Rental Sprayers

- **Slide-In Sprayers #123 & 124**
  - 200 gallon tanks
  - Handgun
  - (2) 187 nozzles
  - **Chart outputs for each nozzle!!!**

    Effective range for sprayer is 20 ft from nozzle.

    5 mph - Each nozzle puts out 20 gal/acre **(2)** nozzles = 40gal/acre

- **Slide-In Sprayer #125**
  - 150 gallon tank
  - Handgun
  - (2) 1250 nozzles
  - **Chart outputs for each nozzle!!!**

    Effective range for sprayer is 20 ft from nozzle.

    6 mph - Each nozzle puts out 10 gal/acre **(2)** nozzles = 20gal/acre

    7 mph - Each nozzle puts out 8 gal/acre **(2)** nozzles = 16gal/acre

- **Slide-In Sprayers #126, 127 & 128**
  - 50 gallon tanks
  - Handgun
  - (1) 1250 nozzles
  - **Chart outputs for each nozzle!!!**

    Effective range for sprayer is 20 ft from nozzle.

    6 mph - Each nozzle puts out 10 gal/acre **(2)** nozzles = 20gal/acre

    7 mph - Each nozzle puts out 8 gal/acre **(2)** nozzles = 16gal/acre

- **ATV Sprayers #418, 419, & 420**
  - 20 gallon tanks
  - Handgun
  - (2) 1250 nozzle
  - **Chart output for nozzle!!!**

    Effective range for sprayer is 20 ft. from nozzle.

    6 mph - Each nozzle puts out 10 gal/acre **(2)** nozzles = 20gal/acre

    7 mph - Each nozzle puts out 8 gal/acre **(2)** nozzles = 16gal/acre

- **Cleaning Tanks**

  After use, rinse tanks with **AMMONIA WATER** spray out **BOTH NOZZLES AND HANDGUN!!!**

Points To Remember Regarding Herbicides

1. ****ALWAYS READ THE ENTIRE CONTAINER LABEL BEFORE APPLICATION****

2. **NEVER** APPLY ANY HERBICIDE DIRECTLY TO OR NEAR WATER.

3. **NEVER** MIX HERBICIDES NEAR A WELL OR OPEN WATER.

4. **ALWAYS** AVOID DRIFT TO UNTARGETED PLANTS DUE TO WINDY CONDITIONS.

5. **ALWAYS** WEAR SAFETY GEAR: GLOVES, GOGGLES, LONG SLEEVES, RUBBER BOOTS.

6. **ALWAYS** TRIPLE RINSE EMPTY CONTAINERS & DISPOSE OF CONTENTS THROUGH SPRAYER.

7. **DO NOT** REUSE CONTAINERS.

8. **DISPOSAL OF CONTAINERS:** THE CITY OF BILLINGS, SOLID WASTE DIVISION HAS A YEARLY 'TOXIC TRASH ROUND-UP' THAT IS ADVERTISED PUBLICLY OR YOU CAN CALL THEM AT 657-8260 TO FIND OUT MORE INFORMATION. THESE THOROUGHLY CLEANED CONTAINERS CAN ALSO BE DISPOSED OF AT ANY SANITARY LANDFILL, AS APPROVED.

9. STORE HERBICIDESAWAY IN A COOL, DARK PLACE AWAY FROM CHILDREN, FOOD AND WATER.

10. LIQUID HOUSEHOLD AMMONIA MIXED WITH WATER IS GOOD FOR CLEANING EQUIPMENT.

IF DOSAGE ON LABEL SHOWS THIS:	USE THIS FOR EACH GALLON OF WATER:
2 PINTS	¾ OUNCE (4 TEASPOONS)
3 PINTS	1 ¼ OUNCES (2 ½ TABLESPOONS)
4 PINTS	1 ½ OUNCES (3 TABLESPOONS)
6 PINTS	2 ¼ OUNCES (4 ½ TABLESPOONS)

