

Species of Management Concern (SOMC) 2025 BCTS TSG Field Cards

Amphibians

- Coastal Tailed Frog, *Ascaphus truei* *
- Northern Red-legged Frog, *Rana aurora* **
- Western Toad, *Anaxyrus boreas* *

Birds

- American Goshawk, *Accipiter gentilis laingi* **
- Bald Eagle, *Haliaeetus leucocephalus* **^
- Barn Swallow, *Hirundo rustica* *
- Common Nighthawk, *Chordeiles minor* *
- Great Blue Heron, *Ardea Herodias fannini* **
- Green Heron, *Butorides virescens* *
- Marbled Murrelet, *Brachyramphus marmoratus* *
- Osprey, *Pandion haliaetus* *^
- Peregrine Falcon, *Falco peregrinus anatum* and *Falco peregrinus pealei* *
- Pileated Woodpecker, *Dryocopus pileatus* **^
- Western Screech Owl, *Megascops kennicottii kennicottii* **

Gastropods

- Dromedary Jumping Slug, *Hemphillia dromedarius* *

Lichens

- Considerable Gingerbread, *Pannaria rubiginosa* *
- Oldgrowth Specklebelly, *Callophrys johnsoni* *

Mammals

- Black Bear, *Ursus americanus* **
- Grizzly Bear, *Ursus arctos* *
- Little Brown Myotis, *Myotis lucifugus* **
- Roosevelt Elk, *Cervus elaphus roosevelti* **
- Western Water Shrew, *Sorex palustris brooksi* **
- Vancouver Island Marmot, *Marmota vancouverensis* *

Plants

- Phantom Orchid, *Cephalanthera austini* *
- Western Yew, *Taxus brevifolia* *

Reptiles

- Painted Turtle – Pacific Coast Population, *Chrysemys picta pop. 1* **

Log Dump Species

- Northern Abalone, *Haliotis kamtschatkana* *
- Orca Whale, *Orcinus orca* *
- Olympia Oyster, *Ostrea lurida* *

Appendix

- Migratory and Breeding Birds Field Card
- TSG Breeding Bird Quick Reference Guide

** = 2025 Focus list

* = 2025 Awareness list

^ = FRPA/Wildlife Act/Migratory Bird Act

Coastal Tailed Frog (*Ascaphus truei*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Special Concern (2003)
- Provincial List: Yellow
- Identified Wildlife: Yes

Description:

- Coastal Tailed Frogs are small (40-50 mm snout-vent length) with a large head.
- The eyes of juveniles and adults have vertical pupils.
- Adult males possess a short, cone-shaped "tail," which functions as a copulatory organ during mating.
- Tadpoles have a flattened oral disc that produces a sucker-like mouth, which they use to attach to rocks in fast flowing water. The body is dorso-ventrally flattened, and the tail fin is low.
- Adults lack a tympanum (eardrum) and males do not call, which may be an adaptation to living within the constant noise of mountain streams.
- The Coastal Tailed Frog and Rocky Mountain Tailed Frog (*Ascaphus montanus*) were formerly considered as single species (*A. truei*) but are now recognized as two species based on genetic and ecological differences.
- Coastal Tailed Frogs lay eggs later than Rocky Mountain Tailed Frog, have smaller clutch sizes, shorter incubation periods and smaller hatching sizes.

Biology:

- Breeds in the fall with females laying 35 to 100 clear eggs in midsummer in small clusters attached to the undersides of rocks.
- Fertilization is internal; male has a tail-like copulatory organ. They are the only North American species that uses internal fertilization.
- It is not known how mates find each other. While adults are mainly active at night, they can sometimes be found out and about in daytime, particularly in damp, cool settings.
- Larval period lasts 2-4 years.
- May not breed until 7-8 years old or 6-8 years after metamorphosis.

- Development to adulthood is lengthy; tadpoles can take 1-4 years to metamorphose depending on geographical location and 7-8 years to reach sexual maturity.
- Tailed Frogs are the longest-living frogs in North America, estimated to live 15 years or more.

Phenology:

										Breeding	
			Metamorphose			Eggs		Hatch			
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: A. McEwan, [E-Flora BC](#)

Habitat:

- Clear, cold swift-moving mountain streams with coarse substrates. Primarily in older forest sites.
- May be found on land during wet weather near water in humid forests or in more open habitat.
- During dry weather stays on moist streambanks.

Field Action Required:

- If observed, stop work in the immediate area.
- Take photos and record sighting's coordinates.
- Report the observation to supervisor and contact BCTS.

Management Recommendations:

- Follow management recommendations from [Management Protocol for Coastal Tailed Frog in BCTS TSG](#).

Northern Red-legged Frog (*Rana aurora*)

****Focus List**



Status:

- SARA Schedule: 1-Special Concern (2005)
- Provincial List: Blue
- Identified Wildlife: Yes

Description:

- Northern Red-legged Frog is brown to reddish or copper-brown colour with black spots scattered over its back.
- The underbelly of the species is whitish, with a reddish colouration appearing on the lower belly and undersides of the hind legs as the frog gets older.
- Bones on the undersides of the hind legs can be seen through the translucent skin.
- This species has a dark eye mask above a narrow, cream-coloured jaw stripe on each side of the face.
- Young may have yellow instead of red on underside of legs and in groin; adult males have enlarged forelimbs and thumb base and more extensive webbing.
- Adults reach 50-60 mm snout-to-vent length, and they have two folds running down the length of the back.
- Tadpoles are tan or olive coloured with gold specks, 70-80 mm total length prior to metamorphosis; eyes in from the margins of the head; tall, short tail fin.
- Eggs are large, gelatinous, grapefruit- to cantaloupe-sized mass that can become loose, floating, and frothy in appearance near hatching.

Biology:

- Northern Red-legged Frogs reach sexual maturity at 3+ years of age and live 8-10 years.
- They are explosive breeders, with reproduction occurring for only a short period in early spring (e.g., 2-4 weeks).
- Males emit an advertisement call under water that may not be audible to the human ear at the surface.
- Females breed every year, laying their egg mass below the water surface in the littoral zone (30-90 cm), often amongst emergent vegetation.
- Like other amphibians, Red-legged Frogs exhibit site fidelity to natal breeding ponds, and females may lay their eggs in the same locations within a breeding site each year.

- Females lay an average of 530-680 eggs per clutch, which usually hatch within 1 to 1.5 months depending on water temperature.
- The larval period is long compared to other anurans, lasting 2.5 to 3.5 months.

Phenology:

Breeding (Eggs)											
Eggs Hatch (Tadpoles)											
Juvenile Frogs											
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: [iNaturalist](#)

Habitat:

- Terrestrial stages of the Red-legged Frog are most typically found at lower elevations, below 200 m, but have been recorded at over 1000 m.
- It is associated with streams, ponds, or marshes, but may also be found far from water in moist forests.
- Wetlands or ponds with a water depth of 0.5-2 m are required for breeding.

Field Action Required:

- If observed or if a breeding area is identified, stop work in the immediate area.
- Take photos and record coordinates.
- Report the observation to supervisor and contact BCTS.

Management Recommendations:

- Follow management recommendations from [BMP for Red-legged Frogs and Western Toads in BCTS TSG](#).

Western Toad (*Anaxyrus boreas*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Special Concern.
- Provincial List: Yellow.
- Identified Wildlife: Yes.

Description:

- Skin is dry granular with bumpy warts, colouration can be light to dark green to brown or even reddish.
- Distinguished by cream-coloured or white vertebral stripe running down the length of the back.
- Oval-shaped parotid glands, horizontal pupils.
- Underside is pale and coarsely mottled.
- Hind feet have two horny nodules for digging.
- Females, up to 125mm, are slightly larger than males, up to 110mm, total length.

Biology:

- Diet consists of worms, slugs and small insects.
- Hibernates during winter, the length of hibernation depending on the climatic and seasonal conditions. Typically, between late September and March or April.
- Hibernation is below the frost line in small mammal burrows, crevices, and can be in easily excavated substrate, such as mud and sand.
- Breeding takes place in shallow water of ponds and lakes.
- The female lays between 3000 to 12000 eggs in two long strings. Eggs are black, surrounded by a clear jelly sac. Eggs hatch in 4-12 days, and the tadpoles develop into juvenile toads within 12 weeks.
- Can travel several kilometers between breeding and summer and hibernation sites.
- Toads are often on roads in the spring and fall hunting or migrating to and from breeding and hibernation grounds.

Phenology:

Hibernation			Breeding						Hibernation		
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: Glynnis Maundrell

Habitat:

- Western Toads are found in forest, wetlands, grassland, meadows, shrub lands, or subalpine or alpine meadows and dry habitats.
- Usually not far from water.
- Can be found thermoregulating in open areas, but also under structures for protection.

Field Action Required:

- If a Western Toad migration route or breeding area is observed stop work in the immediate area and notify BCTS.
- Consult a qualified professional (if necessary) to verify identification and breeding.
- If field crews believe a Western Toad breeding area exists, take photos and locate with GPS waypoint if possible. Report to supervisor and contact BCTS.

Management Recommendations:

- Follow management recommendations from [BMP for Red-legged Frogs and Western Toads in BCTS TSG](#).

American Goshawk *laingi* (*Accipiter atricapillus laingi*)

****Focus List**



Previously known as the Northern Goshawk, the species is now called the American Goshawk due to differences between North American and Eurasian populations.

Description:

- There are two subspecies of the American Goshawk in British Columbia, *Laingi* breeds in the coastal rainforests west of the Coast Mountains and *Atricapillus* breeds throughout the interior.
- A raven sized (50cm long) sturdy hawk.
- Adults are brown-gray to slate-gray on the back.
- Underparts are pale-gray with fine horizontal grey bars and darker vertical streaking.
- There is a distinctive whitish line above the eye and a dark-gray to black cap.
- Long tail rounded at the tip with a thin white band.
- Broad round tipped wings.
- Wing span of around one meter.
- The bill and claws are bluish gray to black.
- Immature birds are an overall mottled brown.
- Adult females may be more brownish above.
- Females are larger than males.
- Juveniles are browner with heavy streaking below, and yellow eyes.

Biology:

- The American Goshawk diet varies from birds, small mammals, amphibians and reptiles and insects.
- They hunt below the canopy in open forests.
- Stick nests are built under the canopy in large trees.
- The same nest is used year after year but can have alternate nests.
- Clutch size of 2-4, one brood annually.
- Eggs are bluish white.
- Incubation by female takes 28-32 days.
- Nestlings stay in nest 35-55 days.

