



Cardinal flower flash of red

By Susan Yost, Ph.D.
Delaware State University

It's the beginning of a new year, and time to reflect on memorable plants of 2008.

A striking sight last summer was a flash of red along the edge of a pond, with a closer look revealing a cardinal flower (*Lobelia cardinalis*), rather than the bird with the same name. Aptly named for its brilliant color, like the robes of a Catholic cardinal, cardinal flower is considered to be one of our showiest native wildflowers.

The color of cardinal flowers did not evolve in order to entertain humans, but to attract pollinators. This beautiful flower is pollinated mainly by ruby-throated hummingbirds, which can see the color red.

Additionally, hummingbirds don't have a well-developed sense of smell, and the flower has no obvious floral scent. Hummingbirds drink while hovering, and the lower petal of cardinal flower doesn't project forward to serve as a landing platform, as is the case in some insect-pollinated flowers like violets.

Cardinal flower root tea was used by Native Americans to treat syphilis, as was a related species, great blue lobelia (*Lobelia siphilitica*). Ironically, cardinal flower was also used as a love potion.

Other medicinal uses included



Submitted photo/David Smith.
Cardinal flower (*Lobelia cardinalis*) is well named for its brilliant red flowers.

root tea for stomach ache, worms and typhoid; and leaf tea for colds, fever and headaches. It's probably best not to experiment with cardinal flower for any of these uses, since this plant is considered to be potentially toxic.

Cardinal flowers are a nice addition to a garden, but it's important to keep the soil moist. This perennial grows 2 to 3 feet tall in rich moist soil, in light shade to full sun; and is said to live about seven to 10 years. Cardinal flower is a member of the bellflower family (Campanulaceae). There

are a number of named hybrids with *L. siphilitica*, in shades from red to blue.

An encounter with a cardinal flower is so memorable that I can tell you exactly where I've seen it recently in Delaware: canoeing along the inlet to Silver Lake in Dover, walking on the trail along the stream at Abbott's Mill, and walking in the Anne McClements Woodland in Dover.

Last year, on the campus of Delaware State University, a single cardinal flower surprised me by appearing for the first time on the edge of a small artificial pond. The seeds are tiny and are said to be carried by the wind and to float on water. So this plant may have been introduced there by the wind or possibly in the mud on a bird's foot.

I'm now looking forward to the summer of 2009, and more surprising flashes of brilliant red cardinal flowers.

Editor's note: On the campus of Delaware State University, the Claude E. Phillips Herbarium is Delaware's center for research, education, and outreach about plant identifications, locations, and uses. Call Dr. Yost, herbarium educator, at 857-6452 to arrange a tour of the herbarium, or for more information about this article.