

us and make homes for the wild.

We believe we must study how trees grow and why they die.

We believe that tiny roots, too small to see, are the parts that trees need most. Roots grow far out from trunks, near the surface. They must have air, water and loose fertile soil. To build, or dig, or trench or fill near trees will kill those roots. Such trees soon die.

We believe trees need our respect and love. They are not at all like us. The tree is a thin layer of live cells spread on dead frames which enlarges each year as last year's layer dies.

We believe that only God can make a tree, but it remains for us to care for trees and make space

for them to grow well. To do God's work takes time and money. We must water young trees each week, and shape them to grow tall with grace.

We believe that how we care for our trees shows how much we love our fragile Earth, and each other.

I hope that these words and the response they have invoked are but the start of an effort which leads to a far greater understanding of and love for the trees which mean so much to me.

Donald C. Willeke
Willeke & Daniels
1201 Marquette Avenue
Minneapolis, Minnesota 55403

Abstracts

HALL, R.W., A.M. TOWNSEND and J.H. BARGER. 1988. **Resistance of 13 species of elm leaf beetle.** *Am. Nurseryman* 168(5):93-94.

Elm leaf beetle has become a major defoliator of elms in cities. We tested 13 tree species to determine their suitability as host for this pest. We found that European species were generally better hosts to the beetle than Asian and American species. Susceptibility by species, with regions of origin, are: Relatively low: *parvifolia* and *Zelkova serrata*, Asia, Moderate: *U. davidiana japonica*, *U. pumila* and *U. wilsoniana*, Asia; *U. americana*, *U. rubra* and *U. thomasi*, America, *U. laevis*, Europe; and *U. '204'*, a cross between *U. carpinifolia* and *U. parvifolia*, High: *U. laciniata*, Asia; *U. carpinifolia* and *U. glabra*, Europe.

HAMILTON, W.D. 1988. **Tree stress in the urban environment.** *Arbor Age* 8(8): 40, 42.

I have studied stresses from the effects of mechanical damage to trees; from pruning methods, pests, weeds, soil salt, and air pollutants, as well as the effects of comparatively warm winters on subsequent growth. I want to discuss how climate-induced stresses have affected the trees' resistance to diseases and insects. Trees endure many different kinds of stresses in the urban environment, but the influence of central California climatic extremes since 1971 has been particularly noteworthy. It is no surprise that several insect and disease problems erupted after consecutive years of drought and warm, wet winters. The long series of climatic extremes in our recent past does not preclude a more normal weather pattern in the future. But this year many states have been afflicted by one of the most severe droughts of the century. The essential lesson for landscape installers and managers seems clear: Provide optimum conditions for root growth and avoid extremes of management. This along with the appropriate use of intelligent management and new research information to maintain vigor, offers the best opportunity for acceptable results in the future.