IN YOUR GARDEN

"Seldom have we seen a season with so many trees showing signs of distress". This was the comment of James A. Fizzell, Horticulturist, University of Illinois in Cook County. This week, throughout Northeastern Illinois, trees are suffering from an assortment of maladies, he said.

Dutch elm disease is still with us. Verticillium wilt is affecting maples and redbuds. Ash are losing leaves from an apparent virus disease, and the inch worms and maple scale have made their annual appearance.

Most distressing is the condition of our oak trees, Fizzell continued. Oaks throughout the area are looking unthrifty. Leaves of many old established plants are yellow, a condition known as chlorosis, caused by a lack of iron in the plant, and leaves are smaller than normal this year. Some trees are even developing dead branches throughout the crown. While there is some oak wilt in the area, the majority of these trees are not infected with that disease.

Extensive investigation has revealed no disease organisms to be associated with the problem. Excavations of the root zones of these trees has shown that in spite of some rainfall in recent weeks, soils six inches down under many trees are powder dry and the small fibre roots dead.

Even under irrigated trees, where the soils are moist, small roots are often decayed and ineffective.

Since there is no disease present, we can only speculate as to the cause of the problem.

Most experts agree, said Fizzell, that the damage is

not due to one single cause, but to a combination of factors. For several springs, rainfall was above normal, saturating the soils at the time the trees should have been making new root growth. Last summer, drought set in, further damaging the delicate roots. Winter added its punch with the coldest weather accompanied by little, if any, snow cover to insulate the shallow root systems.

This spring, the roots were unable to provide the push necessary to develop an abundance of normal, healthy, green leaves.

For some of these trees, the unusually hot, dry summer may be the death knell.

Fizzell suggests that owners of trees investigate the soil condition and the condition of the roots by doing some careful digging beneath the trees. The most active roots should be under the outermost 1/3 of the branches of the tree. If the soil is dry, provide water through deep, slow irrigation.

In fall, after the leaves have fallen, fertilize with a complete fertilizer containing soluble phosphorus and with some chelated iron. Tree experts can pressure inject fertilizer under large trees and provide needed moisture too.

Try to provide the best environment you can for those roots, Fizzell concludes, and then let the tree alone so that the wonderous curative powers of nature can take over.

> James A. Fizzell Extension Adviser, Horticulture University of Illinois at Urbana-Champaign Rolling Meadows, IL

