



TREE AND SHRUB ID GUIDE for LIVE STAKE HARVESTING

Live Stake Cooperative

Live Stake Cooperative Partners

Chesapeake Conservancy

Pennsylvania Department of Conservation and
Natural Resources

Susquehanna University

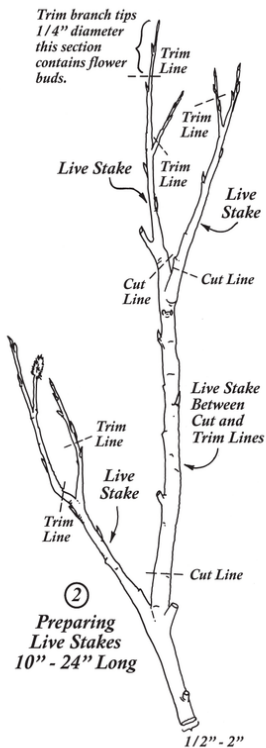
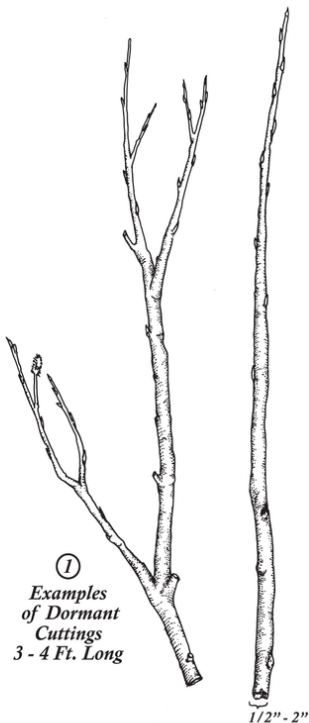
Merrill Linn Land & Waterways Conservancy

How to harvest live stakes:

Collect live stakes in late fall through early spring while plants are still dormant. Use a pair of loppers or pruning shears to cut straight stems. Each stake should be between 10 – 36 inches long and between ½-inch and 1 ½-inch in diameter. Make a straight cut on the top end of the branch, removing the terminal bud and any side branches. Cut the bottom end at an angle to form a point. The angle cut at the bottom is important so that it gets installed with the proper growth orientation. Do not remove more than 30% of the source plant and allow it to regrow several years before harvesting again. Package and label each species collected appropriately.



Dormant Cuttings



Multiple live stakes can be prepared from one dormant cutting.

TREES

Sycamore – *Platanus occidentalis*



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Leaf: Alternate, simple, palmately veined, 4 to 8 inches wide, ovate in shape, with three to five lobes, margins coarsely toothed, petiole bases encircle and enclose the buds, veins may be pubescent below.

Flower: Species is monoecious; imperfect, both male and females are very small and appear in dense round clusters, typically a single cluster to a stalk, appearing with the leaves.

Fruit: A spherical multiple of achenes borne on a 3 to 6 inch stalk. Each seed is tiny, winged, and 1/2 inch long; maturing in November, disseminating in late winter.

Twig: Obviously zigzag, quite stout and orange-brown in color; leaf scar surrounds the bud and the stipule scar surrounds the twig; terminal bud is absent; lateral buds are reddish, resinous, with a single, cap-like scale

Quaking Aspen - *Populus tremuloides*



Quaking Aspen - *Populus tremuloides*

Leaf: Alternate, simple, 1 to 3 inches long, green above and paler below, heart-shaped to nearly round with a fine toothed margin, petiole is flattened.

Flower: Species is dioecious; male and female hanging catkins 1 to 3 inches long.

Fruit: Catkin (2 to 4 inches long), with attached light green capsules which contain many small hairy seeds.

Twig: Slender, glabrous, reddish brown often with a gray, waxy film; buds conical, reddish brown, terminal bud 1/4 inch long, may be slightly resinous.

