

**Winter Key  
to  
Deciduous Trees and Shrubs**

**Semiahmoo & Drayton Harbor Areas**

**Whatcom County, Washington**

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This greatly simplified key includes only those wild, deciduous trees and shrubs you are most likely to see in the Semiahmoo-Drayton Harbor Area. A few other similar species also are included.

1a Leaf scars, buds, and twigs alternate.

2a Plants unarmed.

3a Bud scales present.

4a Bud scales more than one.

5a Bud stalks absent or very short, bundle scars 3 except *Cytisus scoparius* with only one.

GROUP I, lead 12a, page 3.

5b Bud stalks present and as long as the red buds. Bundle scars 3, or 4 if the two bundles comprising the center scar are separate and counted as individual scars. Reddish male catkins of the season conspicuous, and clusters of woody female catkins of last season are often present. Trees with smooth gray bark to 25M (75 ft) or more. Shrubs of *Alnus sinuata*, SITKA ALDER, are similar, but the bud stalks are much shorter than the buds and they are seldom found in lowlands.

*Alnus rubra* Bong.  
RED ALDER

4b Bud scales one, sack-like. Buds ovoid, usually flattened against the twig, the tip appressed. Stipule scars usually present, at least on fast-growing shoots. Buds and twigs usually pubescent but occasionally glabrescent. Trees reaching 12M (40ft.) or more, or arborescent shrubs. Bark smooth and gray except for scaly bark on the basal trunk of some old, large trees. Found on sunny, wet to dry, well drained habitats, but seldom with the base submerged in water. See also Table I, page 7.

*Salix scouleriana* Barratt  
SCOULER WILLOW

3b Bud scales absent. End bud with 2 to 4 rudimentary leaves exposed, the leaves to 15mm long, lanceolate, tan, hairy; lateral buds to 3.5 mm long. Leaf scars oval with 3 prominent bundle scars. Twigs purplish-red with fine pubescence and warty. These trees can reach 10M (35 ft.) or more, but owing to demand for the bark for a laxative, trees that large are seldom seen.

*Rhamnus purshiana* D.C.  
CASCARA

2b Thorns, spines, or prickles usually present.

6a Plants with prickles (modified epidermis); shrubs erect to ascending, or woody sprawling and trailing vines. Pinnate leaves often present.

7a Leaf scars distinct, thin concentric lines about halfway around the stalk; bundle scars 3. Erect to ascending shrubs; fruit, a red hip, usually present. GROUP II, ROSES, lead 22a, page 5.

7b Leaf scars covered by petiole fragments and obscure.

8a Sprawling shrubs or woody, trailing vines with hooked prickles, green leaves often present. GROUP III, BLACKBERRIES, lead 27a, page 6

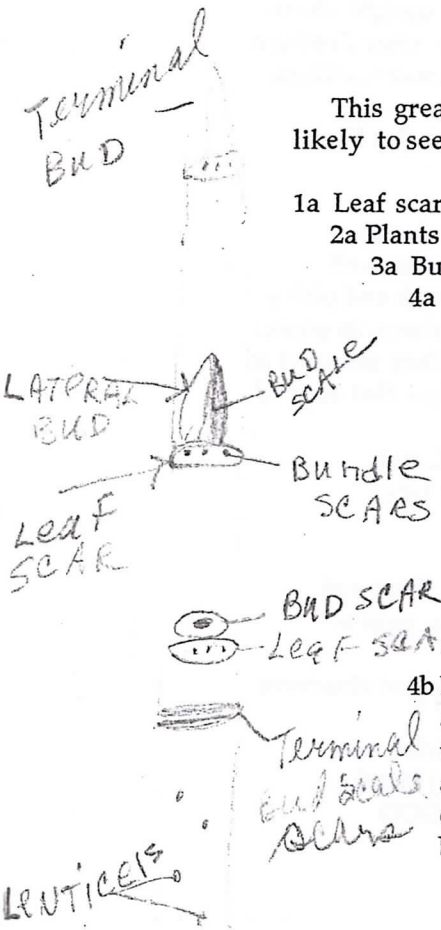
8b Erect, orange-brown to tan shrubs, mostly 1.3-2.4M (5-7 ft.) tall, branched and unarmed above, and with straight, weak prickles below. Widespread in sunny openings in woodlands, especially on damp ground.

*Rubus spectabilis* Pursh  
SALMONBERRY

6b Trees or large shrubs usually with thorns, (modified twigs). GROUP IV, HAWTHORN & CRABAPPLE, lead 28a, page 6.

1b Leaf scars, buds, and many twigs opposite. Buds with more than one scale.

9a Buds without stalks.



