

TurfGrass TRENDS



Volume 6, Issue 3

March 1997

GREEN SECTION LIBRARY
DO NOT REMOVE

Maximizing Turfgrass Irrigation Efficiency

by William E. Richie, Robert L. Green and Victor A. Gibeault
University of California, Riverside

Fresh water available for human consumption, recreation activities, agricultural production, and industrial uses accounts for only 1% of all water on the earth. The remaining 99% is salt water and polar ice. Water is a particularly precious resource in the arid Southwest where average annual rainfall is approximately 10 inches. This is insufficient for plant needs, such as tall fescue (*Festuca arundinacea*), which comprises 70-80% of the sod industry in the state of California. Tall fescue is also a popular turfgrass species in other regions of the USA. In Riverside, CA, tall fescue requires an average of 46 inches of water annually while a typical warm-season turfgrass requires 35 inches of water each year. As might be expected, plant water needs are greater in the arid West vs. the humid East.

Irrigation is a necessary component of typical landscape maintenance in the Southwest, and is becoming commonplace in landscapes countrywide. The



IN THIS ISSUE

- Maximizing Turfgrass Irrigation Efficiency 1
How Much Water Should Be Applied?
University Research Findings
From Recommendation to Practice
Optimizing Water Penetration
Optimizing System Uniformity
- Weather Stations Unlock Nature's Secrets 10
- Irrigation Uniformity. Looking Like A Million \$\$ 12
- Intracacies of an Irrigation Maintenance Budget . . 13
- Under New Ownership 15