Friends of Cypress Provincial Park

P.O. Box 91053, West Vancouver, B.C., V7V 3N3, Canada

Yew Lake - Old Growth Plant List

FCPP expresses its gratitude to Van-Dusen Botanical Garden for permission to reproduce this plant list, compiled and detailed in 1997 by Carolyn Jones from plant lists prepared by Gerald Straley and Terry Taylor.

Flowering Plants: Tress and Shrubs

Abies amabilis AMABILIS FIR, PACIFIC SILVER FIR
Pinaceae
- climax tree at this elevation
- pitch blisters protect against infection
- lvs dark green, notch at apex, whitish below

Alnus sinuata
SITKA ALDER, SLIDE ALDER
Betulaceae
- shrubby alder of higher elevations
- bacteria in root nodules convert N2 from the air.
- to a form the plant can metabolize

Cassiope mertensiana
WHITE MOSS HEATHER
Ericaceae
- bell-shaped white fls; small adpressed leaves
- here Cassiope and Phyllodoce grow together.
- Cassiope continues to higher elevations;
- Phyllodoce continues to lower elevations

Chamaecyparis nootkatensis
YELLOW CEDAR
Cupressaceae
- the oldest known trees in Canada are in this species: up to 1,700 years old at Caren Ridge
- very resistant to decay

Cladothamnus pyroliflorus
COPPERBUSH
Ericaceae
- deciduous, hairless, pale green leaves covered with a waxy powder
- salmon or copper flowers, long curved style
- moist forests (commonly w/mtn. hemlock)
- could be confused with Rh. albiflorum (shiny leaves w/ rusty hairs on top) or Menziesia (gladular hairy leaves that are often bluish-green)
- one of the few genera endemic to Western North America
- mostly near streams in this area, e.g. before bridge to west of OGF

Gaultheria humifusa WESTERN TEA BERRY, ALPINE WINTERGREEN
Ericaceae
- small relative of salal; very sweet, red berries
- berries have hairs; wetter habitat than G ovatifolia

Gaultheria ovatifolia
WESTERN TEA BERRY
Ericaceae
- similar to previous but berries have no hairs

Kalmia occidentalis
SWAMP LAUREL
Ericaceae
- a toxic bog plant with pink flowers
- immature stamens are held in pits in the petals

Menziesia ferruginea FALSE AZALEA, FOOL'S HUCKLEBERRY
Ericaceae
- bluish-green azalea-like lvs; bronze bell flowers

Phyllodoce empetriformis
RED HEATHER
Ericaceae
- pink bell-shaped fls; spreading, needle-like lvs
- with Cassiope, dominant on open mtn ridges

Pinus monticola
WESTERN WHITE PINE
Pinaceae
- five needles
- trees small due to white pine blister-rust, a serious fungal disease introd. to BC in 1910
- fungus may have come from Europe on French pine stock but was probably originally Asian
- it is wind borne and has three types of spores, one of which affects Ribes

Populus balsamifera ssp. tricocarpa
BLACK COTTONWOOD
Salicaceae
- common along moist areas, such as river banks
- used commercially to make tissue paper
- new buds secrete a sweetly-fragrant resin

Rhododendron albiflorum
WHITE RHODODENDRON
Ericaceae
- both leaves and flowers look like an azalea, but it is a true rhododendron, with ten stamens.
- White flowers and distinctively slimy leaves

Ribes bracteosum
STINKING CURRANT
Rosaceae
- deciduous shrub to 3 m, all parts with round, yellow glands
- large, shiny, maple-shaped lvs w/ deep veins
- white flws in long clusters; blue-black berries with a whitish bloom (waxy coating)
- fruit edible but flavour is variable

Rubus spectabilis SALMONBERRY
Rosaceae
- deciduous shrub to 4 m; scattered prickles
- lvs divided into three, sharply toothed leaflets
- stems zigzag; bark golden-brown and shredding; flowers pink; fruit orange red
- often abundant along stream banks and in wet disturbed sites, such as avalanche tracks

Yew Lake - Old Growth Plant List (Continued)

