

Woody Plant	Habitat	Buds (Arrangement, Description, Pic. #)*	Bark	Leaves/flowers	Smell/Taste	Tree Shape/Size	Other
Ash, White	Younger forests, sometimes moist	OPP; mitre cap end buds; #1	grey; neat vertical ridges, which flake off in older trees	drop early, rot quickly, leaflets detach at leaf drop	not marked	generally straight-trunked with coarse Tinker-Toy branches	brittle; broken branches common; look for dried seeds
Aspen	Young, dry woods (esp. Big Tooth)	ALT; side buds divergent; dusted (Big Tooth), shiny brown (Trembling); #38 & 39	grey/green to white, non-peeling; smooth, rougher at base.	Generally rot quickly, flat petiole distinctive	not marked	tend to be relatively straight	leaves with flat petioles
Basswood	Stream sides & limey areas	ALT; bulbous, often reddish; #53	ash-like but sinewy; often with sapsucker holes	large but rot relatively quickly	not marked	medium branching; sprawling at times	often multiple trunked & with root shoots
Beech, American	Moderately rich woods	ALT; gnome cigars; #35	light grey; smooth if healthy, rough if sick	often hold dry, papery leaves into winter	not marked	often relatively thick trunked	often in clusters; sometimes in spinney
Birch, Black	Moderately rich woods	ALT; spur shoots, pointed	dark; smoothish, horizontal lenticels; flaky when older	drop all, rot quickly	wintergreen	tend to be relatively straight	as with other birches, catkins can be visible
Birch, Grey	Fields, edges	ALT; spur shoots	white, but not peeling to paper	usually drop and rot quickly, arrowhead shape	not marked	thinner, more spindly, & supple than white	often multi-trunked
Birch, White/Paper	Younger forests	ALT; spur shoots; fine twigs; #37	white and papery	smooth but peeling	not marked	straight but scruffy	usually single trunked
Cedar, Red	Old pastures	small, scale-like needles; sharp lower on tree; softer, flatter higher up	light, reddish & peeling in strips	dry 'berries' rather than cones	evergreen	trees often smallish	look for Cedar-Apple Rust gall-like swellings.
Cherry, Black	Younger forests	ALT; small, somewhat globular; #15	dark grey/black; "potato chip" flaking	fruits devoured but look for seeds below tree	bitter, medicinal	central trunk, sometimes scruffy	look for black knot fungus swellings
Cottonwood	Stream sides	ALT; pointed; lateral buds divergent; #40	grey with irregular ridges	Worth looking for; like Big Tooth aspen with glands	not marked	branched, sometimes sprawling	leaves with basal glands
Dogwood, Grey	Edge and oldfield	OPP; naked, quite narrow; #9	grey tinged with red	fruit cluster at twig tip	not marked	multi-stalked shrub	clonal
Elm, American	Moister forest, tree lines	ALT; bent end & crooked lateral buds; #44	ragged; Amer. Elm w/ Oreo layers, Slip. Elm solid truffle	flower buds often obvious	not marked	vase-shaped in open field	dead trunks common
Hemlock	Often thin-soiled hillsides	flattened individual needles held largely in one plane (unlike Spruce)	dark grey and cracked	gumball-sized round cones	evergreen	not as centralized as white pine	Hemlock wooly adelgid killing many
Hickory, Bitternut	Near streams	ALT; naked & sulfur yellow; #42	grey with meshwork	mid ribs can remain on branches	not marked; husks sweet	tend to be relatively straight	thin nut husk with raised seams
Hickory, Pignut	Drier woods	ALT; smaller than Shag, but bulbous; #49	"whicker" meshwork	mid ribs can remain on branches	not marked; new husks sweet	relatively straight	nut with thinnish husk, often pear-shaped
Hickory, Shagbark	Often moister forests	ALT; large and bulbous; #50	large, vertical flakes	mid ribs can remain on branches	new husks sweet	somewhat irregular	find thick nut husks
Hop Hornbeam	Drier woods	ALT; "apple seeds" on fine twigs; furrowed bud scale surface; #43	light grey; vertically peeling 'french fries'	hop-like seed clusters sometimes present	not marked	often understory, delicate & spreading	occasionally medium forest tree
Maple, Norway	Near houses etc; "invasive"	OPP; rather large & full, greenish; #6	grey, tighter than Sugar	drops leaves late	not marked	medium branching	sometimes milky sap
Maple, Red	Wide ranging, includes wet forest	OPP; blunt, reddish; often with swollen flower buds on high twigs; #3	smooth to ragged; often darker than Sugar	leaves rot quickly; look for remains of winged seeds	not marked	medium branching	often with bull's eye scarring on trunk
Maple, Sugar	Rich forest	OPP; relatively small, pointed on brown twig; #2	grey; tight ridges to flaking in older trees	leaves rot quickly; look for remains of winged seeds	not marked	medium branching	trunk often with white lichen 'wash'
Musclewood/Blue Beech	Moister forest	ALT; small, squarish in x-section; #36	smooth and muscular	look for seed clusters	not marked	understory, spreading	often in 'stands'
Oak, Black	similar to Red Oak; scarcer	ALT; clustered pointed with white fuzz	dark; similar to Red but with horizontal cracks, so blocky	leaf rots slowly, retained; seek shiny, tough leaves	not marked	medium branching	frayed acorn cup edges
Oak, Chestnut	Often thin-soiled hillsides	ALT; clustered end buds, pointed but grey	thick and DEEPLY furrowed	leaf rots slowly, retained; distinct wavy-edged leaves	not marked	straight but can be scrawny/contorted	large acorns, deep caps; quickly eaten
Oak, Red	Drier woods, but wide ranging; our most common oak	ALT; clustered end buds; pointed reddish brown; #47	furrows becoming smooth-topped higher up	leaves rot slowly, retained; sharp-lobed leaves	not marked	medium branching	sauce-pan acorn cups; galls common on all oaks
Oak, White	Moderately rich woods	ALT; clustered end buds, blunt; #45	LIGHT grey & flaky	leaf rots slowly, retained; round-lobed leaves	not marked	medium branching	small, deep cupped acorns, quickly eaten
Pine, White	Old fields and drier forests	five long wispy needles to a cluster	dark grey and blocky	large banana-like cones	pine pitch	central trunk with annual branch whirls	about 1/2 of needles drop each year
Sassafras	Near forest edges?	ALT; chunky on greenish twigs; #18	grey; sometimes with reddish tinge; furrowed	leaves rot quickly; come in three shapes	noticeably sweet	single trunk, often twisted	brittle; broken branches common
Shadbush/Serviceberry/Juneberry	Moderately rich woods; hedgerows	ALT; 'sharp, 'goosehead' buds; #31	smooth when young, with vertical dark streaks	flowers early Spring; leaf buds often open prematurely	not marked	usually understory; sometimes small tree	sometimes with witch's broom
Willow (various species)	Usually near water	ALT; lateral buds appressed 'slippers' on wispy twigs; #33, 34	grey; contorted on larger trees	medium rotting; tend to be long and skinny	not marked	various; sometimes shrubby	resilient & supple: will re-root from horizontal
Witchhazel	Moderately rich woods	ALT; naked on zig-zaggy twigs; #32	grey; fairly smooth	flowers late autumn; flower remains often seen	not marked	understory spreading;	often multi-trunked

\* - ALT = Alternate arrangement, OPP = Opposite arrangement; picture numbers refer to buds pictured in our 'Buds in Winter' file available at <http://hvfarmscape.org/winter-woody-plant-botany>.

