

THE PURDUE LANDSCAPE REPORT

Equipment Damage To Trees

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One of the most dangerous pests to trees is a human, especially with equipment. Injuries to trees caused by a lawn mower or weed trimmer can seriously threaten a tree's health.

Additionally, damage to the bark layer of trees causes a long-term liability by creating a wound which leads to a defect, becoming an unsafe tree.

The site of injury is usually the root flare area, where the tree meets the turf and gets in the path of the mower or trimmer. The bark on a tree acts to protect a very important transport system called the cambium layer. This is where specialized tubes are located which move nutrients and water between the roots and the leaves. Bark layers can vary in thickness on different tree species. It can be more than an inch in thickness or less than 1/16 of an inch on young, smooth-barked trees such as maples and birch trees. This isn't much protection against string trimmers and mowing equipment, especially the young trees.



Any type of damage or removal of the bark and the transport system can result in long-term damage. Damage, which extends completely around the base of the tree called girdling, will result in ultimate death in a short time.

Tree wounds are serious when it comes to tree health. The wounded area is an opportunity for other insects and diseases to enter the tree that causes further damage. Trees can be completely killed from an attack following injuries. Fungi becomes active on the wound surface, causing structural defects from the decay. This weakens the tree or it eventually dies, creating a risk tree to people around it.

Newly planted, young trees need all the help we can provide to become established in the landscape and these trees are often the most commonly and seriously affected by maintenance equipment. However, injury can be avoided easily and at very low cost with these suggestions.

1.



The removal of turf or

prevention of grass and weeds from growing at the base of the tree are low-tech solutions to eliminate a serious problem. Spraying herbicides to eliminate vegetation around the base of the tree can decrease mowing

maintenance costs. Be sure to use care when applying herbicides around trees.

2. A 2-3" layer of mulch on the root zone of the tree provides an attractive and healthy environment for the tree to grow. Additionally, it provides a visual cue to keep equipment away from the tree.
3. Also, trunk guards and similar devices can add an additional measure of protection for the tree. Using white,

expanding tree guards can help improve the trees ability to withstand equipment contact, but also help to reduce winter injury.

Trees are a major asset to your property and important to our environment. Protect our trees and preserve these valuable assets by staying away from tree trunks with any mowing or weed trimming equipment. The damage lasts and it cannot be repaired and often results in losing your tree.

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