

A Selection of South Carolina Spring Wildflowers



Hepatica
Anemone americana



Spring Beauty
Claytonia virginica



Trout Lily
Erythronium americanum



Little Sweet Betsy
Trillium cuneatum



Oconee Bells
Shortia galacifolia



Bloodroot
Sanguinaria canadensis



Halberd-leaf Violet
Viola hastata



Mayapple
Podophyllum peltatum



Foam Flower
Tiarella cordifolia



Star Chickweed
Stellaria pubera



Cutleaf Toothwort
Cardamine dissecta



Woodland Phlox
Phlox divaricata



Jack in the pulpit
Arisaema triphyllum



Yellow Lady Slipper
Cypripedium parviflorum



Wild Ginger
Hexastylis sp.



Atamasco Lily
Zephyranthes atamascasca

An Ecology of Spring Wildflowers: Adaptations and Connections

The forest floor begins to stir in early February as small green shoots push through the leaf litter. Spring begins! Spring wildflowers are stars in our wooded exhibits on the Natural Heritage Trail. The spring herbaceous layer is exceptionally diverse in environments with rich soils containing lots of organic material. Every day, from February to May, something new appears in the landscape!



Spring Beauty
Claytonia virginica

Spring wildflowers synchronize their life-cycles to the trees above them. Many are spring ephemerals: they pop up, flower, set seed and die back before the trees completely leaf out. Once the temperatures warm, all signs of Spring beauty disappear. Hepatica is not ephemeral. Hepatica leaves persist and enable it to photosynthesize throughout the year. Look for its lobed leaves on the forest floor all year long.



Round-lobed Hepatica
Anemone americana

These plants adapt in other ways to cold temperatures and challenging environmental conditions. Their small stature offers them some protection from harsh weather. Bloodroot flowers are protected by a single enveloping leaf when they first emerge. If you look closely at hepatica, the stems and leaves are covered by tiny hairs that act as insulation. Deer are dissuaded from browsing Jack-in-the-Pulpit and Mayapple by the bitter chemicals each contains. Many of these plants only open their flowers when it's warm enough for their pollinators to be out. Bloodroot flowers open at 46° and their primary pollinators, bumblebees, fly at 41°. If pollinators don't visit, asexual reproduction comes to the fore. Plants are spread instead by stolons, rhizomes, or division of the underground structures.



Spring beauty bee
Andrena erigeniae
Photo: Judy Gallagher
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Many of these spring flowers are an important nectar source for early emerging native bees and other insects. Some bees are generalists and visit multiple flower types. Other bees are more selective, relying on specific flowers: the spring beauty bee and trout lily mining bee are two examples. Butterflies, beetles, flies and other insects are also reliant on these flowers for nectar and pollen. The red-neck false blister beetle feasts on trout lily pollen (left).



Red-neck false
blister beetle
Asclera ruficollis
Photo: Seth Ausubel
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Seed dispersal for spring wildflowers is often accomplished by helpful ants. Ants are attracted to a small fleshy, protein rich addition to the seed called an elaiosome. Once they find a seed, they take it back to their nest to feed their offspring the elaiosome and then discard the seed in the leaf litter. Spring wildflower seeds and fruits are important food for small mammals, birds and reptiles.

When you visit your local woods, search out these diverse miniature beauties and check out who is visiting them!



Ant and seed with elaiosome
Photo: Alex Wild, used with permission