

PINO
PINACEAE
Pinus monticola Dougl.
Pino

western white pine

FORM: Tree, up to 70m (230ft) tall; symmetrical crown with slender, drooping branches; well-marked nodal branching.

IDAHO CHAMPION: 1981. 81.8in dbh; 257in circum. + 214ft tall + 9.5ft crown= 481pts; Palouse RD, Clearwater NF.

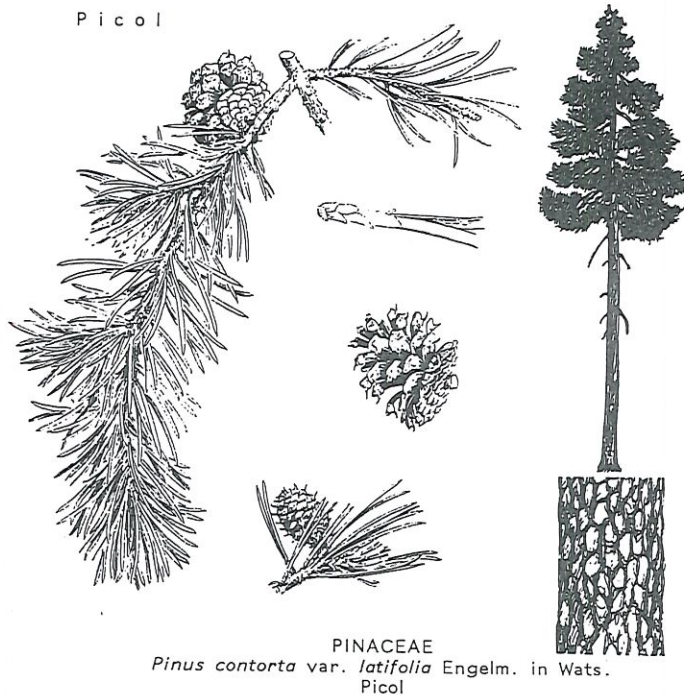
BARK: Very thin at first, grey and smooth, with resin blisters on young trees (similar to *Abies grandis* and *Pseudotsuga menziesii*, becoming finely checked into small, dark grey squares.

LEAVES: Needles in bundles of 5, 5-10cm (2-4in) long, blue-green, slender and flexible, tip blunt.

CONES: Narrow and curved, 12-38cm (5-15in) long, thin unarmed scales; mature mid-Aug. of second year; seed shed Aug.-Sept.

ENEMIES: Diseases: White pine blister rust, *Armillaria* species, *Poria subacida*, *Fomes pini*, *Phaeolus (Polyporus) schweinitzii*, *Phellinus (Poria) weirii*, *Fomes annosus*, *Polyporus anceps*, *Verticicladiella* species (blackstain), dwarf mistletoe, and *Atropellis* canker; Insects: mountain pine beetle; Fire: very susceptible.

SIMILAR SPECIES: *Pinus albicaulis*, p.17, short and heavy cones.



PICOL
PINACEAE
Pinus contorta var. *latifolia* Engelm. in Wats.
Picol

Rocky Mtn. lodgepole pine, jack pine

FORM: Tree, up to 30m (100ft) tall with short crown.

NATIONAL CHAMPION: 1980. 43.6in dbh; 137in circum. + 135ft tall + 10.3ft crown= 282pts; Valley Co., ID.

BARK: Lowland form has thick, black, rectangular plated bark; subalpine form is thin, reddish to grey with loose scales.

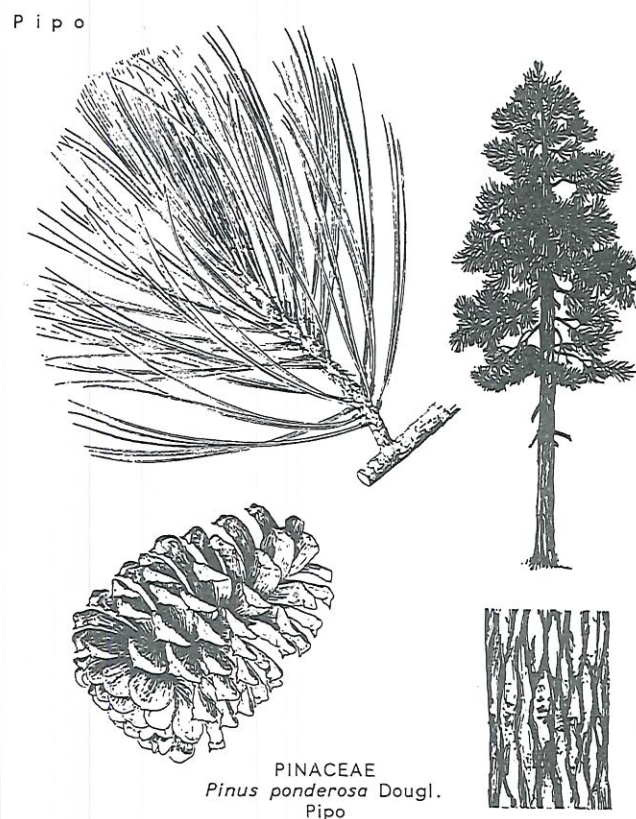
LEAVES: Needles in bundles of 2, 3-8cm (1-3in) long; stiff, often twisted; yellowish green.

CONES: Subsessile, 3-5cm (1-2in) long, sharp-spined tip on scale; persistence and cone serotiny is regionally variable; cones mature Aug.-Sept.; seed shed Sept.-Oct.

ENEMIES: Diseases: Stalactiform rust, *Phaeolus (Polyporus) schweinitzii*, *Polyporus tomentosus*, *P. anceps*, *Fomes pini*, *Armillaria* species, *Verticicladiella* species (blackstain), *Atropellis* canker, dwarf mistletoe, and western gall rust; Insects: mountain pine beetle, and tip borers; Fire: susceptible.

SIMILAR SPECIES: Persistent cones are not a characteristic of any other pine in this area, but may be confused with 5-needle pines: *Pinus albicaulis*, p.17; or *Pinus monticola*, p.19.

HABITAT: Potential early seral occupant on all habitat types except *Pinus ponderosa* series.



PINO
PINACEAE
Pinus ponderosa Dougl.
Pino

ponderosa pine, yellow pine, bull pine

FORM: Tree, 43m (140ft) tall; with symmetrical bole.

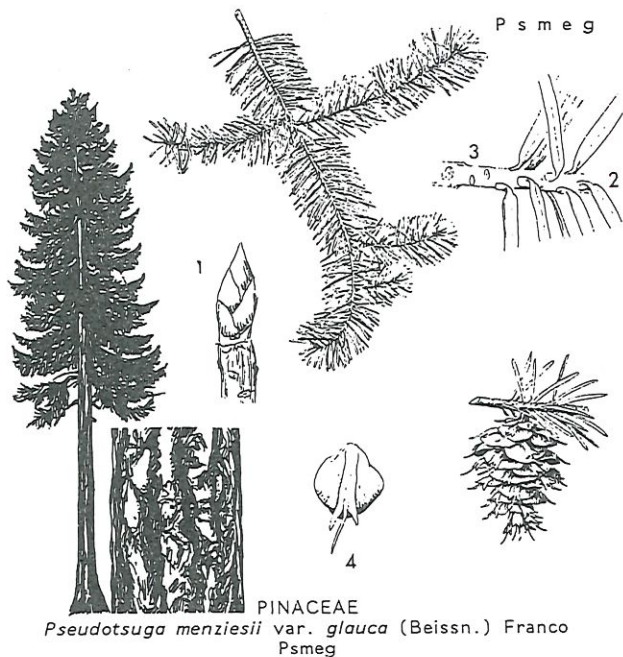
IDAHO CHAMPION: 1962. 88in dbh; 276.6in circum. + 138ft tall; description incomplete; Valley Co.

