Forest Wildflowers

Walking the forest during the early days of spring you will notice that the trees overhead are leafless. The sun's rays are streaming down warming the soil below. As you look more closely a carpet of small wildflowers will catch your eye. The spring wildflowers of the forest take **advantage** of this window of sunlight **opportunity** because a few months from now, the forest floor will be cool and shaded by the leaf-filled tree **canopy**.

Alive Below the Ground

How are wildflowers able to grow so quickly during the spring? These plants are alive all year underground waiting, using their stored energy to survive. During the spring, the plant quickly flowers to reproduce by making seeds. It grows buds underground, and these buds sprout the following spring when the soil warms and rains make the soil moist. Most spring flowers are **perennials**. After flowering and making seeds, the parts above the ground die back and the parts below ground stay alive.

The stored energy in the plant remains in special structures. **Tubers** grow out of the underground stem, called the **rhizome**. Potatoes are an example of a plant **tuber,** helping the plant store energy. Other plants store energy in bulbs or **corms**, which look like onions. When conditions are just right in the spring these structures begin to grow stems, leaves, flowers and seeds before the trees above them leaf out and reduce the sunlight.

Special NC Wildflowers

Some special NC spring wildflowers are the trout lily, lady's slipper and bloodroot. Each grows in early spring in its unique habitat near a stream, on the forest floor, along the edge of the swamp or along the roadside. The earliest of the spring wildflowers is the trout lily. The trout lily has speckled green and brown leaves which look like a trout's skin. They like to grow in patches, so if you see one you will see many nearby. Young trout lilies only grow one leave during their first year. Then in the 2-4 years that follow they grow a second leaf and a flower. These wildflower **colonies** are slow growing. The yellow flower will open during the daytime and close at night. In the past, Native Americans used this plant's extracts for a medicine, it has **antibacterial** properties.

The soil in a pine and oak forest is perfect for the lady's slipper wildflower, which also grows in large colonies. These flowers from the orchid family need specific **fungi**, or mold to be present on their roots in order to grow. The flower of the lady's slipper has a pouch that looks like a shoe. When bees climb in, they get trapped at first. The flower's nectar and its color patterns show the way to the exit for the bee. The bee brushes pollen in the flower to fertilize new seeds.

The single white flower of the bloodroot wildflower is recognizable by its 8-12 petals and its single wide leaf making. Native Americans used the red juice from its root to make dyes for skin and fabrics.

A Symbiotic Relationship

A close **symbiotic** relationship between ants and some wildflowers exists in these forest communities. The seeds from the trout lily and the bloodroot are scattered around the forest floor by ants. The ants eat the sweet fleshy part surrounding the trout lily seed, then leave the seeds behind to germinate. It's a bit like a cupcake where the ants eat the frosting and leave the cake behind. This is a mutual relationship because both the ant and the plant benefit from the ant's behavior.

Protect the Spring Wildflowers

How can you conserve these spring perennials? When taking a spring stroll in the park, stay on the path. That way you won't step on the flowers and interrupt the life cycle of the plant. Bring a sketch book or a camera to record what you see. Do not pick wildflowers because many of them only have a single flower bloom and if the stem is broken it will not grow another flower. The park's spring wildflowers are specially adapted to live in their natural habitat. If you want to have spring flowers at your home, buy plants from a nursery.