



## Proper Care of Birch Trees in the Landscape

Birch trees are prized for their outstanding bark characteristics and their graceful delicate foliage. Numerous species and cultivars are used in landscapes, and almost all are distinctive in bark coloration, growth form, and susceptibility to certain insect pests. Though homeowners often desire birch as an ornamental tree, they soon discover that birch can be very difficult to maintain as a healthy, long-lived specimen. In many landscapes, birch trees begin to decline within a few years, and many trees die well before reaching maturity. A healthy birch tree should be able to survive and thrive for 40-50 years. In many yards, however, it is not unusual for birch trees, especially the white-barked birches, to die well before reaching 20 years of age.

In many instances, homeowners have predisposed their birch trees to problems by planting and growing them under conditions that are not the best for their survival. In the forest, birch trees thrive on cool, moist soils. Their very shallow root system makes them sensitive to even short periods of drought or heating of the soil, thus they grow poorly on hot, dry soils. Therefore, homeowners should attempt to place birch trees in locations where the soil will be shaded, cool, and moist. Sufficient water is probably the single most important factor in maintaining a healthy birch tree. If rainfall is insufficient, supplemental watering may become necessary. During the growing season a slow (2-3 hours), deep (8-18 inches) watering once per week is a general rule for maintaining adequate soil moisture. Laying a hose on the ground and allowing it to run slowly over the root zone is a very good technique for ensuring adequate watering. A soil that can be formed into a ball in your hand has sufficient moisture; loose, dry soil that crumbles in your hand indicates the need for additional watering.

Regular fertilization of birch trees is important to maintaining their health. Maintaining proper nutrient levels promotes plant vigor, the first line of defense against the pressures of insects and disease. Many birch trees respond to low fertility with small, stunted leaves, reduced growth and increased susceptibility to insect and disease attacks.

Additionally, chlorosis, the yellowing of leaves, indicates a lack of one or more of the micro-nutrients that birch trees need to maintain a high level of vigor. Birch trees need to be protected from insect attacks. The bronze birch borer will quickly take advantage of a white birch that is in less than perfect health. Too little or too much water, poor soil conditions, low vigor and damage from leaf eating insects will predispose a white birch to bronze birch borer attack. The bronze birch borer is a tree killer. It is a small beetle that thrives on weakened trees. The first symptom of birch borer attack is sparse, stunted foliage in the upper crown. The process of decline can take several years before a tree dies, though it can also occur very quickly during a single hot, dry year.



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