BARK: Brownish-black on vigorous young trees, turning to an orange or cinnamon color as diameter growth slows; always scaly with deep furrows on mature tree.

LEAVES: Flexible, yellowish-green, needles in bundles of 3 sometimes 2, 12-20cm (5-8in) long.

CONES: Ovate, 8-15cm (3-6in) long, cone scales have prickly tip; clustered at branch ends; may persist 2-7 years; ripens Aug.-Sept.; seed shed Sept.-Jan.

ENEMIES: Diseases: *Armillaria* species, *Phaeolus (Polyporus) schweinitzii*, *Polyporus anceps*, *Verticicladiella* species (blackstain), *Fomes pini*, *Atropellis* canker, dwarf mistletoe, *Elytroderma* needlecast and western gall rust; Insects: western and mountain pine beetle; Fire: mature trees very resistant.



PINACEAE
Pseudotsuga menziesii var. *glauca* (Beissn.) Franco
Psmeg

Rocky Mountain Douglas-fir, red fir

FORM: Tree up to 45m (150ft) tall; compact, pyramidal crown with irregular branching habit; branches upward spreading to drooping, with stiffly erect leader.

IDAHO CHAMPION: 1978. 75in dbh; 217.5in circum. + 150ft tall + 8.75ft crown=377pts; Wallace RD, Coeur d'Alene NF.

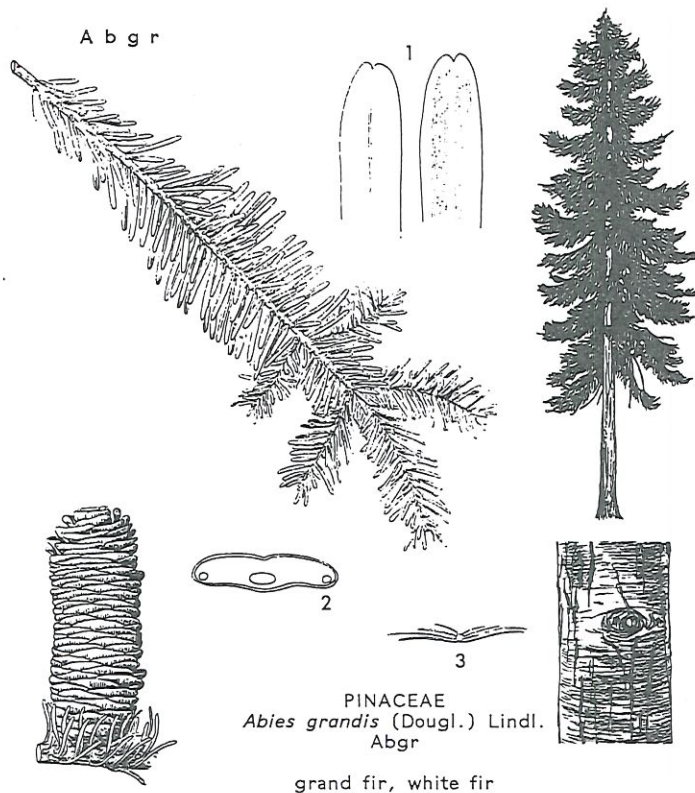
BARK: Rough, very thick, reddish-brown, separated by irregular deep furrows, bark's internal layers consist of light colored corky material mixed within reddish-brown material.

BUDS: Shiny, reddish-brown, sharp-pointed, 6mm long (1).

LEAVES: Linear, flattened, blue-green petiolate needle (2), 2-3cm (1in) long, apex blunt, slightly grooved above with 2 white stomatal bands below, spirally-arranged on twig, petiole drops with needle, leaving small flat scar on twig (3).

CONES: Pendent, reddish-brown, oblong-cylindric, 4-10cm (2-4in) long, with three-lobed bracts (4), protruding from thin scale; ripens/sheds, Aug.-Sept. of first year.

ENEMIES: Diseases: *Phaeolus (Polyporus) schweinitzii*, *Armillaria* species, *Phellinus (Porja) weirii*, *Fomes annosus*, dwarf mistletoe, *Dasyscypha* canker, and *Rhabdocline* needle cast; Insects: Douglas-fir beetle, western budworm, and tussock moth; Fire: susceptible when young but resistant when old.



PINACEAE
Abies grandis (Dougl.) Lindl.
Abgr

grand fir, white fir

FORM: A large conifer up to 80m (260ft) tall, neatly whorled with primary branches distinctly opposite.

IDAHO CHAMPION: 1981. 54.9in dbh; 172in circum. + 218ft tall + 7.7ft crown= 398pts; Pierce RD., Clearwater NF.

BARK: Smooth and greyish with resin blisters when young, aging to ashy brown with thick, deep furrows; inner bark purple-red.

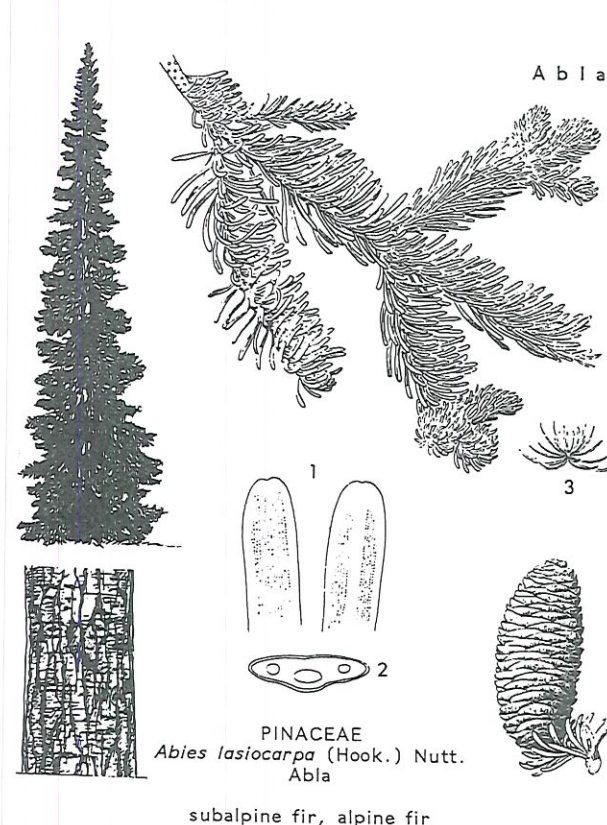
BUDS: Resinous, blunt to rounded, yellow-brown, 6mm.

LEAVES: Flat needles, 2-3cm (1in) long, apex rounded and notched (1), dark green, grooved above with two white stomatal bands underneath with very small resin ducts located near leaf margin (2), distinctly two ranked (3).

CONES: Cylindrical, 6-11cm (2-4in); borne upright, high in crown and disintegrating on tree; ripens Aug.; seed shed early Sept.

ENEMIES: Diseases: *Echinodontium tinctorium*, *Armillaria* species, *Phellinus (Porja) weirii*, and broom rust; Insects: spruce budworm, and tussock moth; Fire: susceptible.

SIMILAR SPECIES: *Abies lasiocarpa*, p.9.



PINACEAE
Abies lasiocarpa (Hook.) Nutt.
Abla

subalpine fir, alpine fir

FORM: Tree, up to 40m (137ft) tall; spirelike crown often extending to the ground; bole extremely tapered; primary branches distinctly opposite.

IDAHO CHAMPION: 1981. 49.9in dbh; 156.7in circum. + 137ft tall + 5ft crown= 298pts; Pierce RD, Clearwater NF.

BARK: Thin, grey, smooth with resin blisters; shallowly fissured.

