

What's Wrong With My Dogwood? By Dawn Pettinelli, UConn Home & Garden Education Center

Flowering dogwoods (*Cornus florida*) are one of the eastern United States' most iconic and beloved tree species. From late May through mid-June, tiered layers of branches are tipped with graceful blooms in white, pink and red. Actually, the flowers are small clusters of rather insignificant yellowish blossoms, but they are surrounded by four showy bracts.



Part of flowering dogwood's popularity comes from its four-season appeal. Spring brings attractive blossoms; summer, handsome foliage; fall, bright red berries and reddish to purple autumnal color, and winter, a most attractive woody framework. Often flowering dogwoods are used as specimen trees or accents, but they put on their best performance as understory trees skirting the edges of woodlands. With an increase emphasis on incorporating more native plants into our yards and gardens, these trees fit the bill nicely putting on an attractive show while serving as a wildlife attractant.

Many problems with flowering dogwoods might be avoided if care is taken to meet this tree's needs. Naturally occurring throughout the east coast as an understory tree, plants thrive in an evenly moist but well-draining, acidic soil with at least a moderate amount of organic matter.

Given an option, they would prefer to be grown in part shade rather than positioned a hot, dry sunny area. In general, flowering dogwoods do poorly in compacted soils, dry soils, poorly drained soils, neutral to alkaline soils and also during prolonged periods of heat and/or drought.

Two of the most serious problems they are sometimes afflicted with are dogwood anthracnose and dogwood borer. Dogwood borer adults are small clear-winged moths that emerge from the tree they overwintered in sometime between late May and early September. Adults mate and lay their eggs on the bark of dogwood trees typically near the site of some type of injury. Eggs can be laid anywhere from ground level to up to the bottom branches and sometimes where the branches meet the trunk. The best way to prevent borers is to make sure the bark is not injured while transplanting or when weed whacking and mowing near trees.

The eggs hatch and the larvae search for an opening in the bark as they are unable to chew through intact bark. They then tunnel into the cambium of older bark and begin feeding. They will remain in the tree until the following spring when they emerge as adults and the cycle begins again. Once inside the tree, it is extremely difficult to control borers. If a fresh hole is discovered, a thin piece of wire could be inserted to try to stab the borer. Look for swollen or calloused areas or sites where the bark seems sloughed off. Dead or dying branches may be another clue that a borer is feeding inside the tree trunk or branch.

Branch dieback can also occur due to dogwood anthracnose, a serious fungal disease that has hit Northeast dogwoods fairly hard since it was discovered in the 1970s. Other symptoms include leaf spots that appear wet with purple edges, dead leaves that cling to the tree and epicormic sprouting (shoots coming from main trunk or large branches). Periods of high humidity and cool temperatures along with lower light conditions favor the development of this disease. Once the tree is infected, it typically dies within 3 to 5 years.



Another disease that enters through wounds in the bark or branches is crown canker. Initial symptoms include smaller than normal leaves that are light green in color and a general stressed appearance of the plant. As the disease progresses, the branches on one side of the tree may die. This disease causes a canker to develop. As this dead area spreads around the trunk or major branch, it destroys the part of the tree that moves water and nutrients from the roots to the crown so the tree slowly dies.

There are several minor diseases that affect flowering dogwoods as well such as spot anthracnose and powdery mildew and while they might look unsightly, they mostly detract from the plant's appearance.

Dealing with flowering dogwood problems can be tackled two different ways. Trees that are already in place need to be taken care of properly. Start with a soil test to make sure the pH is somewhere between 5.0 and 6.0. If it is higher, follow the recommendation to lower it with sulfur. Do not overfertilize but feed plants once a year in the spring with a balanced fertilizer. Place a ring of mulch, 2 to 3 inches deep, around the tree, the wider the better, to keep soil moist and to eliminate the possibility of injury from lawn maintenance equipment. Do not let the mulch touch the trunk. Monitor your tree for any signs of injury and prune injured or broken branches.

There are almost 100 cultivars of flowering dogwoods. A number have been bred for resistance to dogwood borers and dogwood anthracnose. The Stellar Series were developed at Rutgers University by Dr. Elwin Orton. He crossed our flowering dogwoods with Kousa dogwoods and developed hybrids highly resistant to the dogwood borer and moderately to highly resistant to dogwood anthracnose. Cultivars include 'Aurora', 'Constellation', Stardust' and 'Stellar Pink'. There are a few *C. florida* cultivars, such as 'Appalachian Spring' that are also resistant to dogwood anthracnose.

If you are having problems with your dogwood or for questions on other gardening topics, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at <u>www.ladybug.uconn.edu</u> or contact your local Cooperative Extension center.