## **The Best Cheatgrass Control Program**



Jim Bean Strategic Accounts Manager BASF Professional Vegetation Management



## Plateau

- History
- Properties
- Proper use
- Tips for success
- Comparison to Rejurva
- Benefits of Plateau





## **Plateau History**

- Registered in 1996
- BLM approval in 2007
- BLM rate set at 6 oz
  - Cheatgrass and Medusahead
  - Threshold rate compromise rate to balance impacts
  - Longer lasting control at higher rates
- 20+ years of successful operational applications



## **Mis-Information / Mis-Understanding**

- Use in spring applications
- Spray after cheatgrass has greened-up
- Spray cheatgrass and Medusahead very late into fall or early winter
- Nothing will germinate following application
- Plateau kills sagebrush and other woody native vegetation
- Cheatgrass control is poor and only provides one year of control



## **Plateau Mode of Action**

- ALS Inhibitor
- Caution signal word
- Pre and early post-emergent activity
- Minimal woody species activity
- Controls cheatgrass and Medusahead pre-emergent
- Late summer timing (before green-up)
- Add glyphosate for burndown after cheatgrass green-up



## **Plateau Mode of Action**

- Best activity when applied to mineral soil following fire
- Must have rainfall to activate
- Controls many weeds post-emergent
- Most legumes and warm season grasses are tolerant
- Plateau will release beneficial native and pollinator plants
- Length of control is based on rate and environmental conditions



## **Cheatgrass Control**





## **Medusahead Control**

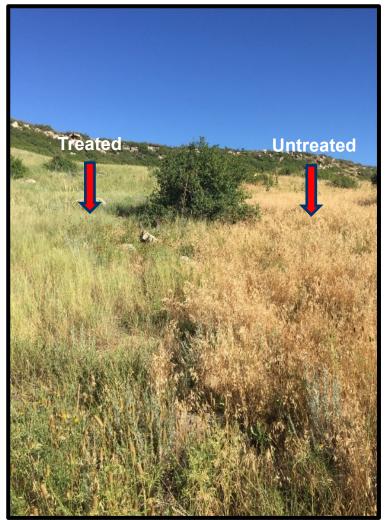
- Native vegetation responds
- Shift of plants toward desirable native vegetation
- Years of experience in rehab efforts





## Mountain Mahogany Release - Fort Collins, CO

Cheatgrass Control Applied 11/9/15 - 7 MAT



#### 5 oz. Plateau + 1% MSO



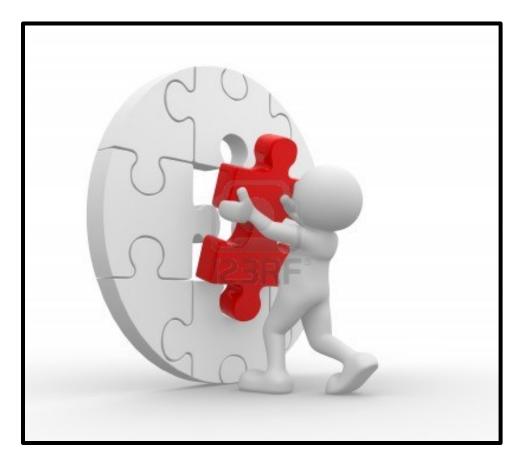
## **Native Vegetation Restoration**

Carate 1	Cheatgrass	Cheatgrass	Native	Native
	Pre-Treat	Post Treat	Vegetation	Vegetation
			Pre-Treat	Post Treat
Non-Treated	67%	75%	33%	25%
Plateau	84%	0%	16%	100%



## **Factors That Influence Control**

Timing
Thatch
Rate
Moisture
Soil





# Timing

Use Plateau in August/October **BEFORE** Cheatgrass and Medusahead have emerged Add 8 oz. glyphosate + 1% MSO after green-up Use Post-emergent applications later in the fall for leafy spurge, Dalmatian toadflax or when trying to release

