

Key to Genera of Common, Wildland Woody Plants of Northern Utah

Stephen L. Clark
Copyright 1987

1. Leaves needle-like, or scale-like. Key 1
1. Leaves not needle-like, nor scale-like (2)
 2. Leaves and branches alternate (3)
 2. Leaves and branches opposite (4)
3. Leaves simple. Key 2
3. Leaves compound. Key 3
 4. Leaves simple. Key 4
 4. Leaves compound. Key 5

Key 1. Leaves needle-like, or scale-like.

1. Leaves scale-like; cones round, bluish purple or grey. Juniperus (Juniper, Western Red Cedar)
1. Leaves needle-like; cones elongated, scaly, brown when mature (2)
 2. Leaves grouped together in clusters of 2 to 5. Pinus (Pine)
 2. Leaves borne singly (3)
3. Needles round in cross section. Pinus (Single leaf pinyon)
3. Needles flattened or 4-sided in cross section (4)
 4. Leaves 4-sided in cross section; branches with rough persistent leaf bases. (Spruce)
 4. Leaves flattened in cross section; branches without rough leaf tissue (5)
5. Cones with 3-forked bracts extending from the scales; needles slightly constricted at their base. Pseudotsuga (Douglas fir)
5. Cones without 3-forked bracts; needles without a constricted base. Abies (Fir)

Key 2. Leaves alternate, simple

1. Leaves at least 15 times longer than wide, entire. Chrysothamnus (Rabbit Brush)
1. Leaves not 15 times longer than wide, entire, lobed, or variously toothed (2)
 2. Veins in leaves palmately arranged (3)
 2. Veins in leaves pinnately arranged (8)
3. Leaf margin, or tip lobed (4)
3. Leaf margin, or tip not lobed (7)
 4. Stems with milky or resinous juice; plants strongly aromatic. (Skunk Bush)
 4. Stems without milky or resinous juice; plants not strongly aromatic (5)
5. Pith with partitions and chambers. Ribes Currant
5. Pith without partitions or chambers (6)
 6. Bark of older stems shreddy. Physocarpus (Ninebark)
 6. Bark not shreddy. Rubus (Thimble Berry)
7. Shrubs. Ceanothus (Deer Brush)
7. Trees. Celtis (Hackberry)
 8. Leaves lobed (9)
 8. Leaves not lobed (11)

- 9. Leaves 3 to 5 inches long. Quercus (Oak)
- 9. Leaves less than 2 inches long (10)
 - 10. Leaves 1 to 2 inches long. Artemisia (Sagebrush)
 - 10. Leaves less than 3/4 inch long. Purshia (Bitterbrush)
- 11. Trees (12)
- 11. Shrubs (23)
 - 12. Leaf margins entire (13)
 - 12. Leaf margins toothed (14)
- 13. Leaf margins curled inward toward undersurface of leaf. Cercocarpus (Curl leaf Mountain Mahogany)
- 13. Leaf margins not curled inward. Elaeagnus (Russian Olive)
 - 14. Teeth on leaf margins double (15)
 - 14. Teeth on leaf margins single (17)
- 15. Leaf bases equal (16)
- 15. Leaf bases unequal. Ulmus (Elm)
 - 16. Stems with thorns. Crataegus
 - 16. Stems without thorns. Alnus
- 17. Thorns present. Crataegus (Hawthorn)
- 17. Thorns absent (18)
 - 18. Petioles with a pair of small dark glands near the base of the leaf blade. Prunus (Chokecherry)
 - 18. Petioles without glands (19)
- 19. Shrubs. Salix (Willow)
- 19. Trees (20)
 - 20. Leaves with unequal leaf bases. Ulmus (Elm)
 - 20. Leaves with equal leaf bases (21)
- 21. Thorns present. Crataegus (Hawthorn)
- 21. Thorns absent (22)
 - 22. Bark reddish-brown, glossy. Betula (River Birch)
 - 22. Bark grey, or whitish green (May be darker brown and deeply furrowed on older stems). Populus (Aspen, Cottonwood, Poplar)
- 23. Prickles present on stems. Ribes (Gooseberry)
- 23. Prickles absent (24)
 - 24. Leaf margin entire. Salix (Willow)
 - 24. Leaf margin toothed (25)
- 25. Leaf margins with minute teeth; a pair of small, dark glands present on petiole near base of leaf blade. Prunus (Chokecherry)
- 25. Leaf margins with coarse teeth; glands absent (26)
 - 26. Teeth on leaves double. Alnus
 - 26. Teeth on leaves single (27)
- 27. Lower leaf surface glandular pubescent. Holodiscus
- 27. Lower leaf surface pubescent or glabrous, but not glandular (28)
 - 28. Veins on leaves prominent, ridged; teeth present on entire leaf margin. Cercocarpus (Birch Leaf Mountain Mahogany)
 - 28. Veins on leaves not prominent, not ridged; teeth present only on forward half of leaf margin. Amelanchier (Service Berry)

