

Salix alaxensis Felt-leaf Willow

Leaf bud much smaller than catkin bud

Tall shrub or tree up to 10 m tall.

Stems elongate up to 1.5 m in one season, coated with whitish bloom or woolly; often a few persisting leaves, upperside reddish-brown glossy contrast with densely woolly off-white underside; stipules elongated; petioles sometimes inflated enveloping a winter bud; catkin buds start developing in winter; bud scale does not split at the tip but detaches from the base, revealing the white silk catkin, leaf buds much smaller than catkin buds. Riverbanks, sandbars, wetlands, disturbed sites.



Shrub 3 to 5 m tall. Thin whiplike twig tips; catkin buds and leaf buds minute; dried leaves elongated, curled, finely toothed at the margin, hairy underneath. Mostly interior Alaska, on sandbars along streams and in disturbed sites.



Leaves dry grey-black above, pale grey underneath; catkin buds conical, elongate, diverging from the stem, slightly larger than leaf buds; large dark grey-brown "willow rose " galls often numerous on fastgrowing shoots. Similar but reddish-brown "rose" galls also on *S. commutata*, *S. hookeriana*, and *S. richardsonii*.

Very common shrub in moist sites along highways and disturbed sites. Form extensive coastal and subalpine thickets associated with other willows.

Winter descriptions



Bebb's Willow

Erect shrub 1 to 8 m tall, branching from low near the base, stems contorted and knobby when heavily browsed, branches often at right angle to the stem as for S. scouleriana and S. commutata; curled dried catkins light tan, loose because each capsule hangs from a long stipe; winter buds small, shiny red, or densely covered with white hair; catkin buds 3.5-5 mm long, only slightly larger than the leaf buds 2.5-4 mm long; rosette gall very small, about 10 mm long and diagnostic for the species; hollow stem gall sometimes on tips of fast growing shoots, single-chambered with hole through the leaf petiole scar from which the gall-inducing insect emerged.

Disturbed sites, open forest, lake shores, wetlands.



Shrub 0.5- 3 m tall. Often branching at right angle to the stem; young twigs and buds white hairy; catkin buds only slightly larger than the leaf buds; occasionally large reddishbrown "rose" galls. Wetlands.



Salix glauca Gray-leaf Willow

Shrub 1-2 m tall.

Twigs and winter buds dull grey from the dense hair cover; appearance of catkin buds similar to leaf buds; female catkins, dried leaves, and sometimes dried stipules remain on the shrub over winter; dried leaves tend to be curled end to end. Treeline thickets, lake shores, spruce-birch forest. *S. niphoclada* is very similar to *S. glauca*.



Salix hookeriana Hooker's Willow

Shrub 1- 3 m tall, many-branched from the base. Young twigs and wintering buds densely white hairy; catkin buds developing early in the spring, twice as large as leaf buds; erect dry catkin; sometimes large egg-shaped reddish brown "rose" galls. Coastal meadow thickets only.



Salix lasiandra Pacific Willow

Tall erect shrub or tree up to 7 m tall and trunk up to 30 cm in diameter. Trunk greyish-black, deeply furrowed, numerous twigs sprouting for the whole length of the trunk; twigs feeling wax-coated to the touch, brown or greyish green in midwinter, yellow-green in spring; catkin buds slightly larger than leaf buds; dried leaves grey, lance-shaped.

Bank of fast moving creeks, wetlands, and disturbed sites.



Salix pulchra Diamond-leaf Willow

Shrub 0.5-2 m tall, many-branched from the base.

Elongated dried stipules usually persisting several years on glossy red twigs; catkin buds dark shiny and long-beaked, much larger than the leaf buds; hairless catkin buds may develop and show some catkin silk as early as February; diamond-shaped leaves, reddish above, pale underneath with untoothed margin often persist; reddish-brown rosette gall, small (1-2 cm) with pointed scales and long white silk at the center, diagnostic for the species when present.

Riverbanks, wetlands, muskegs.



Shrub many-branched, 0.5 - 2 m tall.

Stem hairy, large dried leaflike stipules persist on the stem, giving a rough appearance to the shrub; catkin buds develop early in the spring, much larger than the leaf buds; leaves dry reddish brown.

Associated with other willows, forming thickets above timberline.



Salix scouleriana Scouler's Willow

Large shrub or tree up to 20 m tall. Usually several trunks with new shoots arising from the root crown. Trunk bark grey, smooth; branching often at right angle to the stem as for S. bebbiana, but stouter and "knobby" from the enlarged leaf scars, catkin buds round-oval with an elongated tip, not shiny, much larger than leaf buds; catkin buds develop by midwinter, the bud scales remain attached at the base but split open to the tip exposing the emerging catkin's white silk, making this willow very conspicuous in late winter. Sometimes hollow stem gall with several communicating chambers at the end of stem often with dried leaves still attached. Similar galls on S. bebbiana have a single chamber, are in the middle of the stem, and usually without attached dried leaves. Common in mixed forest in the lowlands and in disturbed sites.



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Shrub or small tree 1-8 m tall.

Stems from fast-growing suckers shiny reddish-brown; slow-growing upper canopy twigs knobby at the leaf scars, silvery grey, hollowed enlarged parasited buds divergent from the stem; catkin buds flattened on the back like a duck bill early in the winter, fuller but still showing a lateral pleat later, only slightly larger than the leaf buds that are blunt at the tip, terminal gall on fast-growing shoots very characteristic; sometimes distinctive insect-induced swelling on slow-growing twigs; underside of leaves and disformed leaves on the terminal galls covered with short silvery hairs.

Often dominating species in coastal willow thickets. Disturbed sites and creek banks in the forest zone.