



### Spring Is Almost Here: March 13, 2022

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Warm weather will be here this week, grass is already greening up, and bulbs are emerging which means weed seeds will be germinating very soon, Psylla will be laying eggs and mites will be stirring. Now is the time to get ready. There are reports of some pesticides and herbicides in short supply this year due to supply chain issues, and likely at higher prices. With that in mind, it is even more important to make sure all of your pesticide applications are successful the first time out.

1. **Sprayer calibration.** Your spraying equipment needs to be accurately calibrated so that what you apply has the best chance of success. George Hamilton, retired UNH Extension Educator, is the calibration expert, having helped many growers calibrate equipment as well as providing calibration demonstrations at our CT grower meetings. He has developed worksheets that will walk you easily through the calibration process. UMass has one for backpack sprayer calibration. Click on each for the worksheet. George also put together many short video clips that are helpful.

[Airblast sprayer calibration](#)

[Boom sprayer \(herbicide\) calibration](#)

[Backpack sprayer calibration](#)

[Calibration video clips](#)

2. **Water volume.** Herbicide effectiveness is impacted by the volume of water applied. Rarely do large volumes of water per acre work well. For instance, the Chateau label recommends 10-30 gallons of water for pre-emergence; Gramoxone (Paraquat) - minimum of 10 gallons of water. Surflan – 20-40 gal water/acre; Simazine -minimum of 40 gals water/acre. That doesn't mean it is OK to apply in 100 gals water/acre

Horticulture oil label recommends at least 150 gal of water/acre because you want thorough coverage to smother over-wintering pests, or to deter Psylla from laying eggs. Some pesticide labels have a chart of minimum water volumes recommended – check them out.

3. **Environmental conditions** when making applications can impact herbicide effectiveness. For instance, the Kerb and Poast labels state that when applying the products under low humidity, or hot and dry conditions use larger droplets to avoid evaporation.

Some herbicides need to be watered in within a specific time frame, particularly preemergent materials. Make sure adequate rain occurs after application of those herbicides that need to be watered in (when in doubt read the label), or be prepared to irrigate, or switch materials if you can't wait. Surflan requires ½-1 inch of rain.

No non-herbicide materials (oil, insecticides, fungicides, miticides) should be applied within 24-48 hours after a frost to avoid damaging buds.

4. **Soil conditions.** Some herbicide labels discuss the impact of the material on different soil types as well as rate adjustments for different soil types. One label states, 'Herbicidal activity is best in soils

containing less than 4 percent organic matter. Use in soils with higher organic matter may result in inconsistent or incomplete weed control.'

5. **Plant conditions.** Weeds under stress from drought, injury, etc. may not be controlled with herbicides.
6. **Adjuvants.** With the chance of having less options available this year, you want to make sure if an adjuvant is called for on the label be sure to add it to the tank.
7. **Rotate pesticide and herbicide groups/classes.** Weeds and insect/disease pests will become resistant to materials if you constantly use the same one or materials in the same group over and over again. The group code is on the top of the first page of the label. Resistance management is also on the labels.
8. **Materials held over from last year.** Make sure materials you had left over from last year are still viable. Liquid pesticides that froze may or may not be as effective if the formulations separated. Check the label for information. Dry materials that remained dry are fine.

Read labels completely for best results. You may find out why some of your previous applications did not work as well as you had expected.

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