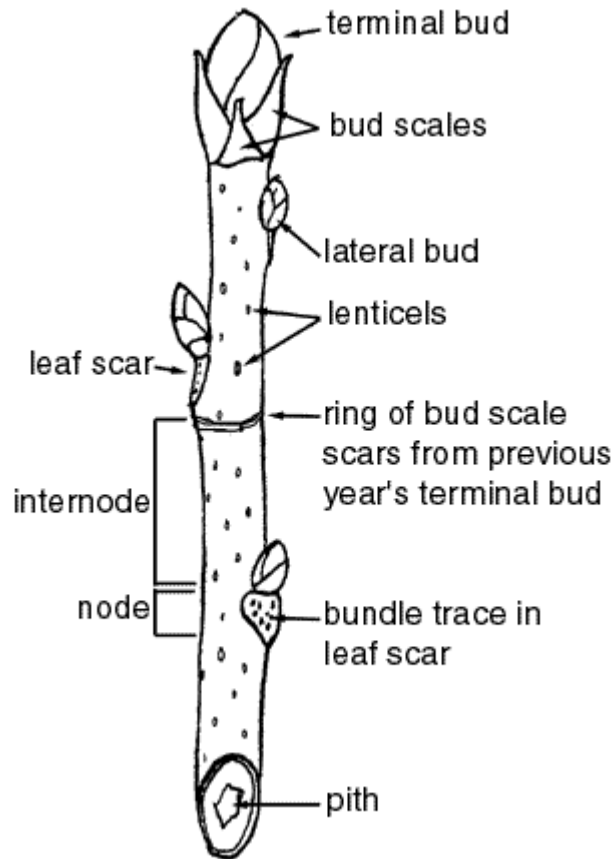
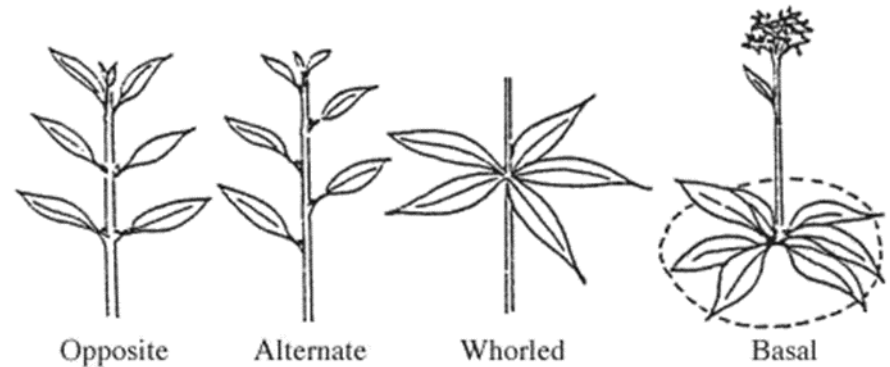


Winter Plant Identification – Anchor Diamond Park at Hawkwood
Compiled by David H. Behm, [Curious By Nature](#)



Leaf and branching patterns:



Source: <http://www.mbgnet.net/sets/temp/lftypes2.htm>

Source: <https://www.greenseattle.org/winter-twig-id/>

Woody plants in winter can be identified by a number of consistent features that are not too difficult to observe. These include leaf scars, buds, and pith. You can determine your plant's branching or leaf pattern by looking at the leaf scars on the branch. This is where last year's leaf fell off. The shape of the scar is unique to each species and can give clues to its identity. A winter branch will also show a terminal bud and lateral buds which are the beginnings of next year's new growth. These buds are usually protected by various styles of bud scales. Some species also exhibit lenticels randomly or systematically arranged on the bark of each twig.

Winter Plant Identification – Anchor Diamond Park at Hawkwood

Compiled by David H. Behm, [Curious By Nature](#)

Source: <https://www.backyardnature.net/fruits.htm>

There are three main groups of fruits:

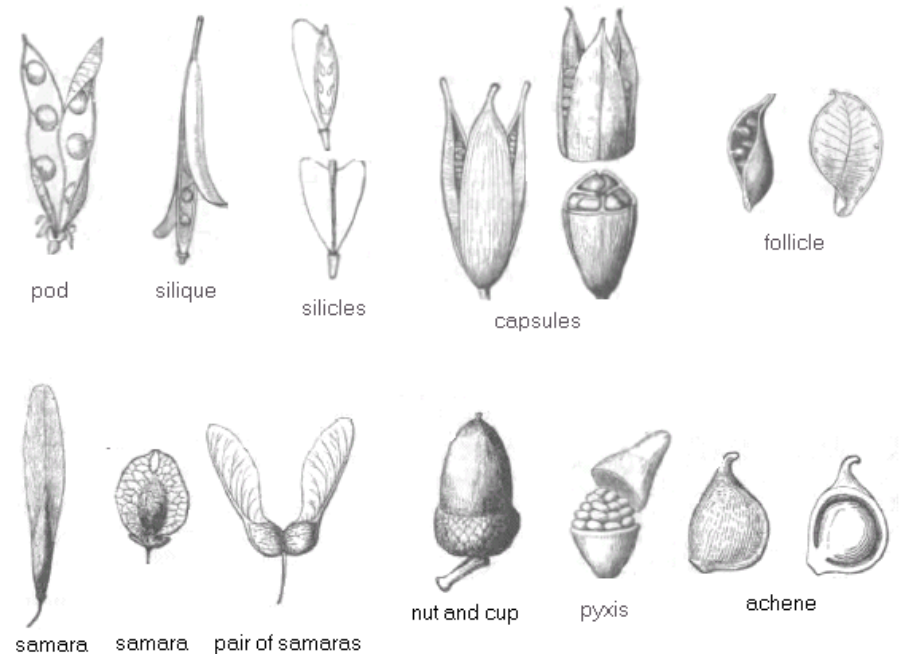
1. Simple fruits, which are then differentiated as (a) dry, (b) fleshy, or (c) accessory;
2. Aggregate fruits, or
3. Multiple fruits.

Simple dry fruits are those in which the fruit wall -- the skin, rind, or husk -- is leathery, papery, or woody. In winter, you will probably come across simple dry fruits because they will more likely persist throughout the season's harsh conditions. There are several forms of simple dry fruits including:

1. *follicles* (e.g., pods of any species of milkweed and Wild Columbine),
2. *legume* (e.g., pods of Hog Peanut or any species of tick trefoils and fruiting heads of sweet clovers or Black Medick),
3. *capsules* (e.g., fruiting head of Canada Lily or Common Witch-hazel),
4. *achenes* (e.g., fruiting head of any species of sunflower),
5. *grains* (e.g., any member of the grass family of plants),
6. *samaras* (e.g., any species of maple or milkweed), or
7. *nuts* (e.g., any species of the oaks, hickories, and hazelnuts). Nuts are further categorized as –
 - a. a single nut lays in a cup-shaped cap (involucre), which is covered by overlapping scales – the nut and cup are referred to as an acorn, which is specific to oaks (NOTE: shape and pattern of those scales help to distinguish the different species of oak from one another);
 - b. one or more nuts lies in a spiny involucre (e.g., Beech); or
 - c. one nut each within a leafy (American Hazelnut) or tubular (Beaked Hazelnut) involucre, sometimes forming a cluster of two or more involucre.

Source:

<https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=2ahUKEwjxncLEqo3mAhWLnFkKHdiaBxwQjRx6BAGBEAQ&url=https%3A%2F%2Fwww.pinterest.pt%2Fpin%2F346777240060014302%2F&psig=AOvVaw1Ue48pqbxt16N80QfOsQoP&ust=1575045005198331>



Winter Plant Identification – Anchor Diamond Park at Hawkwood

Compiled by David H. Behm, [Curious By Nature](#)

Twigs, perhaps, can be the most telling. Twigs show many of the highly individual features that are used to differentiate between species. For example –

Source: <http://dendro.cnre.vt.edu/IDBasics/twigs.htm>



Maple lateral buds, leaf scars and twigs are all oppositely arranged. Sugar Maple twigs are brown, slender and shiny with very sharp terminal buds.



Oaks have multiple end buds. White Oak twigs are red-brown to somewhat gray, hairless, with rounded and hairless buds. Twigs are often shiny or somewhat waxy.



Apple, pear, and cherry trees have obvious spur shoots. These shoots usually bear flowers/fruit and only grow a few millimeters each year.



Some twigs are covered with obvious hairs. Staghorn Sumac is a good example of this.

Winter Plant Identification – Anchor Diamond Park at Hawkwood

Compiled by David H. Behm, [*Curious By Nature*](#)

Trees & Shrubs & Vines –

Alternate branching:

Asiatic Bittersweet (*Celastrus orbiculatus*) = blue and orange trails (rich thickets and fencerows): woody vine with alternate branching; bark changes from smooth reddish brown (young) to blocky silver (mature); vines generally <2" in diameter, but may live up to 20 years; distinctive red seeds encased in yellow pods that break open in autumn

Beech (*Fagus grandifolia*) = all trails (rich mature soils): alternate branching; tall tree with distinctive smooth gray bark (throughout its life); buds long, pointed; elliptic or egg-shaped leaves often retained through winter; may retain spiny involucre (which may still contain one or more triangular-shaped nuts) into winter

