

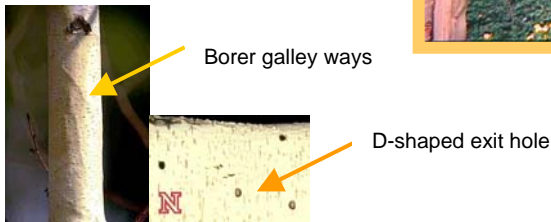
# Birch Tree Culture



Chlorosis on Yellow Birch



Gypsy Moth Caterpillar



Bronze Birch Borer



Birch Leaf Minor

Two species of native birches are primarily part of the landscape tree market of nurseries and garden stores. They are 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 are subject to the same insect pests.

## Culture Methods

The first important fact in regard to Paper Birch is that it is a northern zone 3 tree. This means it does not tolerate heat and drought. 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 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. Lawn grass in the root zone should be replaced with 2–3 inches of wood chips. This maintains a cooler ground where there is less competition from the grasses from around this shallow rooted tree. Ground covers such as Rug Juniper or other shrubs also prevent direct contact of the sun on the root zone. Most importantly, after these culture techniques, is to water the birch tree when it is subject to prolonged drought. Water deeply if there has not been rain for two to three weeks. ( See center photo at the top)

River Birch also requires the “keep cool and moist techniques as mentioned above. Although it is more of a southern, zone 4 tree, the river in its name implies that its comfort zone is 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 develop chlorosis. (The yellowing leaves, but dark green vein). 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 deep-rich organic topsoil. If chlorosis develops, apply 10 pounds of Sulfur per 100 square feet around the root zone. ( Photo top left ).

David Bayer, Seasonal Horticulture  
UW-Extension, Outagamie County  
3365 W Brewster St., Appleton, WI 54914

Telephone: (920) 832-5119  
e-mail: david.bayer@ces.uwex.edu  
Web Site: www.co.outagamie.wi.us/uwex  
Publications Web Site: http://cecommerce.uwex.edu

# Pest Management

Gypsy Moth caterpillars consider birch leaves as a favorite, right along with the Oaks. Watch for pin size hole in May and larger missing sections of leaves in later 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. (See *photo at the upper right*)

Birch Leaf Minor 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. If heavy infestations have occurred in the recent growing season you may apply *Di-Syston* to the soil in early May or *Merit*, (Bayer Tree and Shrub Insect Killer) in fall. These are both systemic insecticides that will enter the tree, move into the leaves and kill the Minor larva. (See *photo at the bottom right*)

BOONZE 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 BRONZE BIRCH BORER. 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. (SEE PHOTO LOWER LEFT)

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.

David Bayer, Seasonal Horticulture  
UW-Extension, Outagamie County  
3365 W Brewster St., Appleton, WI 54914

Telephone: (920) 832-5119  
e-mail: david.bayer@ces.uwex.edu  
Web Site: www.co.outagamie.wi.us/uwex  
Publications Web Site: http://cecommerce.uwex.edu