

James River Rock Pool Flora



VINES

Vines are plants with long, flexible stems that climb over other plants and objects as they grow. This strategy enables them to reach sunlight without investing large amounts of energy and resources in tall, strong stems. They can be annual or perennial, woody or herbaceous.



Bindweed

Calystegia sepium (L.) R. Brown
Morning Glory Family (Convolvulaceae)

Wild Morning Glory, Hedge Bind-weed

An annual, twining vine, similar to a morning glory, but with more narrow, grey-green, arrowhead-shaped leaves. The 2 to 3 inches funnel-shaped flowers are white or pink with white lines. This is a native plant, often found in damp places. The leaf shape and flower color of this plant are very variable.



➡ LOOK FOR the white or pink flowers. They will have a wider mouth than Morning Glory flowers.



Dodder

Cuscuta gronovii Wild ex J.A. Schultes
Morning Glory Family (Convolvulaceae)

Common Dodder, Love Vine

This unusual plant starts as a tiny green seedling with leaves and roots. As it grows and touches another plant, it loses the leaves and roots, attaches, and becomes parasitic on its host plant, sharing its sap. The adult parasite has no leaves or chlorophyll of its own and develops a yellow-orange color. It weakens and sometimes kills its host, and is a big pest in agricultural fields. Dodder vines have recently been shown to use airborne volatile organic compound cues to locate their host plants. The old folk name, Love Vine, may reflect a sense of humor since these plants “hug” too tightly and suffocate the host!



➡ LOOK FOR snarls of yellow yarn tossed over other plants (especially water willow). Look for dense clusters of tiny white flowers in mid-summer.



Groundnut

Apios americana Mdik.

Bean Family (Fabaceae)

Groundnut

A climbing, twining, herbaceous, perennial vine with compound leaves comprised of 5 to 7 oval, pointed leaflets. The brownish-purple flowers, borne in the leaf axils, resemble a small elephant head with an upturned trunk! Flowers are very fragrant. The fruit is a long, skinny bean which dries up and splits along its length to release seeds. The rootstock is comprised of many small, sweet-tasting, potato-like tubers that were once collected by Native Americans for food. (This is prohibited in the park today.)



➡ LOOK FOR vines with alternate, compound leaves, and many bees around the flowers._



Morning Glory

Ipomoea purpurea (L.)

Morning Glory Family (Convolvulaceae)

Morning Glory (*Non-native*)

A reclining (or twining), weak, herbaceous, annual vine with fuzzy stems and alternate, heart-shaped leaves. Flowers located in the leaf axils are funnel-shaped and are purple, or sometimes pink or white. Tiny seeds are released when ½ inch round, brown capsules dry and break open. Related to sweet potatoes and white-flowered bindweeds, this plant was introduced from Europe and has spread widely in a variety of disturbed habitats. In the Park, seeds wash in during floods and can grow in any sunny place along the shore or forest clearing nearby as well as among the rocks.



➡ LOOK FOR the bright, purple, 2 inch, funnel-shaped flowers open in the morning but closed in the afternoon.



Muscadine Grape

Vitis rotundifolia Michx.

Grape Family (Vitaceae)

Muscadine Grape

A woody, high-climbing (or trailing) perennial vine wraps its tendrils around adjacent vegetation to climb and reach the sunlight, often smothering and killing small trees. The leaves are broadly heart-shaped, 3 to 4 inches across, with coarse, saw-toothed edges. Small, 5-petaled fragrant flowers bloom in early summer. Tiny fruits ($\frac{1}{2}$ - 1 inch in diameter) hang in clusters in late summer. These wild grapes range from bronze to dark purple to black in color when ripe; however, many wild varieties stay green through maturity. They are edible, vary in sweetness, and have skin sufficiently tough that eating the raw fruit often involves biting a small hole in the skin to suck out the pulp inside. Muscadines are not only eaten fresh, but are also used in making wine, juice, and jelly. They are quickly eaten, however, by birds and small mammals like flying squirrels.



➡ LOOK FOR a vine with stringy bark. It is distinctive and comes off in strips that break at 90 degree angles.



Purple Passionflower

Passiflora incarnata L.

Passion-flower Family (Passifloraceae)

Maypops

This herbaceous vine sprawls over the ground or climbs with tendrils. Alternate leaves have 3 broad lobes with finely toothed edges. Blue-purple, circular, fringed flowers are so distinctive they almost look artificial. The Spanish saw religious significance in the flower features, naming it after the Passion of Christ. Fruits are globe-shaped with a juicy interior that is tart and refreshing. It was a favorite summer food of Native Americans and English Settlers. Fruits ripen in August-September, and, when shaken, the seeds rattle inside. The name 'Maypop' is the English pronunciation of the Virginia Indian word **maracock** that approximates 'rattle fruit'.



➡ LOOK FOR the distinctive flowers, and try to find the religious reference points.