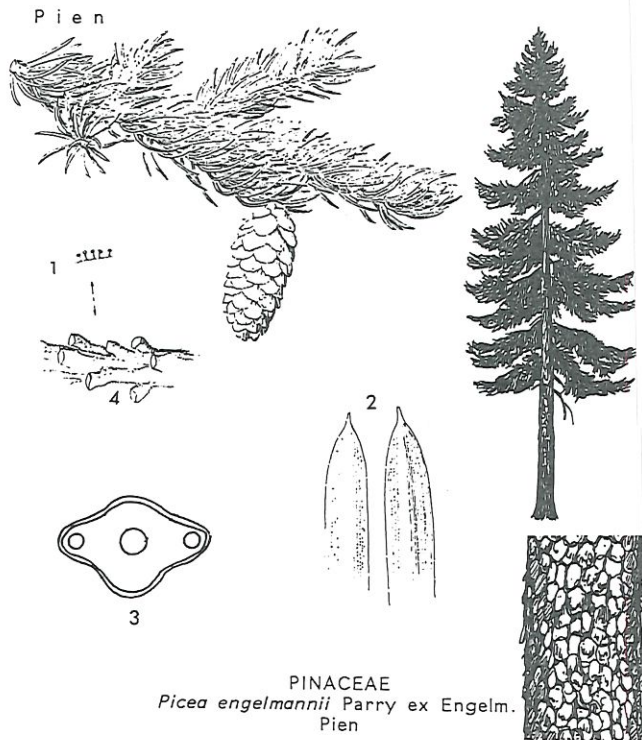
BUDS: Rounded, light brown, 6mm long.

LEAVES: Thick needles, 2-4cm (1-2in) long, apex rounded (1), blue-green with stomatal bands on both surfaces with large resin ducts located midway between leaf margins (2); leaves brushed to upperside (3).

CONES: Purplish-grey, cylindrical, 6-10cm (2-4in) long; borne upright, high in the crown and disintegrating on tree; ripens mid-Aug.; seed sheds mid-Sept.

ENEMIES: Diseases: *Echinodontium tinctorium*, *Fomes pini*, *Armillaria* species, *Polyporus tomentosus*, and broom rust; Insects: spruce budworm, and tussock moth; Fire: susceptible.

SIMILAR SPECIES: *Abies grandis*, p.8; and *Picea engelmannii*, p.16.



PINACEAE
Picea engelmannii Parry ex Engelm.
Pien

Engelmann spruce

FORM: Tree, up to 55m (180ft) tall; crown spirelike; branches extending to the ground.

NATIONAL CHAMPION: 1970. 92.4 in dbh; 290in circum. + 179ft tall + 10.8ft crown = 480pts; Valley Co., ID.

STEMS: Young twigs finely pubescent (1).

BARK: Thin, brownish-red, scaly.

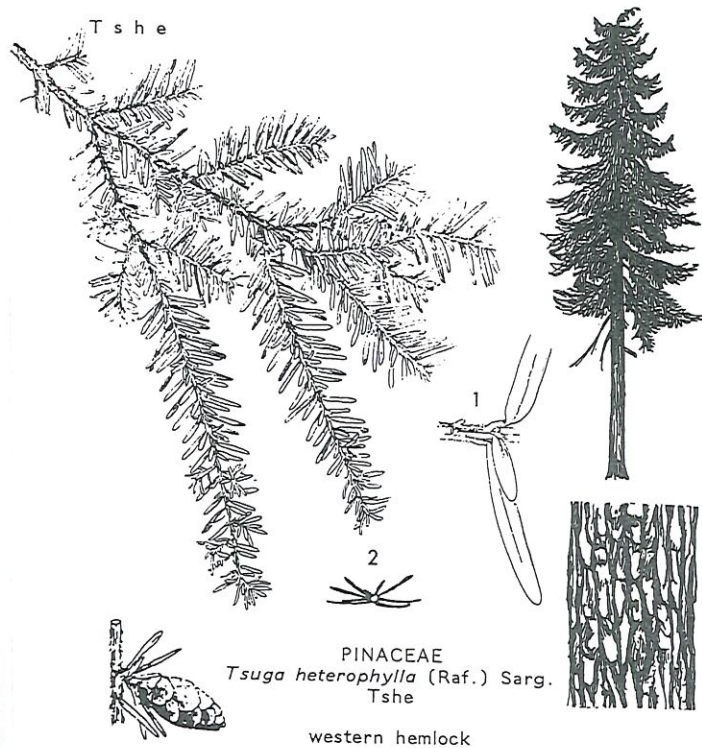
LEAVES: Short, rigid needles, 2-4cm (1-2in) long, blue-green, pointed (2), 4-angled in cross-section (3); borne singly on a peg, that remains on twig when needle is shed (4).

CONES: Oblong, 2-4cm (1-2in) long; light chestnut-brown, scales paper-thin; cones droop from branches, falling during autumn or winter; ripens Aug.-Sept., seed shed Sept.-Oct.

ENEMIES: Diseases: *Armillaria* species, *Fomes annosus*, *Phaeolus (Polyporus) schweinitzii*, *Fomes pini*, broom rust, and dwarf mistletoe; Insects: western budworm, and tip weevil; Fire: very susceptible.

SIMILAR SPECIES: *Abies lasiocarpa*, p.9.

HABITAT: Montane; favors cold humid sites, and wet frost pockets of all elevations.



PINACEAE
Tsuga heterophylla (Raf.) Sarg.
Tshe

western hemlock

FORM: Tree, 30-50m (100-160ft) tall; narrow pyramidal crown with drooping terminal leader.

IDAHO CHAMPION: None Registered

BARK: Young trees scaly, russet-brown; old trees hard, dark, russet-brown; furrows separating widely, flat ridges, inner bark dark purple-red.

BUDS: Light brown, rounded, 2mm long.

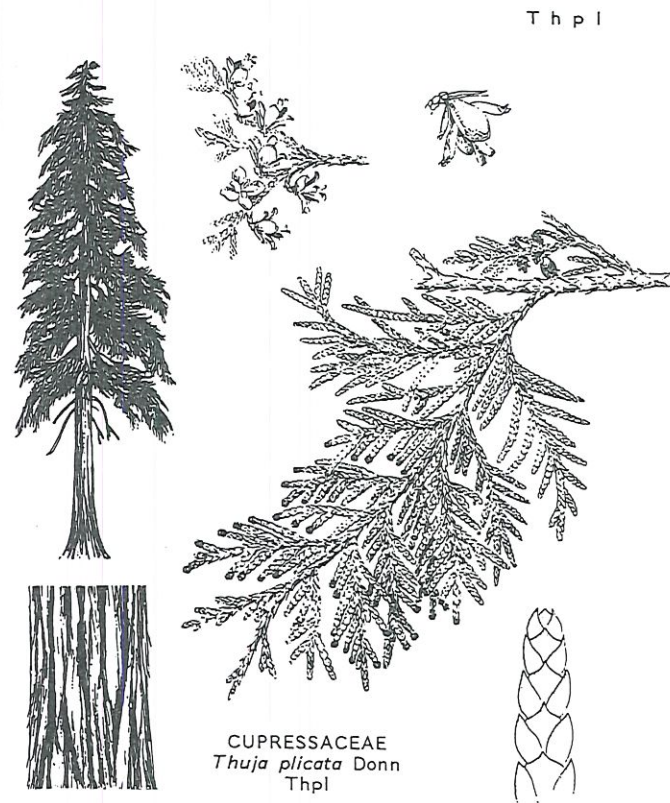
LEAVES: Thin, flat, singular, petiolate, dark green needles 6-10mm long, grooved above, marked with white stomata bands below, apex rounded, needles of varying lengths (1), 2-ranked on twig (2).

CONES: Light brown, 2cm (<1in) long, thin scales narrow with wavy margin; ripens first year, Aug.-Oct.; seed shed Sept.-Jan., after seed release cones remain on trees until the next summer.

