Enlightened Solutions

A good method to spot-treat weeds and a simple, lightweight sprayer.

BY MATT NELSON

Spot application weed control and the use of lightweight spraying systems are nothing new in turfgrass maintenance. Scouting and mapping for weeds, followed by herbicide spot applications, are recognized integrated pest management strategies. Each of these strategies is commonly employed, and turfgrass managers continuously refine the tools needed to utilize these management philosophies.

DEDICATED SPOT-SPRAYER

Victor Wassner can be considered a guru of spot spraying for weed control. While serving as the golf course superintendent at Shadow Valley Golf Club (Eagle, Idaho), Victor maintained weed-free turf with good cultural programs and only spot applications of herbicide over the past seven years. To facilitate the spot-spraying program, Victor retrofitted two golf carts with 25-gallon spray tanks. The spray tanks were purchased from a local agricultural supplier and fitted with a 25-foot hose. Pressure regulators maintain a constant spray pressure of 40 psi, and a marine battery is used to supply enough charge for continuous agitation throughout the day.

Victor set up one spray system for post-emergence broadleaf weed control and another for pre-emergence weed control under tree basins. Each spray cart is clearly labeled for its intended use. The beauty of this system, according to Victor, is that these spray rigs are always ready to go when weed control is necessary and the wind is not a factor.

Victor estimates the value of a used golf cart at $500, and the cost of the sprayer, battery, and hose is $250. Certainly this is a low-cost way to manage weeds while performing other maintenance tasks on the golf course.

AN ULTRA-LIGHT, HOMEMADE SPRAYER

Charles Golob, turfgrass research technician at Washington State University, needed a portable, lightweight sprayer to apply various products for different treatments in relatively small research plots. Using lightweight steel pipe, bicycle tires, and an adjustable boom assembly, the sprayer was created. Pressurized CO₂, a small pressure tank, a pressure regulator, and 110-degree flat fan nozzles constitute this simple sprayer. While there are commercially available models of lightweight sprayers, not many are as portable, lightweight, or operate as stand-alone systems. Total cost of constructing this sprayer is estimated at less than $750.

So how can this be applied to golf course maintenance? Obviously, difficult-to-treat areas can be sprayed more easily with this type of unit. A special niche for such a sprayer, however, is for grow-in of new putting greens. This lightweight rig is a great way to apply fertilizer and other products to an immature stand of turf without causing turfgrass injury or surface disruption. Light, foliar applications of fertilizer lower the potential for leaching by reducing the nutrient load in the system.

Lightweight sprayers and spot application of pesticide are good ways to maintain excellent turfgrass quality in an ecologically and economically sound manner. Perhaps these examples can help you work these strategies into your maintenance program.

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