Vocalization:

- https://www.allaboutbirds.org/guide/American_Goshawk/sounds

Phenology:

		Breeding			Nestling/Fledging						
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: [BC Environment](#)

Habitat:

- Mature and old growth forests for nesting.
- Open and dense forests of all types for foraging.
- Tree snags, coarse woody debris and open forests are all important habitat attributes.

Field action if bird/nest is found:

- Immediately notify BCTS
- Take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit or halt activity that may cause disturbance in the immediate area
- Contact a qualified professional to verify species and nest occupancy and assist in retention design.

Management Recommendations:

- Follow management recommendations from the [TSG Goshawk BMP](#).

Status:

- SARA Schedule: 1-Threatened.
- Provincial List: Red.
- Identified Wildlife: Yes.

Bald Eagle (*Haliaeetus leucocephalus*)

****Focus List**



Status:

- SARA Schedule: Not Listed.
- Provincial List: Yellow.
- Identified Wildlife: Yes.

Description:

- Large powerful raptor.
- Characterized by the white head and tail at maturity.
- Adults have black body that contrasts with the white head and tail.
- Can reach one meter tall at maturity.
- Wingspan of two meters.
- Large yellow bill.
- Female is larger than male.
- Immature eagles are mostly dark for one to two years before white begins to appear.
- Time to maturity approximately four years, can vary.

Biology:

- Food consists of small birds, mammals and fish as well as scavenging carrion.
- Eagles mate for life, but will mate again if one mate dies.
- Nests are large stick structures, usually constructed on the top of large trees.
- There may be one or two alternate nests in the breeding territory.
- Nests can be constructed on cliffs if no suitable trees exist.
- One to three dull coloured eggs are laid.
- Incubation is approximately 35 days.
- Young fledge in 11 to 13 weeks.
- Susceptible to human disturbance.
- They will nest in urban areas where suitable habitat exists.

Phenology:

			Breeding		Parental Care						
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Habitat:

- Forested, riparian, marine and grassland habitats throughout British Columbia.
- Nesting and foraging activities are common near water.
- Higher populations occur near the Pacific Region near fjords, and estuaries.
- Some inland populations migrate to the Pacific Regions after freeze up.
- Prefer forested shorelines and waterways, lakes.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

Management Recommendations:

- Active and inactive nests of this species have regulatory protection, therefore nest must be retained if found.
- Notify BCTS, document, flag the location of the nest tree and occupation status.
- From mid-February to Aug. 31, stop work within 200m of an occupied nest until an assessment has been completed by a qualified professional biologist

Barn Swallow (*Hirundo rustica*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Threatened.
- Provincial List: Yellow.
- Identified Wildlife: No.

Description:

- Medium sized songbird, about the size of a sparrow, 15-18cm length, 29-32cm wingspan.
- Back and tail distinctive iridescent blue, light brown or rust stomach, chestnut coloured throat and forehead.
- Distinctive long forked tail and pointed wings.
- Streamlined bodies, for acrobatic flight.
- Male and female similar size.
- Female not as brightly coloured and shorter tails.
- When perched they look conical due to flat short head, short neck, long body.

Biology:

- Aerial insectivore.
- Diet consists of feeding on beetles, bees, wasps, ants, butterflies, moths, and other flying insects.
- Usually take relatively large, single insects rather than feeding on swarms of smaller prey.
- Nests in barns or other buildings, under bridges, in caves or cliff crevices.
- Clutch size 3-7. Often 2 broods, except in far north.
- Incubation lasts 13-17 days, mainly or totally by female.
- Fledge at 18-23 days, stay together and are fed by parents for about a week.
- Females first breed at 1 year, males may remain unpaired until 2 years old.
- Adults often have same mate in successive years. Eggs are creamy or pinkish white, spotted with brown, lavender and gray.

Phenology:

Breeding, Fledging, Parental Care											
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: Miep Burgerjon

Habitat:

- Open grasslands, fields, over water, and open forest cutblocks where nesting habitat exists.
- Often found near water, can be small ponds.
- During breeding season these birds can be found at mud puddles sourcing mud for nest building.
- This is a long-distance migrating bird.
- Spending their summers in North America and their winters in Central or South America.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Active and inactive nests of this species have regulatory protection.
- Report the nest observation to supervisor and contact BCTS.



Common Nighthawk (*Chordeiles minor*)

*Awareness List



BCTS
BC Timber Sales

Phenology:

				Breeding		Fledging					
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Status:

- SARA Schedule: 1-Special Concern.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- Medium sized bird of the nightjar family.
- Brownish body with yellowing on side of face and back of neck.
- Body with white spots on upperside, belly with narrow white horizontal bars.
- Dull yellow eye ring.
- Breeding males, white throat, large white wing patch, white terminal tail band.
- Breeding female, cream buff throat, mottled wing patch, no white wing patch, belly wide white horizontal barring.
- In flight notice the wide wing bars past the elbow of wing. Tail is slightly notched at the terminus.
- Distinctive by its long narrow pointed wings and wing bars.
- Length 22-24cm, wingspan 50-57cm.
- Difficult to locate on nests due to well camouflaged plumage.



Photo Credit: [Parks Canada](#)

Biology:

- Diet consists exclusively of flying insects, and flies.
- A crepuscular bird feeding while in flight, usually at dawn and dusk.
- Nests are located on open ground, gravel beaches, rocky outcrops, and open forest floors that match their plumage colouration.
- Have also been found in urban areas on gravel roofs and golf courses.
- Female selects nest site.
- Nests are not constructed but rather a location is selected.
- Clutch size 2, one to two broods.
- Eggs are creamy white to pale grey, speckled with grey, brown and black.
- Incubation by female lasts 16-20 days.
- Nestlings stay in nest 17-18 days.
- Mostly solitary except during migration when they flock together.

Vocalization:

- https://www.allaboutbirds.org/guide/Common_Nighthawk/sounds

Habitat:

- Semi open areas where flying insects are common.
- Cultivated fields, rangelands, farmlands, marshes, sloughs, large ponds, beaches, lakes, slow moving rivers, mixed open forests, estuaries, sand and gravel bars, rock outcrops, urban fields, golf courses, gravel and dirt roads, reclaimed sites, and early regenerating clearcuts, transmission lines and subalpine.
- Nests are usually close to the feeding habitat.
- Spend their summers in North America (mostly Canada) and their winters in South America.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

****Focus List**



- SARA Schedule: 1-Special Concern.
- *Migratory Birds Regulations* Schedule 1.
- Provincial List: Blue.
- Identified Wildlife: Yes.

- Two subspecies are identified in British Columbia, the *Fannini* on the West Coast and the *Herodias* in the interior.
- *Fannini* subspecies has darker plumages, smaller in size and has a smaller clutch size.
- Adults are tall (60cm), long-legged wading birds with a sinuous neck held in an “S” curve at rest and in flight.
- The thick long bill is yellow and black
- Head and face are white.
- Mature Great Blue Herons, plumage is a steel blue-grey with dark blue-grey flight and tail feathers.
- As the birds mature a distinctive black plume extends from above the eye to beyond the back of head and a bib of long trailing plumes on the chest and scapula area become more pronounced.
- Juveniles are grey-brown on the back and upper wing plumage and lack the black eyebrow and adult head and bib plumes.

- Herons are colonial nesting birds.
- Nest are built with sticks in large trees in forests and woodlands.
- Heronry can have many nests in a small area. Reports of up to 200 in two hectares.
- A single tree can have multiple nests.
- Nest are added to in successive years.
- Diet consists of small fish, crayfish, crabs, frogs, salamanders, snakes, large insects and small mammals.
- Clutch size 3-5, only one brood.
- Eggs are pale blue.
- Incubation by both parents lasts about 27 days.
- Young remain in nest for up to two months.

				Fledging/Parental Care							
		Nest Construct		Eggs Laid/Chicks in Nest							
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



- Forage in fresh and marine waters and riparian and tidal areas.
- Mudflats, grassland and farm field.
- During non-breeding periods birds may roost high up in mature trees in close proximity to foraging sites.
- Canopy closures of >80% is typical for Heronries.
- Most common on the South Coast in association with low elevation lakes, wetlands, sloughs and estuaries.

- Notify BCTS and take photos, document habitat and activity/occupancy details, and GPS the location.
- Active and inactive nests of this species have regulatory protection
- Do not disturb the nest. Retain the nest tree or trees within a WTP with a 200m buffer.
- From Jan 15 – Sept 15 maintain a quiet buffer within 200m of nest site, if occupied.

- [https://www.allaboutbirds.org/guide/Great Blue Heron/sounds](https://www.allaboutbirds.org/guide/Great_Blue_Heron/sounds)

Green Heron (*Butorides virescens*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: Not Listed
- *Migratory Birds Regulations* Schedule 1.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- Small stocky wading bird with relatively short legs (dull yellow; bright orange in breeding males), long straight bill, and short tail.
- Adult has a mostly deep chestnut neck, greenish-black crown, green/blue-gray upperparts, and white mid-ventral throat region.
- Immature is browner above, with white throat and underparts heavily streaked with brown.
- Total length is about 46 cm, wingspan is 66 cm
- Looks short-necked because it holds its head close to its body.

Biology:

- Generally breeds as either solitary pairs or widely spread in small colonies.
- Platform nest of sticks, placed in tree, thicket, bush or grass hummock.
- Clutch size 4-6, sometimes 2 broods/year.
- Eggs are pale blue-green.
- Incubation by both sexes lasts 19-21 days.
- Young fly at 21-23 days, but are still fed by parents.
- Eats fish, crustaceans, insects and other small animals; usually forages in shallow water.



Vocalization:

- https://www.allaboutbirds.org/guide/Green_Heron/sounds

Phenology:

Fledging/Parental Care											
Nest Construct			Eggs Laid/Chicks in Nest								
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: A&R Photography

Habitat:

- Swamps, mangroves, marshes and margins of ponds, rivers, lakes, and lagoons.
- Prefers fresh water or brackish sloughs, slow-moving rivers, and lakes all with thickets or woodlands of willows and alders along the shore.
- Is at the northern edge of its distribution and only breeds in southwestern BC.
- May nest a kilometer away from a foraging area and permanent water sources.
- Able to breed in relatively small habitat patches and to colonize new sites readily.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- Active and inactive nests of this species have regulatory protection.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

Marbled Murrelet (*Brachyramphus marmoratus*)



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Threatened.
- Provincial List: Blue.
- Identified Wildlife: Yes.

