Bloodroot (Sanguinaria canadensis)

Identification:

Bloodroot's name is derived from the reddish sap of the underground rhizome. Its flower gives no indication of such a name. Eight or more 1-inch long petals radiate from a central core clustered with numerous yellow stamens and a single 2-lobed pistil. The stamens are usually twice the number of petals. Count them to check. The flower arises on a solitary stalk from the rhizome below. A single leaf mimics the flower as it also rises on a single petiole. The 8-inch wide leaf is palmately-lobed, often looking like a glove for a stubby fingered gnome. The plant likes mixed hardwoods with rich soils. Bloodroot is a spring ephemeral and quickly goes to seed. The seedpod is often hidden by the leaf, which tends to wrap itself around the seedpod.

Bloodroot can be found from New England to Florida and west to Texas. In Canada, it can be found from Nova Scotia west to Manitoba. Depending on your latitude, bloodroot blooms from February into May. It is a member of the poppy family. And the only species in the genus Sanguinaria.

Natural History:

As a spring ephemeral, bloodroot has a very short blooming season. Before the leaves of the forest trees begin to shade the forest floor, bloodroot must produce a flower and get pollinated. It has been reported that the leaf remains wrapped around the flower and its stalk until the flower has been pollinated. This is perhaps an adaptation that allows for its early spring blooming. The leaf may offer some protection from the cold, much like a blanket wrapped about a cold body.

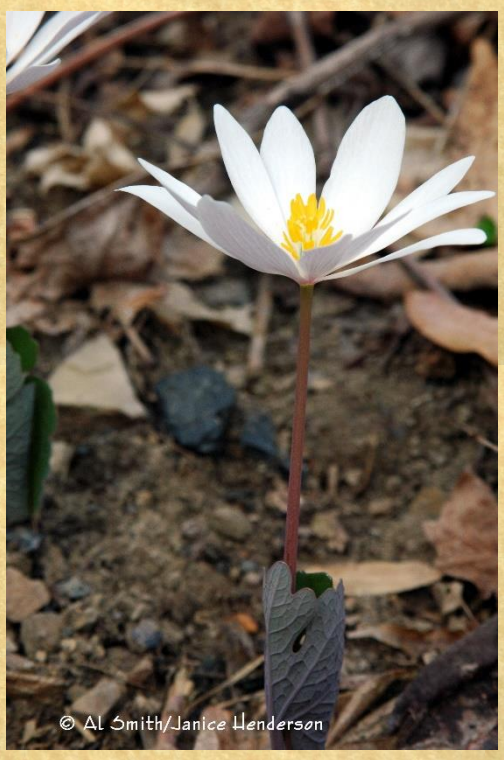
The trick of pollination is to get the pollinator to visit you and another flower of the same species with the least amount of energy expended. Bloodroot uses its cluster of bright yellow stamens to attract pollinators such as bees. Nectar is a great deal for the pollinator, but is an energy intensive product for the plant, so bloodroot produces no nectar and so pollinators get no reward for their visits. Yet with so few flowers in bloom early in the spring, pollinators have little choice but to visit bloodroot. But even if they don't, bloodroot has

been known to self-pollinate. Its not the best choice, since it produces no genetic diversity, but it can keep the species going.

The seeds of bloodroot are covered with a sticky layer which attracts ants. The ants carry away he seeds to eat the outer covering back in their nest. The waste seed is then transported to the ant hill's rubbish pit where it effectively becomes planted by the ants.

After seed dispersal, the leaf will remain to gather sunlight and store sugars in the rhizome for next year's early spring bloom.

Significance:



Bloodroot has been used by many people in a variety of ways throughout history. Captain John Smith reported that Indian women used the plant's red sap to paint themselves and to dye their baskets. Bloodroot has sometimes been called Red Puccoon, an Indian term for bleeding. It was used to induce bleeding in women either as a treatment for cramps or to induce an abortion. Medical advice journals in the 1800s suggested that women use it for similar purposes.

Bloodroot sap's caustic nature has led to its use to treat skin ailments as well. It was an early attempt treatment for skin cancer, with little success, but it should remind us that 2/3 of the earth's population still treat themselves with traditional herbal medicines. That is nearly 4 billion people. Ethnobotany is a branch of science that continues to search for active medicinal herbs by exploring the plants used by aboriginal peoples across the globe.

Perhaps bloodroot's most common use is in toothpaste. Next time you find yourself in the toothpaste aisle at the local grocery store check out the ingredients on the back of the toothpaste boxes. You find at least one brand that still uses sanguinaria extract as an active ingredient. In fact, the American Dental Association said that it was a promising plaque-fighter.