

Red-wing blackbirds are singing, geese are on the move, maple sap is running, spring peepers are serenading, days are getting longer, and nights are getting shorter! The long, awaited reawakening is upon us. Every spring, I anxiously await the emergence of spring wildflowers; a sure sign that the worst of winter is behind us. I encourage you to meander along a woodland stream to discover the subtle changes taking place beneath the streambank's towering trees. If you look closely, you will find sprinkles of colorful spring ephemeral wildflowers gracing the forest floor.

Spring ephemerals bloom in early spring before trees and shrubs leaf out, blocking sunlight from reaching the forest floor. As the name suggests, bloom time is often brief, so you don't want to miss the short interval of glorious blooms between snowmelt and leaf out. In just a few weeks, they bloom, photosynthesize, reproduce, and enter dormancy. They grow in the moist rich soils, are prevalent along woodland streams, and are a critical source of pollen and nectar for pollinators such as bees, flies, and gnats. Both insects and spring ephemerals are important parts of the forest ecosystem. Both are valuable and should be protected.

Some of my favorite spring ephemerals include the following:

Skunk cabbage (*Symplocarpus foetidus*) - This member of the Arum family is a true harbinger of spring. It has the remarkable ability to produce heat, enabling the flowers to emerge when the ground is still frozen. You may see the mottled yellow and purple hooded flowers emerging in February. The flowers are born on a club-like structure called a spadix. Look closely and you will see many individual flowers. Its large, ovate shaped leaves grow after it flowers and can be found late in the season along streambanks and in moist low-lying areas. The name refers to the unpleasant odor of the flowers and foliage when crushed. Carrion flies and bees are important pollinators.

Bloodroot (*Sanguinaria canadensis*) - This lovely white flower is named for the dark red sap that exudes from all parts of the plant if cut. Flowers are up to two inches across and have 8-12 petals. The center stamens are yellow. You may find the 3-9 lobed, pale green leaves into mid-summer. They are clump forming and spread via rhizomes. If pollinated, they produce a seed pod that splits open, scattering seeds. Ants are attracted to the seeds and aid in seed dispersal.

Spring beauties (*Claytonia virginica*) - These dainty white or pink flowers have five petals adorned with pink stripes that act as nectar guides for pollinators. The flowers open on warm, sunny days and close at night and when it's cloudy. The flowers are erect when blooming and nod when closed. You may find them in loose colonies. They reseed and spread via small corms and secondary roots. They have grass-like, dark green leaves.

Trout Lily (*Erythronium Americanum*) - This beautiful member of the Lily family graces the moist woodlands. The name aptly describes the mottled appearance of the brown and green leaves resembling the markings on a brook trout. The yellow, nodding flowers have six petals that curve back away from the stamens. They are colony forming and spread via rhizomes and grow from a white bulb that looks like a

tooth. Hence, the common name, dogtooth violet. Ants also help scatter seeds. They eat part of the seed and let the rest to germinate.

Jack-in-the-pulpit (*Arisaema atrorubens*) - This familiar spring wildflower is commonly called Indian turnip and, like skunk cabbage, is also a member of the Arum family. The flower has a unique green and maroon striped, hooded pulpit - the spathe. It surrounds the maroon-colored spadix ("Jack") which bears the tiny, embedded flowers. The spathe keeps insects confined, increasing the success of pollination. The leaves are divided into three leaflets. After it flowers, you can find the leaves and mature fruits that turn green to red by late summer.

Wild geranium (*Geranium maculatum*) - These showy, pink-purple flowers bloom late April to early June. They have 3-7 flowers per stalk. They form stunning patches and are attractive to a variety of bees and butterflies. They have palmately lobed, delicate leaves. The common name, cranesbill, refers to the slender fruits that resemble long-billed birds. Seeds are catapulted from the pods, dispersing them far from the parent plant. They colonize by rhizomes.

These are just a few of the many charming wildflowers you may discover along a wooded Pennsylvania stream. Others include Virginia bluebells, mayapples, lady's slippers, Solomon's seal, violets, dutchmen's breeches, phlox, Jacob's ladder, columbine, and more. By mid-June the towering, deciduous trees shadow the forest floor with deep shade, virtually making these early woodland wildflowers retreat to the underground for another year.

Spring ephemerals are threatened by habitat fragmentation, development, climate change, invasive species, and deer pressure. They are a valuable part of the forest ecosystem. They stabilize the soil, contribute vital nutrients, and help sustain native insect populations. Some colonies of spring ephemerals may be older than the trees surrounding them. Once disrupted, it may take many years until they become re-established. Protecting and properly managing forests will protect the delicate early blossoms that seem to bring the spring woods to life after a long winter's rest.

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