desirable woody species





## **Thatch Removal**

- Prescribed burn
- Heavy grazing
- Mowing/racking
- Other





## Rates

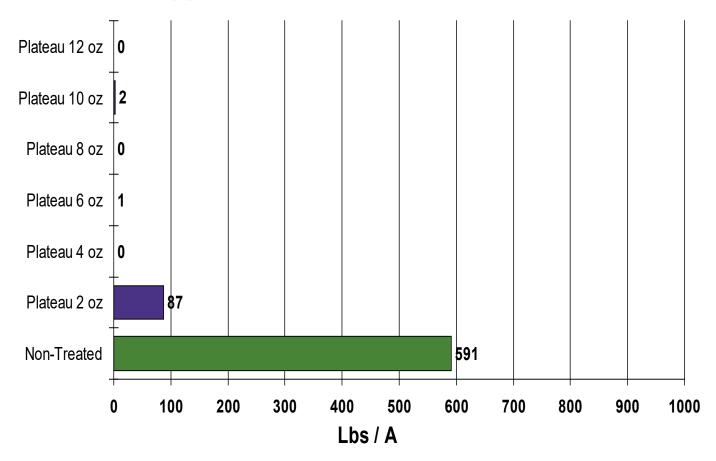
- Length of control dictated by rate, moisture and temperatures
- In many cases, 6-10 oz. per acre is the appropriate rate
- Use lower rates on sandy soils, soils with low pH or in cool dry sites.
- Add 1% MSO for ALL post-emergent applications
- Plateau controls cheatgrass for 3 years in most cases





