**BACKPACK SPRAYER CALIBRATION**
**NO MATH VERSION**

**Step 1.** Measure and mark a calibration plot that is exactly
18.5 feet wide X 18.5 feet long

**Step 2.** Spray the calibration plot uniformly with water, noting the number of
seconds required, do this three times and average. Spray at your normal or
usual pace.

Time Required = _______________ Seconds

**Step 3.** Spray into a bucket for the same number of seconds.

**Step 4.** Measure the number of ounces of water in the bucket.

Volume Sprayed = _______________ Ounces

**Step 5.** The number of ounces collected from the bucket is equal to the number of
gallons per acre the sprayer is delivering.

Gallons Per Acre (GPA) = ____________________

Go to back of page for amount of herbicide to add to tank
CORRECT AMOUNT OF HERBICIDE PER TANK
FOR LIQUID HERBICIDE FORMULATIONS

STEP 1: Record sprayer output in gallons/acre (from step 5 calibration sheet)
Output (Volume) = _______________ GPA

STEP 2: Determine volume of full spray tank.
Tank volume = _______________ gallons

STEP 3: From the herbicide label determine the amount of herbicide concentrate
to apply per acre.
Herbicide per acre, oz, pts, qts.

STEP 4: Determine the amount of herbicide to add for each gallon of water in the
sprayer from the chart below.

<table>
<thead>
<tr>
<th>Spray Volume GPA</th>
<th>Amount of Herbicide to Add To Each Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recommended Herbicide Rate Per Acre</td>
</tr>
<tr>
<td></td>
<td>1 Pint</td>
</tr>
<tr>
<td>15</td>
<td>6 tsp</td>
</tr>
<tr>
<td>20</td>
<td>5 tsp</td>
</tr>
<tr>
<td>30</td>
<td>3 tsp</td>
</tr>
<tr>
<td>40</td>
<td>2.33 tsp</td>
</tr>
<tr>
<td>50</td>
<td>2 tsp</td>
</tr>
<tr>
<td>60</td>
<td>1.66 tsp</td>
</tr>
<tr>
<td>70</td>
<td>1.33 tsp</td>
</tr>
<tr>
<td>80</td>
<td>1.25 tsp</td>
</tr>
<tr>
<td>90</td>
<td>1 tsp</td>
</tr>
<tr>
<td>100</td>
<td>0.75 tsp</td>
</tr>
<tr>
<td>120</td>
<td>0.75 tsp</td>
</tr>
</tbody>
</table>

STEP 5: Calculate the amount of herbicide to add to each tank.
______ Amount of herbicide/gallon X _______ number of gallons in tank
= _______ Total amount of herbicide to add to each tank load.

Example: You calibrate your sprayer and the output is 30 GPA, and your sprayer holds
3 gallons. You are spraying spotted knapweed and want an herbicide application rate
of 1 pint/acre. Go to the
chart and read across from 30 GallA - the amount of herbicide to add per gallon is 3 tsp..
Since your
sprayer holds 3 gallons of total solution you would add 9 tsp (3 TBS) of herbicide in
addition to the water to each tank.

Liquid conversions: tsp = teaspoons; TBS = tablespoons; fl oz = fluid ounces, 3
teaspoons = 1 tablespoon, 8 fluid ounces = 1 cup,
2 tablespoon = 1 fluid ounce, 1 cup = 16 tablespoons.

BACKPACK SPRAYER CALIBRATION
CORRECT AMOUNT OF HERBICIDE PER TANK
FOR ESCORT DISPERSIBLE GRANULE HERBICIDE

STEP 1: Record sprayer output in gallons/acre (from step 5 calibration sheet)
Output (Volume) = _____________ GPA

STEP 2: Determine volume of full spray tank.
Tank volume = ______________ gallons

STEP 3: From the herbicide label determine the amount of herbicide
to apply per acre.
___________ Herbicide per acre, oz, pts, qts.

STEP 4: Determine the amount of herbicide to add for each gallon of water in the
sprayer from the chart below.

<table>
<thead>
<tr>
<th>Escort gram tube conversion table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escort rate in grams per gallon</td>
</tr>
<tr>
<td>Herbicide Rate/acre</td>
</tr>
<tr>
<td>½ oz</td>
</tr>
<tr>
<td>1 oz</td>
</tr>
<tr>
<td>2 oz</td>
</tr>
</tbody>
</table>

If you have questions about any of these instructions, please contact the Malheur County
Weed Inspector.
541-473-5102
gpage@malheurco.org