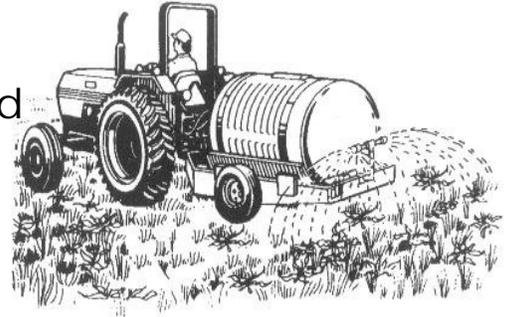


Ferry County Noxious Weed Control Board

Need Help call 509-775-5225, extension 1116 or 1111



SKID MOUNT CALIBRATION

- 1.) Put some water in sprayer – 20 gallons or so.
- 2.) Plug any nozzles you won't be using.
- 3.) Turn sprayer on and measure swath sprayed (= width)
- 4.) Divide swath width into 43,560, to equal distance you would have to drive to cover 1 acre. Divide this by some number\* (10, 20, 50, etc.) to cover a portion of an acre. Number used = \_\_\_\_feet.
- 5.) Mark this last distance off.
- 6.) Time how long it takes to drive the distance at the speed you'll be spraying. You don't have to have the sprayer going for this, just count the seconds it takes. (=\_\_\_\_seconds.)
- 7.) Start sprayer and collect spray from broad jets using a hefty bag for the (\_\_\_\_) seconds it took you to drive the distance. Poke a hole in the bag and pour it into a bucket and measure it. Multiply this amount of gallons by the number\* (above) to get (\_\_\_\_) gallons per acre the sprayer is putting out.
- 8.) Mix the amount of chemical required per acre for each (\_\_\_\_) gallons of water the sprayer puts out per acre.

**FOR EXAMPLE:**

- 1.) Put water in tank, no chemical yet.
- 2.) In this case, I'll use all nozzles.
- 3.) I start pump. Say the swath wetted is measured at a 15' width.
- 4.)  $43,560 \div 15' = 2,904'$ . Say I'll divide this by  $30=96.8'$ . So I'd have to drive 96.8' in this case to cover  $1/30$  of an acre (30 would then be the multiplier to get an acre).
- 5.) I mark off 96.8'.
- 6.) I drive it at the speed I'll spray at. The pump is off. I time it; it takes 16.5 seconds to drive it.
- 7.) I start the sprayer and hold hefty bag over the broad jet nozzles and turn on jets for the 16.5 seconds. I poke a hole in or pour from the bag and collect this in a bucket. I collect 5 pints of water.  $5 \text{ pints} \times 30 = 150 \text{ pints/acre,} = 19 \text{ gallons/acre.}$
- 8.) I find the sprayer puts out 19 gallons/acre, and in this case I need 2 quarts of chemical/acre. I would add 2 quarts chemical for every 19 gallons of water in tank and would be able to cover 1 acre with each 19 gallons.

Note: **Chart A** represents a 100 GAL Total mix while **Chart B** is for 1 GAL Total mix.

Handline  
CHART A  
Volume of Chemical to Mix per  
100 gallons of Water

Your Calibrated Gallons per Acre	Rate of Chemical	Quarts per Acre				
		½	1	2	3	4
20		2 ½ qt	5 qt	10 qt	15 qt	20 qt
30		1 2/3 qt	3 ½ qt	6 2/3 qt	10 qt	13 1/3 qt
40		1 ¼ qt	2 ½ qt	5 qt	7 ½ qt	10 qt
50		1 qt	2 qt	4 qt	6 qt	8 qt
60		27 fl oz	1 2/3 qt	3 1/3 qt	5 qt	6 2/3 qt
70		23 fl oz	1 ½ qt	3 qt	4 ¼ qt	5 ¾ qt
80		20 fl oz	1 ¼ qt	2 ½ qt	3 ¾ qt	5 pt
90		18 fl oz	36 fl oz	2 ¼ qt	3 1/3 qt	4 ½ qt
100		1 pt	2 pt	2 qt	3 qt	4 qt
120		13 fl oz	27 fl oz	1 2/3 qt	2 ½ qt	3 1/3 qt
140		11 ½ floz	23 fl oz	3 pt	4 ¼ qt	5 ¾ qt
160		10 fl oz	20 fl oz	2 ½ pt	3 ¾ qt	5 pt
180		9 fl oz	18 fl oz	36 fl oz	3 1/3 qt	4 ½ pt
200		8 fl oz	1 pt	2 pt	3 pt	4 pt

**CLEANING:** If some spray is left in the tank, drain tank completely in an area where no undesirable plant damage will occur. After spraying clean the tank thoroughly (rinsing 3 or more times with water is recommended) be sure to pump the rinse water through all sprayer mechanisms until air is coming out. The check valve can be removed to quickly flush the pump. The nozzle assembly should be removed and thoroughly flushed with clean water. When using hormone type herbicides, follow the cleaning instructions of the manufacturer.

Backpack  
CHART B  
Volume of Chemical to Mix per  
1 gallon of Water

Your Calibrated Gallons per Acre	Rate of Chemical	Quarts per Acre				
		½	1	2	3	4
20		5 tsp	10 tsp	3 ¼ fl oz	4 ¾ fl oz	6 1/3 fl oz
30		3 tsp	6 tsp	2 fl oz	3 ¼ fl oz	4 ¼ fl oz
40		2 1/3 tsp	4 ¾ tsp	1 2/3 fl oz	2 1/3 fl oz	3 ¼ fl oz
50		2 tsp	3 ¼ tsp	1 ¼ fl oz	2 fl oz	2 ½ fl oz
60		1 2/3 tsp	3 ¼ tsp	6 1/3 tsp	1 2/3 fl oz	2 fl oz
70		1 1/3 tsp	2 ¾ tsp	5 ½ tsp	1 1/3 fl oz	1 ¾ fl oz
80		1 ¼ tsp	2 1/3 tsp	4 ¾ tsp	7 ¼ tsp	9 ½ tsp
90		1 tsp	2 tsp	4 ¼ tsp	6 1/3 tsp	8 ½ tsp
100		1 tsp	2 tsp	3 ¾ tsp	5 ¾ tsp	7 2/3 tsp
120		¾ tsp	1 1/3 tsp	3 ¼ tsp	4 ¾ tsp	6 1/3 tsp
140		2/3 tsp	1 1/3 tsp	2 ¾ tsp	4 tsp	5 ½ tsp
160		2/3 tsp	1 ¼ tsp	2 ½ tsp	3 2/3 tsp	4 ¾ tsp
180		½ tsp	1 tsp	2 tsp	3 ¼ tsp	4 ¼ tsp
200		½ tsp	1 tsp	2 tsp	3 tsp	3 ¾ tsp

**Remember that other people will be using the sprayer after you have finished with it.**