

Roundup at the Circle Tree

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Through some innovative engineering, an out-front rotary mower can be transformed into a highly specialized spray rig. Canisters are mounted on the back of the mower body to carry herbicide mixtures.



After mowing around the trees, a flick of a switch applies an application of non-selective herbicide to any remaining vegetation.

A COMMON PROBLEM among golf course superintendents each growing season is tall grass and weeds around the trunks of trees. Common solutions include hand mowing, string trimming, or spraying with a non-selective herbicide. Unfortunately, this mundane task can take up much of the work-week of one or two members of the maintenance crew. Through some innovative engineering, Tim Norris, CGCS of Golfcrest Country Club, in Pearland, Texas, has made this time-consuming job much more efficient. Norris and his mechanic, Bob Flanders, can transform their out-front rotary mower into a highly specialized spray rig at the flick of a switch. The following is an explanation of how the system works.

Two canisters are mounted (one on each side) on the back of the out-front rotary mower body. When filled with a herbicide mixture, they are pressured to 35 psi (the canisters and hoses are safe

at pressures exceeding 125 psi) by a small air compressor. This particular compressor was taken from a 1986 Cadillac El Dorado, where it was used to fill shock absorbers. The pressure generated from the compressor is kept in check by a regulator. As the mixture becomes pressurized, it moves through a hose to a solenoid valve located on the deck of the mower. On the other side of the valve is a small brass screen and spray nozzle. When the operator hits an electrical switch, the valve opens and the mixture is sprayed.

While the machine can be used on a daily basis for routine mowing, it is used approximately once a month for its unique spraying capability. After the herbicide is carefully mixed with water, it is added to the canisters. The lids are closed and locked, and the modified spray rig is ready to go. Normal procedures could include mowing around a tree with the rotary blades engaged.

Another pass is then made around the tree, and as the operator hits the switch, any remaining vegetation is sprayed with the non-selective herbicide mixture. Glyphosate is most commonly used, as it is not hazardous to most species of trees if not sprayed directly on the foliage. (Glyphosate also can be absorbed through the thin bark of very young trees.) To prevent grassy weeds from re-sprouting, a pre-emergent herbicide also can be added. As always, read and follow label directions for best results.

Benefits include saving the club time and labor that is normally required to hand-trim around trees. Also, the trees are protected from employees who have a tendency to be overly aggressive with a string trimmer or rotary push mower. With a few simple modifications to your current equipment, you too can enjoy the many benefits of this innovative idea.