Let's GO to the Forest!

FIELD ID CARDS

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HABITAT CONSERVATION TRUST FOUNDATION



- Habitat and Range Widespread and common throughout most of B.C., except rarely in alpine, grasslands, and densely populated areas.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I love my space and live a solitary life, except if I'm a mama bear with cubs. We can be
- brown, cinnamon or blonde. The Kermode bear or spirit bear, which is a black bear, is
- white. Not a fussy eater, I am omnivorous eating insects, plants, meat and carrion. I feast on
- berries in late summer and early fall before I den in caves, tree cavities, under fallen wildlife trees or in a hole on a hillside for the winter. During a warm spell in winter, or if disturbed,
- I can be awakened from my torpor state. Don't let my slow lumbering gait fool you, I can
- run up to 55 km per hour, and I am an excellent tree-climber.



- Habitat and Range Widely distributed across the province except absent from coastal areas and islands, including Vancouver Island and Haida Gwaii.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am the largest member of the deer family. I am a browser and need as much as 19 kg of
- food each day. During the winter months, I depend solely on twigs and shrubs to survive.
- In summer my diet includes everything green and fresh. We can defend ourselves from
- predators with aggressive behaviour, including kicks from my front and hind feet. Male moose grow antlers each summer and shed them each autumn. I can swim 19 kilometres
- and can dive 5 metres underwater to forage on aquatic plants. Although I have poor
- eyesight, I make up for it with my excellent senses of smell and hearing.
- I need a diversity of open areas and patches of larger trees for cover so recently burned or
- selectively logged forested areas suit me well.

MooSt (Alces alces)

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Habitat and Range Widespread throughout B.C. The related Pacific marten (Martes caurina) is found along the Pacific coast.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I prefer to live in old-growth forests, but I have adapted to the changing forest and may
- also be found in younger forests. I am a small cat-sized predator in the weasel family,
- Mustelidae. My close relatives include several more familiar animals such as the ermine,
- skunk, and mink. I am curious, energetic, and have lightning-fast reflexes, which help me to find and catch my prey. In the spring and summer I am active 16 hours a day! During
- the cold months I may only hunt for a few hours during the warmest part of the day.
- I hunt by investigating underneath downed trees and stumps, inside hollow trees, and in dense clumps of young conifers. I eat a varied diet and whatever I find, including voles, mice, hare, grouse, squirrels, and shrews. I have few natural enemies, however I must be
- wary of hawks and owls.

American Marten (Martes americana)



- Habitat and Range Most common in the southern half of the province; it does not occur on coastal islands.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I belong to the weasel family, all of which have well-developed scent glands located at
- the base of the tail. My scent glands produce a thick, yellow, oily fluid, or musk. I spray to
- protect myself as a last resort after giving warning signals, including growling, hissing, and
- rapidly stamping my front feet. If a threat continues, I will turn into a U-shaped position so that both my head and tail face the threat. Then I aim and spray. My spray can reach as far
- as 6m and be carried almost 1 km on the wind. Because owls do not have a sense of smell
- they are one of my main predators. I am omnivorous, eating a wide variety of plant and
- animal foods. I am especially fond of grasshoppers, crickets, and insect larvae. I have long,
 straight claws for diaging out the burrows of mice, ripping apart old logs for grubs and
- larvae, and digging in the sand for turtle eggs. I will even eat wasps and bees, which I kill
 with my front feet.



- Habitat and Range Widespread in forests throughout B.C. except absent from the southwest coast of the mainland.
- Conservation Status B.C.: Secure (YELLOW LIST)
- You will probably hear my chattering call before you see me for I am very territorial
- and will send out alarm calls to all the forest dwellers. I do not hibernate and am active
- throughout the winter, when I depend on my caches of cones that I collect over the late
 summer and fall. Wherever you see a large pile of cones you'll know you are in squirrel
- territory. Not only do I eat conifer seeds, but I also eat fungi, flowers, berries, young birds,
- bird eggs and some invertebrates. My feeding habits help to spread conifer seeds and
- mushroom spores throughout the forest. I use the cavities of wildlife trees for dens and for nesting.