Description:

- Small bulky seabird with a large head for its size.
- Short thin bill.
- Summer plumage dark brown with red-brown tints. Crown and face may be darker than body.
- Winter plumage mostly black above and white below with white scapular strip.

Biology:

- Food is small fish and pelagic crustaceans.
- A diving bird using their wings for underwater thrust.
- Nests are of solitary pairs.
- Often nests are within 30km of the ocean but can be as far as 65km inland.
- Nests are inconspicuous on larger mossy branches.
- Eggs, usually one, placed on well-developed moss layer often in the branches of old growth trees.
- Incubation, approximately 30 days, fledging approximately 30 days.
- The breeding season is long (late-April through early September).
- Breeding season overlaps with fledging and parental care.

Phenology:

Breeding, Fledging and Parental Care											
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Natural Resource District:

Vocalization:

- https://www.allaboutbirds.org/guide/Marbled_Murrelet/sounds



Photo Credit: [birdatlas](#)

Habitat:

- Spends most of its time along the inshore marine habitat within 0.5 kms of shore in shallow waters.
- They spend time on land, for nesting, breeding and rearing their young, most of which is in Old Growth coastal forests of Sitka Spruce and Western Hemlock.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Active and inactive nests of this species have regulatory protection.
- Report the observation to supervisor and contact BCTS.
- Managed under higher level planning, FRPA, WHA's OGMA's etc.

Osprey (*Pandion haliaetus*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: Not Ranked.
- Provincial List: Yellow
- Identified Wildlife: Yes

Description:

- Ospreys have long narrow wings, dark brown upperparts, and white underparts.
- Head is white with a prominent dark eye streak, and dark wrist patches (visible in flight) on the underside of the wings.
- Immatures have pale buff edging on the dark feathers of the upper surface.
- Females are more likely than males to have a necklace of dark streaking.
- Average length 56-64 cm, wingspan 147-183 cm.

Biology:

- The Osprey diet consists almost entirely of fish.
- In some locations small mammals, birds, reptiles and amphibians or crustaceans may be taken.
- Capture prey with a feet first plunge, usually into water.
- Build large stick nest on natural nest sites, usually in treetops of large trees, cliffs and on rocky ledges.
- The same nest is used year after year but can have alternate nests.
- Nests are usually close to open, shallow water, usually within 4km, can be 20km.
- Clutch size of 1-4, one brood annually.
- Eggs are white pinkish, marked with brown olive spots.
- Incubation by female takes 35-42 days.
- Nestlings stay in nest 50-60 days and are dependent on parents for several weeks after fledging.

Vocalization:

- <https://www.allaboutbirds.org/guide/Osprey/sounds>

Phenology:

				Breeding		Fledging					
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: [inaturalist](#)

Habitat:

- Primarily along rivers, lakes, streams and marine environments.
- Open sites with suitable nesting sites close to water.

Field Action Required:

If nest is found:

- Retain the nest tree (protected under the Wildlife Act)
- Default 200m vegetative buffer around nest location
- A Qualified Professional may be able to recommend alternative buffers on a case-by-case basis
- Notify BCTS, document, flag the location of the nest tree and occupation status
- Contact a QP if you are uncertain about occupancy.

Peregrine Falcon, pealei (*Falco peregrinus pealei*)

*Awareness List



Status:

- SARA Schedule: 1-Special Concern
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- Peregrine Falcons are a medium sized falcon.
- Fastest bird in the world. Closes wings to body when stooping or dropping on prey.
- The *Pealei* Falcon have long pointed wings, a dark crown and nape.
- Adults are bluish-grey or darker in colour and have a blackish facial stripe that extends from the eye to along-side the lower jaw.
- Forehead is black or gray pale in adults, and brownish pale above in immatures.
- Two subspecies, *F.p. pealei* and *F.p. anatum* breed in British Columbia.
- The *pealei* subspecies are slightly larger than the *anatum*.
- They are whitish, greyish or buff-coloured underneath and have blackish spots and stripes.
- Females are larger than males.

Biology:

- The Peregrine Falcon diet is related to concentrated populations of shorebirds, waterfowl, pigeons, and songbirds.
- Other prey includes bats, rodents and insects.
- Peregrines require an ample supply of suitable prey species in areas that permit aerial hunting.
- The *pealei* subspecies nest on rock cliffs above lakes or river valleys where abundant prey is nearby.
- Nest is a well-rounded scrape on the ground usually on a cliff ledge.
- Clutch size of 2-6, one brood annually.
- Eggs are white pinkish occasionally marked with brown or red blotches.
- Incubation by female takes 29-32 days.
- Nestlings stay in nest 35-42 days.

Vocalization:

- https://www.allaboutbirds.org/guide/Peregrine_Falcon/sounds

Phenology:

			Breeding			Fledging					
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: [inaturalist](#)

Range:

- The *pealei* subspecies of the Peregrine Falcon is restricted to Pacific coastal areas of British Columbia.

Habitat:

- Open landscapes with suitable nesting cliff sites.
- The *pealei* subspecies are associated with coastal areas of British Columbia.
- Sometimes nesting under Sitka Spruce roots.

Field Action Required:

- Active and inactive nests of this species have regulatory protection.
- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

Pileated Woodpecker (*Dryocopus pileatus*)

**Focus List

BCTS
BC Timber Sales

Status:

- SARA Schedule: Not Listed.
- *Migratory Birds Regulations* Schedule 1.
- Provincial List: Yellow.
- Identified Wildlife: No.

Description:

- Large crow sized (40-49 cm) woodpecker. Largest woodpecker in North America.
- Mostly black with a bright red crest and white stripes extending down the neck from the bill to underwing area.
- Sexes are similar in appearance. Male has a red patch on the black line off base of bill.
- In flight striking white on linings of underwings are revealed.
- Flies with slow, jerky wing beats.

Biology:

- Diet consists of carpenter ants, other ants, woodboring beetle larvae, termites and other insects such as flies, spruce budworm and caterpillars, some fruit and nuts.
- Drill rectangular or irregular shaped feeding holes with rough edges in rotten wood.
- Feed in snags, logs and stumps.
- Pairs stay together in their territory all year round.
- Pairs excavate a new nest cavity each year.
- Entrances to nesting cavities can be circular, slightly oval (tear drop shaped) or rectangular with smooth edges; vertical diameter around 12 cm and horizontal diameter around 9 cm.
- Nests are excavated in large diameter (typically > 40cm) live or dead trees with heart rot.
- Nest trees typically have only one cavity, roost trees may have numerous entrance holes.
- Clutch size of 2-5, one brood annually.
- Eggs are glossy white.
- Incubation by both parents 15-18 days.
- Nestlings stay in nest 24-31 days.

Vocalization:

- https://www.allaboutbirds.org/guide/Pileated_Woodpecker/sounds

Phenology:

			Breeding	Fledging							
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: All About Birds

Habitat:

- Forest birds that require large, standing dead trees and downed wood.
- Mature evergreen, deciduous or mixed forests can be used.
- Found in suburban areas where large dead trees are present.
- Nests in mature mixed or coniferous forests or in younger forests with numerous large, dead trees.
- In BC prefers live hardwoods for nesting, especially trembling aspen and black cottonwood, but paper birch, red alder and maple are also used. Conifers are used but less frequently.

Field Action Required:

- Active and inactive nesting cavities of Pileated Woodpeckers are protected under the *Migratory Birds Regulation*.
- If an active nest is observed or a suspected nesting cavity, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

Pileated Woodpecker Nesting Cavities

One per tree, smooth edges



Western Screech-Owl, kennicottii (*Megascops kennicottii kennicottii*)

****Focus List**



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Threatened.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- Two distinct subspecies in British Columbia, the *kennicottii* along the Pacific coast and the *macfarlanei* in the valleys of the southern interior.
- A small sized owl, 19-25 cm long.
- Grey-brown owl with feather “ear” tufts and yellow eyes.
- The head is crowned with a triangular russet and black cap that follows the eyebrow ridge to the ear tufts.
- Breast and belly are pale with dark vertical streaking.
- The coastal subspecies tends to have greater brown colouration while the interior subspecies is greyer.
- Females tend to be larger than males.

Biology:

- Diet consists of small mammals, including mice, voles, insects, amphibians, and small fish.
- A nocturnal predator.
- A cavity nester that often nests in abandoned cavities of the Northern Flicker or Pileated Woodpecker.
- Nest in large diameter deciduous trees, Black Cottonwood, Aspen, Bigleaf Maple and Birch.
- Two to seven white eggs, usually one brood.
- Eggs are incubated by females for 21-30 days.
- Fledglings leave nest 28-36 days after hatching.
- Monogamous pairs.

Phenology:

		Nesting			Fledging						
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Vocalization:

- [https://www.allaboutbirds.org/guide/Western Screech-Owl/sounds](https://www.allaboutbirds.org/guide/Western_Screech-Owl/sounds)



Photo Credit: [inaturalist](#)

Habitat:

- The Western Screech-Owl is found in almost every type of low elevation woodland habitat, including coniferous and deciduous forests and suburban gardens, most often near streams or in riparian habitats.
- The key is availability of suitable roosting cover and nest sites.
- They will use nest boxes if no suitable tree cavities exist.

Range:

- Western Screech-Owl *kennicottii* subspecies occur in low elevations and valley bottoms in coastal British Columbia. have been found from sea level to 600 meters in the coastal regions of British Columbia.

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location.
- If an active nest is observed, do not disturb the nest and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- Report the observation to supervisor and contact BCTS.

Dromedary Jumping Slug (*Hemphillia dromedarius*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Threatened.
- Provincial List: Red.
- Identified Wildlife: No.

Description:

- Relatively large slug with visceral pouch raised into a pronounced hump and a part of yellowish internal shell plate visible through a slit in the mantle.
- Tail laterally compressed, keeled, and tipped with a hornlike protuberance.
- Colour – mantle and foot typically gray (may be tan or brown).
- Cream-coloured mottling on the sides, sole of foot is pale yellow, orange-yellow, or cream coloured.
- Length up to 60 mm when extended in movement.
- No eggs or juveniles have been found in BC.
- Endemic to coastal forests of western North America.

Biology:

- Simultaneous hermaphrodite and lays eggs.
- Oviposition takes place in wet or moist decaying wood.
- Nothing is known of its reproductive biology in BC.
- Eggs probably laid in moist microhabitats, such as large decaying logs, likely in the fall and hatch the following spring.
- Life cycle details are unknown.
- Little known about the specific diet, but species is herbivorous-fungivorous.
- Anti-predator behavior is unique. It consists of “violent writhing and leaping” in response to disturbance.
- Possible predators – birds, shrew, mice, beetles, and snails.