10a Leaf scars on a distinctly raised flange, twigs very slender, hollow end buds often absent. White fruit usually present in winter but by spring they are black and rotten. Shrubs 1-1.6M (3-5 ft) tall. In the absence of fruit, *Symphoricarpos albus* is similar to the upright shrub, *Lonicera involucrata*, BLACK TWINBERRY, which has solid twigs; and to other *Lonicera* species which also have hollow twigs but are vines climbing by twining. *Lonicera ciliosa* has glabrous twigs and *Lonicera hispidula* pubescent twigs.

*Symphoricarpos albus* (L.) Blak  
SNOWBERRY

10b Leaf scars not on a flange and little raised, stems solid. End buds present or absent.

11a End buds conspicuously absent, the dead twigs obvious beyond the last buds; well developed buds often about 1.5 cms long. Medium to large shrubs with weak and pithy twigs. Dead leaves, if present, are mostly 5-7 pinnate. Fruit usually is absent in winter (it is a favorite of birds), but fruit-support structures often are present. They are erect to ascending with rounded tops; *Sambucus cerulea*, BLUE ELDERBERRY, has flat-topped structures but is uncommon in coastal Washington.

*Sambucus racemosa* L. var.  
*arborescens* (T. & G.) Gray  
RED ELDERBERRY

11b End bud usually present, or where absent, buds not much over 3 mm long. Trees and arborescent shrubs, fruit a double samara. GROUP V, MAPLES, lead 30a, page 6.

9b Lateral buds on conspicuous stalks, appressed; buds and twigs usually red. Fruit support structures erect and flat-topped. Shrubs to 4.6M (15 ft.) often on wet ground.

*Cornus stolonifera* Michx. var.  
*occidentalis* (T. & G.) Hitchc.  
RED-OZIER DOGWOOD

### Group I

12a Lowest bud scale directly above the leaf scar. *Populus* - COTTONWOOD, ASPEN.

13a Buds over 12 mm, the terminal bud much larger; buds pointed, resinous, somewhat spreading. Trees to 45M (150 ft).

*Populus tricocarpa* T. & G.  
NORTHERN COTTONWOOD

13b Buds less than 12mm and averaging 8 mm. Trees to 20M (60 ft) but usually less.

*Populus tremuloides* Michx.  
QUAKING or TREMBLING ASPEN

12b Lowest bud scale <sup>pinkish</sup> not immediately above the leaf scar.

14a Inner bud scales densely covered with appressed white hairs and exposed in winter as the two outer scales are early deciduous. Leaf scars raised, buds ovoid, twigs slender, angular. Mature plants usually tipped by tan sprays of persistent calyxes on complex fruiting structures. Shrubs to 4.6M (15ft.), common.

*Holodiscus discolor* (Pursh) Maxim.  
OCEAN SPRAY

14b Buds glabrous or sparsely hairy.

15a Leaf scars obscure and on raised petiole bases; old bud scales persistent. Buds dull brown, ovoid, more or less pubescent. Shrubs 1.3-2M (4-7 ft) tall, tan to orange-brown, erect, little branched, often with large stem galls, and generally on well drained soil.

*Rubus parviflorus* Nutt  
THIMBLEBERRY

15b Leaf scars distinct and not on raised bases.

- 16a Buds generally 2mm or more long. Trees and shrubs with spreading or pendulous branches.  
 17a Tips of lateral buds pointed, buds widest above the middle and often spindle-shaped.  
 18a Conspicuous white ciliate bud scale margins, buds otherwise glabrous and reddish. Lateral buds 5-8mm long, 2.5 times as long as wide; end buds longer and more slender. Commonly present are a few shriveled, black fruit < 5mm with an unlobed calyx ring and often a persistent base of styles. Shrubs and small trees 1-5M (3-16 ft.) tall in sunny, well-drained habitats.

*Amelanchier alnifolia* Nutt.  
 SERVICEBERRY

- 18B Buds glabrous, erect to spreading; lateral buds 3-4mm long and about half as wide. Twigs slender, glabrous, or gray-woolly. Trees with reddish, shiny bark, often to 15M (50 ft.) tall. Bitter bark of twigs distinguishes this species from similar specimens of *Betula papyrifera* var. *commutata*, *Pyrus fusca*, and *Prunus avium*; also, it lacks the large clusters of buds at twig ends characteristic of *Prunus avium*.

*Prunus emarginata* var. *mollis*  
 (Dougl.) Brew.  
 BITTERCHERRY

- 17b Lateral buds usually more ovoid than spindle-shaped and the tips more rounded, or the buds widest at the base.

