





Family: Betulaceae Common name: Mountain Alder

Alnus viridis (A. viridis ssp. fruticosa)

Tall spreading shrub, 3-8 m tall (less in Arctic),

Bark: Often reddish or greyish.

Flowers; In dense clusters, small pale yellow.

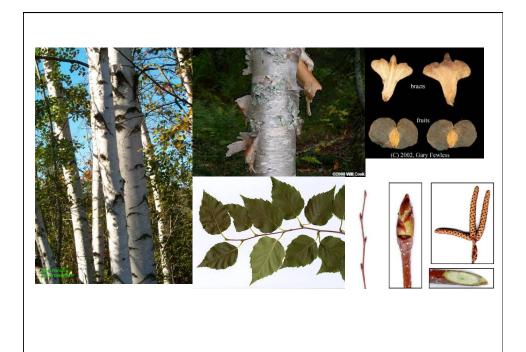
Fruit: Samaras (nut-like cones) 2-3 cm long,

with stalks.

Leaves: Opposite, simiple, coarsely and irregularly toothed, prominent veins.

Habitat: Well drained, moist soils, along creeks, or dense shrublands near treeline, also alder

savannas in areas of frost boils.



Betula neoalaskana

- Common name: Paper Birch
- White bark exfoliates into paper-thin sheets. Externely waterproof (used for canoes).
- Seeds and bracts disperse all winter.



Larix laricina

Family: Pinaceae Common name: Tamarack

- <u>Deciduous</u> needle leaves.
- Small rounded cones 1-2 cm x 0.5-1.0 cm
- Mostly, wet, poorly drained habitats, but can occur on uplands









Text from: http://nature.ca/aaflora/data/www/erlopr.htm

Loiseleuria procumbens

Family: Ericaceae Common name: alpine azalea

Vegetative morphology:

Plants $5-10~{\rm cm}$ high; shrubs; dwarf shrubs, or low shrubs. Horizontal stems at ground level, branching extensively to shape plant habit as mats

Leaves present; distributed along the stems; alternate; persistent and marcescent. Blades 4–8 mm long, 1–2.5 mm wide, oblong or elliptic, involute, veins pinnate (with midvein impressed into the adaxial surface) or appearing single-veined.

Reproductive morphology:

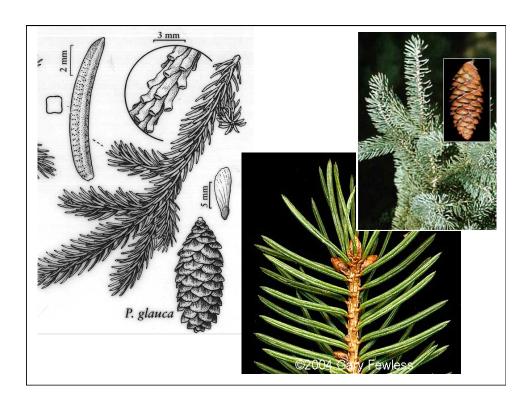
Flowering stems two or more per plant. Flowers solitary, or in inflorescences. $\label{eq:flower} % \begin{center} \end{center} \begin{center$

Sepals conventional; 5; fused (at the base); 2–2.5 mm wide; red (burgundy).

Petals conventional; fused; 5; white, or pink; 6–9 mm long

Stamens 5. Anthers reddish, becoming yellow. Anthers opening with a terminal pore. Anthers 0.4–0.6 mm long (without horns).

Nectaries present (in a ring around the base of the ovary). Ovary superior; carpels 3–5; syncarpous. Ovaries oblong; glabrous



Picea glauca

Family: Pinaceae

Common name: White Spruce

- Spire-shaped trees (sometimes very stunted elfin forests in mires) with little taper to crown.
- Cones elliptical, 2.5 to 6 cm long, more papery scales than *P. mariana*.
- Mostly better drained habitats, along streams, and near treeline.
- Smooth new stems, no hairs between needles.



