



S&S

TREE AND HORTICULTURAL SPECIALIST

405 Hardman Avenue • South St. Paul, MN 55075 • 651 451 8907

GIRDLING ROOTS

Girdling roots are a serious problem for many shade trees most notably maples, lindens, elms and hackberry. Trees that have girdling or circling roots generally have thinning crowns, branch dieback, smaller leaves, and are prone to failure (i.e. blow over) during severe wind storms as well

Girdling or circling roots occur when a root grows around the trunk encircling it or against it rather than outward away from the trunk. As the tree and these roots enlarge, they begin to strangle the trunk restricting the upward and downward flow of water and nutrients. Important symptoms for girdling roots include those mentioned previously, thinning crown, branch dieback, and smaller leaves. In addition, trees experience early leaf drop and the trunk appears to enter the soil like a telephone pole (i.e. straight into the soil with no natural trunk taper).

Correcting girdling root problems are difficult. In fact, if more than 50% of the crown appears affected, it is not likely that the tree will survive. However, if the problem is diagnosed early, there is a good chance that the tree can be saved.

S&S RECOMMENDATION

Carefully dig a small trench around the entire trunk about 10 to 12 inches wide and about 6 to 8 inches deep. As you dig, brush, or vacuum soil away from the roots and trunk looking for those roots encircling the trunk and in contact with the trunk.

Cut out the girdling roots as cleanly as possible and replace the soil with a loose rock or gravel.

Water frequently

Fertilize by soil injections both spring and fall to increase vigor.

Soil drench using Cambistat to slow top growth and encourage root growth.

Prune out deadwood.

NOBODY KNOWS TREES BETTER
