



# BONNER COUNTY NOXIOUS WEEDS

1500 Hwy 2, Suite 101 • Sandpoint, ID 83864 • Phone: (208) 255-5681ext.6  
<https://www.bonnercountyid.gov/noxious-weeds>

## Calibrations 2019:

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 common use rates for available herbicides:

Escort/MSM60 & Telar/Chlorsulfuron @ 1 oz. per acre = ¼ teaspoon per gallon of water
Milestone @ 6 oz. per acre = ¼ oz. per gallon of water
Opensight @ 3 oz. per acre = ¾ teaspoon per gallon of water
Curtail/Cody & Weedmaster/TrimecClassic @ 2 qts. per acre = 1½ oz. per gallon of water
Crossbow & Vastlan/Garlon @ 4 qts. per acre = 3 oz. per gallon of water
Stinger/Transline @ 1 pt. per acre = ⅓ oz. per gallon of water
2,4-D @ 1 qt. per acre = ¾ oz. per gallon of water
Polaris/Ecomazapyr & Glyphosate @ 3 qts. per acre = 2 oz. per gallon of water
Non-Ionic spreader (R-11/Induce)/MSO sticker (Syl-Tac), use 1 teaspoon per 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]:

<b>Gallons Per Acre = <math>\frac{\text{Gallons Per Minute (of spray output)} \times 495}{\text{MPH} \times \text{Swath Width (in feet)}}</math></b>
--

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			

<b>MPH = <math>\frac{200 \text{ feet} \times .682}{\text{Seconds traveled (in 200 ft)}}</math></b>
--

\*\*Note: These are general guidelines, always read product labels and calibrate your spray equipment\*\*