## **Dry Weight Yields of Downy Brome**

Applied 9/5/02 8/20/03 11 MAT

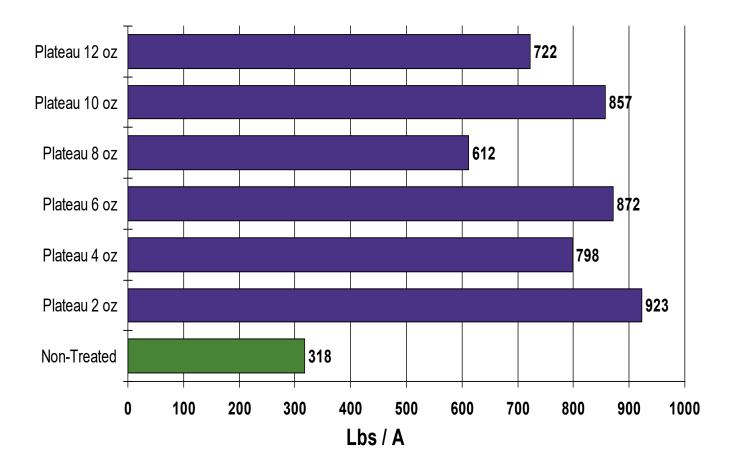


Data by Dr. Tom Whitson, UWY



## **Dry Weight Yields of Perennial Grass**

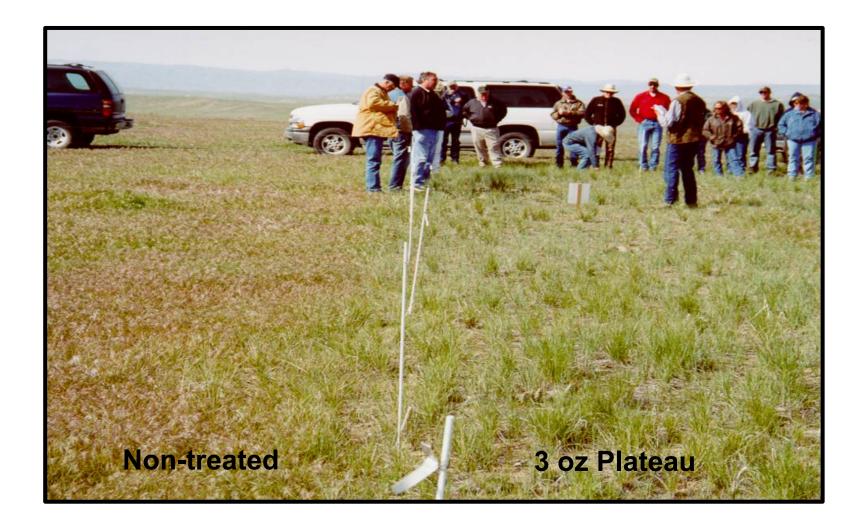
Applied 9/5/02 8/20/03 11 MAT



Data by Dr. Tom Whitson, UWY

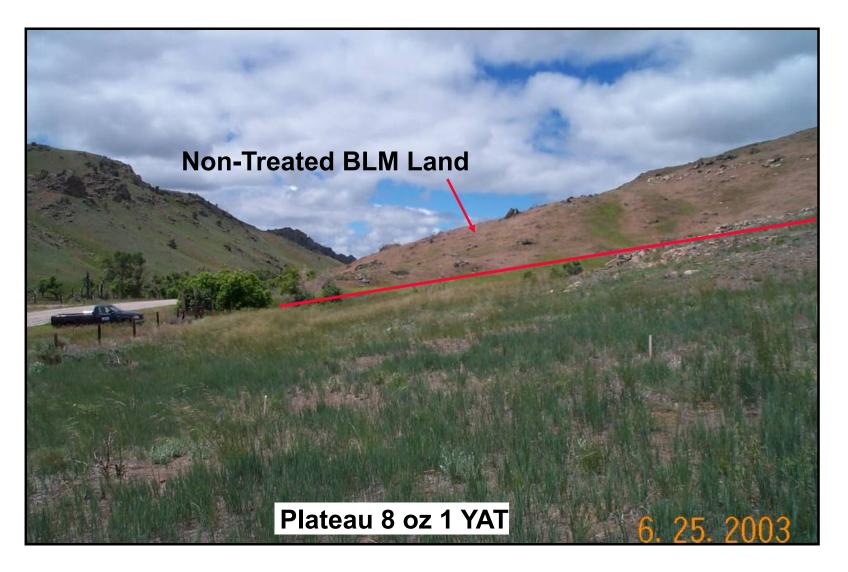


## **Western Wheatgrass Release**



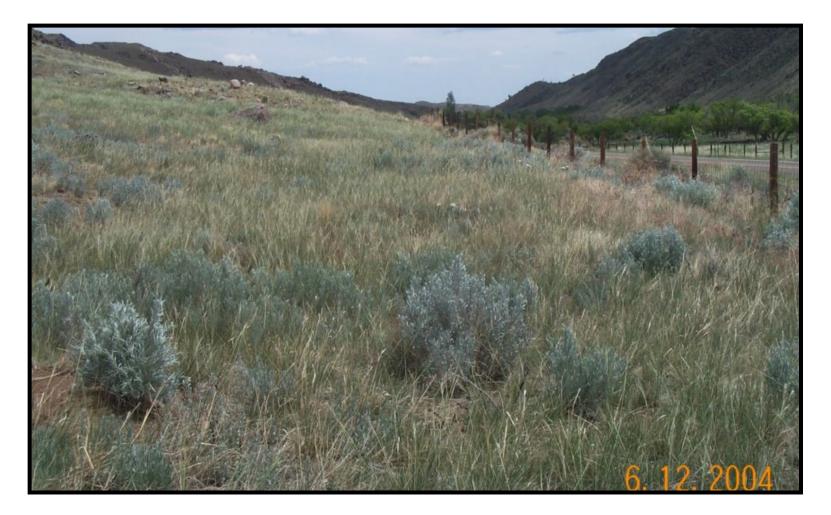


## Plateau Cheatgrass Control 1 YAT





## Plateau Cheatgrass Control 3 YAT 8 oz. Plateau



8 oz. Plateau - WY



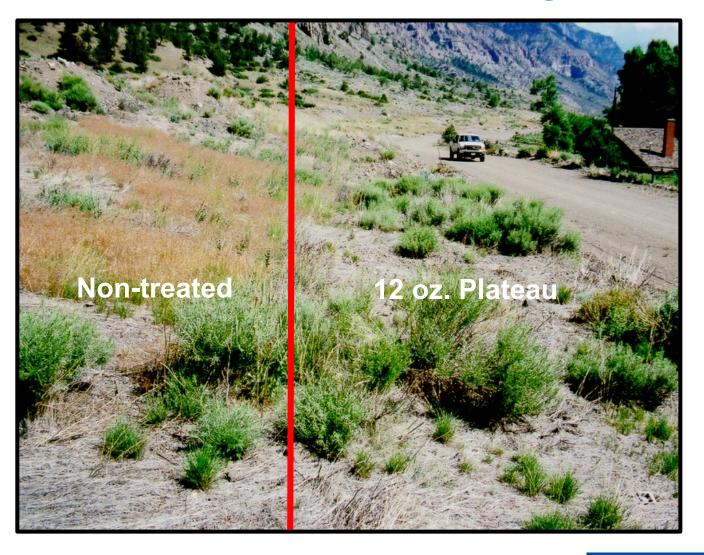
## **Dalmatian Toadflax & Downy Brome Control 3 YAT**



