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SOIL AND WATER  
CONSERVATION DEP.

State of Wisconsin  
Jim Doyle, Governor



Department of Agriculture,  
Trade and Consumer Protection  
Rod Nilsestuen, Secretary



Department of  
Natural Resources  
Matthew Frank, Secretary

September 10, 2009

Subject: Beech Bark Disease observed in Door County

Beech bark disease, a disease of American beech trees, was recently discovered in Door County thanks to a report from an observant private citizen and follow-through by DNR and DATCP staff. This is the first finding of this disease in Wisconsin. Beech bark disease is a complex that consists of a scale insect and several species of fungi. The scale insect, *Cryptococcus fagisuga*, is European in origin; *Nectria coccinea* var. *faginata*, one of the associated fungal species, is also presumed to be introduced from Europe. The nearest known location before the Wisconsin find was near Norway, Michigan in the Upper Peninsula of Michigan.

The natural range of beech extends from Michigan into eastern Wisconsin. There are approximately 16.6 million beech trees over 1" in diameter in Wisconsin's forests; Door County has approximately 1.8 million.<sup>1</sup> Beech is typically found in forests that also have ash, maple, birch, oak and hemlock. Its ability to produce large seed crops makes it an important source of food for a large variety of birds and mammals. Beech trees often contain cavities that provide valuable den and nest sites for a variety of wildlife, and beech logs produce lumber that is used in pallet, crating and furniture applications. It is also marketed as a source of pulpwood in paper production and makes excellent firewood.

The discovery of beech bark disease in Wisconsin is significant. Research has shown that only a small percentage (<5%) of American beech are resistant to this disease; another small percentage will be partially resistant while the majority of beech trees are susceptible and will die. The scale and fungus can travel long distances on infested beech logs and firewood. Management options will vary from area to area, depending on the amount of beech present and distance from an infestation. In most cases, it is not desirable to remove all beech from a stand before the disease moves through. This practice would eliminate potentially resistant beech trees.

DNR and DATCP are considering options for slowing the movement of beech bark disease. Under consideration are proposed regulations that would restrict the movement of infested material and hardwood firewood. Any plan will include educational efforts focused on measures designed to minimize spread. To determine the best course of action, the following steps are planned:

<sup>1</sup> Data from USDA Forest Service Forest Inventory and Analysis Data, 2007

1. Under the authority granted to the DNR under Wis. Stat. s. 26.30(4), a survey of the infested area and other areas where beech is prevalent will be conducted during October and November, 2009, to determine the extent of the infestation. Surveyors will be looking for signs of the disease during reasonable times of the day. Given the short amount of time and limited staff available to conduct this work, we will not be contacting each landowner before the survey. If you have concerns about surveyors examining beech on your property, please contact Jane Cummings Carlson, (608) 275-3273. [Jane.cummingscarlson@wisconsin.gov](mailto:Jane.cummingscarlson@wisconsin.gov)
2. Once the survey information is summarized, a meeting will be planned to share the information with affected landowners and discuss management options.

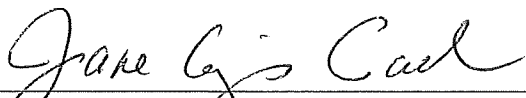
For the time being, we recommend no movement of potentially infested material, especially beech logs and beech firewood.

For questions related to potential regulations, contact Robert Dahl, (608) 224-4573. [Robert.dahl@wisconsin.gov](mailto:Robert.dahl@wisconsin.gov)

For questions related to the survey, contact Jane Cummings Carlson, (608) 275-3273. [Jane.cummingscarlson@wisconsin.gov](mailto:Jane.cummingscarlson@wisconsin.gov)

For further information about beech bark disease, visit:  
<http://www.co.bay.mi.us/Docs/Health/GypsyMoth/BeechBark.pdf> and  
<http://dnr.wi.gov/forestry/FH/exotics/exotic-bb.htm>.