Red Squirre (Tamiasciurus hudsonicus)



- Habitat and Range The most widespread shrew in BC, found across the mainland and most islands, in all biogeoclimatic zones.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am hyper. I am go, go, go all the time. I will starve to death if I don't eat every 3 hours.
- Hence I am a fierce predator always on the hunt for insects and other small invertebrates
- such as worms and sowbugs, which I find primarily by sound and smell. I have tiny eyes and poor vision. I need to watch out for owls and other birds that will devour me. Like all shrews I do not hibernate. I use echolocation to navigate my small territory. I can have as
- many as four litters of babies in a year. Each litter can have up to 10 babies. That's 40 babies
- in one year!

Dusky shrew (Sorex monticolus)



- Habitat and Range Widespread across the mainland and islands in a wide range of habitats.
- Conservation Status BC: Secure (YELLOW LIST)
- My species is in trouble. Although for centuries I had the largest distribution and was the
- most common bat in Canada, my species has been struck with a deadly fungus, Geomyces
- destructans, which causes White Nose Syndrome (WNS). This fungus was likely spread by
- cave explorers who unknowingly transported it from Europe to North America. Other threats include the disturbance or destruction of my hibernating sites (hibernacula) and maternity
- colonies, habitat loss, and the use of pesticides and presence of toxins in the food web.
- I help keep forest pests' populations under control and if you don't like mosquitoes,
- then you want me around to keep them away from you. I am an opportunistic feeder,
- but I especially enjoy moths, mosquitoes, beetles and midges. I catch my food using
- echolocation. I eat about 1000 insects per night, or half of my body weight. Watch for me as the sun sets and just before sunrise. Owls, snakes, raptors, cats, raccoons, and weasels are my main predators. I roost behind the bark and in the cavities of wildlife trees.

Little Brown Bat (Myotis lucifugus)



Habitat and Range A common resident of western and southern B.C. in many forest types.

- May move from mountains to lowlands in winter.
- Conservation Status BC: Secure (YELLOW LIST)
- I am B.C.'s official bird. My vibrant blue colouring and my bold inquisitive and noisy
- habits make me easy to pick out in forest habitats. Like ravens, crows and magpies I am
- a member of the Corvidae family. I am omnivorous. I love pine seeds, acorns, and other nuts and seeds, especially during fall and winter. I also eat berries and fruits and in summer
- and by eating many insects I help keep the insect population in check. My population has
- actually increased since the 1970's most likely because I am a versatile generalist found in
- a wide variety of habitats and I can adapt easily to human-caused habitat fragmentation.



• Habitat and Range Widespread. Most common in hilly and mountainous areas.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a highly intelligent large black bird related to crows, jays, magpies and nutcrackers.
- I live up to 21 years in the wild, making me one of the species with the longest lifespan
- in all songbirds! I will eat just about anything I can find! I eat adult and nestling birds,
- eggs, small mammals, sick and dying larger mammals, amphibians, reptiles, fish and
- invertebrates. I also scavenge carcasses. I am an important inhabitant of many ecosystems,
- helping nutrient cycling by consuming carrion and controlling prey populations. Of high
- importance to Indigenous Peoples throughout Canada, I appear in myths, legends, art
- and tradition.

Common Raven (Corvus corax),



Habitat and Range Feeds in coastal areas and nests in old growth forest up to 100 km inland

- Conservation Status B.C.: Threatened (BLUE LIST)
- Look for me as I zigzag low over the water like an oversized bumblebee. I use my stubby
- wings to "fly" underwater diving deep for my favourite meals of fish. I occasionally make a
- peculiar "jet-plane" noise by allowing air to rush through my feathers. I am a devoted parent, carrying a meal as much as 70 km from the sea to my chicks every night for a month. I must have mature and old growth coniferous forests along the coast in order to breed and this
- has placed me in direct conflict with the forest industry throughout my range.

