

Practical Weed Control
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Section 1. How to spot-spray weeds. Spot-spray applications appear easy on the surface, but can turn out to be more difficult than expected. Some things to keep in mind are: 1. quantity sprayed, 2. overspray, and 3. skips and misses. It is easy to assume that “the more you spray the better”. Unfortunately, the more volume you spray per weed equals more runoff and less retention on the leaf. Retention is key to proper herbicide activity. Overspray is a major concern if you are using a non-selective herbicide like glyphosate (Roundup). What commonly happens is that you kill the intended weed, but also a large spot of grass surrounding that weed. It is essential you spray cautiously and direct the herbicide onto the weed and avoid contact with grass. When walking/riding through a pasture to spot-spray, it is very common to spray one weed several times while completely missing others. When spot-spraying, do a little bit every day for a few days in a row. When using 2,4-D type chemicals, you will see the injury within a day. So a quick follow-up spray will allow you to see all the plants you missed.

Section 2. Calibrating an ATV sprayer. To know how much herbicide you are applying, you first need to know how much water is being pumped through the sprayer. One should periodically collect water from several spray nozzles, in a given amount of time, to ensure that each nozzle is consistent. From there, knowing speed, and other factors, you can very precisely calculate exactly how much herbicide is being applied per acre.

Section 3. Measuring herbicides correctly. Herbicides can be purchased as a liquid or dry formulation. This section is to remind us that a dry ounce is based on weight and a liquid ounce is based on volume. The demonstration will prove that using liquid measuring devices for dry herbicides can lead to dramatic over-application. Secondly, when measuring liquid herbicides, it is important to have several sizes, so you can be accurate for both large and small volumes.

Section 4. Sprayer nozzles. All sprayers operate by atomizing the spray solution into a consistent set of droplets. The spray nozzle that is being used to accomplish this is key to proper application and herbicide deposition. All spray nozzles are color coded so you can quickly determine their output potential. Secondly, these nozzles are designed to have the spray pattern overlap for complete coverage of the weed. However, as nozzles get old, they lose their consistency and spray in streaks rather than an even output. It is important to periodically check the nozzles to ensure their pattern and consistency.