

Notable Natives

by Linda Novak

Castilleja coccinea, a hard-to-establish Illinois native plant, is now growing amid more common species at CFC's restored prairies. If you volunteer for a workday in the early summer, you may catch a glimpse of its brightly colored bracts.

The plant, commonly called Indian paintbrush or scarlet paintbrush, grows one to two feet tall. At its top are spiky orange-red bracts, which are actually modified, colored leaves (think poinsettia) surrounding small flowers. The plant gets its common name from these structures because they look like a ragged brush dipped in red paint.



Indian paintbrush. Photo by Wes Wolf.

The species found on CFC property is a biennial or monocarpic perennial. Monocarpic perennials grow for two or more years, flower, produce seeds and then die. In its first year, Indian paintbrush forms a small rosette of leaves close to the ground. In its second year, it sends up a leafy stalk that develops the bracts and flowers. "It must set a lot of seed to thrive," said Tom Vanderpoel, Restoration Chairman of CFC. If something happens to the flowers – for example, they get eaten by deer – the plant will disappear from the site."

Castilleja coccinea is a member of the figwort family, a relative of Culver's root and the *Penstemons* and is related to the non-native snapdragon and foxglove. *Coccinea* is hemiparasitic which means it can make its own food through photosynthesis but also has roots that tap into the roots of other plants. There is some evidence that the relationship is reciprocal with the host plant receiving benefits as well. It is this parasitic relationship that makes a new patch of Indian paintbrush so difficult to establish. No one is certain which other species the paintbrush needs to be near.

How did CFC's experts get Indian paintbrush established? Vanderpoel said, "We did not do anything special to the seeds we sowed, but we did select places where we thought it might be successful. However, since the plant is so rare in the area, we do not have a lot of sites on which to study its preferred habitat."

Keep your eyes open when you walk our preserves; you might be rewarded with the sight of this rare beauty.