

FOREST SERVICE-U.S. DEPARTMENT OF AGRICULTURE IN COOPERATION WITH YOUR STATE AGENCY

Drought and winter drying have periodically caused major damage to trees. Drought reduces the amount of water available in the soil. In the case of winter drying, the water may be in the soil, unavailable to the tree. In both cases, more water is lost through transpiration than is available to the plant.



Tip burn



Drought-caused mortality



Winter drying



Reprinted by MSU Upper Peninsula Forestry Extension Office 5/00.

Michigan State University programs and materials are open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status, or family status.

DROUGHT AND WINTER DRYING

Symptoms of drought and winter drying may include partial or complete leaf scorch, premature leaf drop, or death of the entire tree. De-icing compounds can cause similar damage. If the tree is not killed, it may be stressed enough to make it more susceptible to attack by fungi such as *Armillaria mellea* and *Diplodia pinea*, or by bark beetles, *lps* spp



Marginal and interveinal burning



Partial mortality caused by winter drying