

# Water conservation for Rhode Island lawns

*Computer modeling helped Rhode Island water professionals choose the best way to educate consumers about lawn irrigation.*

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**T**his article presents results from a program for water conservation on home lawns in Rhode Island. The objectives of the program were twofold: (1) to adapt a computerized agricultural irrigation scheduling program for home lawns and (2) to develop an educational outreach program to promote the appropriate timing and application rates of irrigation water by homeowners.

In 1989, water professionals in Rhode Island developed a program for home lawn irrigation scheduling that adapted an agricultural soil moisture model for use on home lawns. The key to the program, which emphasized supplemental watering only, was a "water factor" that was developed from daily simulation models for lawns on two soil textures. The program was pilot-tested in 1990 and ran statewide in the 1991 growing season. The simulation model relied on a single weather station for moisture data. Analysis of rainfall amounts suggested that computerized irrigation scheduling for home lawns requires spatially explicit data. Variability in factors such as rooting depth and soil composition caused additional concern about the accuracy of the recommendations. It was concluded the computerized farm-based irrigation scheduling programs for the Northeast cannot be easily adapted to home lawn water management over a broad area. Instead, emphasis should be placed on linking sprinkler calibration rates to soil types. Low-maintenance landscaping also should be encouraged in suburban areas.

