



Comparing The Water Use Of Trees and Grass

Recently, turfgrass reduction programs are being used to conserve water in the Southwest. Turfgrass is an easy target because of the amount of good science quantifying turfgrass water-use rates. However, there is little information about the water-use rates of trees and the trade-offs between trees and grass. Over the next few years, University of Nevada researchers will compare the monthly water use of several tree species with different turfgrasses. The experimental work will be conducted at the University of Nevada's Center for Urban Horticulture and Water Conservation in North Las Vegas.

The study will compare the water-use rate of 10 different, mature trees species relative to hybrid bermudagrass, bentgrass, perennial ryegrass and tall fescue. The research will address the following questions:

1. What are the water-use rates of mature landscape trees growing in an arid environment?
2. What are the water-use rates of these trees relative to growth parameters that will allow such data to be used at other locations?
3. What are the water-use trade-offs between tree species and turfgrass on an area basis?
4. How do tree water-use rates under experimental conditions compare with water-use rates under golf course conditions?
5. What is the impact of tree water use on turfgrass?

Comparing the water use of trees and grass will enable golf course superintendents to predict better water budgets, maintain favorable growing conditions and understand the potential trade-offs between trees and turfgrass with regard to water use.

Additional Information:

[Drought Impacts On Golf Courses Trees In The Southwest](#)

[Trees vs. Turf: Manage the trees on the golf course to provide healthier turf](#)

Source: [Mike Kenna](#)



Trees have been negatively affected as many golf courses have eliminated irrigation in the rough to conserve water. There is little research comparing tree vs. grass water use on golf courses.