

For Tree Tips column on March 31, 2000  
by Steve Rasmussen, District and Extension Forester

## THREE ‘M’**s** FOR TREE HEALTH

Welcome to the first Tree Tips column for the 2000 year growing season. The most frequently asked question asked about tree care this year so far has been related to the lack of moisture we have experienced last year and carrying through to this spring. So far I am not expecting serious problems with well established and older trees at this time. Long lived plants like trees can withstand periods of dry conditions especially when they are for the most part dormant. However, if we stay dry through this spring and into next fall, then even the older trees with well established root systems will begin to suffer.

The trees that will be first showing the effects of the dry conditions are the young trees and those that have been transplanted within the last three to five years. These trees will not have an adequate root system able to obtain the limited moisture in the soil and will suffer. With the soil temperatures getting warmer, the roots are beginning to grow and they need moisture. Trees use and lose moisture when they are growing in two ways. First, trees and green plants obtain their growing energy, “food”, through a chemical process called photosynthesis (remember high school biology?). Water sent up from the roots is used during this process. Second, during photosynthesis water is lost from the leaf out of stomata openings during an involuntary occurrence called transpiration. The drier the atmosphere, then the more chance of moisture loss from the plant.

What can you do to help your young establishing tree? I suggest three “M”**s** for tree health. Most obviously is to provide **M**oisture for the growing roots and total plant. Root growth has already begun for this year and deep soaking around the tree underneath the branches now will help with root growth and initial above ground growth this spring. Continue these deep soakings every 10 to 14 days if it continues dry.

Second is to **M**ulch around the base of the tree out to the edge of the branches with organic material like wood chips and composted leaves. Do not use fresh grass clippings or rock. Grass clippings mat together and exclude oxygen and moisture from reaching the soil. Rocks do not insulate the soil, they do not conserve moisture and they do not decompose for available nutrients.

Third is **M**aintenance. During stressful times like drought conditions, plants are more susceptible to insect / disease attacks. In addition, the mild and dry winter will probably cause there to be more insects this year than following a cold and extended winter season. Keep an extra attentive eye out for these pests to help keep your tree healthy.

Paying attention to the three “M”**s** for tree health: **M**oisture, **M**ulch, and **M**aintenance will be especially important as we continue with these dry conditions. The extra care given this year will keep your trees healthy and growing.