ENEMIES: Diseases: *Echinodontium tinctorium*, *Fomes annosus*, *F. pini*, *Phellinus (Poria) weirii*, *Armillaria* species, *Phaeolus (Polyporus) schweinitzii*, *Polyporus tomentosus*, and dwarf mistletoe; Fire: moderately susceptible.

SIMILAR SPECIES: *Tsuga mertensiana*, p.27; and as sapling *Taxus brevifolia*, p.24.

NOTE: Largest hemlock native to the United States.



CUPRESSACEAE
Thuja plicata Donn
Thpl

western redcedar

FORM: Large, tapering tree, up to 54m (177ft) tall, with a buttressed, fluted trunk; branches usually drooping; leader slender and drooping.

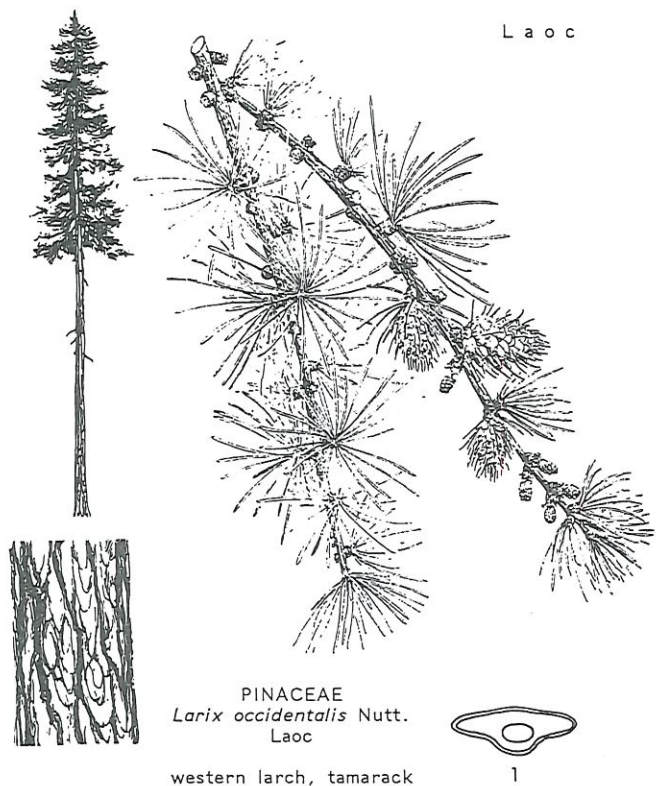
IDAHO CHAMPION: 1979. 216in dbh; 680in circum. + 177ft tall + 9.9ft crown = 867pts; Palouse RD, Clearwater NF.

BARK: Thin, cinnamon-red, aging to grey-brown, fibrous, finely ridged and furrowed, readily separating into long thin strips.

LEAVES: Dark yellow-green, glossy, scalelike (1), in opposite pairs; branchlets forming flat sprays.

CONES: Ovoid-cylindrical cones about 1cm long, with thin spine-tipped, paired scales; cones borne erect, pointing backwards on twig; ripens early Aug.; seed shed Sept.-Nov.; often reproduces vegetatively by layering.

ENEMIES: Diseases: *Phellinus (Poria) weirii*, *Polyporus sericeomollis*, *Phaeolus (Polyporus) schweinitzii* and *Fomes pini*; Insects: western cedar borer, and cedar bark beetle; Fire: susceptible.



PINACEAE
Larix occidentalis Nutt.
Laoc

western larch, tamarack

FORM: Tree, up to 60m (200ft) tall; short open crown with long, clear bole, often with swollen butt.

IDAHO CHAMPION: 1977. 76.2in dbh; 239.3in circum. + 142ft tall + 5.5ft crown= 387pts; Latah Co.

STEMS: Young twigs without dense woolly hair.

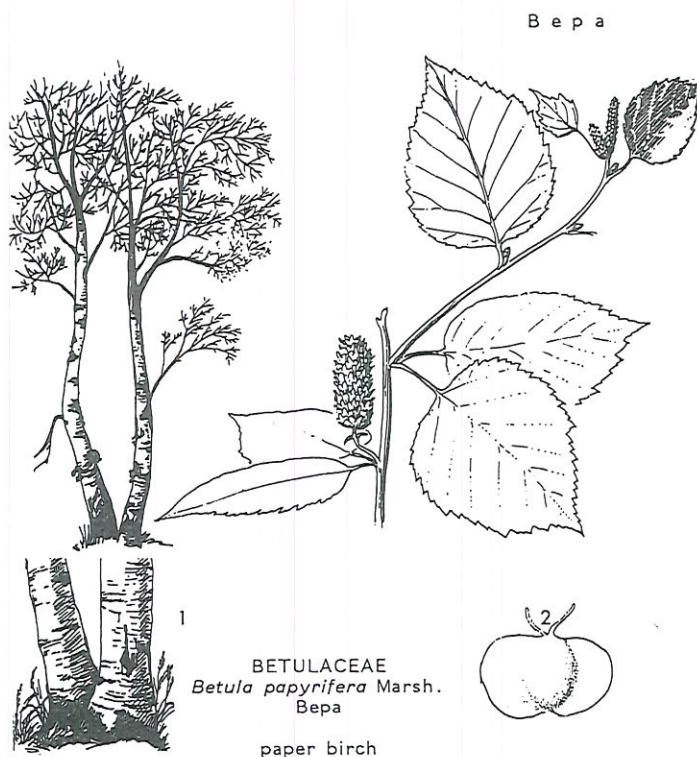
BARK: Initially thin and scaly becoming very thick and deeply furrowed into large plates; flaking into cinnamon-red scales, resembling *Pinus ponderosa*.

LEAVES: Deciduous, 15-30 needles borne on short spur, pale green, broadly triangular with no resin ducts visible (1), 2-4cm (1-2in) long; becoming yellow and falling in late fall after *Larix lyallii*.

CONES: Oblong, 2-3cm (<2in) long; thin, red-brown scales; borne upright on spur shoot, may remain on tree for several years; ripens Aug.-Sept.; seed shed Sept.-Oct.

ENEMIES: Diseases: *Fomes officinalis*, *Fomes pini*, *Phaeolus (Polyporus) schweinitzii*, *Armillaria* species, *Phellinus (Poria) weirii* and *Hypodermella laricis*; Insects: larch casebearer; Fire: very resistant.

SIMILAR SPECIES: *Larix lyallii*, p.14.



BETULACEAE
Betula papyrifera Marsh.
Bepa

paper birch

FORM: Tree, 15-20m (50-66ft) tall; old trees have open crowns and short, pendulous branches.

IDAHO CHAMPION: var. *commutata*: 1973. 29in dbh; 91in circum. + 70ft tall + 16.5ft crown= 178pts; Bonner Co.

BARK: Young trees bronze to light reddish brown, aging cream-white to coppery, with horizontal raised lenticels (1); peeling in thin, papery strips, thus its common name.

BUDS: Resinous, orange-brown; pointed ovate, 3-5mm long.

LEAVES: Alternate, deciduous, ovate, 6-10cm (2-4in) long, yellow-green and smooth above, pale below, usually doubly serrate.

FLOWERS: Cylindrical catkin 2-4cm (1-2in) long; flowering with or before leaves, breaking up at maturity; April-June.