Bitternut Hickory (*Carya cordiformis*) = blue trail (woods): alternate branching; slender twigs; bark tight with network of fine smooth ridges; buds bright yellow-powdery, bud scales paired but not overlapping; thin nut husks with ridges toward outer end

Black Cherry (*Prunus serotina*) = all trails (thickets and borders): alternate branching; small to large tree, largest of all cherry trees; bark of young trees smooth, dark with short horizontal lines – bark of older/mature trees rough, resembling burnt potato chips, and often exposing red-brown underbark; hairless buds with pointed bud scales; scraping of twig bark smells of bitter almond

Black Locust (*Robinia pseudoacacia*) = white and orange trails (woods and fields): alternate branching; strong paired thorns flank nearly circular leaf scars; hairless stout twigs; false end buds; bark on old trunks dark and deeply ridged, often crosshatched; may retain long flat seedpods into winter

Grape (*Vitis spp.*) = white and yellow trails (varies depending upon the species: dry or moist thickets; riverbanks and bottomlands; dry woods and thickets): alternate branching; woody vine with dark brown shredded bark; twigs round and brown; depending upon the species, tendrils or fruit clusters either absent opposite each third leaf node or opposite nearly every leaf node; cluster of fruit may be retained into winter, fruit color varies by species (black or purple; black; blue-black with whitish powder)

Hawthorn (*Crataegus sp.*) = all trails (open woods and hillsides): alternate branching; very dense shrubs or small trees with long thorns (which have no buds or leaves); bundle scars 3; buds nearly spherical; true end buds; small fruit (resembling a crabapple) often remain on plants through winter

Ironwood (*Carpinus caroliniana*) = yellow and blue trail (bottomlands and other rich soils): alternate branching; small tree with distinctive muscular-appearing, smooth, dark gray bark – trunk has deeply rippled and sinewy look; twigs variably hairy or not; buds brown, somewhat square in cross section, with scales in 4 rows; false end buds

Japanese Barberry (*Berberis thunbergii*) = all trails (thickets and pastures): alternate branching; low, compact shrub; twigs brown, somewhat ridged; inner bark yellow; thorns either unbranched or with 2 small side branches; fruits red, long or globular, often remain on plants through winter

Multi-flora Rose (*Rosa multiflora*) = all trails except yellow (roadsides and moist thickets): alternate branching; arching canes with thorns pointing backward; numerous glossy non-fleshy fruits often remain through winter; leaf scars narrow half-circles

Pear (*Pyrus communis*) = blue and orange trails (hedgerows, young successional forests, forest edges, thickets, and roadsides): alternate branching; shiny gray branches with protruding brown buds; trunk bark is gray and checkered

Winter Plant Identification – Anchor Diamond Park at Hawkwood

Compiled by David H. Behm, [*Curious By Nature*](#)

Trees & Shrubs & Vines – (continued)

Alternate branching: (continued)

Poison-ivy (*Toxicodendron radicans*) = all trails (open woods, thickets and fencerows): **WARNING: All plant parts contain a heavy nonvolatile oil that causes serious inflammation of the skin;** alternate branching; aerial rootlets when climbing as vine, often numerous; hairy buds without scales; small white berries in a cluster may remain on plants into winter

Shagbark Hickory (*Carya ovata*) = all trails (mature woods and fencerows): alternate branching; stout red-brown twigs; older gray trunk bark shaggy in long vertical strips often curled up at the end; large end buds (> 1/2"), bud scales not paired; thick-walled nut husks (> 1/8" thick)

Spicebush (*Lindera benzoin*) = all trails (damp woods and along streams): alternate branching; stalked flower buds may flank stalkless 2- or 3-scaled leaf buds; false end buds; brown twigs with random light-colored lenticels; twigs and buds aromatic, spicy

Virginia Creeper (*Parthenocissus quinquefolia*) = all trails (woods and thickets): alternate branching; climbing woody vine; tendrils long slender and disk-tipped with several branches; hairless twigs; buds covered with scales; numerous bundle scars (very pronounced on short erect stems that are not yet climbing); bark tight often dotted; pith white

Opposite branching:

Common Buckthorn (*Rhamnus cathartica*) = all trails (hedgerows and thickets): opposite branching; inner bark yellow; thorn-tipped twigs; no bud scales at twig bases; black fruits scattered along twigs near end of branches may be retained through the winter

Common Elderberry (*Sambucus nigra ssp. canadensis*) = all trails (thickets): alternate branching; twigs stout with warty lenticels; leaf scars large with connecting lines between; buds small, green or brown; bark brownish; may retain peduncle (that held fruit) into winter; pith white