Salix sitchensis SITKA WILLOW
Salicaceae
- deciduous shrub or small tree with densely velvety twigs that are brittle at their bases
- satiny short adpressed hairs under leaves
- growing along streamsides and wet margins

Sorbus sitchensis var. grayi
SITKA MOUNTAIN ASH
Rosaceae
- similar to the European rowan tree, but it is a shrubby species of the mountain slopes

Spirea densiflora SUBALPINE SPIREA
Rosaceae
- dwarf shrub; dense clusters of dark pink flws

Tsuga heterophylla WESTERN HEMLOCK
Pinaceae
- climax tree in coastal forests; there is an old tree in the OGF, approx. 600 yrs. old
- important timber source
- delicate, flat needles of two lengths

Tsuga mertensiana
MOUNTAIN HEMLOCK
- replaces western hemlock at higher elevations
- needles spread, looking like small starbursts
- some trees in this park are over 600 years old
- fruit commonly collected in the local mountains
- bell-shaped flowers protect against rain
- blue-black berries without bloom (waxy coating)
- turn leaf over and fold along midvein; if there are widely spaced 'whiskers' along midvein, it is Alaska blueberry and if not, it is oval-leaved blueberry (V. ovalifolium) which also has blue-black berries with bloom.

Vaccinium membranaceum
BLACK HUCKLEBERRY
- similar; very tasty, purplish or reddish black fruit, without bloom
- lvs usually have more teeth with sharper points

Vaccinium uliginosum. BOG BLUEBERRY
- bog species not common at higher elevations here
- a low shrub with blue-green leaves
- near fork of paths to parking lot and OGF
- common in Burns Bog too

Flowering Plants: Herbaceous

Anaphalis margaritacea
PEARLY EVERLASTING
Asteraceae
- long-lasting woolly bracts surround small fls
- narrow lvs w/ 3 parallel veins woolly when young
- rocky slopes, open forest, meadows; weedy native on disturbed sites

Arnica latifolia MOUNTAIN ARNICA
Asteraceae
- yellow daisy common in moist, subalpine meadows and streambanks

Pond, Yew Meadows, Laura Parkinson photo

- basal lvs round to lance-shaped, usually withering by flowering time
- stem lvs opposite, 2-4 pairs, usually coarsely toothed

Aruncus dioicus (syn A. Sylvester)
GOAT'SBEARD, SPAGHETTI FLOWER
Rosaceae
- a robust perennial to 1-2 m
- large lower leaves usually three times compound, sharply toothed and pointed
- tiny white flowers are dioecious (male and female flowers on separate plants)
- flws in elongated, much-divided terminal clusters
- "edge" habitats, of roads, streams and forests

Carex nigricans BLACK ALPINE SEDGE
Cyperaceae
- tufted from stout creeping rhizome
- forms hummocky mats
- lvs flat or channeled, stiff, 1-3 mm wide
- survives with a very short growing season and is often dominant in areas where snow drifts and banks remain late into the summer

Clintonia uniflora
QUEEN'S CUP, BEADLILY
Convallariaceae
- 2-3 oblong, basal lvs; slightly fleshy and shiny
- large, white, cup-shaped fls erect, usually solitary
- flw ripens into a single, bright metallic blue berry

Coptis asplenifolia
FERNLEAF GOLDTHREAD
Ranunculaceae
- shiny fern-like leaves
- small, yellow-green flws with long projections
- close to the southern end of its range

Coptis trifolia
THREELEAF GOLDTHREAD
- the rarest plant at Cypress Bowl
- northern species: does not extend south of North Shore • only other known nearby site Blue Gentian Lk
- shiny leaflets held close to peat surface

Corallorhiza maculata ssp. mertensiana
WESTERN CORAL ROOT
Orchidaceae
- red-brown stems with pink to red-purple flowers
- lvs do not photosynthesize, so are reduced to translucent sheaths
- grows in rich humus
- while usually referred to as a "saprophyte," it is believed to be a hyperparasite, parasitic on the mycorrhizal fungi that are in turn parasitic on hemlock and fir roots

Cornus canadensis BUNCHBERRY
Cornaceae
- a herbaceous relative of the dogwood tree
- intermediate between northern and eastern races

