Identifying and Managing Vines in the Wild - Not so "di-Vine" By Douglas A. Spilker, Ph.D.

Perennial vines are prevalent in many forest situations in the Midwest and because of their invasiveness, and propensity to rapidly grow to great lengths. They can be very detrimental to the ecology in these areas. Some vines, like Wintercreeper (*Euonymus fortunei*), do their damage by developing into a dense ground cover "squeezing out" the undergrowth, especially Spring ephemerals. On the other hand, tree-climbing vines, like Raccoon Grape (*Ampelopsis cordata*), can break even large branches, due merely to the weight of their massive growth. Whenever possible, vines should be controlled before their growth is very extensive, but it is important to be able to recognize those that should be handled with caution – e.g. Poison Ivy and the thorny Greenbrier. The common vines include:

Raccoon Grape (Ampelopsis cordata)

Raccoon grape is a woody vine climbing by tendrils to a length of more than 60 feet in a single year. It is the most aggressive native vine in the Midwest. Small- to medium-sized trees may be smothered or bent over by the weight of the vine growth. Heavy growth can even break large



tree branches.

Raccoon grape is also referred to as false grape, but the two should not be confused. The upper surface of its triangular leaves is rather dull and olive-green, with the lower surface much paler. Tendrils arise at some nodes, each opposite a leaf, and are forked at the end, but without thorns. Small greenish flowers in loose clusters appear in May through July. Flowers develop into small (¼ inch across) globe-shaped fruit, changing color as they develop from green to orange to rose-purple and finally to turquoise. Berries of all colors may appear in the same cluster. The fruit is not edible.

Wild Grape (Vitis Spp.)

The grape *family* in Missouri includes 4 genera, including Virginia creeper and woodbine (genus *Parthenocissus*), marine vine (genus *Cissus*), raccoon grape and peppervine (genus *Ampelopsis*), but the species most people think of as grapes are in the genus *Vitis*.

Wild grape plants are perennial woody vines that climb into trees, on fences and may wrap around each other. Older stems have bark that appears shredded, with tendrils located opposite to leaves, and without any thorns or spines. The stems can thicken to over 2" in diameter and can reach 65 feet or more in length. Leaves are simple but may vary in appearance, with leaves having 3 to 5 lobes. Flowers appear in



clusters and are usually greenish yellow, with globe-shaped fruit, often blue-black, with a white, waxy coating.

Virginia Creeper (Parthenocissus quinquefolia)

Virginia creeper is a climbing vine with tendrils and aerial roots to 75 feet high. Leaves are alternate, palmately compound (leaflets arise from a single point), with usually 5 leaflets. These vines can be easily spotted in autumn because the leaves commonly turn bright red.



The stems are reddish-brown, finely hairy. Tendrils are many-branched, 1½–2 inches long, ending in sucker disks. A distinguishing characteristic of older stems is that when climbing, they develop side hairy aerial roots that are used to attach to tree trunks, walls of buildings, etc. and allow it to grow more than 75 feet high. Greenish flowers appear in late May to August and develop into dark purple berries with red stalks. Fruits are inedible and reputedly poisonous.

Poison Ivy (Toxicodendron radicans)

Poison ivy is a toxic vine that climbs by aerial rootlets. However, sometimes it appears as a low, upright shrubby plant, especially in a pasture-like setting. Leaves are alternate, compound, with 3 leaflets ("leaves of 3, let it be") that are variable in size and shape. Leaflets take on different colors as the season progresses, turning red, orange, or yellow in fall.

Stems are light brown, and hairy, climbing until they find support; lacking support, they assume an erect, shrublike posture with single stems. The small greenish-white flowers of poison ivy show in May–June, with clusters on the new growth. Fruit are small berries in grapelike clusters, and creamy white in color.



American Bittersweet (Celastrus scandens)



American bittersweet is a native, woody vine that twines into trees to lengths of 20 feet or more, but commonly sprawls on bushes or fences. It is easily recognizable in late summer with its clusters of orange fruits that split into sections to reveal seeds covered with a bright red, fleshy coating. It has smooth simple leaves that are dark yellowish green with blades 2–4 inches long with small, finely pointed teeth. The stems are commonly found twining through neighboring bushes, and around each other, but do not have any tendrils. Small inconspicuous flowers appear in clusters at the end of twigs in May through June. Male and female flowers are in separate clusters, or on separate plants. Clusters of fruit develop in July through October.

Japanese Honeysuckle (Lonicera japonica)



Japanese honeysuckle is a climbing or sprawling, semi-evergreen woody vine that often retains its leaves into winter. Leaves are opposite and simple. Leaves produced in spring are often highly lobed; those produced in summer unlobed.

The tubular flowers appear in May to June and are white or pink but turn yellow with age. Fruits form in fall (September–October). The black, glossy berries develop singly or in pairs on stalks from leaf axils.

<u>Climbing False buckwheat (</u>Fallopia scandens (formerly Polygonum scandens)

Climbing false buckwheat is a rampant annual or perennial climber often forming curtainlike masses of very thin twining red stems, covering shrubs and trees. Leaves are heart-shaped to ovate, looking very much like bindweed. Flowers are minute, produced in masses on long racemes so that the effect is showy. Flowers are greenish white, sometimes pink-tinged, and show throughout July to November. Seeds are shiny, smooth, and dark brown to black, which looks and is said to taste like buckwheat (ergo the common name).



Wintercreeper (Euonymus fortunei)



Wintercreeper is a very aggressive perennial woody vine and was first introduced as a landscape groundcover but escaped into the wild. It climbs on rocks and trees as well as spreading over the ground. It is a serious threat to certain ecosystems because it spreads so rapidly and replaces the undergrowth, especially spring ephemerals.

It can also be shrubby looking when covering downed trees and rocks. It climbs 20 feet or higher with aerial rootlets that cling to tree trunks and other structures. The branches are densely covered with minute warts. Leaves are shiny and leathery, usually toothed. Flowers are small, greenish, and occur in clusters, with a long flower stalk.

Bristly Greenbrier (Smilax Hispida) or Greenbrier (S. glauca)

There are numerous species of Greenbrier, but the Bristly Greenbriar appears throughout central Missouri. Bristly greenbrier is a stout, perennial woody vine with bristle-like black spines, climbing high by tendrils to a length of more than 40 feet. Leaves vary in shape but are commonly heart-shaped; upper surface green, smooth, shiny, with the 5–7 main veins sunken; lower surface paler, smooth. Tendrils arise in pairs at the base of leaf stalks. Bark is green to brown, hard, densely covered with numerous prickles and hairs; prickles can pierce thin leather gloves. Yellowish-green flowers appear in May– June. Globe-shaped bluish-black berries mature in September– October.



Control?

As mentioned above, it is more effective to control these twining vines before they become extensive, by pruning and painting the cut end with an herbicide labeled for this use. Vines that have intertwined significantly up in the trees (or crossing between trees) can be a challenge to pull down, being attached or twining among the branches, and may result in unwanted broken limbs during eradication. [Author Note: other limbs can be broken too in this scenario – I broke my arm during a fall trying to remove a 40' Raccoon Grape vine.] So, these native plants aren't quite so divine!