Marpled Murrelet (Brachyramphus marmoratus)



- Habitat and Range Widely distributed and year-round resident in many forest types
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am the largest woodpecker in North America. I forage mainly by probing, prying, and
- excavating deep into dead wood, using my large bill to search for insects, including
- carpenter ants. I make large, rectangular holes in wildlife trees. I am a primary excavator,
- meaning I create the first holes in trees which I use as a nest site. Each year I make a new nest and my old cavities may then be occupied by other animals, such as owls,
- ducks, or raccoons.

Pileated Woodpecker (Dryocopus pileatus)



Habitat and Range Widely distributed and year-round resident in many forest types

Conservation Status B.C.: Secure (YELLOW LIST)

I am one of the first birds to nest in very early spring, however I make little effort to construct a nest and instead I lay my eggs in wildlife trees or an old nest of another species. If you see swooping of crows and songbirds and hear their persistent calls, this is a clue that I may be in the vicinity. Birds frequently harass or "mob" me while I am at my daytime roost. Because I am both large and powerful, I am capable of handling a wide variety and size of prey, from shrews and songbirds to skunks and ducks. The fur, feathers, teeth, and bones of my prey are indigestible are compacted in my stomach and later regurgitated as "pellets." Scientists obtain information on my food habits by identifying the remains of prey animals in such pellets. Like my other owl cousins, I can approach my prey in total silence thanks to specializations of my flight feathers. As well as being a silent hunter, I have acute night vision and hearing.

Great Horned Ow (Bubo virginianus)



- Habitat and Range Widely distributed and year-round resident in many forest types. Absent from Vancouver Island, where only the chestnut-backed chickadee is found.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a smart little bird that can remember where I hid food for at least 28 days after
- putting it in its hiding place. From sunrise to sunset, I spend most of my time feeding.
- I am a devoted parent use much of my energy by feeding my young 6 to 14 times an
- hour. We use many calls to stay in communication while we forage for food in loose family groups. The best known is the chickadee-dee-dee that gives me my name. I am, hands-
- down, one of the most important pest exterminators of the forest or orchard, eating many
- species of insects and spiders in all stages of their life cycles. I stay active all winter long
 and conserve energy by dropping my body temperature at night by about 10°C. I keep
- warm by fluffing up my soft, thick feathers to trap warm air close to my body.

Black-Capped Chickadee (Poecile atricapillus)



Habitat and Range Widely distributed and year-round resident. Most often found in dense forest with deciduous trees.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I can startle you with an explosive burst of flight from the forest floor. My fancy flights don't
- stop there as I can hover and make complete turns in the air when flying through thick
- bush. I do not migrate, preferring to live all my life within a few hectares of where I was
- born. And I do not hibernate. Where the snow is deep and soft I travel over it with the help of my "snowshoes"—lateral extensions of the scales of my toes. I also burrow into the snow,
- which keeps me keep warm and protects me from predators. Have you ever heard what
- sounds like an engine starting up in the forest? That's a male grouse. The sound is made by cupping my wings and rapidly beating them against the air. The drumming warns other
- male grouse to keep away and attracts hens when they are ready for mating. Try beating a
- fist on the ground, it may stimulate me to drum. Look for me atop a large moss-covered log
- at the edge of a forest opening. I am an herbivore and my diet consists of buds, leaves, and
- twigs. Foxes, northern goshawks, and the great horned owls are my main predators.

Ruffed Grouse (Bonasa umbellus)



- Habitat and Range Widely distributed throughout B.C. Year-round resident along the coast and seasonal during breeding season in the interior.
- Conservation Status B.C.: Secure (YELLOW LIST)
- It takes four or five years for me to achieve my distinctive coloration of a white head and
- white tail feathers. I build the largest nest of any bird in North America. Up to 15,000
- bald eagles winter in B.C. approximately 40% of the world's population. Wildlife trees are important to me as use them for perches, nests, and roosts. I mate for life and our nests can be the size of double beds. I have a less than a 50 percent chance of reaching adulthood. As an adult, I hunt for my food; younger eagles rely more on scavenging and
- stealing food from other birds.



