

P.O. Box 3129
Champaign, IL 61826-3129
(217)-355-9516 Fax
www.isa-arbor.com



Media Contact:
Sonia Abney
Marketing Coordinator
217-355-9411, ext. 27

For Immediate Release

The Battle of Trees Versus Turf

CHAMPAIGN, IL — There may be a battle brewing in your backyard between your trees and your grass. Trees and turf tend to be mutually exclusive — you won't see many trees growing in the prairies or grasslands, and grass is uncommon on the forest floor.

Our urban landscapes represent an unnatural ecosystem in which we force two somewhat incompatible plant types together and expect optimum performance from each. Trees and turf compete for sunlight, water, mineral nutrients, and growing space below ground. Turf roots typically out-compete tree roots and win the below-ground battle. But the dense shade of a tree's crown can be too much competition for turf, enabling trees to win the aerial war. Shade leads to reduced grass density, increased root competition, and increased weed invasion.

In order for turf and trees to cohabitate, here are some areas you should consider:

- **Pruning for light penetration** — Pruning to increase light penetration should be considered, keeping in mind that it is usually not a permanent solution. Remember that trees will grow into the voids created by pruning. That's why a rule of thumb is not to remove more than one-fourth of the tree's foliage-bearing crown in a single pruning. If a tree is thinned too much, it will be stressed, and will probably produce many watersprouts (suckers) along its branches to compensate for lost foliage. This process defeats the purpose of pruning to allow more light penetration. It may help to "raise" a tree's crown (crown raising) to improve light penetration. Crown raising involves the removal of lower branches on trees, and most tree species are quite tolerant of this pruning practice.

- **Root Control** — Some trees tend to form surface roots, which can be a major problem in lawns. Homeowners always want to know to what extent they can prune or remove tree roots without killing the tree. Because cut roots tend to develop more roots, root pruning is generally not a solution.

The most simple maintenance recommendation is also the most important. Mulch. Mulching the root areas of trees is one of the least expensive but most beneficial things you can do to enhance tree health and minimize competition with turf. Mulch helps retain soil moisture, moderates soil temperature, and reduces competition from weeds. Organic mulch can help condition the soil and improve microbial activity. Apply mulch about 2 to 4 inches deep but do not pile it against the tree trunks. As far as the trees are concerned the bigger the mulched area the better. Mulch groups of trees together and extend the mulched areas as far out as practical.

- **Fertilization** — There is a long-standing, but inaccurate, belief that trees must be “deep root” fertilized. This notion is associated with the myth that a tree’s root system is an underground mirror of the crown. Because most of the absorbing roots are actually in the upper few inches of soil, it makes little sense to place the fertilizer deeper.

If you are fertilizing your lawn and trees are occupying the same area, the trees might not require supplemental fertilization. The key to any fertilization program is to base the application of the plant’s needs.

- **Mowing** — Most people don’t realize the degree of damage that can be caused by the bumping of a mower or the whipping action of a nylon string trimmer. A tree’s bark can only provide so much protection against these devices. Young, thin-barked trees can be damaged almost immediately. In the worst case scenario, the trees may die. Those that are not killed will be stressed (weak and susceptible), and wounds may serve as entry points for diseases, borers or other insects.

- **Chemical treatments** — Herbicides, especially broadleaf weed killers, are often used on lawns. It is important to remember however, that most trees are broadleaved plants and can be injured or killed if high enough doses reach them. Homeowners must keep in mind that “weed and feed” fertilizers contain herbicides, which can damage trees.

- **Achieving a balance** — Trees and turf can peacefully coexist, even thrive, in a landscape. Armed with an understanding of how each affects the other, a homeowner can modify the environment and the maintenance procedures to optimize the growing conditions for both.

One of the best ways to be assured you are making wise decisions regarding your trees is to educate yourself on some of the basic principles of tree care. The International Society of Arboriculture offers consumer information about trees at www.treesaregood.com. To contact an ISA-certified arborist in your area, visit www.isa-arbor.com.

The International Society of Arboriculture (ISA), headquartered in Champaign, Ill., is a nonprofit organization supporting tree care research around the world. As part of ISA’s dedication to the care and preservation of shade and ornamental trees, it offers the only internationally-recognized certification program in the industry. For more information, contact a local ISA Certified Arborist or visit www.treesaregood.com.

###