Western Wheatgrass Release



## **Dalmatian Toadflax and Cheatgrass Control**





## **Moisture**

- Time applications when rainfall is likely within a few days
- Minimum of ½ inch rainfall required to activate in soil
- Results will diminish if no rainfall within 30 days of application



## **Behavior in Soil**

- Half-life is 31 to 410 days depending on rate, moisture and temperature (120 days typical)
- Plateau is broken down by soil microbes. Product breaks down the fastest when it is warm and moist
- Plateau is more effective at lower soil pH; No effect for increasing pH above 6.5.
- Applications to bare mineral soil, after fire are the most effective. Wait 2 weeks after fire before treatment



## Successful Rehab of BLM

- 30,000 near Burns, OR
- Sprayed 2016
- Medusahead controlled
- Desirable native vegetation released
- BLM has documented shifting of plant population toward

desirable native vegetation





### Native Plant Release Following Wildfire 7 oz. Plateau for Medusahead





## **Native Woody Vegetation Restoration**

Sagebrush:

- Fringed, Silver, Wyoming, Sand, etc.
- Antelope Bitterbrush
- Atroplexes Four wing, Shadscale
- Mountain Mahogany
- Rabbit brush species
- Greasewood
- And many others



## **Native Woody Vegetation Restoration**

- Spray during leaf color change or after leaf drop
- No surfactant
- See label for tolerance information



We create chemistry

## **Tips for Success**

- Know the tolerance of the species you want to promote
- Reducing the thatch layer will greatly improve performance
- Use higher rates to extend control
- Add 1% MSO for post-emergent applications
- Uniform application is critical
- Aerial applications from 5 to 10 gpa



#### Better value

- Rejurva cost 6x+ more per acre
- Fewer restrictions
  - No grazing restrictions
  - Much shorter haying interval
  - No hay export restrictions
  - Easier and faster reseeding
  - Shorter soil persistence allows for land use changes
  - No history of soil movement issues causing off-target injury to crops
  - Less concern with root pruning of desirables



#### Proven Success

- Operational control for 20 years
- Length of Control
  - 3 years vs 4 years
- Simple
  - One product





## Flexible

- Pre-emergent AND early post emergent control of cheatgrass and Medusahead
- Post-emergent control of many other invasive weeds
  - Leafy spurge, Dalmatian toadflax, Russian knapweed and more!

#### Broader Spectrum

- Undesirable grasses and many broadleaf weeds at higher rates
  - Pre-emergent and post-emergent



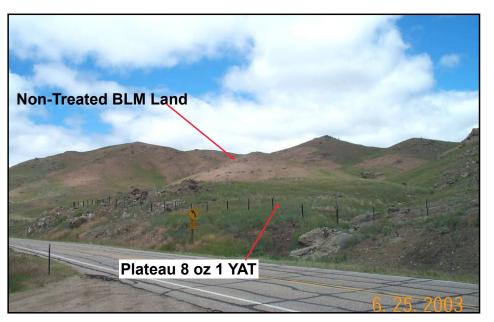
# Is one more year of control and many more restrictions worth 6x+ the cost?



**BASF** We create chemistry

## **Plateau Summary**

- Economical
- Time tested, unique, versatile, effective product
- Pre-emergent and post-emergent control
- Reduces fire hazards
- Restores native plants
- Improves grazing quality





## **BASF ProVM Podcasts**

- 5 7 Minute Podcasts
  - Posted on the ProVM website
  - Timely subjects

## www.bettervm.basf.us





## **BASF ProVM Webinars**

#### 15 – 30 Minutes

- Slides and Audio
- Posted on the ProVM website
- Timely subjects



## www.bettervm.basf.us

#### Look for the PGR and Pollinator webinars!



## Questions

## Jim Bean 901-496-2443 james.bean@basf.com www.bettervm.basf.us