- Habitat and Range Wet to moist streambanks and forests in the lowland to sub-alpine zones; common throughout all but northeast B.C.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a shade-tolerant understory shrub. Small spines along the underside of my leaves and
- on my thick stalk make me an unpleasant plant to walk through in the forest. When CPR
- railroad was being built through B.C., I caused builders to change the route because in some areas I was too difficult and painful to work in. Look for my plume of white flowers in spring, followed by red berries in the fall. Bears and other brave animals eat my berries.

Devil's Club (Oplopanax horridus)



- Habitat and Range Common in southern B.C. in dry and moist forests and from lowlands to montane zones.
- Conservation Status B.C.: Secure (YELLOW LIST)
- Birds, bears and other small mammals love the berries I produce each fall, and deer and
- other herbivores graze on my spiny leaves. Many First Nations ate my berries especially
- when mixed with a sweeter berry like salal. The bark of my stems and roots were shredded
- to make a bright yellow dye, and my bark and berries were used for medicine for the liver and eyes. Try making jelly with my berries.

Tall Oregon-Grape (Mahonia nervosa)


- Habitat and Range Common and widespread throughout B.C.
- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a low growing shrub that tolerates drought well. That makes me a favourite with
- gardeners because I am an attractive groundcover used in dry areas of gardens. In the
- wild, birds and bears eat my fruit; grouse, moose and sheep eat my leaves. Look for
- me on sandy, exposed sites, rocky slopes and in dry forest areas. Kinnikinnik is the First
- Peoples' word for "smoking mixture" and is used to refer to any of several plants mixed with tobacco. Another name for me is common bearberry.



- Habitat and Range Most common in southern B.C., west of the Coast-Cascade
 Mountains
- Conservation Status B.C.: Secure (YELLOW LIST)
- My strong "skunk" smell actually attracts pollinating insects, such as flies and carrion
- beetles. I am one of the earliest flowers to bloom in spring. In March or April, look for a
- yellow leaf-like flower (bract) and spike poking out of wet forested areas, swamps, and
 wet ditches where I am found. First Nations Peoples' used my roots for food and medicine.
- My big waxy leaves were used for packaging and serving food.

Western Skunk Cabbage (Lysichiton americanus)



Conservat	ion Status B.C.: Secure (YELLOW LIST)
Watch out	for me in moist woodlands, thickets, disturbed areas, and along partially shade
trails. I have	a tiny hairs that contain histamine and formic acid. When brushed up against
they cause	an itchy, burning rash in humans and other animals that may last up to 12
hours. Som	etimes I come with my own first aid kit. Dock leaves are commonly believed
to soothe t	he symptoms of a nettle sting, and they often grow close by. Once picked
(carefully) a	and steamed my young leaves make an excellent spinach substitute and can b
used in ste	ws and soups or drunk as a nourishing tea.

Stinging Nettle (Urtica dioica)



• Habitat and Range Widespread throughout B.C. over a great elevation range.

Conservation Status B.C.: Secure (YELLOW LIST)

Look for a short trailing herb with long stems that run along the ground and send up shoots, up to 10 cm tall. My pink trumpet-shaped flowers bloom in pairs at the top of the stem. My scented flowers bloom in late spring and summer and ripen into small seeds that have hooks on them. The hooks catch on passing animals, and the animals carry the seeds throughout the forest. I also spread with my trailing stems. Bees and other insects are attracted to the smell of my flowers and help to pollinate me. I am named in honor of Carl Linnaeus, the originator of the binomial system that names plants and animals by genus and species. Linnaeus often posed for photos with a sprig of-ta-da-me, twinflower!

Twinflower (Linnaea borealis)



- Habitat and Range Widespread and common throughout B.C.
- Conservation Status B.C.: Secure (YELLOW LIST)

I am a highly adaptable tree that can grow in all sorts of environments, from waterlogged bogs to dry, sandy soils. One of my most severe insect pests is the mountain pine beetle (Dendroctonus ponderosae), which leads to blue stain fungi that invades my sapwood and kills me. Climate change, including reduced winter precipitation, earlier loss of snowpack, and increased drought are affecting my range. I am one of the first trees to grow after a wildfire. My cones are protected by a seal of pitch that requires fire or heat to release the seeds. This allows seeds to stay on the tree or on the ground for many years until disturbance provides suitable growing conditions. I can occur as the only tree in dense, very slow-growing groups of trees (so-called "dog-hair" stands). Many First Nations peoples in British Columbia used my wood for a variety of purposes, including poles for lodges, homes or buildings. My pitch was used as a base for many medicines. It was boiled, mixed with animal fat, and used as a poultice for rheumatic pain and all kinds of aches and soreness in muscles and joints. I am excellent for use in lumber, plywood, and paneling. I can be made into doors, windows and furniture, as well as railway ties and fence posts.

