



BONNER COUNTY NOXIOUS WEEDS

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<https://www.bonnercountyid.gov/noxious-weeds>

Calibrations & Mixing - Quick Reference:

Sprayer calibration is a measured amount of a solution to a measured amount of area, and is an important factor in determining accuracy of spray output. Over-applying will waste money and could damage the environment, while under-applying will result in poor control.

A back-pack sprayer, or hand held sprayer, are generally recommended to apply at 50 gallons per acre of solution; this involves spraying to thoroughly wet the plants but stopping short of spray running off. This spray output rate (50 GPA) is assumed for the following conversion chart of customary use rates for commonly used herbicides:

Herbicide	Common Use Rate <i>Per Acre</i>	Conversion
Escort or Telar (or generics)	1 oz/acre	¼ teaspoon/gallon of water
Milestone	6 oz/acre	¼ oz/gallon of water
Opensight	3 oz/acre	¾ oz/gallon of water
Curtail & Cody	2 qts/acre	1 ½ oz/gallon of water
TripletSF, Trimec or Foundation	2 qts/acre	1 ½ oz/gallon of water
Vastlan	3 qts/acre	2 oz/gallon of water
Crossbow	4 qts/acre	3 oz/gallon of water
2,4-D (Weedar 64, Freelexx, etc)	1 qt/acre	¾ oz/gallon of water
Transline & Stinger	1 pt/acre	⅓ oz/gallon of water
Polaris (or generic) or Glyphosate	3 qts/acre	2 oz/gallon of water
Spreaders/Stickers (Syl-Tac, Rainier, etc)	N/A	½ oz/gallon of water

Field sprayer calibration is a different process than hand gun sprayer calibration, there are far more variables and every spray apparatus is different. Common application rates vary from 5 GPA (gallons per acre) to 100 GPA; most common for land based power sprayers is 15 GPA – 40 GPA, the Bonner County rental sprayers are set for 40 GPA mixes at 3 MPH. The following is the gallons per acre formula [and other helpful measurement references]:

Gallons Per Acre = $\frac{\text{Gallons Per Minute (of spray output)} \times 495}{\text{MPH} \times \text{Swath Width (in feet)}}$
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Liquid Measurements	Dry Measurements	Length & Area
6 teaspoons = 1 ounce	28.4 grams = 1 ounce	5,280 feet = 1 mile
8 ounces = 1 cup	16 ounces = 1 pound	43,560 square feet = 1 acre
2 cups = 1 pint		
2 pints = 1 quart		
4 quarts = 1 gallon		

MPH = $\frac{200 \text{ feet} \times .682}{\text{Seconds traveled (in 200 ft)}}$
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****Note:** These are general guidelines, always read product labels and calibrate your spray equipment**