found:</b> <ul style="list-style-type: none"> <li>○ Retain the nest tree and stop work within 200m</li> <li>○ Document occupancy, location and flag the nest tree</li> <li>○ Notify BCTS</li> </ul> </li> </ul>
Birds	<b>Bald Eagle</b> ( <i>Haliaeetus leucocephalus</i> )	<ul style="list-style-type: none"> <li>• Throughout Vancouver Island and the Coast Mainland</li> </ul>	<ul style="list-style-type: none"> <li>• Large raptor with white face and head</li> <li>• Juveniles all brown</li> <li>• Largest stick nests</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a nest is found:</b> <ul style="list-style-type: none"> <li>○ Retain the nest tree and stop work within 200m</li> <li>○ Document occupancy, location and flag the nest tree</li> <li>○ Notify BCTS</li> </ul> </li> </ul>

<b>Category</b>	<b>Species</b>	<b>Habitat / Range</b>	<b>Defining Characteristics</b>	<b>Action Required</b>
Birds	<b>Any bird species</b>	<ul style="list-style-type: none"> <li>• Throughout Vancouver Island and the Coast Mainland</li> </ul>	<ul style="list-style-type: none"> <li>• Any nest occupied by a bird or egg</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If a nest is found:</b> <ul style="list-style-type: none"> <li>○ Retain the nest tree</li> <li>○ Notify BCTS</li> <li>○ Document occupancy, location and flag the nest tree</li> </ul> </li> </ul>
Mammals	<b>Little Brown Myotis (bat)</b> <i>(Myotis lucifugus)</i>	<ul style="list-style-type: none"> <li>• Wide range of habitats and often use human-made structures for resting and maternity sites; they also use caves and hollow trees.</li> <li>• Winter hibernacula typically have stable temperatures between 2-10°C and relative humidity &gt;80%.</li> </ul>	<ul style="list-style-type: none"> <li>• Little Brown Myotis is a small (7-9 g) brown bat with black ears, black wings, and a black tail membrane.</li> <li>• Cinnamon-buff to dark brown above, buffy to pale gray below.</li> <li>• Hairs on back have long glossy tips.</li> <li>• Ear when laid forward reaches approximately the nostril.</li> <li>• Its wingspan is approximately 22-27 cm. Females tend to be slightly larger than males.</li> <li>• Compared to other mammals, Little Brown Myotis has a long lifespan; some individuals live more than 30 years</li> <li>• Myotis bats are difficult to identify in the field and often hibernate in mixed aggregations so all small bats should be managed to the level of the most conservatively regulated species possibly present</li> </ul>	<ul style="list-style-type: none"> <li>• <b>If Myotis bats are found or suspected in summer or winter:</b> <ul style="list-style-type: none"> <li>○ Notify BCTS and document the location</li> <li>○ Contact a qualified professional to assist in reserve design</li> <li>○ Hibernacula are protected as Critical Habitat during winter (October 1- May 31) under the Species at Risk Act.</li> <li>○ All cave karst features should be considered potential hibernacula and assessed for use by a qualified Professional Biologist.</li> </ul> </li> </ul>

Mammals	<p><b>Grizzly Bears</b> (<i>Ursus arctos</i>) and <b>Black Bears</b> (<i>Ursus americanus</i>)</p>	<ul style="list-style-type: none"> <li>• Throughout Vancouver Island (black only) and the Coast Mainland (both)</li> </ul>	<ul style="list-style-type: none"> <li>• Ground den: on steep slope with large pile of earth at entrance, evidence of bedding material</li> <li>• Tree base den: sheltered hollow beneath tree</li> <li>• Arboreal den: large diameter trees with large limb scars (den in tree trunk)</li> </ul>	<p><b>Under the 2018 BCTS TSG Bear Den BMP If a den is found:</b></p> <ul style="list-style-type: none"> <li>○ • Notify BCTS and document location of the den and whether it is occupied.</li> <li>○ • Contact a qualified professional if you are uncertain about occupancy.</li> <li>○ Retain den site within a windfirm WTRA (preferably 1 ha or tied to a riparian reserve); ensure there is security and thermal cover around the den, some larger trees or snag where adult females and cubs can “escape” to and a healthy shrub layer for forage.</li> <li>○ • If den is active, non-disturbance buffers defined in the protocol are applicable in the between Nov 1 and May 15.</li> <li>○ • 200m buffer around the den(s) for falling, primary harvesting activities, hauling, road building (no blasting)</li> <li>○ • 1000m buffer around dens for blasting or helicopter yarding</li> </ul> <p><b>Portions of the Campbell River Forest district fall within the Great Bear Rainforest: Under the GBRO Part 3- South Central Coast, Division 5- Wildlife,</b></p> <p><i>19.Objectives for grizzly and black Bear Dens</i></p> <p><i>(1) Protect grizzly Bear Dens and black Bear Dens.</i></p> <ul style="list-style-type: none"> <li>○ <i>(6) All found Bear Dens must be documented and this documentation must be submitted to the Applicable First Nations and the Province of British Columbia at the end of each calendar year.</i></li> </ul>
---------	--	--	---	--