Drosera rotundifolia SUNDEW
Droseraceae
- carnivorous plant of nitrogen-poor bogs
- slender glands on lvs contain digestive enzymes

Epilobium angustifolium FIREWEED
- very common on logged and burned slopes
- wind-disseminated seeds; important honey plant
- tall plant with purple flowers

Erigeron perigrinus MOUNTAIN DAISY, SUBALPINE DAISY-FLEABANE
Asteraceae
- light purple, daisy-like flowers
- moist meadows, streamsides and open forests

Eriophorum angustifolium
(syn. E. polystachion)
COMMON COTTON GRASS
Cyperaceae
- dominant subalpine sedge forms almost a mono-culture in marshy spots
- bristles form in large white clusters that look like cotton balls near bridge before OGF

Juncus ensifolius DAGGERLEAF RUSH
Juncaceae
- lvs laterally flattened like an iris, 3-4 per stem
- bulkheads in leaves help transport oxygen to the roots
- flowers in a terminal inflorescence on wet sandy soils in bogs, marshes and meadows; common in our region

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Listera caurina WESTERN TWAYBLADE
Orchidaceae

Listera cordata HEARTLEAF TWAYBLADE
- perennials from creeping rootstock; a single pair of leaves mid-stem
- elongated clusters of pale green flowers
- L. caurina: lvs egg-shaped; flowers lighter green; lip rounded
- L. cordata: Lvs heart shaped; flowers browner green; lip splits into two lobes
- both are just at beginning of OGF loop fork, on the right

Luetkea pectinata PARTRIDGEFOOT
Rosaceae
- a western North America endemic
- is more common at higher elevations
- dense heads of ' tiny, white flowers; very divided leaves; short plant

Lupinus arcticus (syn L.latifolius) NORTHERN LUPINE
Fabaceae
- perennial with purple flowers and 6-8 leaflets
- >10 leaflets and hollow stems: L. polyphyllus, introduced at subalpine elevations, usually from seeding of disturbed areas for reclamation

Luzula parviflora SMALL-FLOWERED WOOD RUSH
Juncaceae
- tufted perennial
- distinguished from other open-flowered wood rushes from its height (usually >30cm) and the presence of four or more broad stem leaves;
- shiny and coarse foliage

Lysichitum americanum SKUNK CABBAGE
Araceae
- contains microscopic calcium oxalate needles, a mechanical means of protection
- pollinated by rove beetles
- generates its own heat for odour release, to attract beetles

Menyanthes trifoliata BOG BEAN
Menyanthaceae
- aquatic to semiaquatic, 3-part lvs held above water
- white flowers have frilly white hairs and a very rank smell to attract flies, beetles and some bees

Nephrophyllidium crista-galli (syn. Fauria crista-galli) DEER CABBAGE
Menyanthaceae
- kidney-shaped leaves; white petals have unusual ridges
- near the southern end of its range on N. Shore
- only grows west of Fraser River, not in Cascades

Nuphar polysepalum YELLOW POND LILY, SPATTERDOCK, COW LILY
Nymphaceae
- yellow flowers; related to water lilies
- egg-shaped lvs (those of water lilies rounder)
- rounded edges near the "notch" (those of water lilies are pointed, like a missing piece of pie)

Pinguicula vulgaris COMMON BUTTERWORT
Lentibulariaceae
- small carnivorous plant of mossy seeps, rocky drip-faces, bogs
- found at edge of logging road above OGF
- basal yellowish-green leaves, forming rosette, greasy-slimy on upper surface
- single dark lavender-purple flower, violet-like in appearance

Platanthera hyperborea
(syn Habenaria hyperborea)
NORTHERN GREEN BOG ORCHID
Orchidaceae

Platanthera stricta (syn. Platanthera saccata or Habenaria stricta) SLENDER BOG ORCHID, SLENDER REIN ORCHID
- similar: greenish flowers that are not fragrant
- found in wet, open places; stands up to 1m tall
- P. hyperborea has a cylindrical spur on its flower;
- P. stricta has an inflated-sac-like spur
- the common name rein comes from the Latin habenas, meaning strap or rein, due to its thong-like lip and spur

