

Common name: **Cardinal flower**

Genus Species: ***Lobelia cardinalis***



Photo credit: Joseph LaForest, University of Georgia Bugwood.org

Description: This perennial plant is usually unbranched and 2 to 3.5 feet tall. Cardinal flower boasts brilliant scarlet-colored blossoms. The flowers are delicate, gradually opening from bottom to top on slender spikes. Beneath the flower spikes are numerous dark green leaves, tapered at both ends.

Habitats: Cardinal flowers are a native wildflower species that grows in marshes, stream banks and low woods.

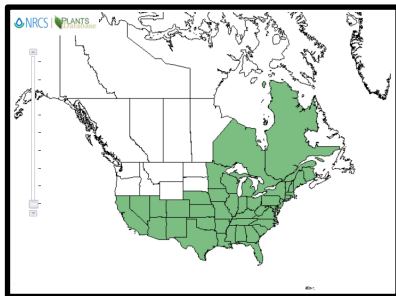
Phenology highlight: Few native plants have flowers of such intense red color as the cardinal flower, and blooms can be recognized at a good distance.

Species facts:

- Cardinal flower is often considered to be a “hummingbird-specialist” flower, meaning that these birds are the dominant pollinators.
- Butterflies visit cardinal flowers for nectar.
- There are many traditional Native American uses for cardinal flower. Various plant parts were used to treat cramps and typhoid, to create a love charm, or as an emetic for an upset stomach.



Photo credit: Harlan B. Herbert, Bugwood.org



Map credit: USDA, NRCS. 2014. The PLANTS Database <http://plants.usda.gov>, 16 December 2015). National Plant Data Team, Greensboro, NC 27401-4901 US.

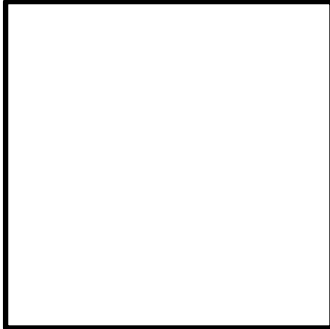
Why observe this species? Cardinal flower is one of the plant species observed by New York Phenology Project member organizations, and data gathered is contributed to the National Phenology Network database. The mission of this public participation in science research initiative is to educate and engage the public while collecting data that is useful for detecting broad scale patterns and changes in the natural world.

Tip for observing this species: Look for the white bearded anthers (the part of the male reproductive structure that holds the pollen) to indicate the Open Flower phenophase.

For more information about phenology and the New York Phenology Project (NYPP), please visit the NYPP website (www.nyphenologyproject.org) and the USA-NPN website (www.usanpn.org).

Cardinal flower (*Lobelia cardinalis*)

Note: flower and fruit phenophases are nested so you may need to record more than one phenophase in each group; for example, if you record **Y** for “open flowers” you should also record **Y** for “flowers or flower buds.”



Initial growth New growth is visible after a period of no growth (winter or drought) as new shoots breaking through the soil surface. Growth is considered initial until the first leaf has fully unfolded.



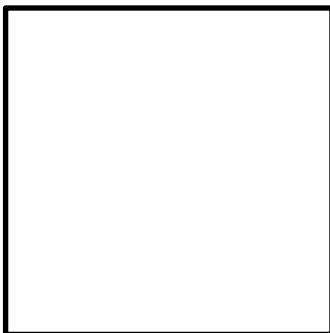
Leaves One or more live, fully unfolded leaves are visible. For seedlings, consider only true leaves, not the two small leaves (cotyledons) that are found on the stem immediately after the seedling germinates. Do not include dried or dead leaves.



Flowers or flower buds One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds that are still developing, but do not include wilted or dried flowers.



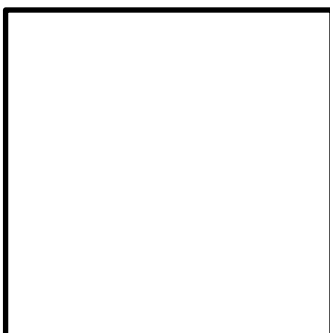
Open flowers One or more open, fresh flowers are visible. Flowers are open when reproductive parts (male stamens or female pistils) are visible between unfolded flower parts. Do not include wilted or dried flowers.



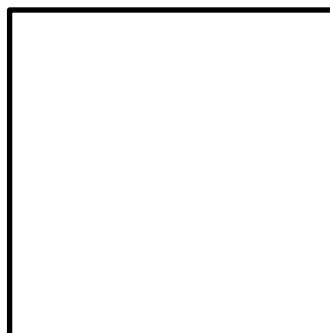
Fruits One or more fruits are visible on the plant. Fruits of cardinal flowers are small capsules that change from green to tan, light brown or red-brown and split open to expose the seeds. Do not include empty capsules.



Ripe fruits One or more ripe fruits are visible on the plant. Cardinal flower fruit is considered ripe when it has turned tan, light brown or red-brown and split open to expose the seeds. Do not include empty capsules that have dropped all their seeds.



Recent fruit or seed drop One or more mature fruits or seeds have dropped or been removed from the plant since your last visit. Do not include immature fruits that fell before ripening or empty capsules.



Mutualism Cardinal flowers and hummingbirds have a mutualistic relationship meaning that both species benefit. Flowers produce food (nectar) to attract hummingbirds that, in turn, move pollen from flower to flower (pollination).

All phenophases are pictured