

Boxelder (Ash-Leaved Maple)

Acer nugundo (ae'-sir ne'gun'-doe)

Family: Aceraceae, Maple <http://www.cmg.colostate.edu/Treed/Boxelder.html>

Key Steps

- [1a - Leaves opposite](#)
 - [2b - Leaves compound](#)
 - [14a - Leaves are pinnately compound.](#)
 - [15a - Leaflets are not uniform in shape; margins are lobed and/or coarsely toothed; leaf scars meet across the stem. — Boxelder](#)

Description



Leaf: Usually 3-5 leaflets, rarely 7-9. Coarsely toothed and/or lobed. Odor when crushed.

Bud: White, hairy. Terminal bud present. 4+ exposed scales.

Leaf Scar: Scars meet across the stem at sharp angles. May have tiny red glands above.

Stem: Greenish-purple, smooth, hairless but sometime white "powder" on new growth. Powder rubs off. Stem smells bad when bruised. Raised lenticles.

Bark: Smooth, light gray-brown. Narrow vertical furrows.

Pith: Large, white, solid.

Flower: Yellowish-green, before leaves appear. Tree dioecious (either male, seedless; or female, seeds).

Fruit: Double samaras hang in clusters all year on female trees.

Habit: Messy form and seeds. Can be multi-stemmed. Irregular branching. Short-lived. Very fast growing, therefore weak branching structure prone to storm damage.

Green Ash

Fraxinus pennsylvanica (frak'-si-nus pen-sil-va'-ni-ka)

Family: *Oleaceae*, Olive

Key Steps

- 1a - Leaves opposite.
 - 2b - Leaves compound.
 - 14a - Leaves are pinnately compound.
 - 15b - Leaflet are uniform in shape; margins are smooth or slightly serrated; leaf scars do not meet across the stem.
 - 16a - Bud sits on tops of leaf scar; leaflet margins toothed, especially above the middle. — Green Ash

Description



Culture: Adaptable to many soils. Moderate moisture requirement. Extremely prone to Liliac/Ash Borer in streets and restricted root spread sites.

Cultivars: 'Marshall's Seedless' - no fruit, 'Summit' - narrow upright, with fruit. 'Emerald' - seedless, dark green foliage.

Leaf: Oddly pinnate, 5-9 leaflets, egg-shaped, long pointed tips, wedge base. Smooth margin below the middle, slightly toothed above. Shiny green. Petiole slightly "winged".

Bud: 1/2 inch long or less, 2-3 pair of brown, fuzzy scales. Terminal bud and two nearest lateral buds form a shape like a king's crown made of suede.

Leaf Scar: Half circle or shield-shaped, straight across top. Many bundle scars from a continuous half circle with leaf scar. Bud sits at top of leaf scar. Leaf scars do not meet across stem.

Stem: Gray-brown, pale lenticles, stout, stiff, compressed at nodes. Long ridges. May be hairy.

Bark: Vertical ridges from a diamond-shape; ridges are flat on top like they've been planted.

Pith: Six-sided, white

Flower: Green to reddish-purple, tiny.

Fruit: Samaras, single wing shaped like a canoe paddle. Pointed at top, round at other end. 1 to 1 3/4 inches long.

Habit: Large shade tree to 60+ feet tall by 30 feet wide. Several main branches, irregular spreading.

Plains Cottonwood

Populus sargentii

or Eastern Cottonwood, *P. deltoides*

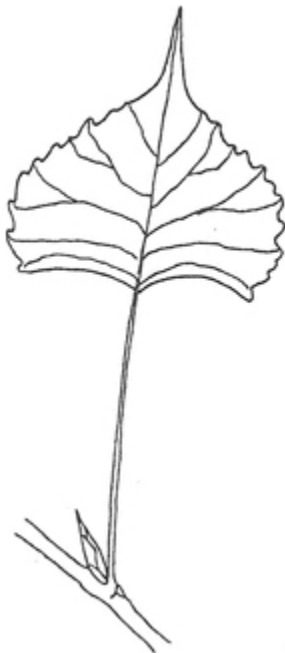
Family: *Salicaceae*, Willow

Key Steps

- 1b - Leaves alternate.
 - 18a - Leaves simple.
 - 19a - Thornless.
 - 22c - All the leaves are unlobed.
 - 31a - Leaf is triangular or diamond/wedge-shaped.
 - 32b - Petiole is flat.
 - 34b - Form of plant is tall, wide, open. — Plains Cottonwood



Description



Bud: Lateral buds: lowermost bud scale is centered directly over the leaf scar (typical of all species of Poplar). Buds are larger (over 1/2 inch), pointed, shiny, and can be green, yellow or gray. Stick out away from stem. May be gummy. Terminal bud present.

Leaf Scar: Crescent-shaped, 3-6 bundle scars. Very noticeable stipule scars (horizontal lines) on either side of the leaf scar.

Stem: Knobby (due to the enlarged nodes) and grayish-green.

Bark: Gray, thick ridges and deep furrows.

