

Sun Scald on Newly Planted Shade Trees Can Be Avoided

Sunscald is a problem of young, newly installed trees in landscapes. It first appears in spring as a vertical crack on the tree trunk, usually on the southwest side. A vertical crack opens and the bark begins to peel in spring, long after the damage actually occurred. This type of damage is commonly restricted to young, recently transplanted landscape trees and is not something that we associate with the same species growing in forests or with mature trees. While the damage occurs in winter, it does not become evident until spring. By that time this disfiguring injury has opened the trunk to decay organisms and opportunistic insects it is too late to do anything. Wrapping the trunk after the damage has become evident will not help nor will applying pruning paint to exposed wood.

Why Sunscald Occurs:

The warming rays of the winter sun can be intense even though the air temperature is cold. As the sun warms the trunk on the south or southwest side of the tree the cambium tissues (located just below the bark) begin to grow just as if spring had arrived. It is the cambium that gives rise to new growth that results in caliper (diameter) growth of the trunk. When the sun dips below the horizon or is suddenly blocked by a cloud, these rapidly dividing cambium cells freeze and die. As spring arrives, the undamaged cambium on the remainder of the trunk begins to grow and the bark on the damaged side stretches until a vertical crack develops and begins to peel back. Young trees in a forest are shaded by larger trees and do not experience as significant warming of the trunk as trees in more open landscapes. However, it is common in woodlots that are suddenly opened allowing the sun to hit the bark.



Sunscald is a preventable type of injury to landscape trees. However, protective measures must be applied prior to when conditions develop for its formation. Failure to protect young, newly established trees in the landscape will result in a loss of money and lengthen the time to when the tree would have become an effective contributor to the aesthetics of the landscape and a beneficial contributor to the environment. We recommend a white plastic tubing designed especially for protecting young trees. Place the “tree guard” tubing on in early December and remove it late March or early April. This material is stocked in the Garden Barn in the fall for winter use. It is cheap insurance for many trees that are susceptible to this damage.