Lodgepole Pine (Pinus contorta)



• Habitat and Range Common in southern B.C., infrequent north to Central B.C.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I am named after David Douglas, the Scottish botanist who introduced many of British
- Columbia's native conifers to Europe. First Nations peoples in the south part of the
- province used my wood and the boughs as fuel for pit cooking. They also used me for
- fishing hooks and for handles. My boughs were used for covering the floors of lodges and
- sweat lodges. My dense wood has been highly valued since the first Europeans exported lumber in the 18th century.
- It is outstanding for heavy-duty construction such as wharves, trestles, bridge parts and
- commercial buildings. Many species of birds as well as rabbits, elk, deer, beaver, and
- chipmunks rely on the needles as a staple of their diet. After scraping off my bark, bears
- will eat the sap layer. Because of my thick bark I am often able to survive forest fires with
- the only damage being blackened bark.



• Habitat and Range Common along the coast, southcentral and southeast B.C.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I am British Columbia's official tree. My scientific name, plicata, comes from a Greek word
- meaning "folded in plaits," in reference to the arrangement of the leaves. I am sometimes
- called arbor-vitae, Latin for "tree of life."
- I grow best in moist to wet soils, with lots of nutrients. I am tolerant of shade and long-
- lived, sometimes over 1,000 years. You will find me growing along with western hemlock
- and Douglas-fir. Coastal First Nations Peoples used all parts of me. They used my wood for
- dugout canoes, house planks, bentwood boxes, clothing, and many tools such as arrow
- shafts, masks, and paddles. My inner bark made rope, clothing, and baskets. My long
- arching branches were twisted into rope and baskets. My wood is durable, lightweight
- and rot resistant. Because of my resistance to decay and insect damage, the wood of large,
- fallen trees remains sound for over 100 years.

Western Redcedar (Thuja plicata)

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Habitat and Range Common west of the Coast-Cascade Mountains and in southeastern B.C.

- Conservation Status B.C.: Secure (YELLOW LIST)
- Feel a cold coming on? My needles contain vitamin C. Drink me as tea. I have a strong
- root system which helps prevent soil erosion in forests. Tannic acid extracted from my
- bark is used for the tanning of leather. Although not related, I got my name from the
- poison hemlock plant (that killed Socrates) because of the similar scent I give off when my needles are crushed. I, however, am not poisonous. I tolerate shade and grow abundantly
- underneath mature trees, where I provide an important source of food for deer and elk.
- Rabbits, deer and squirrels like to eat my bark, porcupines eat my twigs, while birds prefer
 my needles and seeds.

Western Hemlock (Tsuga heterophylla)



• Habitat and Range Common along the coast and in south central and southeastern B.C.

Conservation Status B.C.: Secure (YELLOW LIST)

I am a slow-growing tree and can be very long-lived. Yews are mostly dioecious, meaning the male and female reproductive systems occur on separate plants. Look for me growing in the same forest as Douglas-fir, western red cedar, and western hemlock, as well as with plants such as salal, Oregon-grape, and skunk cabbage. I am important food for deer, elk, moose, and caribou. Many species of birds and various small rodents eat my fruit. In so doing, this spreads my seeds. First Nations peoples used my strong wood for making items such as bows, tools, paddles, and prying sticks. Bows and paddles are still made from me today. My bark contains a compound called taxol, which shows promise in treating some forms of cancer. Some historians believe that Robin Hood's bow was made from English yew.