Pussy Willow – *Salix discolor*



Pussy Willow – *Salix discolor*

Leaf: Alternate, simple, elliptical to oblong, weakly serrated, 2 to 4 inches long, may be fuzzy, blue-green above, pale almost white below.

Flower: Species is dioecious; catkins, both males and females very fuzzy, silvery gray, 1 inch long, appearing in late winter or very early spring.

Fruit: Small, brown capsules in clusters 2 to 2 1/2 inches long, each containing many small fuzzy seeds, ripen in late spring.

Twig: Slender, green or red, may be fuzzy, buds purple-red with a single cap-like scale.

Black Willow – *Salix nigra*



Black Willow – *Salix nigra*

Leaf: Alternate, simple, pinnately veined, lanceolate in shape, 3 to 6 inches long, with a finely serrate margin. Leaves are dark and shiny above, light green below.

Flower: Species is dioecious; flowers are tiny, green, borne on catkins, 1 to 3 inches long, early summer.

Fruit: Cone-shaped capsules that contain many small, cottony seeds, borne on catkins; capsules split at maturity, mid summer.

Twig: Slender, orange-brown in color, with a bitter aspirin taste; buds are small and appressed, covered by one bud scale, the terminal bud absent; stipules/scars are obvious.

Silky Willow – *Salix sericea*



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Silky Willow – *Salix sericea*

Leaf: 6–10 cm long, 7–8 mm wide, glaucous (whitened) and sericeous (silky-hairy) beneath.

Flower: Catkins are sessile and usually bracteate. *S. sericea* blooms in May and fruits in June

Twig: thin and purplish

SHRUBS

Speckled Alder – *Alnus incana*



Speckled Alder – *Alnus incana*

Leaf: Alternate, simple, oval, doubly serrated, 2 to 4 inches long, dull dark green above, paler and may be velvety below

Flower: Species is monoecious; in small clusters, preformed male catkins are 1/2 to 1 inch long, slender and green; females are much smaller, reddish green, open in early spring.

Fruit: Cone-like, 1/2 inch long, brown when ripe, each scale enclosing a very small winged seed, mature in late summer, and persistent

Twig: Moderate, gray-brown to reddish brown, velvety, lighter lenticels, buds stalked, plump and reddish brown

Smooth Alder – *Alnus serrulata*



Smooth Alder – *Alnus serrulata*

Leaf: Alternate, simple, obovate to elliptical, 2 to 4 inches long, pinnately-veined, finely serrated wavy margin, dark green above, paler and finely hairy beneath.

Flower: Species is monoecious; both males and females preformed; males green brown catkins, 1 to 1 1/2 inches; female 1/2 inch long, reddish, opening in early spring.

Fruit: Woody, cone like catkin, 1/2 inch long, dark brown with each scale enclosing a tiny, winged seed. Fruit ripens in fall and is very persistent.

Twig: Reddish brown with gray fuzz, 3-angled pith; buds are stalked, plump, covered in 2 to 3 red-purple scales, resemble a match head.

Buttonbush – *Cephalanthus occidentalis*



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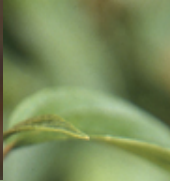
Leaf: Opposite or whorled, elliptical, pointed tip, entire margins, 3 to 5 inches long, shiny dark green above.

Flower: Small, white tubular flowers occur in a dense round (1 inch across) cluster at the end of a slender 1 to 2 inch stalk, appear mid-summer.

Fruit: Round cluster of nuttlets (each 1/4" long), dark brown, mature late summer to fall.

Twig: Slender to moderately stout, dark reddish brown, speckled with lighter, elongated lenticels; tips of twigs typically die back; lateral buds small and embedded in bark, leaf scar "D"-shaped or nearly round with a single "U"-shaped bundle scar.

Silky Dogwood – *Cornus amomum*



Silky Dogwood – *Cornus amomum*

Leaf: Opposite, simple, oval, 2 to 4 inches long, arcuately veined, margin entire, green above and maybe silky grayish when young, paler below.

