

RANGE & PASTURE PORTFOLIO

Western

Visit us at

rangeandpasture.com



The Value of Controlling Weeds and Brush

Weeds and brush compete with forage grasses for valuable soil nutrients and moisture, sunlight, and space. Due to their rapid growth habits, many weeds and brush left unchecked can quickly outperform desirable grasses reducing forage production and quality. Decades of pasture research has demonstrated removing weed and brush competition coupled with adequate soil fertility and grazing management can lead to improved forage quality and yields. For example, in one study shown in **Figure 1** the dry matter gathered from an area treated with herbicides produced 5.8 tons of forage compared to 2.3 tons in the untreated area.

Controlling weeds when they are small and before they are well established requires the least amount of input costs. Scouting pastures early and often is recommended.

An investment in a proper herbicide treatment is the single best input for increasing forage grass production.



LEFT—Treated with herbicides

RIGHT-Untreated

Using herbicides to manage weeds resulted in a 152% increase in forage grass compared to untreated, 5.8 tons/A vs. 2.3 tons/A.

THE VALUE OF WEED AND BRUSH CONTROL

BFFORF WFFD CONTROL

AFTER WEED CONTROL



The Condition of My Pasture

A well-managed pasture where fertility is maintained, grazing is properly managed, and weeds are controlled will provide an excellent forage base for livestock. However, if either or all of these components of management are neglected, pastures will decline. Encroaching weeds will invade and take resources from the desirable forages. The presence of weeds encourages spot grazing which leads to increased weed pressure and a declining forage base resulting from the heavy selective grazing. Over time woody plants begin to encroach resulting in an even greater decline in grazeable forage.

As the pasture progresses from stage 1 to stage 5 in the image on the right, the inputs required to transition a pasture back into a more desirable state results in increased costs, time, and effort.





- · Well managed pasture with minor weed competition
- Uniform grazing



- Encroachina annual and perennial weeds
- Spot grazing around weeds
- · Increased grazing pressure on weed free parts of pasture



- Annual and perennial weeds cover most of the pasture
- Significant impacts on forage grasses and grazing behavior



- Annual and perennial weeds cover most of the pasture
- Encroachment of woody plants
- Grazing becomes more concentrated in weed



- Heavy infestation of annual and perennial weeds and woody plants
- Limited grazing with little opportunity for grass recovery from grazing



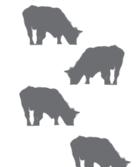


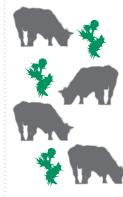




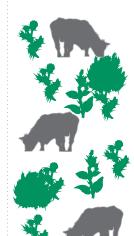














Corteva Agriscience™, Your Range & Pasture Partners

You knew us as Dow AgroSciences—a company synonymous with Range & Pasture management. Corteva Agriscience now builds on that legacy and are reaffirming our commitment to put your needs first.

Corteva Agriscience gives you tools and expertise to help your land flourish today—and for years to come.

Here's how we can help you improve your Range & Pasture land.

Ranching runs in our blood. We have a specialized team of Range & Pasture experts dedicated to working with you. Our goal is to enrich the lives of those who produce and consume beef and those who steward the land. It's a goal that affects nearly everyone on the planet, and founded in our commitment to lead and continually achieve greater results, *together*.

Corteva Agriscience has the industry's most complete Range & Pasture herbicide portfolio to fit your needs. That means you can always count on the highest level of field-proven products to help you achieve your goals.

Range & Pasture Solutions to Cover the Majority of My Needs



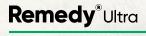
HERBICIDE

Superior, broad spectrum residual weed control. Control broadleaf weeds with better efficacy and longer residual on more than 100 of the toughest weeds ranchers face.



HERBICIDE

Premier brush and non-residual broadleaf weed control. Excellent choice for hayfields or temporary pastures where non-residual weed control is desired. Tank mix with GrazonNext HL for mid to late season applications to control brush and more mature weeds. Selectively target vines and brush along fence rows.



HERBICIDE

Flexible, long-lasting brush control. Rapidly translocated to roots of woody plants to prevent regrowth. Can be applied as a foliar, basal bark, or cut surface treatment.





Solutions to Take Care of Specialized Needs

Chaparral™

HERBICIDE

Broad spectrum non-2, 4-D brush and residual weed control in one container. Properly timed applications of Chaparral may be used to reduce fescue toxicity to cattle. Excellent choice for bermuda grass pastures. May be used to remove Pensacola bahiagrass.

Surmount®

HERBICIDE

HERBICIDE

Tordon® RTU

Spike® 20P

HERBICIDE

Non-2, 4-D broadleaf weed herbicide with residual. Good on prickly pear, Bois d'arc, and Eastern red cedar. A pesticide applicator's license is required for purchase and application.

A premium, dry pellet formulation used to provide long-lasting control of unwanted brush species. Activated after a suitable rainfall. Ideal as an individual plant treatment for woody plants. Enhances grazing and wildlife habitat.

A simple ready-to-use herbicide solution for individual plant treatments of unwanted brush. Apply after hand-cutting operations to prevent re-sprouting or as a hack and squirt treatment. Apply using the convenient squirt bottle to the cut surface of unwanted woody plants. It can be used nearly year-round.