- 19a Lateral buds 4-6mm long, erect. Male catkins usually present in winter. Mature bark yellowish-, or reddish-brown, or white, and occasionally peeling in thin sheets; lenticles common on young bark.

*Betula* - BIRCH

- 20a Buds glabrous, yellowish-green, often with a shiny, yellowish "varnish," or brownish. Twigs light brown to reddish with long and short hairs. Trees to 30M (100 ft).

- 21a Mature bark yellowish-or reddish-brown, or white, the darker bark resistant to peeling and possibly related to wet habitats. Young trunks and limbs commonly reddish-brown and shiny. Bracts of the female catkins cross-like, the tip longer than the base and the crossarms with squarish tips. Often found on flat, poorly drained soil, and the common birch variety in Northwest Washington.

*Betula papyrifera* Marsh var.  
*commutata* (Regel) Fern.  
 WESTERN PAPER BIRCH

- 21b Mature bark white or yellowish and peeling in thin sheets. Bracts of female catkins like a plunging arrow, the base of the bract longer than the tip and the cross arms (fins) curved upward. Uncommon in Northwest Washington but occasional in horticultural settings.

*Betula papyrifera* Marsh var.  
*papyrifera*  
 PAPER BIRCH

- 20b Buds and twigs brownish, often with white, peeling epidermis; pubescence scarce. White mature bark that does not peel but splits into black, vertical streaks, ridges, and diamonds, usually is sufficient to distinguish this species. Immature limbs and trunks reddish-brown, pendulous branchlets common. Bracts of female catkins bird-like with a short head, long tail, and wings curved backwards. Trees to 20M (60 ft.) originating in Europe and the favorite horticultural birch in Washington. Naturalized on the Frazer Delta in Canada and along roadsides and other disturbed sites in Washington.

*Betula pendula* Roth  
 WEEPING BIRCH

19b Lateral buds widest at the base, 2-2.3mm long and about as broad, the tip appressed; end buds conical, pointed, 3-4.5mm long. Bud scales dark red to purplish-red, glabrous, or with a few ciliate hairs. Twigs grayish to reddish-brown, glabrous to gray woolly. Old, mature bark on trunks gray and scaly; spines common near the base of old trunks. Fruit (pommes) borne in pendant clusters of 3-5; in winter some empty outer skins persist after finches have eaten the seeds. Trees and shrubs 3-12M (10-40 ft.) tall, often in wet soil. Prefers sunny locations but is moderately shade tolerant in second growth woodlands.

*Pyrus fusca* Raf.

WESTERN CRABAPPLE

16b Buds generally 1mm or less, leaf scars distinct but minute, bundle scar one but usually obscure. Twigs numerous in erect, to ascending sprays, green, glabrous, and angular. Fruit a legume. Shrubs to 2.5M (8 ft) but usually less. Naturalized from Southern Europe and a pretty but noxious weed..

*Cytisus scoparius* (L.) Link

SCOT'S BROOM

## Group II, Roses

22a Native species. Prickles straight, perpendicular to the stem. Fruit, a globular red hip, commonly present.

23a Prickles nodal, fruit with persistent calyx lobes constricted near the middle.

24a Prickles stout, strongly flattened, usually in pairs. Fruit usually single or occasionally 2, 1.2-2cms, calyx lobes to 2cms. Shrubs seldom taller than 2M (6 ft). Widespread, mostly in sunny locations on well drained soil.

*Rosa nutkana* Presl

NOOTKA ROSE

24b Prickles needle-like, less flattened, often in pairs but commonly single, and absent from some branches. Fruit 6-12mm, mostly in clusters of more than 2. Shrubs 2M (6 ft) in wet, sunny habitats.

*Rosa pisocarpa* Gray

CLUSTERED WILD ROSE

23b Numerous internodal prickles, hips about 1cm, borne singly, calyx lobes early deciduous, Shrubs to 2M (6 ft) but often 1M (3 ft.); shade tolerant and common understory plant of lowland forests.

*Rosa gymnocarpa* Nutt

BALDHIP or LITTLE WILD ROSE

22b Alien species. Prickles nodal, inclined downward, either hooked or straight but tilted.

25a Fruit single, ellipsoidal, and greater than 10mm; prickles distinctly retorsely hooked.

26a Fruit and pedicels glabrous, calyx lobes early deciduous exposing a black pentagonal base. The only known population in Whatcom County is just south of Semiahmoo Park on the west side of the road.

*Rosa canina* L.

DOG ROSE

26b Fruit glandular, pedicels bristly; almost universal occurrence of large, tan "mossy" galls in Whatcom and Skagit Counties.

*Rosa eglanteria* L.

