

SAY IT, DON'T SPRAY IT: A STUDY OF LANDSCAPE IRRIGATION PRACTICES

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Introduction

This poster presents results from a study of irrigation practices by landscape professionals in California. For this study, we surveyed landscape contractors regarding their business practices and trends in irrigation systems and equipment in an effort to identify opportunities for efficiency improvements in landscape irrigation.

Methods

Data collection for this study consisted of an online survey of landscape irrigation contractors in California; survey questions were designed to gather data on the type of irrigation services provided, the service area and sectors served by contractors, and the characteristics of irrigation equipment and systems on which the contractors work. Emails were sent to over 600 members of the California Landscape Contractors Association (CLCA), inviting them to participate in the online survey. Respondents were offered a \$25 incentive to encourage them to complete the survey. A total of 64 landscape contractors completed the survey between June 23, 2016 and July 24, 2016.

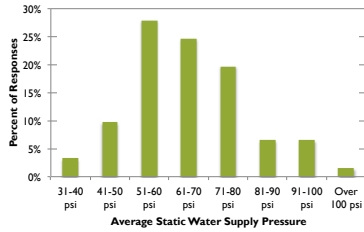
Findings

The key findings of this study, based on the survey responses of landscape irrigation contractors, are as follows:

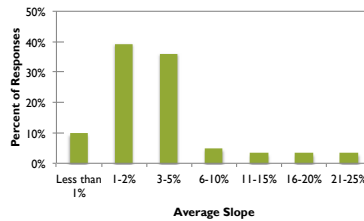
- The majority (80%) of irrigation contractors responding to our survey provide both installation and maintenance services for irrigation equipment. Another 16 percent provide installation services only, and 5 percent provide maintenance services only.
- On average, contractors are conducting 60 percent of their work in the residential sector, 25 percent in the commercial sector, and 15 percent in the multifamily sector.
- Average static water supply pressure at the point of connection for irrigation systems was reported by the majority (72%) of respondents to be within the range of 51 to 80 psi.
- Over 75 percent of contractors reported that they install pressure regulation at the valve or sprinkler for overhead irrigation systems "sometimes" (43%) or "most of the time" (33%).
- For the majority of irrigation projects in these contractors' portfolios, 76 percent stated that the average slope of an irrigated area planted with turf is between 1 and 5 percent.
- Nearly half (49%) of respondents encounter between one and five broken overhead sprinklers in a typical week.
- Sprinkler heads with spray nozzles are the most common type of sprinklers present in irrigation projects, followed by sprinkler heads with rotating nozzles; rotors are the least common.
- Drip or other low volume irrigation methods are also frequently used, with 37 percent of respondents stating that 71 to 90 percent of the irrigated area in their project portfolios uses low volume irrigation.
- The equipment lifetime of pop-up spray sprinklers and rotors was most frequently reported to be within the range of six to ten years.

Key Findings

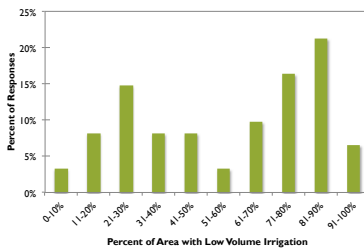
Average Static Water Supply Pressure



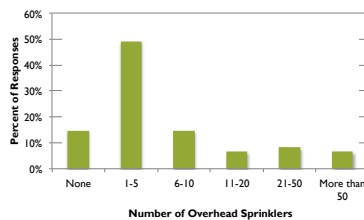
Average Slope of Irrigated Area Planted with Turf



Percent of Area Irrigated with Low Volume Irrigation



Broken Overhead Sprinklers Encountered per Week



Say It, Don't Spray It

A Study of Landscape Irrigation Practices

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Study Objectives:

- Determine business practices of landscape irrigation contractors
- Identify potential areas for efficiency improvements in irrigation

Study Methods:

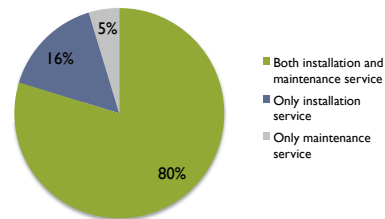
- Online survey of 64 landscape irrigation contractors in California
- Distributed via email to California Landscape Contractors Association (CLCA) members
- Survey instrument developed in coordination with PG&E and CLCA

Key Findings:

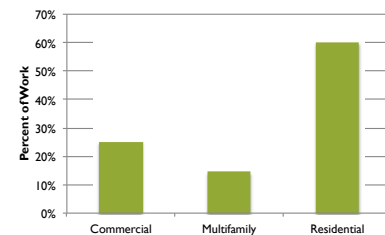
- The majority (80 percent) of contractors provide both installation and maintenance service.
- On average, contractors conduct 60 percent of their work in the residential sector, 25 percent in commercial, and 15 percent in multifamily.
- The majority (72 percent) reported an average static water supply pressure at the point of connection of between 51 to 80 psi.
- Nearly half (49 percent) of respondents encounter between one and five broken overhead sprinklers in a typical week.
- Sprinkler heads with spray nozzles are the most common type of sprinklers, followed by sprinkler heads with rotating nozzles, and rotors being the least common.
- Drip or other low volume irrigation is also frequently used.
- The equipment lifetime of pop-up spray sprinklers and rotors was most frequently reported to be within the range of six to ten years.

Business Practices/Characteristics

Type of Irrigation Services Provided

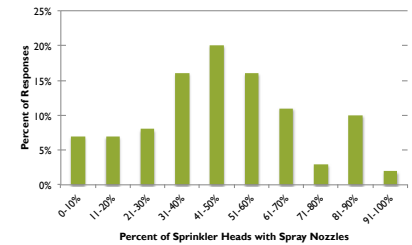


Percent of Irrigation Work by Sector

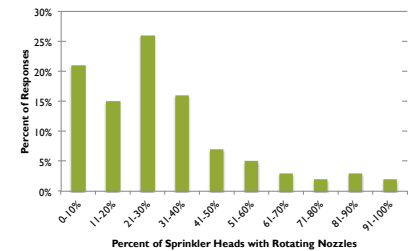


Key Findings

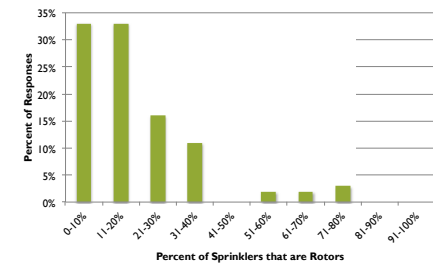
Sprinkler Heads with Spray Nozzles



Sprinkler Heads with Rotating Nozzles



Rotor Sprinklers



Average Lifespan of Pop-up Spray Sprinklers and Rotors

