

*Cercis canadensis*  
 Eastern redbud

**Radford Phenology  
 Monitoring**

**Why Observe?**

Eastern redbud is a deciduous shrub or small tree native to eastern North America. Redbud was included in the 2012 Nature's Notebook campaign comparing spring leaf and flowering phenology of nine target tree species from 2010 to 2012, to evaluate anomalies in spring life cycle events and how climate changes may influence leaf phenology.

**Tips for Identification**

In early spring, eastern redbud is easily recognized by its numerous small pink to purplish flowers that appear before leaves emerge. Flowers are bilaterally symmetric, with 5 petals in a pea-like structure. Leaves appear in late spring, with a unique heart-shaped or nearly circular appearance. Leaves are simple, alternate, 2.5 to 5 inches long and wide. The fruit is a long, flat legume that appears in mid- to late- summer and persists well into the winter. Overall tree shape is also distinct, having a vase-shaped canopy with widely spreading branches. Bark is smooth and dark on younger trees, becoming shaggy with age.

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.



Christine Small



Christine Small



CJ Small

**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.



Photo credit

**Leaves**

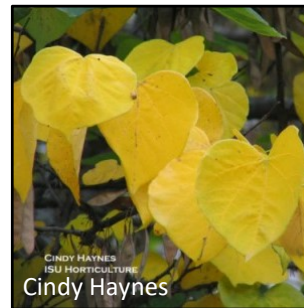
One or more live, unfolded leaves are visible on the plant. A leaf is considered "unfolded" once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf stalk (petiole) or leaf base is visible at its point of attachment to the stem. Do not include fully dried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



Kathy Diemer

**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.



CINDY HAYNES  
ISU HORTICULTURE  
Cindy Haynes

**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.



CJ Small

**Flowers or flower buds**

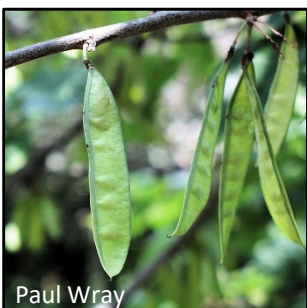
One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.



CJ Small

**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.



Paul Wray

**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.



Marlin

**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