SWEETBRIAR

25b Fruit globular, about 5mm; in loose clusters, often of about 50. Prickles retorsely inclined, slightly hooked or straight. Horticultural along roads but expected to spread.

*Rosa multiflora* Thumb.

MULTIFLORA ROSE

### Group III, Blackberries

27a Stems sprawling or ascending to 2cm thick, reddish, greenish, or brownish but not glaucous. Leaves deciduous in harsh winters but usually present; leaflets 5 or occasionally 3, serrate-dentate and sharply tipped. Dried fruits, aggregate of drupelets, often present. A widespread aggressive alien weed.

*Rubus discolor* Weihe & Nees  
HIMALAYAN

Other similar species: *Rubus laciniatus*, EVERGREEN BLACKBERRY, has evergreen leaves deeply dissected and coarsely toothed. *Rubus leucodermis*, BLACKCAP, has ascending blue-glaucous stems, and, if leaves present, usually 3 leaflets.

27b Trailing woody vines, more slender and often white glaucous; leaves deciduous but commonly present, leaflets 3. Fruit usually absent. Common in newly formed sunny openings in woodlands.

*Rubus ursinus* Cham. & Schlecht,  
PACIFIC BLACKBERRY

### Group IV, Hawthorne & Crabapple

28a Thorns present on principal branchlets.

29a Thorns arising directly from the principal branchlets and perpendicular to them, usually with a bud adjacent to the base; dark red, shiny, and 1-2cms long. Buds dark reddish, several scales exposed, glabrous except the basal scales. Bud tips rounded or acute but not appressed. Lateral buds to 3mm, end buds twice as long. Fruit black but usually absent in winter. Trees to 10M (30 ft), and shrubs.

*Crataegus douglasii* Lindl.  
BLACK HAWTHORNE

29b Thorns at tips of short twigs bearing one or more leaf scars and/or buds. Fruit red with a single persistent style or none. Naturalized Eurasian trees to 10M (30 ft) along roads and on other disturbed ground.

*Crataegus monogyna* Jacq.  
ENGLISH HAWTHORNE

28b Thorns, if present, generally on short branches near the base of old trunks. Buds somewhat similar to those of *Crataegus douglasii* but the lateral buds have tips appressed and are shorter. See also 19b, page 5.

*Pyrus fusca* Raf.  
WESTERN CRABAPPLE

### Group V, Maples

30a Leaf scars large, usually meeting at a point, twigs and buds stout and seldom reddish. Terminal bud to 2.5cms; bundle scars 5-7. Trees to 30M (100 ft) with gray, ridged bark. Fruit support structures, often present and racemose, pendulous, to 10cms long. The fruit is a favorite food of Evening Grosbeaks, and commonly has been eaten or fallen by winter. Common tree in lowland woodlands.

*Acer macrophyllum* Pursh  
BIG-LEAF MAPLE

30B Leaf scars do not meet at a point; buds, twigs and fruit support structures smaller, buds commonly 3mm or less; bundle scars 3.

31a Buds and twigs reddish, glabrous; terminal bud present. A tree to 10M (30 ft) tall. Intolerant of shade, it occurs in openings in forests and along shores.

*Acer glabrum* Torr. var *douglasii*  
DOUGLAS MAPLE

31b Prominent tuffs of white hairs at the base of buds, terminal bud often lacking. Open grown in sunny exposures, it is an arborescent shrub or tree with multiple trunks and reddish twigs and buds. Shade tolerant, it is common in the understory of lowland second-growth forests where the twigs and buds are grayish or greenish, and sprawling, moss-covered trunks reach 10M (30 ft).

*Acer circinatum* Pursh  
VINE MAPLE

**Table I**  
**Willows with Ovoid Buds, Tips Appressed**

There are three willows in Western Washington with similar buds; *S. scouleriana*, *S. piperi*, & *S. hookeriana*. Twig and bud pubescence apparently is related to wetness of habitat. The extremes are *S. scouleriana*, glabrous in a very dry habitat; and *S. hookeriana* with dense pubescence and almost always growing in wet habitats. Other distinguishing features are given below.

	<i>Salix scouleriana</i>	<i>Salix piperi</i>	<i>Salix hookeriana</i>
Stipule scars present	X	X	
Twig size			
—Commonly >4mm		X	X
—more slender	X		
Twig & bud pubescence			
— <u>Densely pubescent</u>			X
—Variable pubescence	X	X	
Growth habit			
—Trees over 30'	X		
—Small trees	X	X	
—Shrubs	X	X	X
Habitat			
—Wet	X	X	X
—Well-drained, dry	X		
—Within 5 miles of coast			X
Earliest to bloom	X		
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