Flower: Species is monoecious; small, white, in flat-topped clusters, 2 inches in diameter that appear in late spring and early summer.

Fruit: Berry-like drupes developing in flat-topped clusters, 1/4 inch in diameter, bluish with white blotches, maturing in late summer.

Twig: Red-purple (may be green-tinged), bearing silky gray hairs with a salmon colored pith, buds are narrow, pointed, hairy, sessile, and close to the stem

Gray Dogwood – *Cornus racemosa*



Gray Dogwood – *Cornus racemosa*

Leaf: Opposite, simple, ovate to elliptical, entire with arcuate veins, 2 1/2 to 5 inches long, dark green above, lighter below.

Flower: Species is monoecious; small, dull white in upright racemes, about 2 inches across appearing in late early summer.

Fruit: Dull white, 1/4 to 1/3 inch in diameter in rounded clusters, maturing in late summer to fall, fruit stalks remaining red well into winter.

Twig: Slender, gray to reddish brown, buds are dark brown and valvate, bud scales sharp-pointed and appear to have frosted tips, pith very light brown

Redosier Dogwood – *Cornus sericea*



Redosier Dogwood – *Cornus sericea*

Leaf: Opposite, simple, arcuately veined, 2 to 4 inches long, somewhat narrow, entire margin, green above, pale below.

Flower: Species is monoecious; small, dull white in flat top clusters about 2 inches across appearing in late spring to early summer.

Fruit: Dull white, 1/4 to 1/3 inch in diameter in rounded clusters. Maturing in late summer to fall.

Twig: Bright red, sometimes green splotched with red, white pith, buds narrow and tapering, flower buds more swollen

Winterberry – *Ilex verticillata*



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Leaf: Alternate, simple, deciduous, margin sharply toothed, lance to egg-shaped (variable), glabrous and green above, paler and generally hairy below, 2 to 3 inches long.

Flower: Species is dioecious; both male and females are stalked and greenish-white with 5-7 petals, usually in clusters, spring.

Fruit: Round drupes, 1/4 inch in diameter, reddish-orange to red in clusters of 2 to 4, ripening in fall but persisting through the winter, seeds smooth and smaller (1/8 inch long) than *Ilex decidua* or *I. montana*.

Twig: Slender, gray, with scattered light lenticels, buds and leaf scars are small, one vascular bundle scar, tiny, black thorn-like stipules may be present on either side of the leaf scar.

Ninebark – *Physocarpus opulifolius*



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Leaf: Alternate, simple, deciduous, maple-like, palmately lobed (3 to 5 pointed lobes); almost circular in outline, 1 1/2 to 3 1/2 inches in diameter; dark green above and paler below, somewhat pubescent.

Flower: Perfect, small (1/2 inch) white flowers borne in dense, upright, hemispherical clusters, appearing in late spring to early summer.

Fruit: Small (1/4 inch long) brown follicles borne in dense, upright hemispherical clusters.

Twig: Slender and orange-brown; young twigs have tight bark but on older twigs the bark splits and exfoliates in long strips

Elderberry – *Sambucus canadensis*



Elderberry – *Sambucus canadensis*

Leaf: Opposite, pinnately compound, 6 to 11 inches long, with 5 to 11 elliptical, serrate leaflets, acuminate tips, bottom leaflets are often 3-lobed, dark green above and much paler below.

Flower: Species is monoecious; small, white, borne in dense, flat-topped clusters, up to 8 inches across, appearing in summer.

Fruit: Small, berrylike drupe, purple-black, and very juicy, up to 1/4 inch in diameter, borne in flat-topped clusters, maturing in late summer.

Twig: Stout, silvery- to yellow-gray with obvious, warty lenticles, large white pith; buds are very small, red-brown and pointed, terminal buds are generally lacking.