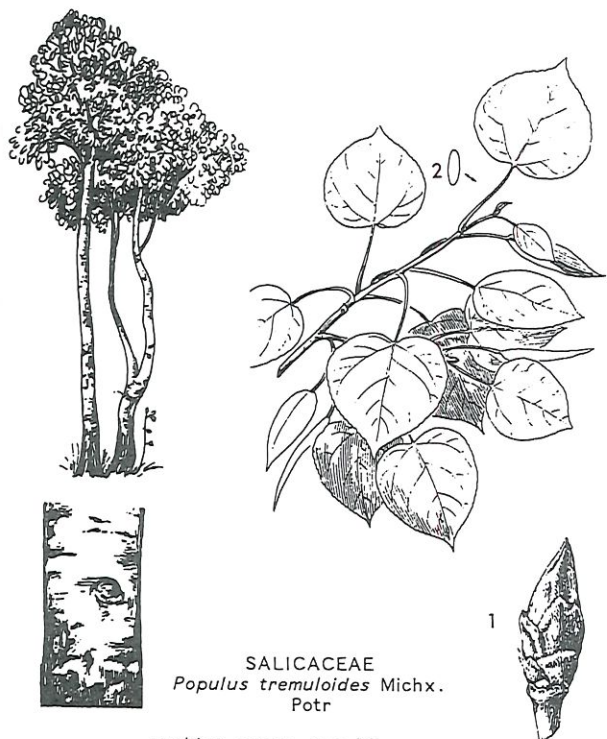
FRUIT: A winged samara tipped with persistent styles (2).

SIMILAR SPECIES: *Betula occidentalis*, p.12.

HABITAT: Moist, open to dense montane woods.

NOTES: *B. papyrifera* and *B. occidentalis* freely hybridize in northern Idaho.

Potr



SALICACEAE
Populus tremuloides Michx.
Potr

quaking aspen, trembling aspen

FORM: Small tree, up to 25m (82ft) tall, forming dense colonies, rarely singular.

IDAHO CHAMPION: 1982. 30.1in dbh; 94.6in circum. + 86ft tall + 10ft crown= 190.6pts; Camas Co.

BARK: Smooth, greenish-white to cream colored becoming blackish and rough with injury and old age.

BUDS: Resinous, sharp tipped, reddish-brown, 1cm long (1).

LEAVES: Alternate, deciduous, broadly ovate almost round, 2-9cm (1-4in) long, finely toothed, apex acute, shiny yellow-green, pale below; becoming bright yellow in autumn; the slender, laterally flattened petiole (2) allows leaf to flutter in slightest breeze.

FLOWER: Catkins drooping; appearing before the leaves; April-May.

ENEMIES: Diseases: *Fomes ignarius*, Hypoxylon canker, *F. applanatus* and *Armillaria* species; Fire: very susceptible.

HABITAT: Streams, moist benches and mountain slopes.

NOTE: Timber and pulp species in other regions.

Potr 2



SALICACEAE
Populus trichocarpa T. & G. ex Hook.
Potr2

black cottonwood

FORM: Large tree, 10-30m (30-100ft) tall, with broad, open crown.

IDAHO CHAMPION: 1984. 32.9in dbh; 103in circum. + 113ft tall + 3.75ft crown= 220pts; Boundary Co.

BARK: Smooth, yellowish-tan to grey on young bark, aging grey with rough and narrow flattened ridges.

BUDS: Orange-brown 2cm (<1in) long; tip sharp (1), resinous with fragrant odor when crushed.

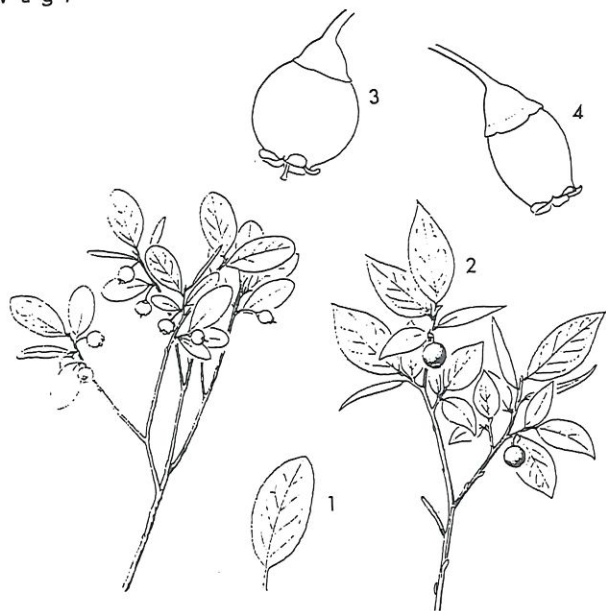
LEAVES: Alternate, deciduous, ovate, 5-15cm (2-6in) long, apex acute, margins finely toothed, dark green above, silver-white beneath, round petioles (2), strongly resinous, especially when young.

FLOWER: Catkins drooping; appearing before the leaves; April-June.

HABITAT: Mostly along streams and lake shores.

NOTE: Largest hardwood native to Idaho.

V a g l



ERICACEAE

Vaccinium globulare
Rydb.
Vagl

blue huckleberry

FORM: Spreading shrub, 4-10dm (1-3ft) tall.

STEMS: Older bark greyish and shreddy; young twigs somewhat angled.

Vagl: greenish-yellow.

Vame: yellow-green.

LEAVES: Alternate, deciduous, 2-4cm (1-2in) long, finely serrate.

Vagl: ovate with rounded tip (1).

Vame: ovate with pointed tip (2).

FLOWERS: Single in axils.

Vagl: pale pinkish-yellow, globular (3), broader than long, 6-7mm long; May-June.

Vame: yellow-pink urn-shaped (4), longer than broad, 6mm long; April-June.

FRUIT: Delicious, edible berry, 6-8mm broad.

Vagl: glaucous bluish-purple.

Vame: purple or dark purplish-red.

NOTE: Vagl and Vame are considered ecological equivalents in northern Idaho.

SIMILAR SPECIES: *Vaccinium Conspectus*, p.78.

S h c a



ELAEAGNACEAE

Shepherdia canadensis (L.) Nutt.
Shca

buffaloberry

FORM: Unarmed, spreading, medium shrub, 1-4m (3-13ft) tall.

STEMS: Older stems brownish, young stems covered with reddish-brown scales; round, reddish-brown, continuous, pith.

BUDS: Opposite, naked, stalked, russet colored buds(1).

LEAVES: Opposite, deciduous, entire, ovate, 2-6cm (1-2in) long, dark greenish on upper surface with whitish silvery hair and rusty-brown scales on lower surface(2).

FLOWERS: 1-several, small yellowish, 1-2mm long clustered in leaf axils, appearing with or before the leaves; male and female flowers are borne on separate bushes (dioecious); May-July.

FRUIT: Orange to red, juicy, translucent berry.

NOTES: Indian name is soopolallie (soap berry); crushed berries yield a soapy frothy drink and also makes a jelly.

A r u v



ERICACEAE

Arctostaphylos uva-ursi (L.) Spreng.
Aruv

kinnikinnick

FORM: Prostrate, often rooting along the stems, usually not over 20cm (8in) tall, sometimes mat forming.

LEAVES: Alternate, evergreen, glabrous, entire, spatulate leaves, 1-3cm (1in) long, dark green somewhat shiny above, paler below.

FLOWERS: White to pink, urn-shaped, 5mm long; borne in terminal clusters; April-June.

FRUIT: Bright red berry 7-10mm broad, edible with a dry, mealy interior.

SIMILAR SPECIES: *Linnaea borealis*, p.48; and *Gaultheria* species, p.45.

NOTES: Alternate host for spruce broom rust. Indians used leaves as tobacco and to make a yellow dye. Fruit makes good jelly; and it is a good ground cover plant.

P a m y



CELASTRACEAE
Pachistima myrsinites (Pursh) Raf.
Pamy

pachistima

FORM: Low shrubs, 20-60cm (8-24in) tall.

STEMS: Slender, glabrous, 4-angled, reddish brown.

BUDS: Opposite, appressed, very small with 2 pairs of scales.

