



Nature's Notebook Phenophase Photo Guide

> Cercis canadensis Eastern redbud



Radford Phenology Monitoring

Why Observe?

Eastern redbud is a small tree or deciduous shrub (16 to 40 feet tall) native to eastern North America. Redbud was included in a 2010-2012 Nature's Notebook campaign comparing spring leaf and flowering phenology of nine tree species, to evaluate climate change influences on spring life cycle events. Redbud is planted often for its attractive flowers and leaves. Flowers have been used as a source of nectar in honey production and may be pickled or eaten fresh; bark extract has been used medicinally to treat dysentery and other ailments.

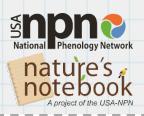
Tips for Identification

In early spring, redbud is easily recognized by its numerous, small, pink- or rose-colored flowers that appear before leaves emerge. Each "pea-like" flower has bilateral symmetry and occurs in a cluster at a leaf node. In late spring, leaves appear with a unique heart-shape. Unlikely most legumes, redbud leaves are simple, not compound. The fruit, a long, flat legume, develops mid- to late- summer and persists into winter. Bark is smooth and dark on young trees and becomes shaggy with age. Redbuds tend to form a characteristic vase-shaped canopy with widely spreading branches.

Be aware there is variation from individual to individual within a species, so your plant may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



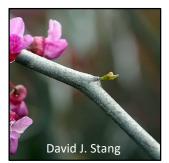




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RADFORD UNIVERSITY



Breaking leaf buds

One or more breaking leaf buds are visible on the plant. A leaf bud is considered "breaking" once a green leaf tip is visible at the end of the bud, but before the first leaf from the bud has unfolded to expose the leaf stalk (petiole) or leaf base.



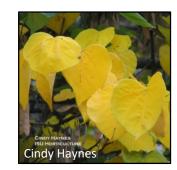
Leaves

One or more live, unfolded leaves are visible on the plant. A leaf is considered "unfolded" once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf stalk (petiole) or leaf base is visible at its point of attachment to the stem. Do not include fully dried or dead leaves.



Increasing leaf size

A majority of leaves on the plant have not yet reached their full size and are still growing larger. Do not include new leaves that continue to emerge at the ends of elongating stems throughout the growing season.



Colored leaves

One or more leaves show some of their typical late-season color, or yellow or brown due to drought or other stresses. Do not include small spots of color due to minor leaf damage, or dieback on branches that have broken. Do not include fully dried or dead leaves that remain on the plant.



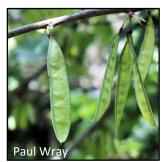
Flowers or flower buds

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.



Open flowers

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.



Fruits

One or more fruits are visible on the plant. For *Cercis canadensis*, the fruit is a pod that changes from green to purplish to dark brown and, over time, splits open to expose the seeds. Do not include empty pods that have already dropped all of their seeds.



Ripe fruits

One or more ripe fruits are visible on the plant. For *Cercis canadensis*, a fruit is considered ripe when it has turned dark brown. Do not include empty pods that have already dropped all of their seeds.

Phenophases not pictured: Falling leaves, Recent fruit or seed drop

This Phenophase Photo Guide has been vetted by the USA-NPN NCO. It is appropriate for use as a supplement to the Nature's Notebook phenophase definition sheet for this species.