Looking Ahead at 2012 Sprayer Needs

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It is a given that 2012 will bring more weeds due to the 2011 drought. We can also consider it a given that custom applicators will not be able to cover all the acres that need to be sprayed next year. Perhaps it is time for you to purchase your own sprayer.

Timing is critical for effective weed control using herbicides. We have many good custom applicators in our region, but there aren’t enough hours in the day for them to cover all the acres that need to be sprayed each spring and summer. If you have your own sprayer, you or an employee can spray weeds when they are young and actively growing, and get good results.

There are many good brands of agricultural sprayers. Three that we have had good experience with are HeavyBilt Manufacturing, Schaben Industries and Wylie Sprayers. All have a local dealer network. Reasonably sized sprayers for average sized Oklahoma and Texas operations can be purchased for $2,000 to $5,000. Contact information is listed at the end of this article.

Some key points to consider are power source, tank size, pump type and nozzles. If the sprayer will be used...
with a tractor with a power takeoff (PTO), then that is the obvious power source. However, sprayers can also be powered with hydraulic motors, small gas engines or with ground drives.

If we assume a 17.5 gallon per acre rate of spray solution, then a 200 gallon tank will treat 11.4 acres between refills and could be three-point mounted on the back of a tractor. A bigger tank will obviously treat more acres between refills, but will require mounting on axles or a trailer. Water weighs 8.4 pounds per gallon, so a 200 gallon sprayer will weigh in excess of 1,680 pounds when the weight of the equipment is added to the weight of the water.

The most common pump type for a pasture sprayer is a roller pump since it is economical and produces appropriate pressures and adequate flow rates. These pumps can be made of many materials, including metal or plastic, but are typically made of cast iron or a very durable alloy known as Silver-Cast™. Likewise, there are different types of rollers and seals available such as nylon, polypropylene, Viton®, Buna-N and Teflon®. If glyphosate herbicides will be used, it is highly recommended to use a SilverCast™ pump housing and Viton® seals.

Of course, none of these features matter if the spray is not uniformly applied to the target weed. Much thought should be given to whether you should use a boom or boomless sprayer. A boom sprayer is preferred on smooth, flat ground with few trees. However, I have seen very few pastures that I would call smooth or flat. If a boom is used on pasture ground, 30 feet is about the maximum useful boom width. Booms wider than 30 feet tend to become cumbersome to navigate around trees, brush, terraces, gullies and other obstacles in pastures. The boomless option may be preferable to a boom in many pasture situations. It makes it much easier to spray around trees and over obstacles. It is preferable to be able to control the flow to the right and left sides separately for either type of sprayer, but especially on a boomless sprayer. For this reason, I prefer Boom X Tender®, Boom Buster® or XP Boom-Jet® nozzles.

For as little as $1,000 more, a producer can also purchase a global positioning system (GPS) guidance tool to be used with the sprayer. This reduces skips and overlaps so herbicide dollars are used more efficiently. The guidance system also reduces driver fatigue and allows operation for more hours per day.

Consult with your tax advisor about the possibility of Section 179 deductions and depreciation, which may make your purchase even more attractive. If you do purchase a sprayer, be sure to calibrate it properly.
Contact information:
HeavyBilt Manufacturing:
www.heavybiltmfg.com

Schaben Industries:
www.schabenindustries.com

Wylie Sprayers:
www.wyliesprayers.com