Phenology (based on best hypotheses):

Eggs Hatch									Eggs Laid		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Photo Credit: [inaturalist](#)

Habitat:

- Habitat requirements are poorly known.
- In WA, observed from 238-1436 m (BC, sea level – 1060 m) but most > 700 m.
- Locales are mature and old-growth forest, but at some high-elevation sites they occur on talus substrates in sparsely wooded, subalpine habitats.
- Unknown whether it uses earlier seral stages within logged landscapes.
- The few Vancouver Island observations support WA data. Found in remnant patches of old-growth, Western Hemlock and Western Redcedar forest.
- One sighting in selection logged stand with remaining large trees and abundant CWD.
- Forest floor at all sites is moist, composed of thin, compact, needle litter, and CWD.
- Threats – loss and fragmentation of old-growth, summer droughts and wildfires.

Field Action Required:

- If a Dromedary Jumping Slug is observed, stop work.
- Document the location, take photos, and record sighting's coordinates.
- Report the observation to supervisor and contact BCTS.

Considerable Gingerbread (*Pannaria rubiginosa*)

*Awareness List

Status:

- SARA Schedule: Not Listed
- Provincial List: Red
- Identified Wildlife: No

Description:

- Considerable Gingerbread is a member of the group called the Mouse Lichens. This reflects the miniature size of the lobes and the dull greyish brown colour of the upper surface in many species.
- Minute to small or occasionally medium sized, and can vary in appearance with many small, leafy lobes, or a few lobes.
- May appear crust like.
- It has a cortex above but not below.
- Rarely pruinose (covered in powder on surface).
- Lobes closely appressed, subrotund to elongate, averaging to 1–3 mm wide, thin to thick.
- Upper surface pale tan to greyish blue or dark brownish (lobe margins often whiter), smooth to slightly roughened.
- Lower surface pale and often resting on dark hypothallus.
- Apothecia (fruiting body) located over upper surface, disc usually reddish brown; spores simple, ellipsoid to somewhat spindle shaped, colourless.

Biology:

- Considerable Gingerbread lichens reproduce both sexually, through spores, and asexually through vegetative reproduction.



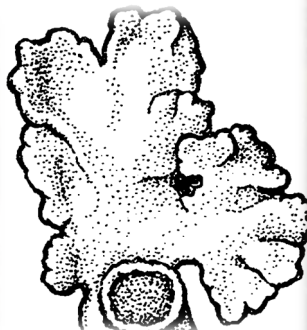
Photo Credit: J. Riley, [E-Flora BC](#)

Habitat:

- Over conifers and sometimes rock, moss, and soil in open coastal forests at lower elevations.

Field Action Required:

- Do not disturb the plant.
- Confirm species identification through photos and specialist if necessary.
- Document and GPS the location.
- Report to BCTS.
- Implement a stand level management strategy identifying necessary buffer.



Oldgrowth Specklebelly (*Pseudocyphellaria rainierensis*)

*Awareness List



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1-Special Concern
- Provincial List: Blue
- Identified Wildlife: No

Description:

- Oldgrowth specklebelly is a large, blue-gray leafy lichen.
- It is a loosely attached foliose lichen characterized by large, draping, curtain-like lobes, ragged lobe margins, a pale greenish-blue upper surface and a pale lower surface bearing scattered small white spots.
- The lichen is up to about 5-12 cm across, lobes are 1.5-3 cm wide and vary from short to elongate.
- It grows loosely attached to branches and trunks in lowland-mid elevation old growth forests (>200 years).
- The dull upper surface is pale greenish-blue.
- It is the only BC lichen with a spotted lower surface – tiny white spots on a pale brownish background, and torn lobe margins.
- Oldgrowth specklebelly is a distinctive lichen, easily recognized in the field.

Biology:

- Oldgrowth specklebelly lichen is an asexual species. Reproduction depends on the propagation and dissemination of thallus fragments, largely in the form of marginal lobules.
- Dispersal is over short distances from the host lichen due to the relatively heavy weight of marginal lobules. Results in a highly discontinuous distribution of the species,
- further enforced by its specific requirement for nutrient-enriched microsites.



Photo Credit: Meridian Forest Services

Habitat:

- Restricted to sheltered old-growth ecosystems at low to moderate elevations in the Coastal Western Hemlock Zone – often in CWHvm2 or upper elevations of vm1.
- Preferred habitat is on bark of lower canopy trees, especially amabilis fir, within the dripline of yellow-cedar. Also found on Hw, Yc, Cw and yew.
- Colonizes the branches and trunks of conifers in ecologically stable lowland to mid-elevation oldgrowth forests, especially in localized nutrient hotspots.
- Deep shade and full sunlight exposure are detrimental to the species; open, humid, stable forest ecosystems are suitable conditions for establishment and growth.

Field Action Required:

- Do not disturb the plant.
- Confirm species identification through photos and specialist if necessary.
- Document and GPS the location, flag the tree with occurrence number and date.
- Report to BCTS.
- Implement a stand level management strategy identifying necessary buffer.

Black Bear (*Ursus americanus*)

****Focus List**



BCTS
BC Timber Sales

Status:

- SARA Schedule: Not Listed
- Provincial List: Yellow.
- Identified Wildlife: No.

Description:

- Not always black, can be cinnamon, brown, and blonde. White Kermode or Spirit Bear is on N-central coast and Blue “Glacier” Bear in British Columbia’s northwest.
- Small black eyes, broad head, rounded ears, short tail, fine, long fur.
- Prominent shoulder hump of grizzlies is absent and facial profile is straight rather than dish-shaped and claws are shorter
- Size and weight, varies greatly by sex, season, food supply, and locale.
- Adult males 60-90 cm in shoulder height and 130-190 cm long and weigh 80-300 kg. Females are smaller at 40-140 kg.
- Solitary life history.

Biology:

- Omnivorous, vegetation is about 80% of diet. Seek abundant food high in protein and energy and available with minimal energy expenditure.
- Mate early Jun–mid Jul but embryo does not implant until Oct–Nov with cubs born Jan–Feb during hibernation weighing about 400 g and nurse while mother hibernates.
- Cubs stay with mother for first year.
- Usual hibernation is 3-5 months on S coast and 5-7 months in the interior and northern. Females hibernate longer than males.
- Coastal dens in or under large trees, snags, logs, or stumps. May be 25 m above ground. Interior, in tree cavities, but can den in rock cavities, under-brush piles, or in holes dug into ground.

Habitat:

- Prefer forested and shrubby areas to open but use wet meadows, high tidelands, ridgetops, burned areas, riparian areas, and avalanche chutes.
- Home ranges (feeding areas joined by travel routes), males about 25-150 km² - larger than females’, 5-25 km².
- Home ranges may shift due to environmental factors and often overlap those of other bears.

Phenology:

Hibernate										Hibernate	
Birth		Nursing			Fertilization				Implantation		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Photo Credit: [Wildsafe BC](#)

Field Action Required, under [TSG Bear Den BMP](#):

- Notify BCTS.
- If a potential den is observed, and it is safe to do so, document the location of the den, take photos, and flag the den.
- Never approach a bear or a bear den during the winter. If occupation status of a den is unknown, stay away.
- If there is uncertainty regarding den quality, value, or occupancy, BCTS will arrange for an assessment

Management Recommendations:

- Where possible, retain den site within a windfirm TLA/WTRA (preferably 1 ha or tied to reserves already on site); 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.
- If den is active, non-disturbance buffers defined in the protocol are applicable between Nov 1 and May 15.
 - 200m buffer around the den(s) for falling, primary harvesting activities, hauling, road building (no blasting)
 - 1000m buffer around dens for blasting or helicopter yarding

Grizzly Bear (*Ursus arctos*)

****Focus List**



Status:

- SARA Schedule: 1-Special Concern.
- Provincial List: Blue.
- Identified Wildlife: Yes.

Description:

- Mostly brownish to yellowish coat. Often white-tipped guard hairs giving the grizzly look. Variations occur, from almost entirely black to almost white.
- Face is concave, with small eyes (in relation to head) and rounded ears.
- Large hump on the front shoulders provides the power of the Grizzly Bear, which helps the bear dig for food and dens when denning underground.
- Large flat paws are equipped with long (5cm) claws.
- Grizzly Bears tend to be solitary animals. The exception can be during the fall salmon runs where they may congregate to feed.

Biology:

- Grizzly Bears are omnivorous, feeding opportunistically on large and small animals, plants, and fish.
- Salmon runs in the fall are an important food source to prepare for fall hibernation.
- Not unusual for a male to delay hibernation and be active well into the winter months.
- Dens can be excavated underground, in trees and rock caves.
- Summer is the mating months, with females displaying delayed implantation.
- Young are born in the den in January to March.

Phenology:

Young born											
Hibernate											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Photo Credit: [BC Ministry of Environment](#)

Habitat:

- Found in a wide variety of habitat from alpine to valley bottoms. Most common in higher elevation meadows and avalanche chutes.
- Avalanche tracks area a critical habitat component that provide spring foraging opportunities of emerging vegetation and roots.
- Dens are usually on steep north-facing slopes, with soils suitable for diffing and where vegetation will stabilize the roof of the den and snow will accumulate.

Field Action Required:

- If a Grizzly Bear is observed, stop work in the immediate area until the bear has moved out of the work area.
- If an active block is near a Grizzly Bear WHA, follow GWMs
- If a potential den, pad trail or significant feeding area is observed, stop work and notify BCTS. If it is safe to do so document the location, take photos, and flag the den.
- Maintain the ecological integrity of important seasonal habitats or features within a WTRA, buffered retention or a WHA.
- Contact a qualified professional if you are uncertain about retention requirements.
- Never approach a bear. If the status of occupation of the den is unknown do not approach.
- Review Great Bear Rainforest Order for specific Grizzly Bear management while operating in the GBR.

Little Brown Myotis (*Myotis lucifugus*)

****Focus List**



BCTS
BC Timber Sales

Status:

- SARA Schedule: 1- Endangered.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- Females slightly larger than males.
- Adults weigh 7-9 grams, 7-10 cm long, forearm 33-41 mm, and wingspan 22-27 cm.
- Fur is cinnamon buff to dark brown on back and may be glossy and slightly paler on the belly.
- Wings and tail lack fur and are dark brown.
- Ears are large compared to size of head.
- Tragus (fleshy projection which covers the entrance of the ear) is short and blunt.
- Summer, males largely solitary, and females form colonies.
- Difficult to distinguish among bat species.