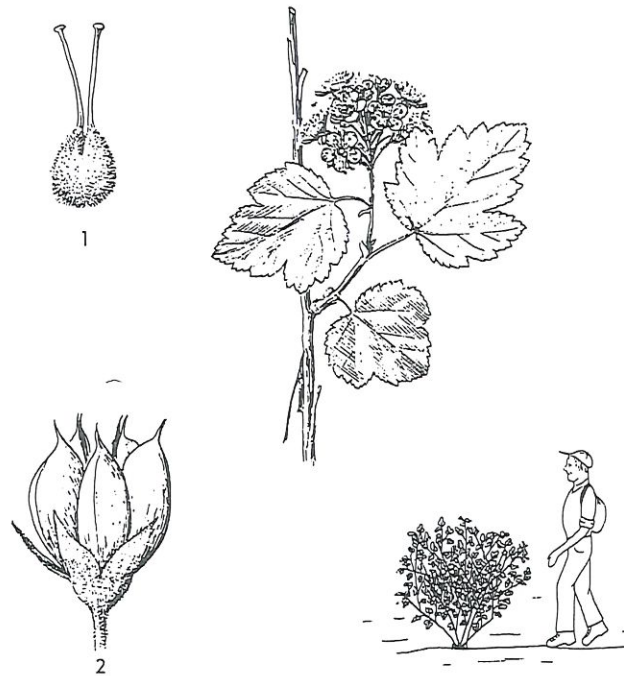
LEAVES: Opposite, evergreen, glossy, simple, oblanceolate, serrate, 1-3cm (1in) long.

FLOWERS: Maroon colored, 3-4mm broad, numerous in axillary clusters (1); April-June.

FRUIT: Small whitish fleshy berrylike aril.

NOTES: No longer a habitat type indicator species!!!
Makes a nice low hedge for landscaping.

P h m a



ROSACEAE
Physocarpus malvaceus (Greene) Kuntze
Phma

ninebark

FORM: Spreading to erect, medium shrub, 5-20dm (2-7ft) tall with angled branches.

BARK: Loose, shreddy; brown to grey.

LEAVES: Alternate, deciduous with 3 palmate lobes, maplelike, doubly toothed, 3-6cm (1-2in) wide, pubescent dark green above, paler with copious starlike hairs beneath.

FLOWERS: Numerous small, white flowers in terminal cluster; May-July.

FRUIT: Generally a pair of brown, many seeded, hairy follicles (1).

SIMILAR SPECIES: *Physocarpus capitatus* (Pacific ninebark), larger shrub with 3-5 smooth follicles (2), a coastal disjunct in Idaho, mostly found on non-glaciated sites from Coeur d'Alene south to the Clearwater River canyon; *Holodiscus discolor*, p.46; and *Ribes viscosissimum*, p.62.

C o s t s



CORNACEAE
Cornus stolonifera var. *stolonifera* Michx.
Costs

red-osier dogwood

FORM: Many stemmed shrub, 2-6m (7-20ft) tall, usually spreading by layering stolons.

IDAHO CHAMPION: 1976. 4.1in dbh; 12.9in circum. + 26ft tall + 3.8ft crown= 43pts; Idaho, Co.

STEMS: Slender, bark turns dark red to purplish-red when growing in the sun; pith round and white.

BUDS: Opposite, one pair of bud scales.

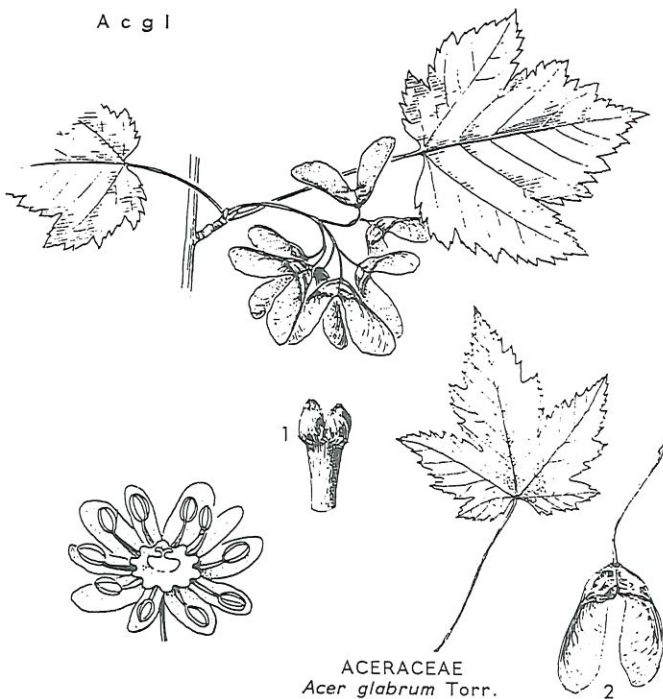
LEAVES: Opposite, deciduous, simple, entire, ovate 4-12cm (2-5in) long, with unique 5-7 prominent upcurving and parallel veins (1), that converge at the tip of the leaf; this vein pattern is unique to native Rocky Mountain *Cornus* species.

FLOWERS: Small, white 2-4mm long, in flat-topped terminal cymes, not showy; May-July.

FRUIT: Small, bitter, white, berrylike drupe, 7-9mm long.

HABITAT: Riparian, and other warm, moist sites.

Acgl



ACERACEAE
Acer glabrum Torr.
Acgl

Rocky Mountain maple

FORM: Shrub (var. *glabrum*) or small tree (var. *douglasii*), 1-10m (3-33ft) tall.

IDAHO CHAMPION: var. *glabrum*: 1973. 5.4in dbh; 16.9in circum. + 25ft tall + 3.75ft crown = 45.8pts; Sawtooth NF.

NATIONAL CHAMPION: var. *douglasii*: 1973. 12in dbh; 38in circum. + 47ft tall + 5.25ft crown = 91pts; Canyon RD, Clearwater NF, ID.

STEMS: Smooth, reddish-purple; old bark grey.

BUDS: Opposite, smooth, red, plump ovate, buds, 3mm long; bud scales paired (1).

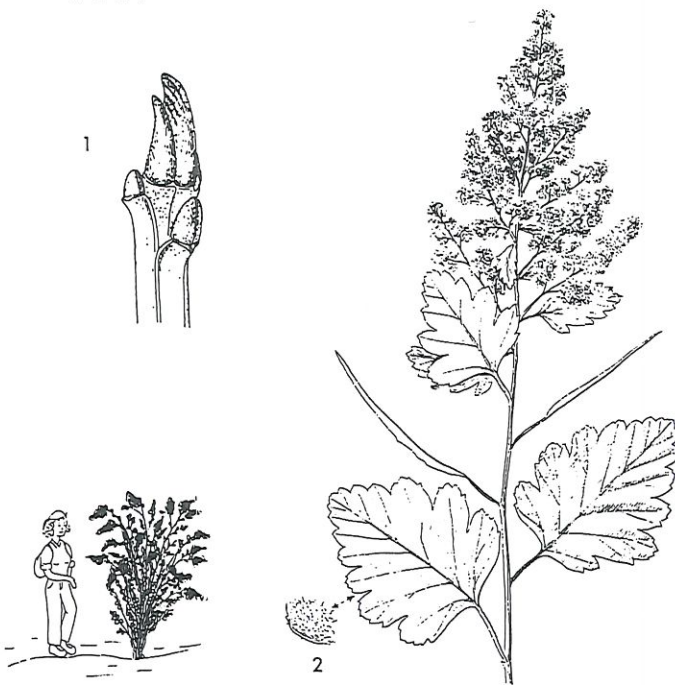
LEAVES: Opposite, deciduous, simple, 3-5 toothed, palmately lobed, maplelike leaves, dark green often with reddish tints, 2-14cm (1-6in) long, trifoliolate leaves may frequently be found; var. *glabrum*: leaves more deeply lobed, mostly >6cm wide; var. *douglasii*: leaves shallowly lobed, >6cm wide.

FLOWERS: Small, greenish-yellow, borne in short terminal or axillary clusters; appearing with the leaves; April-June.