Additional Range & Pasture Needs

Graslan[®] L

HERBICIDE

An improved formulation of P+D offering broadleaf weed control with residual. It features broad use rates and the flexibility to be applied at multiple stages of weed growth. A pesticide applicator's license is required for purchase and application.

Grazon® P+D

HERBICIDE

The old standard for residual broadleaf weed control in pastures. A pesticide applicator's license is required for purchase and application.

Tordon[®] 22K

HERBICIDE

Is still the foundation for many noxious weed and brush control programs. Provides all-purpose noxious weed control and basic invasive weed management. A pesticide applicator's license is required for purchase and application.





Application Methods

- Aerial Application—(BT) Spraying crop protection products onto a crop from an agricultural aircraft.
- Ground Broadcast Foliar–(BT) Using a truck, tractor, or similar equipment with either a boomless or boom sprayer the treatment is uniformly applied across the pasture. Well-suited for treatment to large areas especially when targeting low growing weeds and brush.
- Directed Spot Foliar—(IPT) or (BT)
 Generally the most widely used among all treatment options and may be applied either as a broadcast or directed, spot treatment. This treatment is applied to the foliage of the target vegetation and can be used to control any combination of grasses, sedges, broadleaf weeds, and woody plants based on herbicide selection and/or application method.

- Basal Bark-(IPT) Basal bark treatments are used to control unwanted woody plants up to 6 inches in diameter. This method can be used to selectively control unwanted woody plants with little to no damage to surrounding vegetation.
- Cut Stump-(IPT) Used on any size woody stem to control re-sprouts after a hand-cutting operation. This treatment should be applied to the cut surface immediately after hand-cutting. This treatment protects the initial cutting investment by reducing or eliminating future maintenance costs.

(IPT) Individual Plant Treatment (BT) Broadcast Treatment



Choose Your Scenario



SCENARIO 1

General broadleaf weed control in pastures to improve grass production.

Product

GrazonNext® HL herbicide

Application

Aerial or ground application. Apply after weed emergence in spring, through summer and into fall.



SCENARIO 2

Bindweed, wild carrot, and leafy Spurge control in pastures.

Product

Graslan® L herbicide

Application

Apply aerial or ground application when the leafy spurge true flowers (after yellow bract is formed) and plants are developing (spring or early summer) or in early to mid-September after the leafy spurge stems have developed new fall re-growth has begun.



SCENARIO 3

Scattered trees and brush to be controlled in pasture.

Product

Remedy® Ultra herbicide

Application

Basal bark application is a great selective application with little to no impact on surrounding vegetation.

Choose Your Scenario



SCENARIO 4

Brush has been cut or burned the year before and the customer wants to treat re-growth this year.

Product

Chaparral™ herbicide, PastureGard® HL herbicide, Remedy® Ultra herbicide

Application

Aerial or ground application. In general, wait a year after cutting or burning to allow sufficient regrowth of brush to allow adequate leaf area to absorb the herbicide.



SCENARIO 5

You have absinth wormwood, Canadian thistle, goldenrod, common mullein, buckbrush or snowberry brush.

Product

Chaparral™ herbicide

Application

Ground or aerial application.



SCENARIO 6

Broadleaf weeds in pasture which may be either grazed and/or hayed.

Product

Chaparral™ herbicide or GrazonNext® HL herbicide

Application

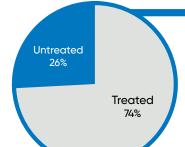
Ground or aerial application. If manure is captured in a compost, put the manure on pasture, rangeland, wheat, CRP, or corn.

Product Use

	Control		Type of Control		Federally Restricted Use Pesticide		Grazing Restrictions		Formulation	
Product	Broadleaf	Brush	Non- Residual	Residual	No	Yes	None for All Livestock	Lactating Dairy	Liquid	Dry
Chaparral" Herbicide	•	•		•	•		•			•
GrazonNext®HL Herbicide	•	•		•	•		•		•	
Graslan® L Herbicide	•	•		•		•		•	•	
Grazon® P+D Herbicide	•			•		•		•	•	
PastureGard® HL Herbicide	•	•	•		•		•		•	
Remedy® Ultra Herbicide	•	•	•		•		•		•	
Tordon® 22k Herbicide	•	•		•		•		•	•	
Tordon® RTU Herbicide		•		•	•		•		•	
Sendero® Herbicide	•	•		•	•		•		•	
Surmount® Herbicide	•	•		•		•		•	•	







THE CATTLE VOTE

74% of cattle preferred grazing herbicide treated pastures vs. untreated.

Don't believe us? Don't just take our word for it, check out the link and see for yourself!

www.dowagro.com/range/CattleVote



Scan QR code to watch a video and learn more

Visit us at rangeandpasture.com

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https://twitter.com/CortevaPastures

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Label precautions apply to forage treated with Chaparral, GrazonNext HL or PasturGard HL and to manure from animals that have consumed treated forage within the last three days. Consult the label for full details.

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Graslan, Grazon P+D, and Surmount are federally Restricted Use Pesticides. Tordon RTU is not a federally Restricted Use Pesticide. State restrictions on the sale and use of Remedy Ultra apply.

Always read and follow label directions.

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