Birch Tree Care

Two species of native birch trees are primarily available for homeowners to purchase and plant: Paper Birch (*Betula papyrifera*) and River Birch (*Betula nigra*). Both are popular ornamentals primarily because of the attractive bark. Both species require similar culturing methods and general tree care techniques. Both trees are also subject to the same insect pests.

**Cultural Methods:**
The first important fact regarding Paper Birch is that it is a northern zone 3 tree. This means it does not tolerate heat and drought well. Site selection is critical if the tree is to endure hot and dry periods further south (Fox Cites). To provide the coolest possible environment, choose a north or east sloping space or a spot where another tree or wall shades the root zone of the tree. Turf grass should be removed within the root zone of the tree and replaced with 2–3 inches of wood chips. This maintains a cooler ground where there is less competition from the grasses around this shallow rooted tree. Ground covers, groups of perennials or shrubs also prevent direct contact of the sun on the root zone. The most important thing to remember is to water the birch tree when it is subject to prolonged drought. One rule of thumb to keep in mind is most trees require one to two inches of water each week to avoid drought stress.

River Birch also requires the same cultural methods as the paper birch that are mentioned above. Although it is more of a southern (zone 4) tree, its name implies that it is native to growing along river bottoms where there is consistent moisture and therefore cooler soils as well. River Birch is a good tree to plant in poorly drained soil. The River Birch is prone to developing chlorosis, or yellow leaves with green veins. (see picture to the right) It is a sign of iron deficiency that is caused primarily by alkaline soils. Plant this tree away from concrete and try to plant it in rich organic topsoil. If chlorosis develops, apply 10 pounds of Sulfur per 100 square feet around the root zone.
**Pest Management:**

Gypsy Moth caterpillars consider birch leaves as a favorite, along with oak leaves. Watch for pin size holes in the foliage in May and larger missing sections of leaves in late June. Monitor or trap the caterpillars using a burlap skirt around the tree trunk. The caterpillars will begin to come down the tree by day to rest and shelter. They will be attracted to the shelter of the burlap where they can be picked off.

**Birch Leaf Miner** is the larva of a very small sawfly that lays its eggs in only the newly expanding leaves in May. The hatched larva will enter and feed between the leaf epidermis layers, literally mining the photosynthetic tissue. Light infestations are of no consequence. However, heavy infestations over several years may stress the tree to a point where other factors such as drought and heat will cause a steady decline in vigor, and will open the door for other insect pests to feed on the tree. If heavy infestations have occurred in the recent growing season you may apply *Merit* (Bayer Tree and Shrub Insect Killer) in May. This is a systemic insecticide that will enter the tree, move into the leaves and kill the miner larva.

**Bronze Birch Borer** is a beetle that lays its eggs just underneath the bark of birch trees. The developing larva feed on the inner bark and cambium tissue, girdling the tree. Mature adults bore D-shaped holes to exit the tree. Bronze Birch Borer will kill the tree. Only birch trees under stress seem to be vulnerable to this beetle. Cultural care is therefore the key to prevention for this deadly birch pest. As mentioned, plant on a cooler north side, or where the root zone is shaded. Remove the turf grass and mulch with wood or bark chips and water during prolonged heat and drought.

**Other pests** such as leaf rusts, leaf spot diseases, aphids and birch catkin bug create little or no problem by themselves to the vigor of birch trees.