Mammals	<b>Mountain Goat</b> <i>(Ormeanos americanus)</i>	<ul style="list-style-type: none"> <li>• Present in most mountain ranges except those on VI, Haida Gwaii and other coastal islands.</li> </ul>	<ul style="list-style-type: none"> <li>• Adult males (billies) weigh on average, 70-120 kg.</li> <li>• Adult females (nannies) weigh between 55-75 kg.</li> <li>• Both sexes have thin, black horns up to 30 cm long which grow throughout life and never shed.</li> <li>• Built to live in steep, rocky terrain. Mountain Goats have very large forequarters, a deep chest and well-developed shoulder muscles, both for climbing and pawing for food in the snow.</li> <li>• They have rough-textured hooves with traction pads that extend slightly past the rim of the hooves. They can also spread their toes widely to distribute their weight over more ground.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Notify BCTS:</b> <ul style="list-style-type: none"> <li>○ if a goat is within or near the block area between November 15th and April 15th.</li> <li>○ Conventional and helicopter harvesting operations and related activities within 500m (vertical and horizontal) of designated mountain goat winter range polygons should be restricted to a work window of April 15 to November 15</li> <li>○ Contact a qualified professional for additional guidance</li> </ul> </li> </ul>
---------	--	--	---	--

Plants	<p><b>Western Yew (<i>Taxus brevifolia</i>)</b></p>	<ul style="list-style-type: none"> <li>• An understory tree of Pacific Northwest forests found in light to deep shade.</li> <li>• Somewhat moist forests, especially along streams and on slopes.</li> <li>• In poorly drained mixed conifer forests at the northern extent of its range.</li> <li>• Scattered in coniferous forests; common on water-receiving sites, frequent on water-collecting sites, and occasional on water-shedding sites.</li> <li>• Small tree 2-15 m tall, often shrubby; branches spreading to drooping in flat sprays; bark thin, with outer purplish scales over reddish to reddish-purple inner bark; male and female plants separate.</li> <li>• Leaves: Needles 2-ranked, flattened, and pointed at tip, (12) 14-18 mm long, 1-2 mm broad; yellow-green and paler on lower surface.</li> <li>• Cones: Fruit is a round, red, fleshy aril, 5-6 mm long, borne on the underside of the branches; pollen cones yellow, globe-shaped, 3 mm long</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Action Required under GBRO</b></li> <li>• <b>Part 3, South Central Coast, Division 2 First Nations, Section 9. Objectives for retention of western yew</b></li> </ul> <p>(1) In Development Areas, retain western yew trees.</p> <p>(2) Despite subsection (1), western yew trees may be altered or harvested if:</p> <ul style="list-style-type: none"> <li>(a) alteration or harvesting is required to accommodate operational requirements for road and bridge construction and there is no practicable alternative; or</li> <li>(b) the retention of all western yew trees in a Cutblock would make harvesting economically unviable and measures are implemented to provide for use of the altered or harvested western yew trees by Applicable First Nations.</li> </ul> <p>(3) Where practicable, include western yew trees in Stand Retention.</p> <p>(4) All areas retained or managed in accordance with subsections (1), (2) and (3) must be documented and submitted as digital spatial data at the end of each calendar year to the Applicable First Nation and the Province of British Columbia.</p>
--------	---	---	--