Orthilia secunda (syn. Pyrola secunda) ONE-SIDED WINTERGREEN
Pyrolaceae
- evergreen perennial; lvs mostly basal but some along lower stem are toothed
- bell-shaped, nodding, pale green/white fls all on one side of stem; style projects beyond corolla
- under the young western hemlock in OGF

Rubus pedatus CREEPING RASPBERRY, STRAWBERRY BRAMBLE
Rosaceae
- small creeper with little, raspberry-like fruits
- white flowers; leaves have five leaflets

Saxifraga ferruginea ALASKA SAXIFRAGE, RUSTY, SAXIFRAGE
Saxifragaceae
- wedge-shaped, all-basal lvs, 5 to15 teeth
- white flws sometimes replaced by bulblets
- petals stalked w/ 2 yellow spots at their bases
- moist, mossy outcrops, streambanks, wet rocks

Streptopus amplexifolius CLASPING TWISTED STALK
Liliaceae
- 1 flr at bend of stalk; flwr stalk also has bend
- bases of the lvs clasp stem, glaucous beneath
- stems branch (those of S. roseus do not)
- berries yellow to red, sometimes dark purple

Streptopus roseus ROSY TWISTED STALK
- leaf bases do not clasp stem, are slimy beneath
- flowers are rose pink with white tips; berries are red and round to oblong
- good example on east path back to parking lot

Streptopus streptopoides SMALL TWISTED STALK
- occurs in OGF; grows to 20 cm; saucer-shaped green flowers

Tiarella trifoliata FOAM FLOWER
Saxifragaceae
- genetically variable
- low-level, three-leaf variety and the mountain, single-leaf variety grow at this site in OGF
- foam-like, white flowers
- peculiar seed dispersal mechanism: the spherical seed rolls down a scoop-shaped structure

Tofieldia glutinosa FALSE ASPHODEL
Melanthiaceae
- erect, iris-like leaves from base; often one or two smaller ones on stem
- dense terminal clusters of small white or greenish white flws on sticky stems to 40 cm tall
- reddish purple seed capsules
- bogs, fens, wet meadows, along streambanks
- to left of path just before OGF and opp 2nd opening to lake w/ cotton grass & Erigeron

Trichophorum cespitosum (syn. Scirpus cespitosus) TUFTED CLUB RUSH
Cyperaceae
- densely tufted perennial clothed with leaf sheaths at the base
- single, terminal spike of pale flowers

Trientalis arctica ARCTIC STARFLOWER
Primulaceae
- a bog plant with small, white, star-like flowers
- stem erect and leafy, 5 to 25 cm
- stem lvs oval w/ rounded tip; lower lvs smaller
- to left of path just before OGF

Veratrum viride INDIAN HELLEBORE
Melanthiaceae
- bold plant to 2 in tall; very poisonous
- large pleated lvs, huge terminal clusters of green flowers
- growing commonly in wet, open areas

Viola orbiculata ROUNDLEAF YELLOW VIOLET
Violaceae
- similar to the evergreen violet of lower forests

Viola palustris MARSH VIOLET
- pale blue or white flws; scalloped, rounded leaves • only violet in our area without above-ground stems; leaves and flower stalks arise from stolons and thick rhizomes
- Two yellow violets also occur in this area.

TRAILING YELLOW VIOLET
(Viola sempervirens)
- has evergreen leaves and purple spots on undersides of leaves or seed capsules. ROUNDLEAF YELLOW VIOLET (V. orbiculata) lacks stolons and its leaves are relatively thin and not purple blotched. "Sedges have edges and rushes are around and grasses are hollow straight to the ground."

Yew Lake - Old Growth Plant List (Continued)

Copperbush, Ian Lane photo

Ferns:

Athyrum filix-femina LADY FERN
Dryopteridaceae
- fronds taper towards tip and base (diamond-shaped in outline)
- plant forms a clump

Blechnum spicant DEER FERN
Blechnaceae
- only rep. of this genus in the N. Hemisphere
- evergreen; sterile fronds usually pressed to ground;
- fertile fronds bear spores and are held upright

Gymnocarpium dryopteris OAK FERN
Dryopteridaceae
- fronds usually solitary, but in a group (ie., not a clump)
- deciduous; broadly triangular in outline