FRUIT: Double samaras (2) 2-3cm (1in) long.

NOTES: Only maple native to northern Idaho.

Hodi



ROSACEAE
Holodiscus discolor (Pursh) Maxim
Hodi

ocean-spray

FORM: Erect to many-branched shrub, 1-4m (3-13ft) tall.

STEMS: Young stems slightly ridged, pith large, white and spongy; older stems have shreddy bark.

BUDS: 2-3 purplish-brown bud scales, 6mm long (1).

LEAVES: Alternate, deciduous, broadly triangular with truncate base, 3-8cm (1-3in) long, somewhat pubescent, pale green above, often with whitish hairs below (2), margins coarsely toothed or very shallowly lobed.

FLOWERS: Tiny, cream-colored, borne in dense terminal panicle; old inflorescences turning brown, persistent over winter; giving the shrub a shaggy appearance; June-Aug.

FRUIT: Tiny, light brown, 1-seeded achene.

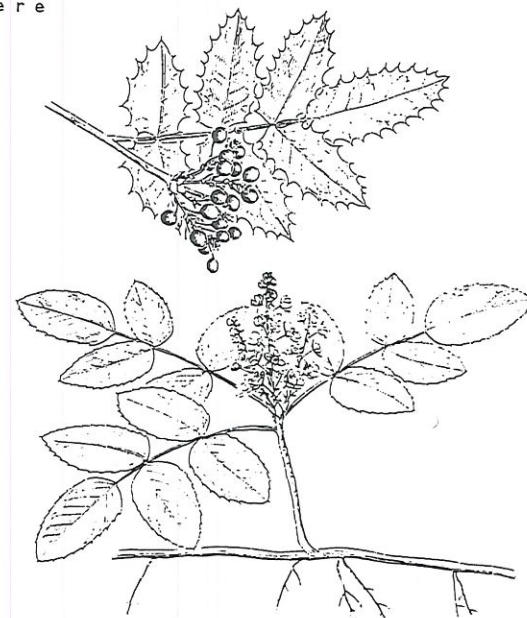
ENEMIES: Fire: moderate resistance, regenerating from basal stem sprouts to preburn level within 5-10 years.

SIMILAR SPECIES: *Physocarpus malvaceus*, p.55.

HABITAT: Successional species on logged or burned areas, climax on warm, dry sites.

NOTES: Indians ate the seeds raw or cooked.

Bere



BERBERIDACEAE
Berberis repens
Lindl.
Bere

oregon grape

FORM: Shrub with hollylike leaflets.

Bere: prostrate, subshrub seldom over 25cm (10in) tall, often rooting at nodes.

Beaq: generally an erect shrub 5-10dm (2-3ft) tall.

LEAVES: Alternate, evergreen, odd-pinnately compound, sessile, hollylike leaflets.

Bere: 10-20cm (4-8in) long, generally with 5 leaflets, ovate, dull green above and paler beneath, 15-42 inconspicuous teeth, rounded tip; turning red in winter.

Beaq: 15-31cm (6-12in) long with 5-9 leaflets, broadly lanceolate, shiny green on both sides, pointed tip, 12-29 prominently spine tipped teeth; turning red or purplish in winter.

FLOWERS: Bright yellow, 6-8mm long in several racemes, bunched together; March-June.

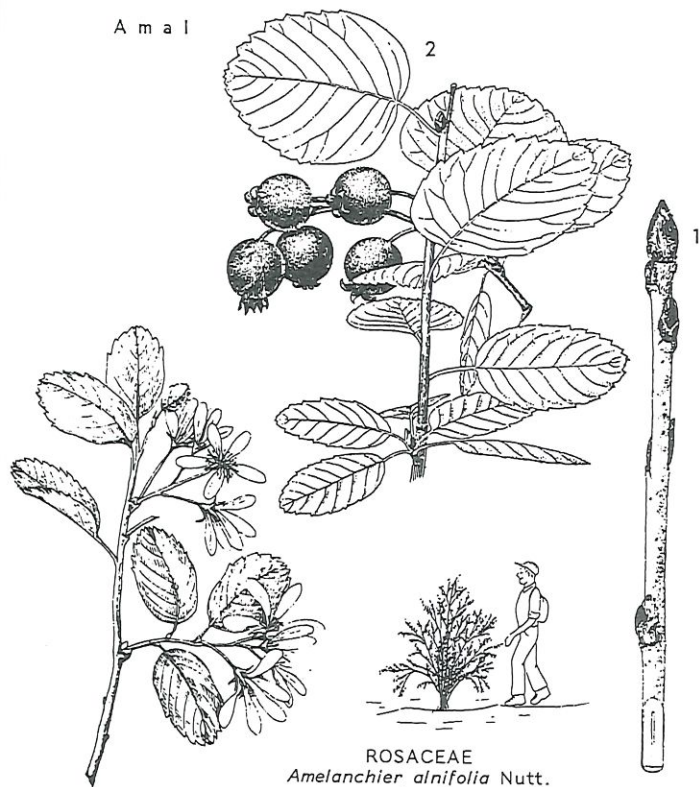
FRUIT: Glaucous, dark blue.

ENEMIES: Fire: moderately susceptible, regeneration from rhizomes to preburn levels within 5-10 years.

HABITAT: Beaq generally more mesic sites than Bere.

NOTES: Edible berry makes a jelly similar in taste to grape. Indians ate the berries, and used roots for dye and medicinal purposes.

A m a l



ROSACEAE
Amelanchier alnifolia Nutt.
Amal

serviceberry

FORM: Shrubs or small trees, 2-7m (6-20ft) tall, spreading to erect.

IDAHO CHAMPION: 1978. 9.6in dbh; 30.2in circum. + 32ft + 5.75ft crown= 68pts; Slate Creek RD, Nezperce NF.

BARK: Glabrous, reddish-brown aging to grey.

BUDS: Alternate, reddish-brown, conical 3-6mm long, scale edges hairy (1).

LEAVES: Alternate, deciduous, thin, oblong to oval, 10-12 individual parallel side veins; generally coarsely toothed above the middle (2), no glands on leaf or petiole.

FLOWERS: White, 5-10mm long; 3-20 in short racemes; April-July.

FRUIT: Dark purple pome (apple), 10-14mm long.

SIMILAR SPECIES: Young or small plant's leaves may be confused with *Spiraea* species, p.75, compare leaf veins; and *Prunus* species, pp.56-57, glands on leaves.

NOTES: Earliest blooming white-flowered shrubs; good jelly made from fruit.

S p b e l



ROSACEAE
Spiraea betulifolia var. *lucida* (Douglas.) Hitchc.
Spbel

shiny-leaf spiraea

FORM: Strongly rhizomatous, glabrous, medium shrub, 20-60cm (8-24in) tall.

STEMS: Erect, slender, light yellow-brown and smooth, not hairy; aging to reddish-brown.

LEAVES: Alternate, deciduous, ovate, 2-7cm (1-3in) long, generally coarsely toothed above middle, dark green on upper surface, slightly pale below, side veins of leaf bend toward apex.