Biology:

- Nocturnal.
- Peak feeding periods 1-2 hours after sunset and before sunrise.
- Few natural predators.
- Insectivorous, primarily feed on aquatic flies but also eat beetles, ants, crane flies, crickets, and leafhoppers.
- Forage while flying over water and semi-open areas such as rocky hillsides, lawns, fields, and forest edges
- Adjust habitat in response to seasonal changes in insect abundance.
- Breeding occurs during fall (Sep, Oct), fertilization after hibernation in spring (Feb, Mar).
- Young born May to July, fly within 3 weeks and are independent after a month.
- Migrate 50-200 km between hibernacula and summer roosts.



Phenology:

Implant			Birth			Copulate					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Habitat:

- Dry open forests as well as wet riparian areas from low elevation IDF up to 2300 meters.
- Daytime roosts protect from predation and weather extremes.
- Roost sites preferably on south to southeast aspects.
- Summer, in attics, under bridges, in hollow trees, under loose bark or shingles, or in rock crevices.
- Require open water and may concentrate at pools and streams to drink at dusk.
- Hibernating habitat poorly understood but thought to hibernate in caves or old mines with stable temperature (2-12 C).
- If undisturbed, occupy same sites year after year.



Photo Credit: [NL Ministry Fisheries, Forestry & Agriculture](#)

Field Action Required:

- If a Little Brown Myotis observed stop work and do not handle bat.
- If roosting or hibernation site is identified, do not disturb the bats. If there is uncertainty regarding occupancy, BCTS will arrange for an assessment
- In both instances, document (photo, GPS coordinates) the location.
- Report the observation to supervisor and contact BCTS.

Roosevelt Elk (*Cervus elaphus roosevelti*)

****Focus List**



BCTS
BC Timber Sales

Status:

- SARA Schedule: Not Listed.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- One of two BC subspecies and largest subspecies of North American elk.
- Distinct summer and winter coats.
- Winter coat: head, neck, and legs are dark brown, and sides and back are lighter gray brown. Bulls tend to have lighter, creamier body colour than cows.
- Summer coat: sleek-looking, reddish-brown, with little or no undercoat.
- Both sexes have heavy dark manes and yellowish-white rump patch bordered by dark brown or black stripe.
- Calves ≤ 3 months: reddish-brown coats with white spots.
- Adult bulls are 140 cm at the shoulder and weigh 265-410 kg. Cows stand 130 cm and weigh 190-270 kg.
- Only males have antlers.

Biology:

- Rut occurs Sep-Oct.
- Birth of single calf, late May – early Jun. weighing 13 kg.
- Cow and calf isolate first 3-4 weeks.
- Bulls do not feed during rut – enter winter in poor shape.
- Generalist herbivores, browse or graze on wide variety of shrubs, forbs, grasses, sedges, and trees.
- Significant browsers can influence plant phenology and successional pathways.
- Migration distances from summer to winter areas varies – a few km to 150 km.
- Social ungulates, maternal groups - adult females, young of the year, and juveniles < 2.5 years old.
- Adult males, solitary or found in small bachelor groups.
- Predators, gray wolves, cougars, bears.

Phenology:

				Birth	Care		Mate				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Photo Credit: [Wikipedia](#)

Habitat:

- Prefer wet areas – meadows, estuaries, seepage sites, and riparian areas adjacent to streams, forest edges and recently burned forest stands and clearcuts.
- Security cover is major habitat factor.
- Dense forests provide security and hold snow. Seek areas that provide both abundant food and dense cover.
- Variable use patterns. Some move seasonally to high-elevation summer areas, others move between various low-elevation seasonal ranges, and others remain in year-round ranges.
- Old growth on low elevation gentle to moderately sloped south aspects, or valley bottoms with riparian influences, highest quality coastal winter ranges. Forest development has limited availability of these areas.

Field Action Required:

- Document any high use foraging and wintering areas and report observations to BCTS.
- Consult the [BCTS Roosevelt Elk Management Protocol in Pacific TSA](#)
- Determine if the Landscape Unit you are working in requires a specific management strategy to protect or enhance forage, security cover or winter thermal cover.

Western Water Shrew (*Sorex navigator brooksi*)

****Focus List**



Status:

- SARA Schedule: Not Listed.
- Provincial List: Blue.
- Identified Wildlife: Yes.

Description:

- Subspecies endemic to Vancouver Island.
- Large shrew, weight 10.6 grams. Length 15.2 cm includes 7.5 cm tail.
- Dense fur, black on top, white or brown below, resists water penetration and traps air. Bicolored tail – dark above, white-silver below.
- Toes have fringe of stiff interlocking hairs, which enlarge foot's the effective surface.
- Adaptation allows animal to run on water for short distances.
- Limiting factor, lack of suitable habitat.

Biology:

- Habitat specialists, living at water's edge.
- Little known of reproductive biology, information from common water shrew.
- Breeding, Mar to Sep. Females pregnant or with young May – Sep. 2 or 3 litters per season.
- Gestation, 3 weeks.
- Opportunistic insectivores.
- Preferred diet: larvae and nymphs of caddisflies, mayflies, crane flies, and stoneflies. Also, organic forest floor CWD.
- Hoard food in caches for later use.
- Active at all hours, but 2 peak times – hour before dawn and hour after dusk.
- Dives readily into water and can remain submerged for periods of up to 30 seconds.
- Stiff hairs on feet allow shrew to actually run on the water's surface for short distances.

Phenology:

				Breeding Period								
				Birth	Care	Birth	Care	Birth	Care			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	



Photo Credit: [Environment & Climate Change Canada](#)

Habitat:

- Depends on presence of high-quality intact riparian systems.
- Suitable aquatic - riparian habitat found over large part of Vancouver Island.
- Diverse range of stream habitats: narrow to wide streams, slow-moving to moderately fast flowing waters.
- Substrate of the streambed is usually cobbles or gravel.
- Stream has complex environmental relationship with instream CWD, and dense riparian vegetation (shrubs and herbs).
- Home range, likely a long, linear strip along water's edge.
- Forest age does not reflect habitat quality provided riparian area is suitable.
- Low elevation (sea level-560 m), variety of forest types and age classes, if riparian corridor is intact.
- Not known if high elevation sites occupied.
- Threats, urbanization in southeast and forestry over much of its range.
- Predators: mink, herons, owls, and snakes.

Field Action Required:

- If observed, stop work in the immediate area.
- Take photos and record sighting's coordinates and notify BCTS.
- Maintain a 5m buffer along streams in the vicinity of where the shrew was found.

Vancouver Island Marmot (*Marmota vancouverensis*)

*Awareness List



Status:

- SARA Schedule: 1- Endangered.
- Provincial List: Red.
- Identified Wildlife: Yes.

Description:

- One of world's rarest animals, found only in high mountain areas of south-central Vancouver Island.
- Population was in significant decline (minimum 2003) but now is recovering.
- Rich chocolate brown coat with contrasting white fur patches on nose, chin, forehead, and chest.
- Pups have uniformly dark, almost black, coat.
- Largest members of squirrel family. Size of large house cat or small dog.
- 65-70 cm from to tip of bushy tail. Weight varies seasonally, female 3 kg (after hibernation) to 4.5-5.5 kg at hibernation onset.

Biology:

- Mating occurs above ground during first 3 weeks after spring emergence (late Apr-early May).
- Young born in burrows and appear above ground in late Jun-Jul.
- Active morning and evening. Rests in burrow at midday, correlates with maximum daily temperature
- Grasses and sedges important food in early spring. Forbs make bulk of summer diet. Small fruits are also eaten.
- Seasonal diet changes reflect both availability of plants and species diet selection.
- Does not store food for winter but accumulates body fat.
- Hibernates, early Oct-early May and may lose one third of body weight.
- Predation by cougars, wolves, eagles is greatest threat to species.
- Colonial (1-3 family units).

Phenology:

Hibernate										Hibernate		
			Mate		Birth							
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

Habitat:

- Suitable habitat is scarce and highly fragmented.
- Open subalpine meadows, on south to west-facing treeless slopes at 1000-1500 m.
- Home range, 0.02-0.05 km².
- Sufficient soil for burrowing, with large rocks or stumps for burrowing under and for lookout sites.
- Colonies have been found in conifer forest, logging slash, road banks, and cleared ski runs.
- Individual marmots occasionally take up residence in valley-bottom gardens.
- Burrows usually below rocks in or near meadows.
- Entrances, 35-45 cm diameter and located on downhill side of boulders or below stumps.



Photo Credit: [Species at Risk Registry](#)

Field Action Required:

- If observed, stop work in the immediate area.
- Take photos and record sighting's coordinates.
- Report the observation to supervisor and contact BCTS.

Phantom Orchid (*Cephalanthera austiniae*) *Awareness List



Status:

- SARA Schedule: 1-Threatened (2003)
- Provincial List: Red
- Identified Wildlife: No

Description:

- A rare ghostly white plant.
- May turn yellowish or brownish, smooth.
- Grows from branched, creeping rhizomes; stems 20-55 cm tall.
- Leaves are bractlike, 2 to 5, mostly sheathing stem, 3-6 cm long. Leaves are minimal to lacking completely.
- Flowers are 5 to 20 white flowers; sepals and lateral petals alike, elliptical to oblanceolate, 12-20 mm long, tips pointed.
- Lateral petals usually longer than lip; lip saclike, with a yellow, pimpled gland within at the base.
- Flowers are delicately scented.
- Fruits are capsules, erect ellipsoid-oblanceoloid, and 15 × 10 mm.
- Although quite dissimilar in appearance, may be confused with Indian-pipe (*Monotropa uniflora*), another all-white saprophytic species.
- It is easily distinguished from other species by the presence of multiple flowers sporting a yellow lip, white appearance, and lack of leaves.

Biology:

- Herbaceous perennial plant.
- Saprophytic (lives on dead or decaying organic matter).
- Summer is the reproduction period, when flowering starts.

Phenology:

				Flower							
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Habitat:

- Occurs naturally in mature mixedwoods, or woods with strong deciduous or coniferous components.
- In most locations, although not all, the orchids occur in sites with little to no ground cover.
- Occurrence also appears to be strongly correlated with limestone.