Pith: Brown, solid, 5-sided.

Flower: Male and female flowers on separate trees.

Flowers appear before leaves. Drooping catkins.

Fruit: Capsules split open to release small seeds that are on a mat of long silky hairs (cotton). Note: *P. deltoides* 'Siouxland' is cottonless.

Habit: Large, open form. Several main branches. Colorado native to the plains and foothills.

Culture: High water needs.

Leaf: Triangular, glossy with flat base, pointed tip. May have 2 or 3 glands near base of leaf at top of flat petiole which is 2 1/2 to 4 inches long. Margins have large rounded to pointed teeth. 3-5 veins meet at leaf base.

Lanceleaf Cottonwood

Populus acuminata (pop'-u-lus a-ku-mi-na'-ta)

Family: *Salicaceae*, Willow



Key Steps

- 1b - Leaves alternate.
 - 18a - Leaves simple.
 - 19a - Thornless.
 - 22c - All the leaves are unlobed.
 - 31d - Leaf is oval or oblong (twice as long as wide).
 - 40b - Base of leaf even. Symmetrical.
 - 43b - Leaf margin not wavy or only slightly wavy. Margin obviously toothed.
 - 44a - Petiole long, 1-3 inches. — Lanceleaf Cottonwood

Description



Bud: Terminal bud 1/2 inch long, shiny, brown, may be gummy. Lateral buds smaller, flattened against stem.

Leaf Scar: Raised.

Stem: Pale yellow brown, smooth, slender, round.

Bark: Older stems are light gray-brown.

Pith: 5-sided.

Fruit: Catkins 4-5 inches long.

Habit: Dense, round crown. 40 feet tall. Colorado native.

Culture: High water requirement.

Leaf: 2-4 inches long. 1-2 inches wide. Oval or egg-shaped, pointed tip, round or wedge-shaped base. Base and tip smooth, rest toothed. Deep glossy green above, dull green below. Veins are light yellow. Two glands at top of round, long petiole.

Key to Identifying Common Colorado Landscape Trees

Narrowleaf Cottonwood

Populus angustifolia (pop'-u-lus an-gus-ti-fol'-e-a)
Family: *Salicaceae*, Willow



Key Steps

- 1b - Leaves alternate.
 - 18a - Leaves simple.
 - 19a - Thornless.
 - 22c - All the leaves are unlobed.
 - 31c - Leaf is long and narrow (3-4 times longer than wide).
 - 37b - More than one bud scale.
 - 39a - Stem yellowish-green to gray. Catkins drooping. — Narrowleaf Cottonwood

Description



Bud: Brown, sticky, 3-5 thin scales. 1/2 inch long. Slender, pointed. Lateral buds may be curved outward.

Leaf Scar: Oval, Three bundle scars.

Stem: Slender, round, smooth, yellow-green when young. Pale lenticels.

Bark: Gray furrowed.

Pith: Greenish to light brown, 5-pointed, solid.

Flower: Male and female on separate trees.

Fruit: Egg-shaped capsule on drooping catkins which release hairy brown seeds.

Habit: Tall, oval. Colorado native usually found along streambanks and wet areas. To 40 feet tall. Suckers.

Culture: High moisture requirement.

Leaf: Narrow (3/4 to 1 1/2 inches wide) by 2-6 inches long. Broadest near the middle, round base, very pointed tip, finely toothed. Sticky underneath Short petiole. Stout yellow midrib (central vein).

<http://www.cmg.colostate.edu/TreeID/CottonwoodNarrowleaf.html>

Peachleaf Willow

Salix amygdaloides (sa'-liks a-mig-da-loy'-dez)

Family: *Salicaceae*, Willow

Key Steps

- 1b - Leaves alternate.
 - 18a - Leaves simple.
 - 19a - Thornless.
 - 22c - All the leaves are unlobed.
 - 31c - Leaf is long and narrow (3-4 times longer than wide).
 - 37a - One bud scale.
 - 38b - Branches not as droopy. Leaf not as narrow (3/4 to 1 1/4 inches wide). — Peachleaf Willow

Description



Bud: One bud scale. Egg shaped, shiny. Brown on top, light orange below. 1/8 inch long. Hugs stem. True terminal bud absent.

Leaf Scar: Narrow, nearly straight across. 3 bundle scars. Very small stipule scars.

Stem: Branches a little drooping. Shiny, yellow-orange or brown. Slender and smooth.

Bark: Blackish.

Pith: White, solid, small.

Flower: Yellow-green, hairy catkin, 1 inch long.

Fruit: Cottony capsule.

Habit: Not as weeping as Weeping Willow. Colorado native found along streambanks. 40-60 feet tall.

Culture: Moist conditions

Leaf: 2-6 inches long, 1 inch wide. Broadest below the middle. Dark yellowish-green, whitened beneath. Very long pointed, fine toothed, leathery. May have small, kidney-shaped stipules. Petiole very slender, may be twisted, no glands. Leaf may have large, yellow, central vein.