James River Rock Pool Flora



Grasses and Plants with Grass-like Leaves

Rooted in the mud or sand around the rock pools are flowering plants with grass-like leaves ranging in size from 4 inches to 3 feet high. Long, slender, leaf blades growing out of a basal clump largely define the character of a grass. Flowers are small, brownish in color, and difficult to see with the exception of the characteristic sausage-like spike of the cattail. Many of these species are difficult to identify without a magnifying glass or microscope. The following descriptions will help you easily recognize four of the most important members of the rock pool ecosystem.





Cattails

'Corn dog grass' identifies this 1 to 4 foot perennial. The flat, grass-like leaves are ½ inch wide and the roots are actually swollen, underground stems (rhizomes) that spread to form dense, impenetrable mats. Flowers are numerous, tiny, and clustered around the tops of bloom stalks arranged with male flowers at the top, a gap of bare stem, and female flowers below. The male flowers drop early leaving the top of the stem bare. Female flowers remain below as a dense cylinder packed with seeds and soft stuffing. It turns dark brown at maturity, giving the spike the appearance of a corn dog. As the spike deteriorates over winter, it breaks apart into bits of fluff that are caught by breezes, spreading the tiny seeds far and wide. Many birds nest in the protection of the dense vegetation, but few animals use cattails as food except muskrats that chew the roots. Native Americans ate the pollen, the pith, the unripe seed heads, and the starchy rootstock and wove the leaves into baskets and rope.



LOOK FOR the way the roots (rhizomes) stabilize the soft mud and keep out other plants. Try to jam your fingers down thru them! Then feel the sides of rhizome for the actual roots that feel like wires. The lumps and scales on top are actually the buds for next year's plants.





Horsetail, Water Paspalum

This annual grass has soft, spongy, round stems that often root at the joints and spread to form mats in shallow water or mud. The tiny flowers bloom in late summer and are clustered on perpendicular branches located at the top of the stem, giving the impression of a bottle-brush.



LOOK FOR the unique shape of the leaves: each pointy blade clasps the stem, but one piece continues down creating an extension that also ends in a point — the result is a grass blade that tapers at both ends.





Sedges

'Sedges have Edges' is the way to differentiate this group of clump-forming, grass-like perennials from true grasses. Sedge stems are triangular, not round. The inconspicuous, short-lived flower spikes produce distinct sprays of small, nutlike fruits. These are an important food for many birds and small mammals. Because many look so similar, few are given common names.



LOOK FOR the way the base of the flat leaves wrap all around the stems to form a closed sheath at each joint. This is another diagnostic feature of sedges.





Spikerush

Clusters of needle-like stems that end in clumps of flowers or seeds make Spikerush recognizable. The plants form colonies whose roots trap sand and mud, building up soil for other plants to colonize. Birds eat the seeds and stems are eaten by muskrats.



LOOK FOR the seed heads that resembles tiny pine cones at the ends of thin sticks, creating the look of tall dark Q-tips.