Key 3. Leaves alternate, compound

1. Trees. Sorbus Mountain Ash)
1. Shrubs, or vines (2)
 2. Leaves with 3 glossy green drooping leaflets. Toxicodendron (Poison Ivy)
 2. Leaves with 3 to many leaflets (3)
3. Stems with prickles (4)
3. Stems without prickles (6)
 4. Stems red, or reddish brown. (Wild Rose)
 4. Stems green or brown (5)
5. Stems erect. Rubus (Wild Raspberry)
5. Stems spreading. Rubus (Evergreen Black Berry)
 6. Leaf margins with sharp spiny teeth. Mahonia (Oregon Grape)
 6. Leaf margins without spiny teeth (7)
7. Leaves with 3 to 7 leaflets. Potentilla (Cinquefoil)
7. Leaves with 11 or more leaflets (8)
 8. Leaflets with rounded teeth; stems with milky juice (Sumac)
 8. Leaflets with sharp pointed teeth; stems without milky juice. Sorbus (Mountain Ash)

Key 4. Leaves opposite, simple

1. Leaves deeply palmately lobed. (Maple)
1. Leaves not as above (2)
 2. Leaves toothed. Pachistima (Mountain Lover)
 2. Leaves not toothed (3)
3. Bark of some stems distinctly red in color. Cornus (Red Osier Dogwood)
3. Bark not red in color (4)
 4. Leaves 2 to 3 inches long. Lonicera (Twin Berry Honeysuckle)
 4. Leaves less than 1 1/2 inch long (5)
5. Leaf tip rounded; bundle scar 1. Symphoricarpus (Snowberry)
5. Leaf tip gradually tapering to a blunt point; bundle scars 3. Lonicera (Honeysuckle)

Key 5. Leaves opposite, compound

1. Plants vine-like. Clematis (Clematis)
1. Plants trees, or shrubs (2)
 2. Trees; leaves with 3 to 5 leaflets; stems not pithy. Acer (Boxelder)
 2. Shrubs; leaves with 5 to 7 leaflets; stems pithy. Sambucus (Elderberry)

DIVISION PINOPHYTA

1. Leaves scale-like or acicular, opposite; fruit berry-like. Cupressaceae

1. Leaves narrowly linear, spirally arranged on the stem. Pinaceae

Cupressaceae

Juniperus L.

1. Leaves always acicular, jointed at the base.

J. communis

1. Leaves scale-like, never jointed (2)

2. Edges of leaves minutely serrulate (as seen through a hand lens). J. osteosperma

2. Edges of leaves never serrulate. J. scopulorum

J. communis L var. depressa Pursh

J. osteosperma (Torr.) Little

J. scopulorum Sarg.

Pinaceae

1. Leaves in clusters of 2-5 (except in P. monophylla which has but one leaf that is round in cross section). Pinus

1. Leaves not in clusters, but borne singly, 4-sided or flattened in cross section (2)

2. Leaves 4-sided in cross-section; branches with rough persistent leaf bases. Picea

2. Leaves flattened in cross-section; branches without rough leaf bases (3)

3. Cone scales persistent; cones with conspicuous forked bracts. Pseudotsuga

3. Cone scales deciduous: cones without bracts. Abies

Abies Mill.

1. Cones gray-green; resin ducts of the leaves positioned adjacent to the lower epidermis. A. concolor

1. Cones dark brown-purple; resin ducts of the leaves positioned centrally. A. lasiocarpa

A. concolor (Gord. & Glend.) Lindl.

A. lasiocarpa (Hook.) Nun.

Picea A. Dietr.

P. engelmannii Parry ex Engelm.

Pinus L

1. Leaves solitary. P. monophylla

1. Leaves in clusters of 2 or 5 (2)

2. Leaves in clusters of 2. P. contorta

2. Leaves in clusters of 5. P. flexilis

P. contorta Dougl.

P. flexilis James

P. monophylla Torr. & Frem.

Pseudotsuga Carr.

P. menziesii (Mirb.) Franco var. glauca (Biessn.) Mayr