Picea mariana

Family: Pinaceae

Common name: Black Spruce

- Spire-shaped small trees (sometimes very stunted elfin forests in mires) with little taper to crown.
- Small rounded cones 1.5-3 cm x 0.5-1.0 cm, often clustered in masses near top of crown, persisting for many years.
- Mostly, wet, poorly drained habitats, but can occur on uplands.
- Evergreen needle leaves, whitish stomates on all surfaces.
- **Reddish to blackish hairs along new stems between needles.



Populus balsamifera

Family: Salicaceae

Common name: Balsam Poplar

- Medium to large deciduous trees.
- Buds resinous with balsam, fragrant (vanilla like) with numerous bud scales.
- Course brown bark near base of tree, smoother toward top.
- Male and female catkins on separate trees (dioecious), pedulate.
- Fruits: small 2-valved dry capsule, with many cottony seeds.
- Leaves finely toothed, deltoid, shiney dark green.



Populus tremuloides

Family: Salicaceae Common name: Quaking Aspen

Whitish to gray non papery bark, curved scars, black knots.

Leaves round with short point, with slender flattened petioles, that tremble with slightest breeze. Small rounded teeth,

Habitats: South facing well drained soils with no permafrost, to treeline in the Brooks Range. Often follows fire and persists for 80-100 years. Often propagates from root suckers.

Fruits are capsules, nearly stalkless, 2 parted, with many tiny cottony seeds.



Family: Rosaceae

Common name: Prickly Rose

Rosa acicularis

Spiny much branched shrub (0.3-2.2m) high.

Leaves: Alternate, pinnate (5-9 cm long). Mostly 5 (3-9) leaflets, paired except at end, rounded at both ends, edges toothed.

Flowers: Large (4-6 cm diam.), Usually 1, sometimes 2-3 at end of twigs, pink to rose petals.

Fruit: Ellptic or rounded "hip", rich in Vitamin C. Food for grouse and other birds.

Habitat: Shaded undergrowth of deciduous and white spruce forest, with aspen on old burns. Common in interior and most of Alaska. Some warm areas of the Arctic, near Umiat and Sadlerochit Springs.





http://www.phytochemicals.info/ plants/raspberry.php



http://www.unigraz.at/~oberma/ baum-dias/rubusidaeus.htm



http://www.uni-graz.at/~oberma/baum-dias/rubus-idaeus.htm

Family: Rosaceae

Common name: American Red Raspberry

Rubus idaeus

Deciduous thorny shrub, 0.6-1.2 m tall.

Common raspberry in the interior.

Leaves: pinnate, 6-18 cm long, with very narrow paired stipules, 3-5 leaflets, ovate, toothed margins, green mostly hairless above, graygreen and hairy beneath.

Flowers: 5 narrow hairy sepals, 5 white petals.

Fruit: aggregate, red raspberry with many hairy drupelets.

Habitat: Common in openings and borders of forests in much of Alaska, and roadside weed. Occurs in most of Alaska except tundra north of Brooks Range. Several other species of *Rubus* are common in southern and SE Alaska.

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Family: Salicaceae Common name: Feltleaf Willow

Salix alaxensis

- Tall shrub: 100-400 cm (up to 700 cm), one of the tallest growing willows in the Arctic.
- Branches: Dense villous branchlets.
- Flowers: Precocious, flowers before leaves form in early spring
- Leaves: White very dense hairs (felty) on underside. Blade margins revolute.
- Habitat: Streamsides, sand dunes. Very common early colonizer, calcareous soils. Favorite moose and caribou browze.
- Distribution: Broadly amphi-Beringian, from Taimyr in Russia to Hudson Bay Canada.



Salix arbusculoides

Family: Salicaceae Common name: Littletree Willow

Often tall shrub, Up to 8 m.

Reddish stems on older shoots. Yellowish brown when young.