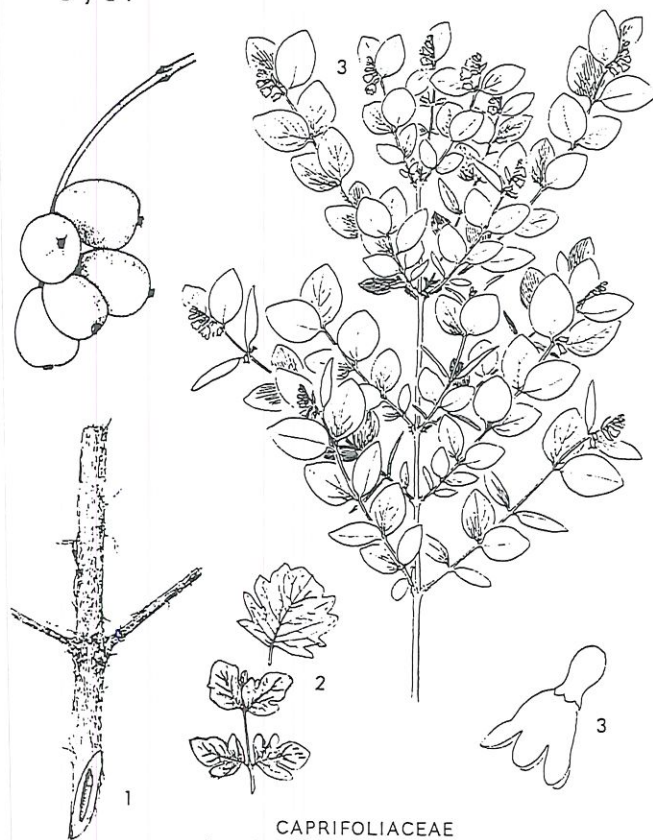
FLOWERS: Dull white in flat-topped corymbs, 3-8cm (1-3in) broad; June-July.

FRUIT: Glabrous follicles, 3mm long (1).

SIMILAR SPECIES: *Spiraea* species; or young *Amelanchier alnifolia*, p.36, different leaf serration and venation patterns.

NOTES: Most common *Spiraea* species in northern Idaho.

S y a l



CAPRIFOLIACEAE
Symphoricarpos albus (L.) Blake
Syal

snowberry

FORM: Erect, rhizomatous shrub, 1-2m (3-7ft) tall.

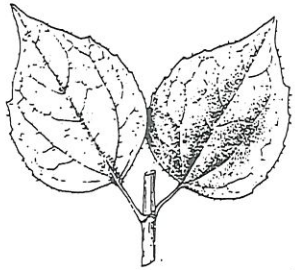
STEMS: Opposite, twigs very slender; older stems have shreddy, greyish bark with hollow, brownish pith (1).

LEAVES: Opposite, deciduous, elliptic, 2-5cm (1-2in) long, entire or with a few teeth; leaves on new shoots may have variable shapes, some resemble small oak leaves (2).

FLOWERS: White to pinkish, bell-shaped, 5-7mm long (3), in few-flowered racemes; May-July.

FRUIT: White, spherical, berrylike, 6-15mm diameter; persistent into fall and winter; considered poisonous.

SIMILAR SPECIES: *Lonicera utahensis*, p.49, white, solid pith; and *Symphoricarpos mollis*, p.77, a trailing, stoloniferous shrub.

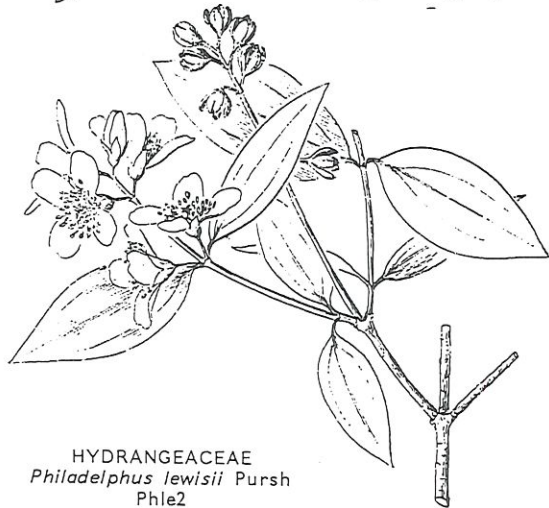
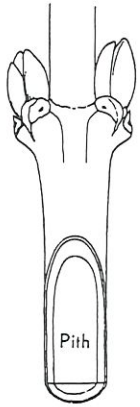


Phle 2

Libo 2

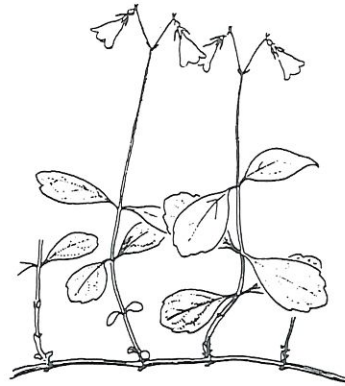


Rogy



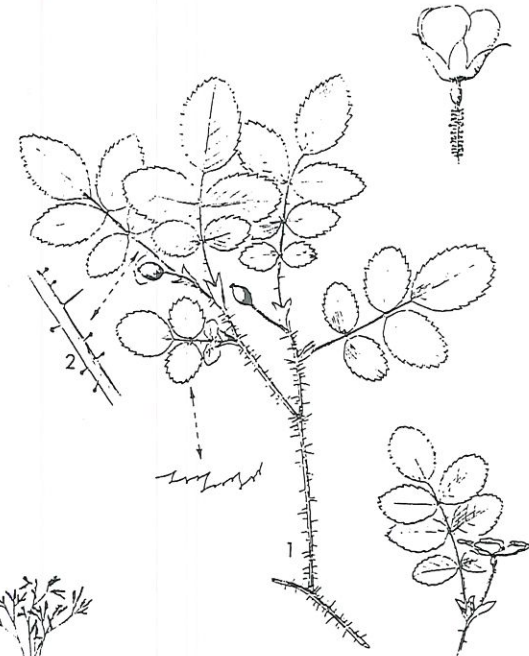
HYDRANGEACEAE
Philadelphus lewisii Pursh
Phle2

syringa



CAPRIFOLIACEAE
Linnaea borealis L.
Libo2

twinflower



ROSACEAE
Rosa gymnocarpa Nutt.
Rogy

wild rose

FORM: Loosely branched, medium to tall shrub, 1-3m (3-10ft) tall.

BARK: Brown; older stems show characteristic cross-checked pattern, eventually flaking off.

BUDS: Opposite, hidden under leaf scars.

LEAVES: Opposite, deciduous, simple, light green, 3-8cm (1-3in) long, may be serrate, 3 major veins from leaf bases.

FLOWERS: Numerous, very fragrant, white, showy, 4-merous, 2-3cm (1in) broad, borne 3-11 in terminal raceme on lateral branches; May-July.

FRUIT: Ovoid-elliptic capsule, 6-10mm long.

NOTES: Idaho State Flower.

FORM: Trailing, woody perennial, subshrub with short erect stems, less than 10cm (4in) tall.

STEMS: Slender but woody.

LEAVES: Opposite, evergreen, firm, elliptic, 7-25mm long, with shallow teeth near apex.

FLOWERS: A pair of tiny, pink, nodding, bell-shaped flowers, 2-5mm long; June-Sept.

FRUIT: Small, 1-seeded capsule.

SIMILAR SPECIES: *Satureja douglasii*, p.72, square stem, fragrant; *Gaultheria* species, p.45; *Veronica americana* (American brooklime) deciduous, no odor, heart shaped capsule; and possibly *Arctostaphylos uva-ursi*, p.37.

NOTE: May form extensive mats on forest floor following disturbance.

FORM: Finely branched shrub, 3-12dm (1-4ft) tall.

STEMS: Densely, armed with soft, straight, slender prickles (1) on older branches, and stalked glands (lollipop-like hairs) (2), on 1-2 year old stems.

LEAVES: Alternate, deciduous, odd-pinnately compound with 5-9 leaflets, 1-4cm long, doubly serrate with gland-tipped teeth.

FLOWERS: Small, pink, 1-3cm (1in) long, mostly borne singly at end of branches; smaller flowers and fruits than other rose species; June-July.

FRUIT: Scarlet, pear-shaped hips, 1cm diameter; calyx deciduous from mature hips (3).

SIMILAR SPECIES: *Rosa Conspectus*, p.63.

NOTES: Rose hips can be used in jellies and teas and provide a good source of vitamin C.