Field Action Required:

- Do not disturb the plant.
- Confirm species identification through photos and specialist if necessary.
- Document and GPS the location.
- Report to BCTS.
- Implement a stand level management strategy identifying necessary buffer.



Photo Credit: [iNaturalist](#)

Western Yew (*Taxus brevifolia*)

****Awareness List**



Status:

- SARA Schedule: Not Listed
- Provincial List: Yellow
- Identified Wildlife: No
- Objectives set in GBRO.

Description:

- 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.
- **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.
- **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



Habitat:

- An understory tree of Pacific Northwest forests, found in light to deep shade.
- Somewhat moist forests, especially along streams and on slopes.
- In poorly drained mixed conifer forests at the northern extent of its range.
- Scattered in coniferous forests; common on water-receiving sites, frequent on water-collecting sites, and occasional on water-shedding sites.

Field Action Required:

- Do not disturb the plant.
- Confirm species identification through photos and specialist if necessary.
- Document and GPS the location.
- Report to BCTS.

Action Required under GBRO:

Part 3, South Central Coast, Division 2 First Nations, Section 9. Objectives for retention of western yew

(1) In Development Areas, retain western yew trees.

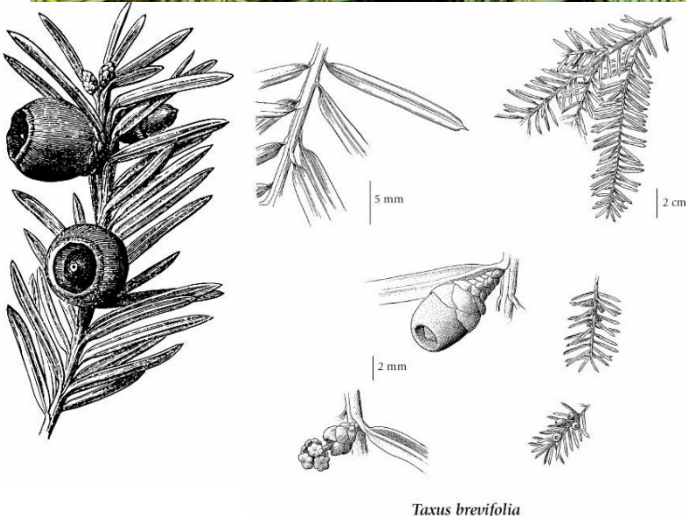
(2) Despite subsection (1), western yew trees may be altered or harvested if:

(a) alteration or harvesting is required to accommodate operational requirements for road and bridge construction and there is no practicable alternative; or

(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.

(3) Where practicable, include western yew trees in Stand Retention.

(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.



Taxus brevifolia

Painted Turtle - Pacific Coast Population (*Chrysemys picta pop. 1*)

****Focus List**



Status:

- SARA Schedule: 1-Threatened (2021)
- Provincial List: Red
- Identified Wildlife: No



Photo Credit: K. Tuttle, [E-Flora BC](#)

Description:

- The Painted Turtle is a colourful species with a red or orange belly or bottom shell and a combination of dark and light markings that form abstract designs similar to fingerprints or topographic patterning.
- The distinctive individual pattern is present from hatching to maturity and allows for individual identification of Painted Turtles.
- The red or orange colouration is also visible along the marginal scutes (sides) and the lower edges of the shell.
- The carapace (back or top shell) is smooth and unkeeled, and ranges in colouration from dark green to black-brown.
- Hatchlings often have light, irregular lines visible on the carapace, and can form intricate net-like patterns especially in subadults.
- The head is dark olive green, with irregular bright yellow markings extending from snout to neck along the sides and throat.
- The non-native, introduced Slider is often misidentified as Painted Turtle. Both have similar physiology, colouration, size and lifecycles but Sliders have a red "ear" patch located behind the eye which can fade on older Sliders, making identification more difficult as they mature.

Phenology:

Mating											
Young stay in nest cavity			Nesting			Eggs Hatch			Young stay in nest cavity		
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Biology:

- Painted Turtles nest in the spring and early summer.
- Females may lay multiple clutches in one season. An average of 10 eggs are laid per clutch but single clutches as high as 23 eggs have been observed.
- Eggs hatch in the fall and hatchlings generally overwinter in the nest and emerge the following spring.
- Hibernation occurs in water or in soft soil in open areas up to several hundred meters from water.

Habitat:

- Painted turtles live in slow-moving, shallow waters with soft bottoms, with basking sites, and aquatic vegetation: streams, marshes, swamps, ponds, lakes, and reservoirs.
- They may colonize seasonally flooded areas near permanent water.



Photo Credit: [Government of Canada](#)

Field Action Required:

- If the species is observed take photos, document habitat and activity details, and GPS the location and notify BCTS.
- If a suspected den, nest, or hibernation site is observed, do not disturb the feature and limit activity in the immediate area. Take photos and locate with GPS waypoint if possible.
- If there is uncertainty, have a qualified professional verify the species.

Northern Abalone (*Haliotis kamtschatkana*)*Awareness List



BCTS
BC Timber Sales

Only a concern when planning activities in foreshore / near shore areas—log dumps, heli drop zones etc

Status:

- SARA Schedule: 1 - Endangered.
- Provincial List: Red.
- Identified Wildlife: No.

Description:

- Single ear shaped shell with row of perforations along one side
- Usually mottled reddish or greenish with areas of white and blue. Orange variant seen rarely
- Often overgrown with various encrusting organisms
- Inside shell is pearly white with faint iridescence
- Large foot usually tan coloured
- No similar shellfish in BC

Biology:

- Can be sexually mature at shell length of 50-70mm (2-5 years)
- Immature found under rocks or crevices
- Mature found on exposed rock surfaces
- Thought to live up to 15-20 years
- Feed primarily on macro-algae
- Larval abalone are poor swimmers and have low dispersal rate
- Threats include illegal harvest; predation and low recruitment



Habitat:

- Sheltered bays to exposed coastlines
- Require full salinity (no brackish water)
- Require source of macro algae such as kelp
- <10m depth
- Ample habitat available on coast of BC

Field Action Required:

- Document location
- Notify BCTS
- Contact a Qualified Registered Professional to develop mitigation strategy for any activities taking place in foreshore or near shore areas

Orca Whale (*Orcinus orca*)

*Awareness List



Only a concern when planning activities in foreshore / near shore areas—log dumps, heli drop zones etc

Status:

- SARA Schedule: 1-Endangered.
- Provincial List: Red.
- Identified Wildlife: No.

Description:

- The orca is the largest toothed member of the dolphin family.
- Recognizable black and white colouring - mainly black above and white below, with an oval white patch behind each eye.
- Round pectoral fins on either side of its body, a large dorsal fin on its back, and a tail fin – called a “fluke”
- Males reach lengths of 8 or 9 metres and weigh up to 5 tonnes.
- Females are smaller at 7 metres and 4 tonnes.



Biology:

- Travels in well-defined social groups (pods), usually of fewer than 40 (averaging less than 10); sometimes forms aggregations exceeding 100.
- Studies in Puget Sound indicate strong social bonds and stable group structure.

- Typical pod contains mature females and their young (1-3 juveniles per female) and variable proportions of males and/or post-reproductive females.
- Southern Resident population (pop 5):
 - Approximately 75 individuals
- Northern Resident population (pop 6):
 - Approximately 310 individuals
- Primarily feed on salmon (preference Chinook)
- Threats include environmental contaminants, reduced prey availability, disturbance (acoustic and boat traffic), oil spills, and incidental mortalities in fisheries

Habitat:

- Southern Resident Orca's critical habitat included the transboundary waters in southern BC, including the southern Strait of Georgia, Haro Strait, and Juan de Fuca Strait
- Northern Resident Orca critical habitat included the waters of Johnstone Strait and southeastern Queen Charlotte Strait
- The movement patterns are influenced by the availability of their preferred prey. During the summer and fall months, Orca distribution is associated spatially and temporally with the migratory routes of Chinook Salmon as this important prey species returns to natal streams to spawn.
- For the rest of the year there is less information available on the diet, distribution, and movement patterns of Orca Whales

Field Action Required:

- Must be given consideration when developing and operating log handling facilities
- Contact a Qualified Registered Professional to develop mitigation strategy as a part of the operational plan for the log handling facility

Olympia Oyster (*Ostrea lurida*)

*Awareness List



BCTS
BC Timber Sales

Only a concern when planning activities in foreshore / near shore areas—log dumps, heli drop zones etc

Status:

- SARA Schedule: Special Concern.
- Provincial List: Blue.
- Identified Wildlife: No.

Description:

- British Columbia's only native oyster.
- Small species of oyster.
- deeply cupped lower (left) valve and a flat upper (right) valve that fits within the margins of the lower valve.
- The shell margin is more or less elliptical and the outer surface of the valves range in colour from white to purplish black.
- The inner surfaces of the valves range from white to iridescent green to purple, with the adductor muscle scar similar in colour to the rest of the valve.



Biology:

- Growth of this species occurs in the first years, with little growth after year 5.
- Morphology is highly variable but it is generally 90 mm in diameter at maturity.
- This species is a filter feeder. Larvae feed on suspended organic matter, while adults feed on suspended organic material and plankton.
- Breeds sporadically in the southern waters of the province; brooding occurs from mid-May to July, and settlement occurs from July to September, on the undersides of hard surfaces—an ambient water temperature of at least 12.5 C is needed to reproduce.
- Predators of this species include crabs, gastropods, sea stars, and birds

Habitat:

- This is a habitat specialist of the lower intertidal and subtidal zone.
- Found in estuaries, saltwater lagoons, bays, tidal flats, and sometimes attached to pilings or free-floating structures.
- Specifically been found in mud-gravel tidal flats, in splash pools and in tidal channels.

Field Action Required:

- Document location
- Notify BCTS
- Contact a Qualified Registered Professional to develop mitigation strategy for any activities taking place in foreshore or near shore areas

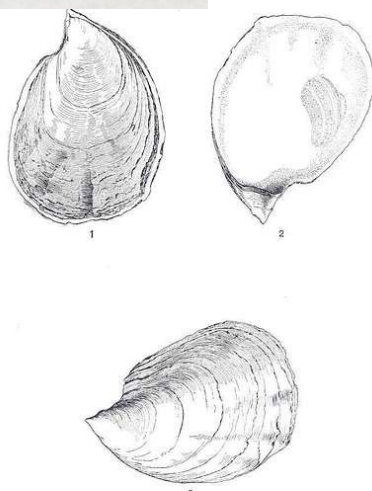


FIG. 1. Upper view of closed valves of Pacific oyster, *Ostrea lurida*.
FIG. 2. Inner face of ventral valve of same specimen.
FIG. 3. Outer face of ventral valve of same specimen.