Western Yew (Taxus brevifolia)



Habitat and Range Common throughout B.C. in moist upland or montane sites.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I require ample moisture and plenty of nutrients to grow well. I favour floodplains and
- moist upland sites with lots of light. I do not grow well in the shade of other species.
- Typically, I maintain a dominant position in the canopy because I grow so quickly. I am
- adapted to colonizing and dominating areas disturbed by floodwaters. I am a superior
- wildlife tree in riparian areas. Fungal decay is common in my wood after weather damage
- to tops, producing good conditions for cavity-nesting birds. Raptors such as osprey
- frequently nest at the top. Large trees that have toppled into streams provide structure for
- aquatic habitat. Beaver gnaw down many of us for dams and food. Elk and deer kill young trees with browsing and antler rubbing. My seeds are minute and are tufted with cottony hairs. It can look like it is snowing in July when my white fluffy seeds release.



- Habitat and Range Common and widespread except northeast B.C., Haida Gwaii and adjacent coast.
- Conservation Status B.C.: Secure (YELLOW LIST)
- Look for a shrub to small tree, 1 to 7 metres in height; my trunk is often separated into a
- number of small slender limbs. First Nations peoples had many uses for me because my
- wood is tough and pliable. They made such items as snowshoe frames, saddle frames,
- spoons, dip nets and fishing hoops, bows, rattles, masks, and headdresses. My inner bark can be made into twine, rope, and mats. I can be heavily browsed in the winter by hoofed mammals such as deer and moose.

Douglas Maple (Acerglabrum)



Habitat and Range One of the most widespread and common snakes in B.C., occurring in a broad range of habitats, often near water. Most abundant on the south coast, Vancouver Island, and the Southern Interior.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a generalist predator, eating many different species, including earthworms, frogs,
- salamanders, fish, fledgling birds and occasionally small mammals. I can even eat the toxic
- Rough-skinned Newt (Taricha granulosa). I have short, sharp, backwards curving teeth,
- designed to hold prey that are swallowed whole. Due to the movable joints in my skull, I
- can swallow large prey. In the winter I tolerate freezing temperatures by hibernating with
- many- even hundreds or thousands- of other snakes in rock piles or mammal burrows
- called my "hibernacula". In the spring I give birth to 10-15 (but up to 80!) live snakes.
- Important components of my habitat are hibernation sites, wetlands for foraging, and vegetative cover for shade and escape from predators.

Common Garter Snake (Thamnophis sirtalis)



- Habitat and Range Found mostly in southern B.C. including Vancouver Island.
 Introduced to Haida Gwaii. Found across a wide range of habitats and elevations.
- Conservation Status B.C.: Secure (YELLOW LIST)
- You may hear me calling from wet forests all year round. You may even hear me on the
- big screen-- my famous call is often used as background night noise in Hollywood movies.
- As an adult I feast on insects and spiders, while in the tadpole stage I eat algae and organic
- detritus. Females lay small clusters of eggs attached to vegetation or leaf litter in shallow water and hatching is in 2 3 weeks. Metamorphosis from egg to froglet generally occurs
- in two months. I am also called the Pacific tree frog. Look for the round, sticky pads on the
- end of each of my toes that I use for climbing and sticking to surfaces.

Pacific Chorus Frog (Pseudacris regilla)



- Habitat and Range Widespread and common throughout B.C.
- Conservation Status B.C.: No Status (Unranked)
- I am a woodworker, excavating tunnels to create my nests, where 50,000 or more workers may live. Unlike termites, I don't eat wood; I prefer to eat living and dead insects. I create 'jaw dust' as I excavate galleries in rotting wood or wildlife trees. In turn pileated woodpeckers make a meal out of me as they use their strong bills and sticky tongues to extract me from trees. Sometimes I choose wooden buildings to live in, causing structural damage. Because of this I have a bad rap with many people. But I'm important! I help keep caterpillars and other insect pest populations under control and I am food for bears. My wood excavation is critical for forest decomposition. You may notice me in the springtime when winged ants (reproductives) swarm to mate and find a new nest.

Carpenter Ant (Camponotus spp. - there are 8 species of carpenter ants in B.C.)



