

had to be stopped so that the maintenance crew could cool the desiccating turfgrass by syringing it, in spite of the fact that prior to the tournament the course was deluged with rain. This so-called condition of "wet-wilt" arises whenever the plant is unable to respire properly, as in a wet, compacted soil. Poor aeration can also lead to deficiencies of nitrogen, potassium and iron, any one of which can produce the chlorotic discoloration often seen in turf trying to survive in poorly drained, compacted soils. Soil drainage affects plant growth in yet another important way, namely through its effect on soil temperature.

- C) **Soil temperature.** The specific heat of water is about five times that of a dry mineral soil. That is, the heat required to raise the temperature of water 1°C is five times greater than that needed

for an equal weight of soil. Thus, a wet, poorly drained soil is generally a cold soil and improving the drainage (either surface or subsurface) helps warm the soil. This also explains why plants growing in a CTS get off to a faster start in the spring than those in a M-FTS. Thus golf courses on sandy soils are the first to open in the spring, in northern climates, whereas, those on organic or clayey soils open later. Other ways of affecting soil temperature include irrigation or syringing, which produces a cooling effect when the water evaporates. In this regard it should be noted that a transpiring grass plant can be considerably cooler (as much as 10°F) than one that is not. Thus well cared for lawns and shade trees, whether they be in the yard or a home or on a golf course create a more pleasant environment even aside from their aesthetic attributes.

## UW TURFGRASS RESEARCH RECEIVES CUSHMAN TRUCKSTER AND ACCESSORIES FROM OMC/LINCOLN AND WISCONSIN TURF

The departments of Plant Pathology, Soil Science, Horticulture and Entomology recently received the free use of a Cushman turf vehicle for turfgrass research. The award was made possible by OMC/Lincoln and Wisconsin Turf Equipment Corporation. Dr. Bob Newman and Dr. Gayle Worf accepted the keys from Curt Larson, General Manager of Wisconsin Turf, on May 29. The unit is provided at **no cost** to the UW—Madison and has a total package value of over \$12,000. OMC/Lincoln started the program in 1982, and company executives feel the student exposure and training will be beneficial to them as they pursue their turf management careers after graduation. This is the first year the University of Wisconsin received this important support.



The award is from OMC/Lincoln and Wisconsin Turf.



The unit is fully equipped and available for use for all of 1985.



Curt Larson presents Bob Newman and Gayle Worf the Cushman keys.