Migratory Birds and Breeding Birds Federal and Provincial Legislation

FEDERAL LEGISLATION

The ***Migratory Birds Convention Act (MBCA)*** and the ***Migratory Birds Regulations (MBR)*** protect migratory birds, their nests and eggs on all land tenures anywhere in Canada and in ocean waters.

What species do these regulations apply to?

They apply to native migratory birds named in the [convention](#) such as ducks, geese, shorebirds, swallows, flycatchers, woodpeckers, hummingbirds and more. They do not apply to hawks, eagles, falcons, owls, corvidae (jays, crows, ravens) and grouse.

What are the prohibitions and protections?

Prohibitions include the deposit of a substance that is harmful to migratory birds to water in an area frequented by migratory birds (**MBCA 5.1(1)**). A person must not capture, kill, take injure or harass a migratory bird (**MBR 5(1)(a)**), or damage, destroy, remove or disturb a nest, nest shelter, eider duck shelter or duck box (**MBR 5(1)(c)**).

All migratory bird nests are protected when they contain a live bird or viable egg. The nests of 18 species listed in [Schedule 1](#) of the **MBR** are protected at all times. These nests may only be removed following [registration](#) of the nest and confirmation that the nest has been abandoned for the species specific designated waiting period outlined in the schedule.

Schedule 1 of MBR – species on the list with the potential for interaction with operations in the TSG BA

Species	Wait Time (months)	Forestry Activities
Pigeon Guillemot	12	Shoreline sites only
Rhinoceros Auklet	12	Shoreline sites only
Great Blue Heron	24	All forestry activities
Green Heron	24	All forestry activities
Fork-tailed Storm Petrel	12	Shoreline sites only
Pileated Woodpecker	36	All forestry activities Cavity Identification

Migratory bird species that are listed as Endangered, Threatened or Extirpated on Schedule 1 of the ***Species at Risk Act*** ([list](#)) may also have year round nest protection if a nest is included in the definition of their residence habitat (**SARA s.33**).

SARA Schedule 1 Birds – species that breed in the TSG BA and have inactive nest protection

Species
Barn Swallow
Marbled Murrelet

PROVINCIAL LEGISLATION

Section 34 of the ***Wildlife Act*** outlines provisions related to birds and their nests: *A person commits an offence if the person, except as provided by regulation, possesses, takes, injures, molests or destroys:*

- A bird or its egg,*
- The nest of an **eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl**, or*
- The nest of a bird not referred to in paragraph (b) when the nest is occupied by a bird or its egg.*

Where and to what species does this apply?

This act applies on all land tenures in BC and it applies to all native bird species in BC as well as species that have extended their ranges into BC unless the species was introduced by human intervention.

Additional Resources:

Migratory Birds - [Migratory birds - Canada.ca](#)

Frequently Asked Questions: [Migratory Birds Regulations, 2022 - Canada.ca](#)

Fact sheet: [Nest Protection under the Migratory Birds Regulations, 2022 - Canada.ca](#)

[Avoiding harm to migratory birds - Canada.ca](#)

Migratory Birds and Breeding Birds Federal and Provincial Legislation

Bird Nests

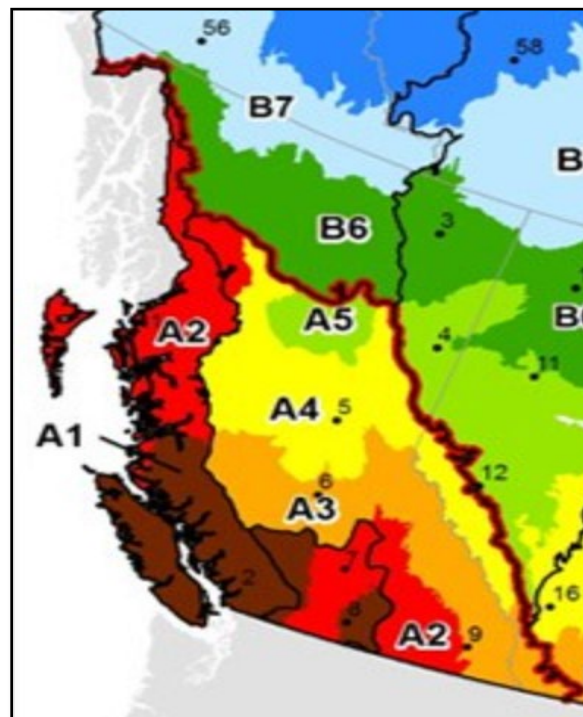
Locations: nests can be located in banks or on cliffs, on the ground, in vegetation or trees, within tree cavities and on structures such as buildings or bridges.

Nest types: nests can be built of sticks, moss, grass, hair and other fibers, they can be a scrape or shallow depression on the ground or they can be in a cavity, crevice or burrow into trees, cliffs or banks.

Active nests: evidence of an active nest include an adult perched in the nest, adult birds performing distraction displays, persistent alarm calls, birds carrying food or nesting materials to a location, accumulated droppings or whitewash below a nest. All active nests are protected. **Do not disturb, remove or relocate an active nest.**

Inactive nests: the inactive nests of birds outlined in the above summary and named on this card are protected by provincial and federal legislation. Photos of nests of these species are included on the following pages. If unsure of the species of a nest take photos and seek the advice of a biologist.

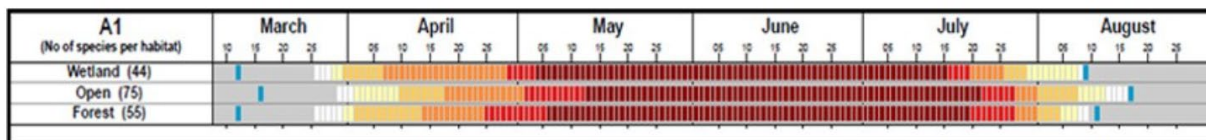
Nesting Zones



Timing of migratory bird breeding in BC

To determine the time periods when migratory bird nests are likely to be present, identify the nesting zone where your activities will occur and then refer to the nesting calendar associated with that zone.

Nesting Calendars



Migratory Birds and Breeding Birds Federal and Provincial Legislation

Summary

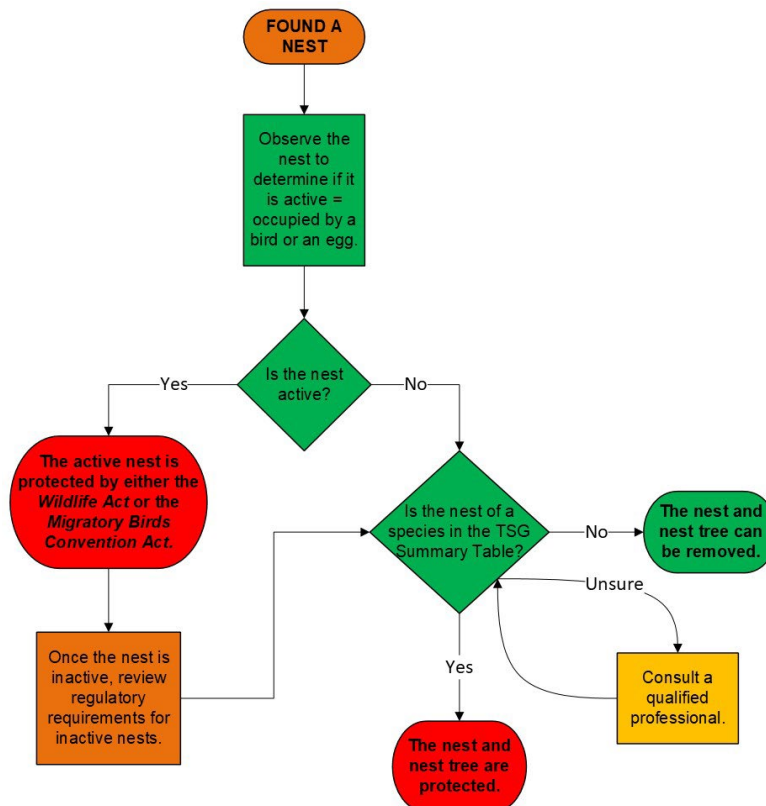
- All active nests of native migratory birds (MBCA) and any native bird species (*Wildlife Act*) are protected on all land tenures in BC.
- Inactive nests of birds listed in Schedule 1 of the MBR are protected.
- Inactive nests of migratory birds listed as endangered, threatened or extirpated on Schedule 1 of the *Species at Risk Act* are protected if nests are included in the definition of the residence for the species.
- Inactive nests of birds named in Section 34 of the *Wildlife Act* are protected.

Summary Table of Inactive Nests that have regulatory protection in TSG*

Great Blue Heron <i>Wildlife Act</i> Schedule 1 <i>Migratory Birds Regulations 2022</i>	Green Heron <i>Wildlife Act</i> Schedule 1 <i>Migratory Birds Regulations 2022</i>	Barn Swallow Schedule 1 of <i>Species at Risk Act</i>
Pileated Woodpecker Schedule 1 <i>Migratory Birds Regulations 2022</i>	Bald Eagle <i>Wildlife Act</i>	Marbled Murrelet Schedule 1 of <i>Species at Risk Act</i>
Peregrine Falcon <i>Wildlife Act</i>	Golden Eagle <i>Wildlife Act</i>	Osprey <i>Wildlife Act</i>

*Schedule 1 of *Migratory Birds Regulations* shoreline sites only species not included as potential interactions are limited to specific activities.

Decision tree to determine regulatory requirements associated with bird nests in BC



Migratory Birds and Breeding Birds *Federal and Provincial Legislation*

The inactive nests of these species have regulatory protection.