- Habitat and Range Widespread and common throughout B.C.
- Conservation Status B.C.: No Status (Unranked)
- There are close to 20,000 described species of my kind, however the true number may be closer to 500,000. My structure, physiology, diverse reproductive patterns, and adaptability have resulted in us being found on more habitats than any other multicellular group of
- animals, including freshwater, marine, and terrestrial environments. We are often referred
 to as roundworms, however we are not closely related to true worms. Most of us are so
- tiny that you need a microscope to see us. Some of us are generalists, occurring across
- wide areas and in many habitats; others are much more specialized. I play a critical
- ecological role as a decomposer and a predator on microorganisms.



Habitat and Range Found in Southwestern B.C. including Vancouver Island and the Lower Mainland, in moist and mossy coniferous forests, usually under forest debris such as logs and leaf litter.

- Conservation Status B.C.: Secure (YELLOW LIST)
- I am a lung-less salamander. I breathe through my skin and the lining of my mouth. I prefer
- to live in the dampness found in rotten logs because my skin must remain moist in order
- to function. I lay my eggs on roots or in the rotting wood of wildlife trees. Females guard the eggs and these hatch into fully formed young when the autumn rains begin.
- l eat a smorgasbord of terrestrial invertebrates including springtails, mites, and spiders. I am primarily active at night and my home range is less than 3 square meters.

Western Red-Backed Salamander (Plethodon vehiculum)



Habitat and Range Infestations have impacted over 180,000 km² in central B.C.

- Conservation Status B.C.: No Status (Unranked)
- I am a tiny species of bark beetle about 5 mm in length. I am native to western North America from Mexico north to British Columbia, where I am found on ponderosa,
- Iodgepole, and limber pine. My life cycle, from egg, to larva, pupa, and then adult, takes
- place under the bark of these trees. I only emerge from beneath the bark in the summer
- as an adult. Then females bore into another tree and lay 60-80 eggs, and the cycle begins
- anew. Historically, I played an important role in the life of the forest, attacking old or
- weakened trees, creating wildlife trees, and contributing to a younger and healthier forest.
- However, in more recent times a "perfect storm" of conditions caused by climate change,
- fire suppression, and forestry practices, have led to a massive epidemic, killing millions of trees each year. You can easily see where I've impacted forests in the interior of the
- province, by large areas of reddish-brown dying trees.

Mountain Pine Beetle (Dendroctonus ponderosae)



- Habitat and Range Outbreaks regularly occur on Vancouver Island and the Lower Mainland; occasionally and more recently also in the Kootenays
- Conservation Status B.C.: Exotic
- I am native to Europe and arrived in eastern North America over one hundred years ago.
- I was first discovered in B.C. in 1978. I am a defoliator, which means my caterpillars eat
- the leaves of trees and shrubs. I can eat a square metre of vegetation during my lifetime
 as a caterpillar, so imagine the damage that millions of us can do to trees and forests
- and the economy! I am known to feed on over 300 trees and shrubs, including native
- e deciduous and coniferous trees, and valuable orchard and ornamental trees. There are
- efforts to prevent me from becoming established throughout B.C., including trapping and spraying. You may see little 'tent' traps hanging on tree branches in some forests. These are pheromone traps used to monitor and detect gypsy moths.


- Habitat and Range Some species are narrowly distributed and habitat specific while others are more widespread
- Conservation Status B.C.: Most species are secure (YELLOW LIST) but several species
- are threatened or endangered (BLUE or RED LIST) due to disease, pesticides, and habitat

changes. 28% of bumblebee species in North America are at risk.

- You may have seen my stocky and fuzzy, striped body flying around in early spring and
- late fall. Similar to all my bee cousins, I am an important pollinator, helping plants transfer
- their pollen and produce fruits and seeds. I have a special trick, called "buzz pollination",
- which few other types of bees can do. I grab the flower with my jaws and quickly contract
- my flight muscles, producing strong vibrations. This causes hidden and tightly held pollen
- to be released from certain flowers, such as blueberries, shooting stars, and tomatoes. I
- do not have a barbed stinger so although I am not aggressive I can sting several times if
- threatened. Males are called drones and have no stinger at all. I gather and feed on flower
- nectar, storing just enough to allow the colony to survive through times of food shortage.
- Our colonies are usually underground and die out when winter comes, with only the
- queens surviving until spring, laying eggs to start the cycle anew.