Honeysuckle (*Lonicera spp.*) = all trails (woods borders and thickets): opposite branching; multi-stemmed shrub up to 10 feet tall; bark light gray, often peels in vertical strips – with age, appears shaggy; hairless twigs; buds short, blunt

Maple-leaved Viburnum (*Viburnum acerifolium*) = all trails (woods): opposite branching; twigs velvety; bud scales several; may retain black/purple fruit through winter

Nannyberry (*Viburnum lentago*) = all trails (woods, thickets): opposite branching; buds hairy or powdery; flower buds copper-colored and covered by 2 long-pointed scales; may retain cluster of black berries into winter

Norway Maple (*Acer platanoides*) = all trails except yellow (spreads from plantings to upland fields, hedgerows and woods): opposite branching; trunk bark smooth; blunt reddish or green buds

Red Maple (*Acer rubrum*) = all trails (wet woods): opposite branching; smooth gray young trunk bark becoming darker scaly older bark; reddish twigs; blunt reddish buds with several scales

Virgin's Bower (*Clematis virginiana*) (moist thickets): vine up to 20ft long with opposite trifoliate leaves; occasional flat-headed panicles of flowers produced from the axils of the leaves; flowers are followed by plumed silky seed clusters (achenes with slender styles ~2" long) that turn brown later on

White Pine (*Pinus strobus*) = all trails (uplands): tall tree with relatively few horizontal large limbs (when mature) or mostly whorled branches (when young); slender needles (2-4" long) in bundles of five; mature bark is thick, reddish brown to gray-brown and deeply furrowed, young bark is greenish gray and smooth; slender tapering cones (3-10" long)

Winter Plant Identification – Anchor Diamond Park at Hawkwood

Compiled by David H. Behm, [Curious By Nature](#)

Forbs –

Alternate leaves:

Aniseroot and Sweet Cicely (*Osmorhiza spp.*) = all trails (woodlands): tall stem with alternate compound leaves topped by a compound umbel, each with 3 or more, (typically 5) smaller umbels with long slightly curved slender pod structures that each splits into 2 seeds, which are black at maturity; foliage of Aniseroot have a stronger anise scent than those of Sweet Cicely; used as a treatment for digestive disorders and as an antiseptic wash

Burdock (*Arctium spp.*) = white and yellow trails (waste places): rather tall plant with alternating leaves/branches whose ends retain clustered burs containing achenes each with a curved hook that quickly attach to animals that brush against them when passing by; Swiss inventor's encounter with these plants inspired the hook and loop fastener named Velcro

Garlic Mustard (*Alliaria officinalis*) = all trails (roadsides and open woods): first-year plant is small rosette of rather rounded basal leaves with scalloped leaf margin (leaves may be green into or throughout most of the winter) and second-year plant is erect with alternate leaves that are somewhat triangular with more pronounced teeth; second-year plant has erect flower stem which develops narrowly cylindrical seedpods (siliques) ~2" long

Goldenrod (*Solidago spp.*) = several species along white trail (varies depending upon the species: (1) fields and borders; (2) moist to dry sandy soils in meadows, prairies, roadsides and shores; (3) moist or dry open places; (4) dry open places; (5) fields and thickets): nearly all species with erect stem (most species without branches) with alternate leaves (most often lanceolate) typically terminating in panicle of flowering stems that often arch upward and outward like a fireworks display; achenes develop with small tufts of hair

Pinesap (*Monotropa hypopitys*) = yellow and blue trails (pine and oak woods): typically a cluster of unbranched erect stems about ~3-10" tall with alternate scale-like leaves; each stem terminates with a raceme of multiple bell-shaped flowers (rather than a single flower like Indian Pipe) that nod toward the ground; after blooming period, entire plant becomes brown or black and each flower is replaced by an ovoid seed capsule about ¼" long (half the length of Indian Pipe) that nods toward the ground

Opposite leaves:

Enchanter's Nightshade (*Circaea canadensis*) = all trails (woods and thickets): erect and unbranched (except at top of) plant with opposite leaves and central stem terminating in a raceme of flowers; flower stalk bears evenly distributed small bur-like fruit covered with stiff hooked hairs

Selfheal (*Prunella vulgaris*) = white and blue trails (varies slightly between the two sub-species: lawns, fields and roadsides; similar, but often occurs in at least seasonally wet depressions): opposite leaves (either lanceolate or ovate, depending upon which sub-species); seedpods form a somewhat square, whirled cluster; immediately below this cluster is a pair of stalkless leaves standing out on either side like a collar