Lichens:

Alectoria sarmentosa OLD MAN'S BEARD, COMMON WITCH'S HAIR
- large hanging hair lichen, pale green
- its location on a trunk indicates the snow line
- lacks the central cord that Usnea has
- used by the Nuxalk people as false whiskers and beards for ceremonial masks

Bryoria fuscescens B.glabra HORSEHAIR LICHENS
- hanging hair lichen, dark medium brown, intricately branched
- the hair lichens are generally found in drier habitats than Alectoria
- fuscescens is Latin for "becoming dark"
- B. glabra has stiff and wiry basal branches

Cladonia spp. PYXIE CUP LICHENS
- upright cup lichens
- three species in our area

Rhizocarpon geographicum MAP LICHEN
- this lime-green lichen can be used to date a glaciated rock surface by measuring from the outer edge of the colony back to the centre
- Sphaerophorus globosus

CHRISTMAS TREE LICHEN
- medium-sized tufted shrub lichen, whitish or greenish brown
- terminal, ball-shaped black fruiting bodies • on trunks and branches of conifers

Usnea sp. BEARD LICHENS
- pale yellowish green
- branches reinforced by a white central cord - if you pull on the branch, it looks like pop beads;
- tends to occur at lower elevations than Alectoria • on conifers and alders in open lowland forests

Horsetail:

Equisetum arvense FIELD HORSETAIL, COMMON HORSETAIL Equisitaceae
- common and weedy in gardens

Fungi:

Biatorella resinae BLACK FUNGUS
- grows on surface of the resin exuded by conifers when there is damage to bark (eg, lightning strikes)
- this genus is being explored to degrade oil from spills

Psilocybe montana
- common small mushroom with red-brown cap
- grows with the moss Polytrichium
- non-hallucinogenic

Fomitopsis pinicola RED BELT BRACKET FUNGUS, PINE DESTROYER FUNGUS
- flat bracket fungus with an orange belt around the margin
- becomes huge

Peatmosses, Clubmosses, True Mosses and Liverworts:

Gymnomitrion obtusum
- grey green liverwort forms a white coating on vertical rock faces; if you look closely, you can see wormlike branches
- under overhang on large boulders

Philonotis fontana SWAMP MOSS
- yellow green, upright, unbranched, in cushions or mats, stems red
- in seeps and on moist soils, banks and rock faces
- always associated with calcium-rich soil
- along Yew Lakec it grows with daggerleaf rush (Juncus ensifolius)

Polytrichum commune HAIRCAP MOSS
- calyptra ("hat") lifts off to reveal a four-angled spore capsule
- prefers moist locations
- common in N. Hemisphere; scattered in S. Hemisphere

Ptilidium californicum PALMATE LIVERWORT
- rusty in color
- occurs on tree trunks below snow line; maybe
- needs high humidity, which it gets close to the ground

Racomitrium. canescens HOARY ROCK MOSS
- whitish or greyish green, rough in appearance, irregularly branched
- forms large whitish green cushions on acidic rocks
- large granite boulder demonstrates zones of this moss where there is runoff of rain water

Rhizomnium glabrescens (syn. Mnium glabrescens)

FAN MOSS
- leaves translucent and round with a colorless margin
- grows on rotting logs, forest floor and epiphytic

Rhytidiopsis robusta PIPECLEANER MOSS
- creeping stems
- golden to yellow-green leaves
- on litter of subalpine coniferous forest

Sphagnum spp. PEAT MOSSES
40 species in our area
- branches occur in clusters
- found in forests, cliff-faces, bogs and fens
- shape of stem leaves help to identify species

NOTE: Although most red algae are marine, one genus (Batrachospermum) grows in the streams in the park. It grows on stones and sticks in flowing water. Because of the mucilage, plants are very slippery. The sperm are non-swimming; they drift.

References:
From lists by Terry Taylor and Gerald Straley, compiled and detailed by Carolyn Jones

- Miller, Orson K. Mushrooms of North America New York: E.P. Dutton & Co, 1972.
- Pojar, Jim and Andy MacKinnon. Plants of Coastal British Columbia. Vancouver: Lone Pine Press, 1994.