

A GUIDE TO RANGE AND PASTURE HERBICIDE APPLICATIONS

Tackle your toughest terrain with the right equipment.

Discouraged by the costs and problems associated with keeping weeds and brush in check on range and pasture land?

Many ranchers are now taking advantage of application equipment options and herbicides developed specifically for range and pasture. Tough weed and brush problems even in rough terrain and difficult-to-access areas can be treated effectively.

The reason ranchers are using herbicides to increase grass production is simple – they get a good return on investment. We invite you to compare the following application options and decide which method is the best and most economical for your operation.

The herbicide and application method you choose should be used as part of your integrated pasture management plan to increase grass production.

Check with your local Range & Pasture Agent for availability of application equipment. Agents can also offer advice when planning a herbicide application for your range and pasture and which equipment to choose.



First step –
PASTURE
ANALYSIS

The perfect pasture doesn't exist, but if weeds and brush are reducing grass production, you have a management concern. Your terrain and the types of weeds and brush present will determine your herbicide and application equipment choices.



Backpack sprayer Spot spray small jobs.

If you need to get rid of small weed or brush patches, the backpack sprayer can be an appropriate choice. Typically a single nozzle on a hose is used to spot spray weeds and small brush. The hose may be fitted with a small boom 4 to 6 feet long with multiple flat fan nozzles.

When spraying individual brush plants, be sure to spray both sides of the brush to ensure good coverage and uptake, but do not spray past the point of run-off.

Calibrate the sprayer with only water in the tank, walking at a slow consistent speed. Measure the flow rate output over a given period of time to determine how much herbicide to put in the tank to get the desired application rate. Variable walking speeds make the rate difficult to calculate correctly. Always wear recommended personal protective equipment.

Quad-mounted sprayer Economical to buy or build.

The quad-mounted sprayer is ideal for a spot application of herbicide on noxious weeds such as leafy spurge and toadflax. Patches can be treated while they're still small, and the quad sprayer can be used to get weeds on fence lines, ditches and pasture edges.

The quad-mounted sprayer can handle reasonably rough terrain, but the operator might be in for a rough ride. Variable speeds during application make calibration of the application rate somewhat difficult.

An industrial applicator with a quad charges approximately \$85/hour for 1 man, a quad sprayer and a nurse truck.

Truck or tractor mounted sprayers

Good choice for small to mid-size pastures.

This application equipment option is best used on reasonably smooth pasture terrain. One advantage is the sprayer itself can be used on multiple vehicles, which could include shared equipment, equipment rented at your retailer or equipment available from your local municipality.

Herbicides for Range and Pasture



Application Options

Benefits:

- Higher water volumes can be applied over larger areas than with quad sprayers.
- The total unit can be built or purchased for \$3,500 to \$4,500.

Booms can be fitted with conventional flat fan nozzles or air induction nozzles to reduce the risk of drift. Boombuster™ or OC (Off Center) cluster nozzles are common boomless choices. Misses as a result of rough terrain or poor marking are not uncommon.

If you have lots of range and pasture to cover, very rough terrain or tall brush, you should consider aerial application.

Cost:

- Approximately \$50 per hour to rent a skid mounted sprayer only (vehicle and driver must be provided by the rancher).
- Rate per acre varies due to variability of application speed.

Commercial large-scale ground sprayer

Suitable for large acreage and moderately rough terrain.

Commercial ground sprayer equipment is often crop spraying or fertilizing equipment that has been modified to suit rough pastures. Whether boomed or boomless fittings are used, they must be heavily reinforced to withstand rough terrain. Some terrain may be too rough for ground sprayers to handle.

Some booms are designed with a break-away system to reduce breakage. The booms, usually 40 to 60 feet, are typically shorter than crop sprayers. The rate of application is likely to be more accurate if the unit is outfitted with a speed rate controller – designed to adjust application rate to match travel speed.

These sprayers can drive over somewhat rough terrain at a higher speed than the smaller equipment applicators. They can also apply a higher water volume at 20 gallons per acre or more, which improves herbicide coverage for consistent results.

This type of sprayer may be available for custom hire at specialized Range and Pasture Agents. Because of slow application speeds in relatively rough terrain, cost usually ranges from \$12 to \$16 per acre.

Grow more grass, graze more cows.

If you've been relying on mechanical clearing and controlled burning to curb your weed and brush encroachment, consider Grazon* and Remedy*, two herbicides developed for range and pasture from Dow AgroSciences.

The benefits of Grazon or Remedy application are clear:

- Efficacy on the entire broadleaf weed or tree right down to the root system.
- Cost effectiveness.



Boomless pasture sprayer.



Cleanwater County sprayer rental units.

Aerial application

Large areas, consistent efficacy with few misses.

Fixed wing and helicopter aerial applications are efficient and effective. If you plan an aerial application, be sure to book your appointment as early as April or May. Some aerial applicators may be less willing to do small acreage jobs. Pooling together a number of ranchers in one area with spray needs may increase the attractiveness for an aerial applicator to come in.

Regardless of your terrain – smooth to very rough – a professional fixed wing aircraft application ensures an effective herbicide application. Many use GPS marking technology to help prevent misses and increase accuracy of application.

Be sure the herbicide manufacturer's recommended water volumes are used. For most herbicide applications, between 2 and 4 gallons per acre is required. You'll also need to consider your pasture's proximity to sensitive areas, which may prevent an aerial application.

Cost:

- \$10 to \$18 per acre
- Price will vary depending on ferrying distance from airport, the number of flying obstacles on and around the pasture, the size of the job and the cost of fuel.

NOTE: Helicopters don't require an airport – an added benefit for ranchers who need to treat remote range and pasture land.

- Uninterrupted grazing.
- An increase in grass production within 2 months of a Grazon application.
- Long-term effect (3 to 5 years) on broadleaf weed and brush populations.
- No ongoing maintenance.
- Safe to grasses.
- Safe for cattle, operators and the environment.
- Choice of application equipment.

RANGE AND PASTURE HERBICIDES



Grazon

Grazon is developed to improve grass production by controlling broadleaf weeds on rangelands and pastures. Grazon is tough on weeds, yet easy on grasses. It is very safe for cattle, operators and the environment. There are no grazing restrictions for livestock other than lactating dairy cows.

Field research has shown that Grazon at 1.5 L/ac provides good results on Canada thistle, oxeye daisy, tall buttercup, scentless chamomile, common tansy, dandelion, diffuse knapweed, spotted knapweed, absinth wormwood, common burdock, sow thistle, prairie sage, pasture sage, gumweed, plantain, buffalo bean and common yarrow.

Note: Do not apply if injury to existing forage legumes cannot be tolerated.



Remedy

Remedy provides the most complete brush control that is safe to grass. It's the only product that controls brush right down to the roots.

Remedy is very safe for cattle, operators and the environment, and there are no grazing restrictions if treatments are less than 2 L/ac. At higher treatment rates, wait 14 days before grazing. Withdraw livestock from grazing treated grass or hay at least 3 days prior to slaughter.

Apply Remedy at rates from 1.6 to 3.2 L/ac to control alder, ash, aspen, balsam poplar, birch, blackberry, buckthorn, chokecherry, cottonwood, maples, oaks, pines, poison oak, raspberry, tamarack, wild rose and willows.



Questions?

Dow AgroSciences Range & Pasture Agents can give you information on the best ways to tackle your worst range and pasture weed and brush problems. For range and pasture support, including equipment and herbicide recommendations, contact a Dow AgroSciences Range & Pasture Agent, phone the Dow AgroSciences Solutions Center at 1-800-667-3852 or visit us at www.dowagro.ca.