Informational Websites

Center For Invasive Plant Management:

http://www.weedcenter.org

CDMS (Chemical) Labels:

http://www.cdms.net

Montana Bureau Of Land Management:

http://www.mt.blm.gov

Montana Extension Service-Bozeman:

http://extn.msu.montana.edu

Montana State Weed Science:

http://www.weeds.montana.edu

MT Statewide Noxious Weed Awareness & Education Campaign:

http://www.weedawareness.org

Montana War On Weeds:

http://www.mtwow.org

Montana Weed Control Association (MWCA):

http://www.mtweed.org

National Pesticide Information:

http://www.npic.orst.edu/gen.htm

Plant Management Information System (PMIS):

http://el.erdc.usace.army.mil/pmis/

Plants National:

http://plants.usda.gov

EMERGENCY TELEPHONE NUMBERS

Fire, Police & Ambulance	**911**
MT Poison Control Center	**800-525-5042**
CHEMTREC®*	**800-424-9300**
_____	_____
_____	_____

*CHEMTREC® (Chemical Transportation Emergency Center) advises principally on hazardous material related incidences (herbicide/pesticide spills). The 800-number is for emergency only.

OTHER TELEPHONE NUMBERS

Montana Department of Agriculture	**444-5400**
Yellowstone County Weed District	**256-2708**
Yellowstone County Extension Office	**256-2828**
Carbon County Weed District	**962-3967**
Stillwater County Weed District	**328-4165**
_____	_____
_____	_____

CONVERSION FACTORS

Liquid Conversion Factors

1 Gallon	=	4 Quarts	=	8 Pints	=	128 Ounces
1 Quart	=	2 Pints	=	32 Ounces	=	4 Cups
1 Pint	=	16 Ounces	=	2 Cups		
1 Cup	=	8 Ounces	=	16 Tablespoons		
1 Tbsp	=	3 Tsp	=	½ Ounce		
1 Cubic foot of water			=	7.5 Gallons	=	63 Pounds

Metric Conversions

Multiply		By	To Get	
Lb	Pounds	2.2	Kilograms	Kg
Pt	Pints	.47	Liters	L
Qt	Quarts	.95	Liters	L
Oz	Ounces	30	Milliliters	Ml
A	Acres	.4	Hectares	Ha
Ha	Hectares	2.5	Acres	A

Weight Conversions

1 Pound	=	16 Ounces	=	454 Grams
1 Ounce	=	28.4 Grams		

Area Size Factors

1 Rod	=	16.5 Feet
1 Sq. Rod	=	272 Square Feet
1 Acre	=	160 Square Rods
1 Acre	=	43,650 Square Feet
1 Mile	=	5,280 Feet

CALIBRATE YOUR HAND SPRAYER

"Make the Most of Herbicide Treatments for Broadleaf Weeds and Brush"

Follow These Steps:

1. Clean your sprayer and nozzle thoroughly.

   Fill the sprayer tank with clean water. Using water only, check to see that the nozzle forms a uniform spray pattern. If the pattern is uneven, readjust the spray pressure and determine if you need to replace the nozzle.

   If you have an adjustable nozzle, mark the setting so you'll use the same one every time you spray.

2. Measure an 18.5 ft by 18.5 ft spot in a typical weeded area.

   Spray this area uniformly with water and record the number of seconds it takes to do the job. Remember that consistency is vital to uniform coverage. Develop a smooth, sweeping motion with the spray wand while you walk at a pace that will be comfortable for actual application. Keep the pressure constant.

   Repeat this procedure three times. Average the three times to determine a typical spraying speed.

3. Spray water into a large container for a length of time equal to your average spraying time determined in Step 2. Measure the number of fluid ounces you collect. This number converts directly to gallons per acre of spray mixture (herbicide and water) you can expect to use in your treatment program. For example, if you gather 60 fluid ounces in the container, plan to use 60 gallons of spray mixture per acre.