Pileated Woodpecker Cavities (Schedule 1 MBR)



Barn Swallow Nest (SARA)



Bald Eagle Nest (Wildlife Act)
Golden Eagle tree nests look similar, or nests can be constructed on cliff ledges



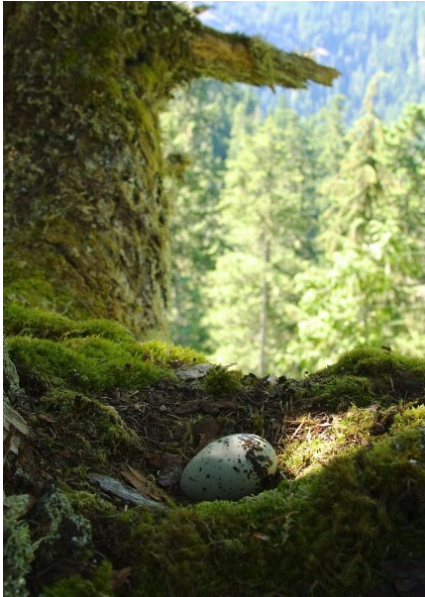
Osprey Nest (Wildlife Act)



Peregrine Falcon Nest (Wildlife Act)



Great Blue Heron Nests
(Wildlife Act, Schedule 1 MBR)







Marbled Murrelet Nest (SARA)



Green Heron Nest
(Wildlife Act, Schedule 1 MBR)






Potential Breeding Birds List for BCTS Strait of Georgia Business Area




Type	Common Name	Prov. Status ¹	Fed. Status ²	Habitat	Nest Location	Nest Height (m)	Re-use of nest? ³	Comments
Waterfowl 	Wood Duck	Yellow	-	In nest cavities adjacent to open water	cavity	0.5-20	Likely Yes	
	Hooded Merganser	Yellow	-	In nest cavities adjacent to open water	cavity	3-6	Likely Yes	
	Common Merganser	Yellow	-	In nest cavities adjacent to open water	cavity	5-16	Likely Yes	
Murres 	Marbled Murrelet	Blue	T	coniferous, deciduous	tree	46	Unk.	Lays eggs on thick, moss-covered lateral branches
Hawks and Eagles 	Red-tailed hawk	Yellow	-	forested	tree	0-37	Likely Yes	
	Osprey	Yellow	-	forested near water	tree	0-61	Likely Yes	Often uses human-made structures
	Sharp-shinned Hawk	Yellow	-	deciduous, mixed woods	tree	3-21	Likely Yes	
	Bald Eagle	Yellow	-	forest edges near water	tree	3-55	Likely Yes	
	Northern Goshawk	Red	T	coniferous	tree	>4	Likely Yes	Can have multiple nests in a territory
	Cooper's hawk	Yellow	-	coniferous, deciduous	tree	6-20	Likely Yes	
Owls 	Barred Owl	Yellow	-	Mixed woods	tree	<10	Likely yes	
	Northern Pygmy-owl	Blue	Not yet rated	coniferous	cavity	2-6	Likely yes	
	Northern Saw-whet Owl	Yellow	-	deciduous	cavity	4-18	Likely yes	
	Western Screech-owl	Blue	T	coniferous, deciduous; riparian habitat	cavity	>2	Likely yes	
	Great Horned Owl	Yellow	-	coniferous, deciduous	tree	5-21	Likely no	




¹ Yellow = not at risk; Blue = special concern; Red = extirpated, endangered, or threatened

² T = Threatened; SC = Special Concern; '-' = not at risk

³ Information about birds reusing nests is somewhat limited. As a rule of thumb, birds that build stick nests (e.g., hawks, eagles, etc.) or nests in cavities will likely re-use nests in following years.

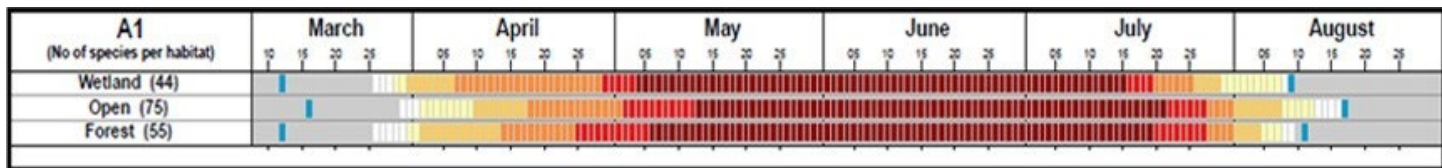
Type	Common Name	Prov. Status	Fed. Status	Habitat	Nest Location	Nest Height (m)	Re-use of nest?	Comments
Hummingbirds 	Rufous Hummingbird	Yellow	-	forested	shrub/tree	0.3-15	Likely no	
	Anna's Hummingbird	Yellow	-	forested	shrub/tree	0.3-15	Likely no	
Woodpeckers and Sapsuckers 	Hairy Woodpecker	Yellow	-	deciduous, mixed woods	cavity	2-6	Likely no	
	Northern Flicker	Yellow	-	forested	cavity	3	Likely no	
	Pileated Woodpecker	Yellow	-	coniferous, mixed woods	cavity	5-24	Likely no	Feeding sign are excavated rectangles
	Red-breasted Sapsucker	Yellow	-	coniferous, deciduous	cavity	2-24	Likely no	prefer dead western hemlock for nesting
Ravens, Crows, Jays 	American Crow	Yellow	-	deciduous, edges	ground/shrub/tree	0-21	Likely no	(prev. Northwestern Crow)
	Canada Jay	Yellow	-	coniferous, mixed woods	tree	1-5	Likely no	(prev. Gray Jay; aka "Whiskey Jack")
	Steller's Jay	Yellow	-	coniferous	tree	2-8	Likely no	
	Common Raven	Yellow	-	Mixed woods	tree, cliff	31	Likely yes	
Flycatchers 	Olive-sided Flycatcher	Blue	T	coniferous, mixed woods	tree	>2	Likely no	flycatchers often perch on tree tops
	Pacific-slope Flycatcher	Yellow	-	coniferous / deciduous	ground/tree/cliff	0-9.1	Likely no	
	Willow Flycatcher	Yellow	-	alder thickets on lakes/swamps	shrub/tree	2	Likely no	
	Hammond's flycatcher	Yellow	-	coniferous	tree	8-18	Likely no	
Swallows 	Tree Swallow	Yellow	-	open areas near forest, water	tree	>1.5	Likely yes	nest box, old woodpecker hole
	Violet-green Swallow	Yellow	-	open forests	trees, cliffs, nest boxes	>1.5	Likely yes	
	Barn Swallow	Blue	T	buildings, structures - nests along roof line	buildings	>1.5	Likely yes	will build new mud nest in same spot as previous years.

Type	Common Name	Prov. Status	Fed. Status	Habitat	Nest Location	Nest Height (m)	Re-use of nest?	Comments
 Thrushes	Hermit Thrush	Yellow	-	coniferous, deciduous; dense forest, edges	ground	0	Likely no	Yellow
	Swainson's Thrush	Yellow	-	coniferous, mixed woods with dense understory	tree	0-2.2	Likely no	Yellow
	American Robin	Yellow	-	matrix of grasses, shrubs, trees - generalist	shrub/tree	1-5	Sometimes	Yellow
	Varied Thrush	Yellow	-	mature contiguous mixed/coniferous	tree	1-5	Likely no	Yellow
 Wood-Warblers	Wilson's Warbler	Yellow	-	deciduous riparian - shrubby areas	shrub	<1	Likely no	
	MacGillivray's warbler	Yellow	-	mixed/conifer regen near water	shrub	<6	Likely no	
	Orange-crowned Warbler	Yellow	-	forested - dense understory	ground/shrub	0	Likely no	flit nervously around low shrubs
	Common Yellowthroat	Yellow	-	early succession forests, wetlands - thick undergrowth	ground	0	Likely no	
	Townsend's Warbler	Yellow	-	coniferous / mixed wood mature forest, dense canopy	tree	2-5	Likely no	
	Yellow Warbler	Yellow	-	open/riparian woodlands - dense low shrubs	fork in shrub/trees	3-12	Likely no	line nest with milkweed fibers/down
	Yellow-rumped Warbler	Yellow	-	coniferous / mixed woods	tree	3-5	Likely no	
 Sparrows and allies	Black-throated Gray Warbler	Yellow	-	dry woodlands	shrub/tree		Likely no	actively forages in trees/shrubs
	Song Sparrow	Yellow	-	forests / shrublands near water and edges	ground	0	Likely no	
	White-crowned Sparrow	Yellow	-	dense second growth - along edges	ground	0	Likely no	breed near ground, shrubs, conifers
	Dark-eyed Junco	Yellow	-	early coniferous forests with dense ground cover	ground	0	Likely no	
	Spotted Towhee	Yellow	-	Dense shrubs	shrub/ground	0-5.5	Likely no	
	Chipping Sparrow	Yellow	-	forest / grassland edges	tree	3	Likely no	prefers coniferous forests for breeding

Type	Common Name	Prov. Status	Fed. Status	Habitat	Nest Location	Nest Height (m)	Re-use of nest?	Comments
Sparrows and allies 	Golden-crowned Sparrow	Yellow	-	coniferous / mixed woods	ground	0	Likely no	feed on/near ground
	Evening Grosbeak	Yellow	-	coniferous / mixed woods	tree	18	Likely no	
	Red Crossbill	Yellow	-	coniferous / mixed woods	tree	1-18	Likely no	2021 numbers are very high - large flocks
	Purple Finch	Yellow	-	primarily coniferous forests	tree	18	Likely no	
	Pine Siskin	Yellow	-	coniferous / mixed woods	tree	2-12	Likely no	2021 numbers are very high - large flocks
	American Goldfinch	Yellow	-	open early succession forests	tree	6	Likely no	
Pigeons	Band-tailed Pigeon	Blue	SC	forest edges and openings	tree	3-54	Likely no	
Misc. Small Passerines  	Chestnut-backed Chickadee	Yellow	-	coniferous / mixed woods	cavity		Likely yes	Only chickadee species on the island
	Bushtit	Yellow	-	open woodlands	shrub/tree	1-8	Likely no	
	Brown Creeper	Yellow	-	mature old growth forest	tree	1-15	Likely no	
	Red-breasted Nuthatch	Yellow	-	coniferous / mixed woods	cavity	2-12	Likely no	sap smeared entrance
	Pacific Wren	Yellow	-	mature moist forests - downed wood	ground	0	Likely no	pre. Winter Wren; nests in clump of moss
	Golden Crowned Kinglet	Yellow	-	coniferous forest	tree	>1.5	Likely no	
	Ruby Crowned Kinglet	Yellow	-	coniferous, mixed woods	tree	0.6-30.5	Likely no	
	Western Tanager	Yellow	-	mature coniferous / mixed woods	tree	<15	Likely no	

- **10 of the most common forest species** to encounter on central and northeastern Vancouver Island are highlighted in green.

Environment Canada - Vancouver Island and Southcoast of BC (Zone A1) Nesting Calendar



Legend: Number of species in percentage (blue markers show extreme dates predicted for some atypical parts of the nesting zone where nesting could be earlier or later).