Bumple Bee (Genus Bombus - currently 32 species reported in B.C.)



• Habitat and Range Common and widespread in moist environments

- Conservation Status Various
- Although you may pass me by in the forest I encourage you to take a closer look—I am
- the closest living relative to the very first plants to make land on the planet, approximately
- 500 million years ago. I am single-celled and able to absorb water and nutrients directly
- through my leaves. Unlike flowering plants, I don't need pollinators and I make spores
- instead of seeds. My spores are dispersed by wind and invertebrates, such as springtails
- and slugs.
- I am valuable and have many important uses. During World War I, millions of moss
- bandages were used to treat wounded soldiers over the course of the war. And before
- there were diapers, there was super absorbent moss. We can also measure air pollution
- and provide more carbon offset than all the trees in the world!



Habitat and Range Widespread and common in many habitats

- Conservation Status Various
- We have our own Kingdom Fungi! We do not contain chlorophyll or any other means
- of producing our own food so we rely on other organisms for nutrition. I get my food by
- decomposing matter or eating off their hosts as parasites. I do not possess chlorophyll
- like plants. I reproduce through numerous spores rather than pollen, fruit, or seeds.
- Mushrooms are my spore-producing fruiting bodies; below the ground I have an
- enormous network of branching, thread-like hyphae or mycelium. I play an important role
- In the decomposition of organic matter. This decomposition is necessary for many of the
- cycles of life such as the carbon, nitrogen, and oxygen cycles. By breaking down organic
- matter, I release carbon, nitrogen, and oxygen into the soil and the atmosphere. Scientists who specialize in the study of fungi are called mycologists. There are estimated to be at
- least 1.5 million different species of fungi.

Mushroom (Kingdom Fungi - 5,000 to 10,000 species estimated to be in B.C.)



Habitat and Range Widespread and common in mature forests with dead trees

- Conservation Status Various
- I am an excellent recycler of forest nutrients. Look for shelf-like growths on the trunks
- of dead trees and stumps, that's me. Unlike plants which get their energy directly from
- the sun and atmosphere using photosynthesis, I obtain mine by digesting living or dead
 organic matter.
- I am one of the most important agents of wood decay and play a significant role in
- nutrient cycling and carbon dioxide production of forest ecosystems. My fruiting bodies are called 'conks', growing in horizontal rows. We can be so numerous on a dead tree that we can weigh hundreds of pounds.



Habitat and Range Widespread and in many habitats depending on the species

Conservation Status Various

We are two in one- a symbiotic partnership of two separate organisms, a fungus and an alga. The fungus provides the support and the algae photosynthesizes to make food. We need clean, fresh air, in fact we are used as a bioindicator. We indicate the health of the environment. We can grow on rocks, tree trunks, leather, shells of living animals and even plastic! Birds use lichen to camouflage their nests. Ancient Egyptians used lichen to fill the body cavity of mummies! Usnic acid is found in many lichen species and can be used as an anti-inflammatory. Lichens are an acid-based indicator and show the pH of a substance, similar to litmus paper. We are nature's pioneers. We can be found in some of the most barren and inhospitable parts of the world. From there we slowly begin the process of creating soils and a foundation for habitation by other organisms.

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Habitat and Range Widespread in moist environments

- Conservation Status Various
- I am seldom noticed, and if I am, most people don't know what I am. I usually look like a
- smooth, green ribbon growing across the ground, with each segment regularly forking
- into two new branches. Like a moss, I am a non-vascular plant, meaning that I don't have
- xylem or phloem tissues to transport water or food. Nor do I have roots, flowers, or seeds.
- I evolved long before flowering plants and am often referred to as the simplest true plant.
- Most of us liverworts like cool, moist and shaded areas where we grow on rocks, trees,
- rotten wood, humus or soil.

Liverwort (Marchantiophyta - more than 200 species in B.C.)





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