

Common name: **Starflower**

Genus Species: ***Trientalis borealis***



**Description:** Starflower is a perennial herb that grows from slender, creeping rhizomes (horizontal underground stems). Starflower is one of the few flowers that has seven petals (may have 5 to 9 petals). Two or three delicate star-shaped white flowers open above a whorl of green leaves on each plant.

**Habitats:** Starflower grows in both deciduous and coniferous forests. It is usually found in open to dappled shade in moist woods but may be found on dry, sandy, acidic soils as well.

**Phenology highlight:** Seven-petaled starflower has an unusual and asymmetrical beauty.

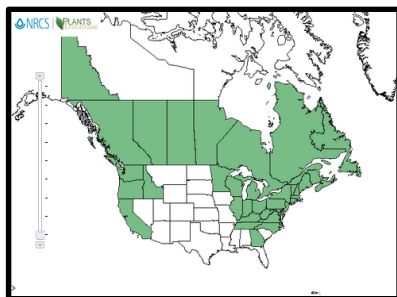
Photo credit: Brett Marshall, Sault College, Bugwood.org

### Species facts

- Starflowers are pollinated by native bees and flies. These insects feed on the pollen, since the flowers do not produce nectar.
- Eastern chipmunks eat the seeds and capsules of the starflower.



Photo credit: Elmer Verhasselt, Bugwood.org



**Why observe this species?** Starflower is one of the plant species observed by New York Phenology Project member organizations. 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 in the natural world.

**Tip for observing this species:** Starflower generally goes dormant in mid-summer when leaves yellow and fall to the ground so that only the stem with one or two tiny fruits (seed capsules) remain. Continue to observe fruits until they ripen and separate from the stem or are removed by animals.

Map credit: USDA, NRCS. 2014. The PLANTS Database <http://plants.usda.gov>, 25 August 2014). National Plant Data Team, Greensboro, NC 27401-4901 USA

For more information about phenology and the New York Phenology Project (NYPP), please visit the NYPP website ([www.nyphenology.org](http://www.nyphenology.org)) and the USA-NPN website ([www.usanpn.org](http://www.usanpn.org))



## Starflower (*Trientalis borealis*)

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

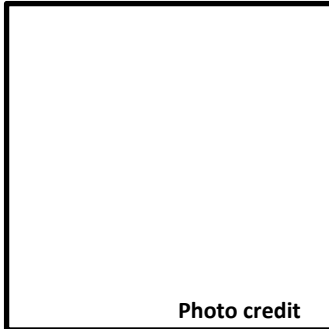


Photo credit

**Initial growth** New growth of the plant is visible after a period of no growth (winter or drought), either from above-ground buds or new shoots breaking through the soil. Growth is "initial" until the first leaf has fully unfolded.



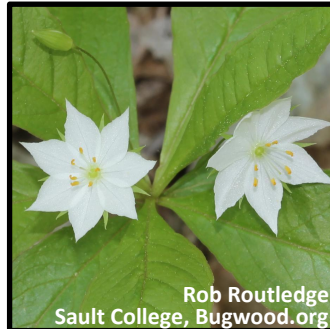
Steven Katovich  
USDA Forest Service  
Bugwood.org

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



Rob Routledge  
Sault College, Bugwood.org

**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.



Rob Routledge  
Sault College, Bugwood.org

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

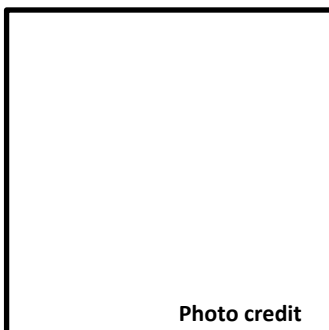


Photo credit

**Fruits** One or more fruits are visible on the plant. Starflower fruit is a small capsule that changes from green to brown and splits open to expose the seeds. Do not include empty capsules that have already dropped all of their seeds.

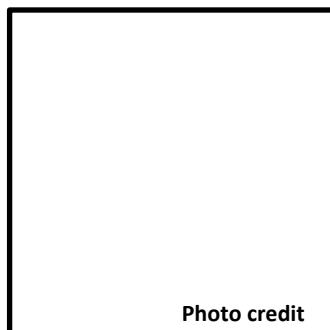


Photo credit

**Ripe fruits** One or more ripe fruits are visible. Starflower fruit is ripe when it has turned brown and has split open to expose the seeds. Do not include empty capsules that have dropped all of their seeds.

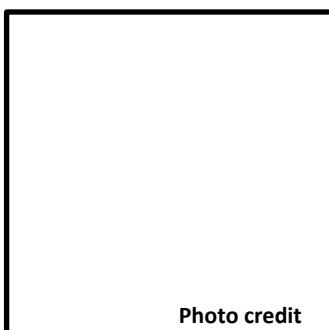


Photo credit

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



Jessica Louque  
Smithers Viscient, Bugwood.org

**Native bees and crops** Native bees and wild honey bees improve fruit size, enhance seed production, and sustain genetic diversity of bee-pollinated crops. In addition, many native plants such as starflower depend on native bees as primary pollinators.

*All phenophases pictured here.*