Leaves: Narrow ellipitical lanceolate. Short pointed both ends. Shallowly dentate, all

around the blade. Margins of leaves glandular.

Flowers: Precocious, before leaves.

Capsules: small, thin silvery, hairy. Ripen early

 $\label{thm:continuous} \mbox{Habitat: Mostly in the forest and along streams in the Interior of Alaska, to treeline, not a } \\$

common tundra species, but grows along some streams in the Arctic. Common

successional species following fires in black spruce.









Salix arctica Family: Salicaceae Common name: arctic willow

Stems: Prostrate, creeping reddish, and much branched, rooting at the nodes. Frequently forming dense mats Less than 10 cm tall.

Extremely variable in growth form and size and shape of the leaves.

Leaves: 2-7.5 cm long, with fairly long petioles (about 1/3 length of leaf) mature leaves **ovate to obovate**, entire margin, upper surface often shiny green usually without hairs, lower surface and margins often with sparse long villous pubescence.

Catkins: Relatively large (to 10 cm) on erect peduncles.

Capsules: Broad with scattered hairs, reddish to pale brown, ripening mid-Aug.

Habitat: Wide range of habitats. Dry to moist, even wet, mineral-rich meadows and tundra.





Photo: Jack Gillette

hoto: Martha Raynolds





http://nature.ca/aaflora/data/www/wlsaar.htm

http://nature.ca/aaflora/data/www/wlsaar.htn

Family: Salicaceae Common name: Bebb Willow

Salix bebbiana

Tall shrub: Multi-stemmed shrub or small tree 200-600

cm (up to 700 cm)

Flowers: Flowers on short leafy stalks before or with

leaves.

Seed capsules: long"beak" very slender.

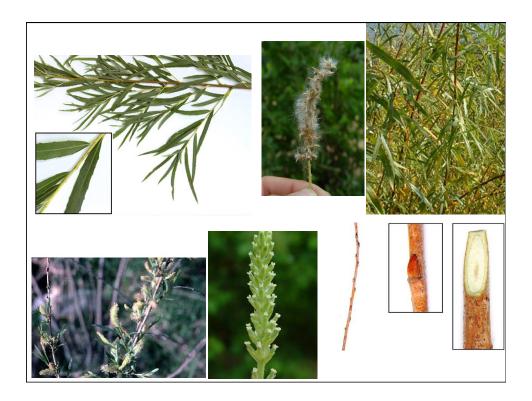
Leaves: Net of veins usually evident Slightly saw-toothed. Dull green. Whitish or dull green, hairy

beneath.

Habitat: , one of the commonest willows in Fairbanks

forests.

Common in black spruce and white spruce forests. Strongly broken ranches by winter snow. Favorite moose and caribou browse.



Family: Salicaceae

Common name: Sandbar Willow

Salix interior

Tall (up to 6 m) riparian willow.

Stems: Multiple from base, long, erect, often unbranched.

Leaves: Long and narrow, with shallow, widely spaced teeth.

Common colonizer along the Tanana and interior rivers, but uncommon in later stages.





Family: Rosaceae

Common name: Beauverd Spirea

Spiraea beauverdiana

Small (30-60 cm) much-branched deciduous.

Leaves: Simple, with short petioles, blades elliptical to ovate 1.5-5 cm long, 1-3 cm wide, rounded at both ends with <u>teeth most conspicuous</u> <u>near the leaf tip</u>.

Twigs: Purplish brown, slender, hairy when young, afterwards shedding outer bark in long thin strips.

Flowers: In flattened clusters (corymbs) 2-4 cm across, Flowers small (about 6 mm) with 5 triangular sepals bent down, 5 white or rose-tinged petals.

Fruit: Usually 5 podlike follicles less than 3 mm long, shiny brown, hairy, with 2 to several seeds. Persistent in winter.

Habitat: Common tundra and black spruce from lowlands to alpine except in SE Alaska and north of Subzone E in the tundra.