## Log Handling Sites

<b>Category</b>	<b>Species</b>	<b>Habitat Range</b>	<b>Defining Characteristics</b>	<b>Action Required</b>
Marine	<b>Northern Abalone</b> ( <i>Haliotis kamtschatkana</i> )	<ul style="list-style-type: none"> <li>Sheltered bays to exposed coastlines</li> <li>Require full salinity (no brackish water)</li> <li>Require source of macro algae such as kelp</li> <li>&lt;10m depth</li> <li>Ample habitat available on coast of BC</li> </ul>	<ul style="list-style-type: none"> <li>Single ear shaped shell with row of perforations along one side</li> <li>Usually mottled reddish or greenish with areas of white and blue. Orange variant seen rarely</li> <li>Often overgrown with various encrusting organisms</li> <li>Inside shell is pearly white with faint iridescence</li> <li>Large foot usually tan coloured</li> </ul>	<ul style="list-style-type: none"> <li>Contact a Qualified Registered Professional to develop mitigation strategy for any activities taking place in foreshore or near shore areas</li> </ul>
Marine	<b>Olympia Oyster</b> ( <i>Ostrea conchaphila</i> )	<ul style="list-style-type: none"> <li>primarily found in lower intertidal and subtidal areas of estuaries and saltwater lagoons</li> <li>also found on mud-gravel tidal flats, splash pools, near freshwater seepage and in tidal channels</li> <li>on outer coast only found in protected locations</li> <li>documented from intertidal to 50m in depth</li> </ul>	<ul style="list-style-type: none"> <li>Small oyster with two oval shells connected by a hinge</li> <li>Generally, 6-9 cm long</li> <li>lower shell is larger and rounded while slightly smaller upper shell is flat with edges tucked inside bottom shell</li> <li>Similar Species— Pacific Oysters are larger with a more heavily ridged shell</li> </ul>	<ul style="list-style-type: none"> <li>Contact a Qualified Registered Professional to develop mitigation strategy for any activities taking place in foreshore or near shore areas</li> </ul>
Marine	<b>Killer Whale</b> ( <i>Orcinus orca</i> )	<ul style="list-style-type: none"> <li>Canadian Range of Southern Resident Pod: Strait of Georgia to Esperanza Inlet</li> <li>Canadian Range of Northern Resident Pod: Dixon Entrance – Johnstone Straits (East Coast of Vancouver Island) and Barkley Sound (W Coast Van Island)</li> </ul>	<ul style="list-style-type: none"> <li>The killer whale, or orca, is the largest member of the dolphin family. Its size, striking black and white colouring, and tall dorsal fin are unmistakable. Males reach lengths of 8 or 9 metres and weigh up to 5 tonnes. Females are smaller at 7 metres and 4 tonnes. Killer whales are mainly black above and white below, with an oval white patch behind each eye.</li> </ul>	<ul style="list-style-type: none"> <li>Must be given consideration when developing and operating log handling facilities</li> <li>Contact a Qualified Registered Professional to develop mitigation strategy as a part of the operational plan for the log handling facility</li> </ul>

# Wildlife and Species at Risk (LPCs) DCR – Coast Mainland

Arboreal bear den



Tree base bear den



Great Blue Heron nest colony



Great Blue Heron



Little Brown Myotis



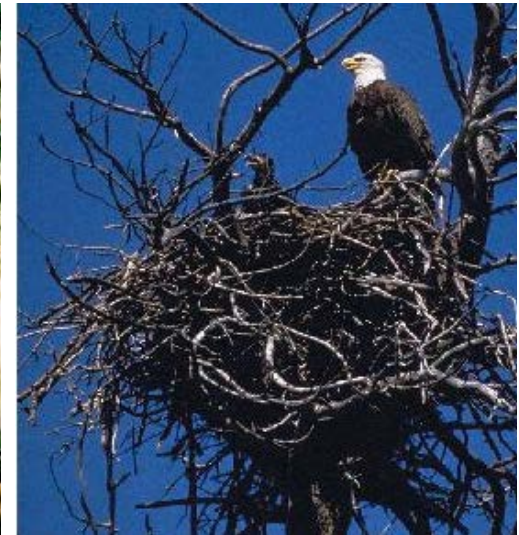
Northern Goshawk



Northern Goshawk nest



Bald Eagle



Vancouver Island Northern Pygmy Owl



Western Screech Owl



Red-legged Frog

