

Repair construction damage carefully

Problem: During the construction of a new housing development last year, some oak and maple trees were damaged. Most of the visible damage is on the main trunk of large (20- to 30-inch DBH) oak trees. Some of the injury is three feet long and about 10 inches wide. Is there anything we can do to help the trees recover? (North Carolina)

Solution: Although injury to the trunk is the most visible damage that occurs during construction, less obvious problems may be as serious, if not more so. Grade changes, disruption of water flow, root injury and soil compaction are all common problems associated with construction.

You indicated that injury occurred to large areas of the main trunk of a number of trees. If bark only was removed, a smooth surface still remains for wound tissue to cover the injured areas. If the damage was not extensive—if less than one-third of its circumference was affected—there is a good chance that, with the proper care, the trees will recover. Recovery also depends on the previous health of the trees and the extent of soil or root damage.

Carefully remove loose or peeled bark; however, do not cause additional injury. It is not necessary to "shape" the wound with bark tracing. For aesthetic reasons, you may want to use a wound dressing.

Fertilize, water and mulch the trees as needed to help improve their vitality. Generally, borer insects and canker-causing fungi establish on weakened and stressed trees. Borers can be managed with labeled insecticides, but fungicides are not effective for canker diseases. Maintaining proper health is the best defense against cankers.

Crabgrass explodes

Problem: We have used Surflan A.S. to manage weeds in the landscape. In previous years, we have had good results. However, this year we are finding an abundance of weeds, particularly crabgrass, in flower beds. Could you please explain this? (*Michigan*)

Solution: There has been an explosion of crabgrass this year in many parts of the U.S. Moisture, sunshine and high temperatures have provided ideal conditions for annual grasses, such as crabgrass, to establish. In many situations, pre-emergence herbicides have not provided satisfactory weed management because of a prolonged germination period and good weed/crabgrass growing conditions.

Generally, crabgrass seeds can remain viable for 10 to 20 years. These seeds germinate in the spring when there is abundant moisture and sunlight, and the soil temperature warms up to 55° F. Most pre-emergence herbicides are effective only during this period and provide 40 to 60 days protection. Generally, this is sufficient to provide satisfactory crabgrass control. However, this

year, germination continued because environmental conditions favored its growth.

Other causes of poor weed control may be related to mixing and/or application techniques and watering after application. Correct mixing techniques and equipment calibration is important. Maintain good agitation and application technique. Avoiding skips and overlaps would reduce poor coverage and/or over-application problems, respectively.

If there is no chance of rain, the treated area needs to be watered in for the herbicide to become active and effective. According to the label, a minimum of one-half inch of rain or its equivalent is needed to activate Surflan A.S. Since much of the Northeast had a dry spring, Surflan might have remained on the surface and degraded more rapidly than after being incorporated into the soil by rain.

This would also cause future weed problems because there is no herbicide residue in the soil to manage germinating seeds. In the future, if there is no chance of rain and/or post-watering, consider providing shallow cultivation (to one to two inches) where practical. This would improve herbicide effectiveness.

Prune black knot on fruit trees

Problem: How do you manage black knot disease on cherry and plum trees? Some of the trees have many black knots. How practical is it to manage this problem? Should we advise our client to remove infected trees? (New York)

Solution: Black knot is caused by a fungus which infects the twigs and branches of cherry and plum trees, which results in the formation of swellings or knots. The disease can weaken the plants, and—if severe—can cause extensive twig dieback.

Knots can kill a branch by girdling it. Sometimes, the fungus can even enter the main trunks. Once the tissue is infected, the new knot continues to grow and mature over two years. During this time, proper cultural and chemical management is necessary.

Prune and discard knotted twigs to whatever extent possible. Ideally, prune all infected branches at least four inches below the knot. Pruning should be done when dry, during late fall or early spring before budbreak. Knots on large limbs may be surgically excised if they have not completely girdled the branches. Destroy all infected areas and plant tissue that was pruned. Treat with thiophanate methyl (such as Cleary's 3336 or Systec) when dormand and at pink bud, full bloom and three weeks later.

Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.

Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.