If you think that you see signs and symptoms of Beech Bark Disease, contact your DNR forest health specialist. The forest health specialist for Door County is Linda Williams, (920) 662-5172. [Linda.williams@wisconsin.gov](mailto:Linda.williams@wisconsin.gov). A listing of all the forest health protection program staff may be found at: <http://dnr.wi.gov/forestry/Fh/staff/index.htm>



Jane Cummings Carlson, Coordinator  
Forest Health Protection Program, Division of Forestry  
Wisconsin Department of Natural Resources

9-11-09

Date



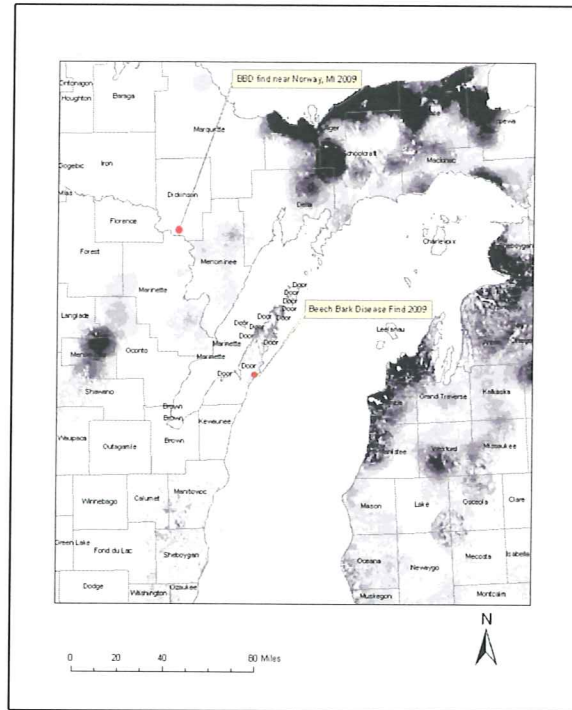
Robert Dahl, Chief  
Regulatory Section, Agriculture Resource Management Division  
Wisconsin Department of Agriculture, Trade and Consumer Protection

9/11/2009

Date

## Beech Bark Disease Detected in Door County, Wisconsin

Beech bark disease, a disease of American beech (*Fagus grandifolia*), was detected in Door County in August, 2009. Affected trees are in a rural forested area. Beech bark disease results when an exotic scale insect, *Cryptococcus fagisuga*, feeds on the bark of beech, making it more susceptible to invasion by fungi, including *Nectria coccinea* var. *faginata* and/or *Nectria galligena*. A third species of fungus, *Nectria ochroleuca*, has been found in association with beech bark disease in Pennsylvania, West Virginia and Ontario, Canada. Research has shown that only a small percentage (<5%) of American beech is resistant to this disease; another small percentage will be partially resistant while the majority of the beech population is susceptible and will suffer mortality. Infected trees are structurally weakened and very susceptible to trunk breakage during high winds, and should be removed from areas where they are a safety hazard. This susceptibility is due to invasion by decay fungi and wood-tunneling insects.



American beech infested with scale (white material) and canker (black spot). Photo by Linda Williams.

Native to Europe, the scale was introduced into Nova Scotia, Canada around 1890 and was first observed in northeastern United States in the early 1930s. The disease has been moving west and south across the United States since that time. This disease was first detected in Michigan in 2000. The scale insects are spread by the wind, birds, and as hitchhikers on infested firewood.

Management strategies are influenced by the amount of beech present and distance from an infestation.

For an overview of options, visit:

<http://www.co.bay.mi.us/Docs/Health/GypsyMoth/BeechBark.pdf> and  
<http://dnr.wi.gov/forestry/FH/exotics/exotic-bb.htm>. If you suspect you may be seeing beech bark disease, contact your DNR forest health specialist:  
<http://dnr.wi.gov/forestry/Fh/staff/index.htm>