Poison Ivy

Toxicodendron radicans L. Kunze
Cashew Family (Anacardiaceae)

Poison Ivy

This woody, perennial vine sprawls over the ground and climbs by small, aerial rootlets growing from the stems. Alternate, shiny leaves are actually 3 leaflets connecting to one stem, and give rise to the expression 'leaves of three, let it be'. Tiny white flowers appear in late spring or early summer in conspicuous clusters, becoming white berries that last well into the winter. ALL PARTS OF THE PLANT contain an oily sap which causes blistering and itching when contacted and not washed off with soap. The oil persists even in the winter when the leaves have dropped off. Wildlife can eat the plant and seeds without problems.



➡ LOOK FOR leaves of three and then **let it be!**



Swallow-wort

Cynanchum laeve (Michx.) Pers.
Dogbane Family (Apocynaceae)

Honeyvine, Sandvine

A twining, climbing, perennial vine with opposite, heart-shaped leaves that have prominent veins and long, tapered tips. (The suffix “wort” is Old English for “plant”; “swallow” may refer to its growing over other things.) Greenish white flowers about ¼ inch wide are borne in clusters at the leaf axils (where the leaf stems attach to the main stem). Tear-drop shaped cases contain flat brown seeds with fine silky hairs attached that help dispersal by wind and water. When crushed or broken, the stems exude milky sap which may irritate skin.



➡ LOOK FOR this plant in wet, disturbed areas like sandy, flood-scoured river shorelines. Look for lines of fine hairs on the stems.

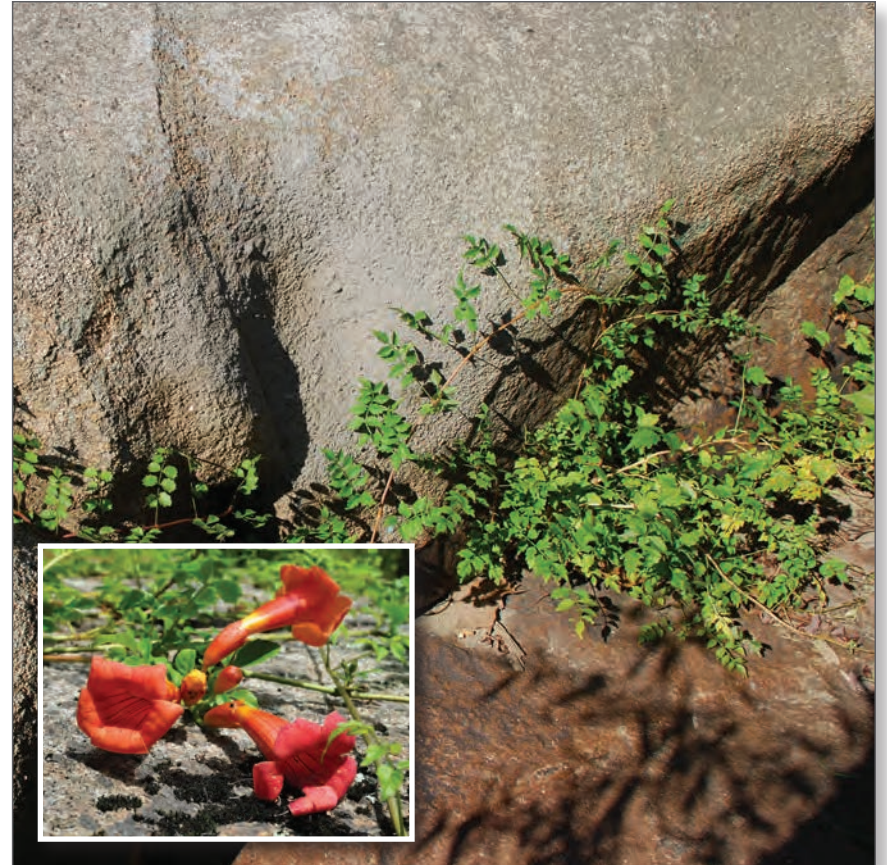


Trumpet Vine

Campsis radicans (L.) Bureau
Bignoniaceae Family (Bignoniaceae)

Trumpet Creeper, Cow Itch

Woody perennial that climbs by twining stems. Opposite, compound leaves have at least 7 pointed, toothed-edged leaflets. Three-inch long bright orange-red, trumpet-shaped flowers appear in summer and are much sought out by hummingbirds. Woody, drooping clusters of 6" pods containing seeds follow in fall.



➡ LOOK FOR how the flower shape and reproductive structures are adapted to pollination by hummingbirds.



Virginia Creeper

Parthenocissus quinquefolia (L.) Planchon
Grape Family (Vitaceae)

Woodbine, Five-finger, Five-leaved Ivy

A tough, woody, perennial vine that hangs on by gripping with adhesive disks that form at the ends of branched tendrils, like the introduced English Ivy. Leaves are alternate and palmately compound with 5 oval leaflets that form a fan shape. New or damaged leaves may have only 3 leaflets, making it easy to confuse this vine with Poison Ivy. Leaves turn a brilliant red in the fall, making it easy to separate from the yellow to orange Poison Ivy. Leaves are the main food source for three species of Sphinx Moth caterpillars. Berries are dark blue and last on the vine well into the winter, serving as late season food for birds and mice.



➡ **LOOK FOR** the adhesive disks formed by attached tendrils. Now try to find tendrils that do not touch anything. They will not develop the disks.