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Surfacing Tree Roots

Homeowners are sometimes troubled by tree roots that develop above the soil. In lawns, these roots grow thicker each year and may eventually stick up above the grass. Surfacing roots may prevent grass from growing, trip passers-by, damage lawn mowers and even lift sidewalks and driveways. These roots may become a problem for the trees as well as for the gardener – wounds on the roots caused by mowers and other equipment often allow diseases to enter the plant. Roots that encircle the trunk can strangle the tree. In such cases large branches die and the tree declines.

Surface rooting of trees can be discouraged by maintaining adequate drainage and by watering deeply and infrequently. Avoid planting trees too deeply. Plant trees at the same level that they grew in the nursery, or up to two inches higher. Any roots encircling trees should be removed as they appear, while the tree is small. Do not plant trees in a confined area such as between a curb and sidewalk. Plant trees at the edge of the yard instead. Keep small trees at least eight feet from a sidewalk or driveway. Large trees would be best planted at least 15 to 20 feet away.

If your tree does develop surface roots, what can be done about them? There are a number of options:

Leave them exposed. This is done in Japanese gardens where trees are treated as sculptures. Decide first how close to the tree the lawn should be allowed to grow. Then, edge the lawn and remove grass and weeds around the big roots. A two inch layer of wood chips or stone mulch can be used to cover the exposed soil. Stone may reflect excessive heat in a sunny area; use it in shaded locations only.

Soil may be used to fill spaces between roots. Work new soil into the layer of native soil beneath. You may then plant ground cover to eventually hide the roots. Choose ground covers that are adapted to dry shade, as they will be competing with the tree roots. Grass is a poor choice of ground cover and is only a temporary solution. Turf does not compete well with roots or grow well in shade. Never cover the roots with more than two inches of soil; thick layers of soil will smother roots and kill them.

You may construct a raised wooden deck over the root system. Be sure to leave spaces between planks to allow rainfall to reach the tree roots. Do not cover the roots with plastic or any impervious material before installing the deck. Consult landscape contractors or carpenters for proper deck construction and installation. If you must cut roots, make the cuts as cleanly as possible. Cut roots are an entry point for many diseases. Whenever large roots are cut, there is a corresponding loss of branches; be prepared to remove dying branches in the future. Never remove more than 25 percent of a root system.

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The information on pest management for New York State contained in this publication is dated October 2004. The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or PMEP (<http://pmep.cce.cornell.edu/>), the Cornell Cooperative Extension pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for reading and following manufacturer's labeling and instructions.

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