

RUBBER RABBITBRUSH CONTROL

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Rabbitbrush (*Chrysothamnus spp.*) is a genus of native shrubs that are common in many plant communities throughout the western United States. The genus *Chrysothamnus* contains 16 species and 41 subspecies, three of these species dominate in terms of distribution: Douglas rabbitbrush (*C. viscidiflorus*), Parry rabbitbrush (*C. parryi*); and Rubber rabbitbrush (*C. nauseosus*).

All species of rabbitbrush are very prolific seed producers and can be extremely invasive, particularly in disturbed areas such as abandoned homesteads or rangeland seedings. Management of rabbitbrush is difficult because it is deep rooted and sprouts vigorously after disturbance such as fire or mechanical treatments. Many treatments and combinations of treatments have been tried with little success or with highly variable results. Effective practical treatments have so far eluded range managers or landowners. Multiple treatments combining fire, mechanical removal, or herbicides in various combinations have shown promise for control.

Recently, the authors used a multiple treatment mower. After mowing, the mower windrows the woody debris, then wipes herbicide on the cut rabbitbrush stubble. Pilot treatments applied in the fall of 2005 showed promising results with Tordon (picloram) and Vanquish (dicamba) at rates as low as one quart per acre providing near 100% control, while Curtail (clopyralid), 2,4-D and mowing alone provided no control. In 2006 and 2007, replicated plots were established at the SUU Valley Farm in Cedar Valley. Milestone (aminopyralid), a new herbicide, was substituted for Curtail and 2,4-D was dropped from the treatments because of poor results in the pilot plots. The following table reports the study results:

RABBITBRUSH TRIALS FALL 2006

	Rep:	1	2	3	Average:
Treatment:		% control	% control	% control	% control
Milestone 7 oz/A		90	90	27.5	69.2
Milestone 3 1/2 oz/A		27.5	20	0	15.8
Milestone 1 3/4 oz/A		10	10	16.5	12.2
Mow		0	5	0	1.7
Tordon 1 pint/A		95	100	85	93.3
Tordon 1 quart/A		100	100	95	98.3
Tordon 2 quarts/A		100	100	100	100.0
Vanquish 1 pint/A		95	42.5	20	52.5
Vanquish 1 quart/A		100	96	68	88.0
Vanquish 2 quarts/A		100	100	80	93.3

Evaluated 7-5-2007 9 months after treatment

RABBITBRUSH TRIALS FALL 2007

	Rep:	1	2	3	Average:	2006-2007 combined
Treatment:		% control	% control	% control	% control	% control
Milestone 7 oz/A		68.2	63	25	52.1	60.6
Milestone 3 1/2 oz/A		23.2	12.8	9.1	15.0	15.4
Milestone 1 3/4 oz/A		20.4	16	7.1	14.5	13.4
Mow		7.9	2	4.5	4.8	3.2
Tordon 1 pint/A		100	87	83.9	90.3	91.8
Tordon 1 quart/A		94.1	96	87.5	92.5	95.4
Tordon 2 quarts/A		96.3	95	100	97.1	98.6
Vanquish 1 pint/A		45	65.2	50	53.4	53.0
Vanquish 1 quart/A		88.8	37.5	80	68.8	78.4
Vanquish 2 quarts/A		96.8	82.6	96.8	92.1	92.7

Evaluated 7-31-2008 9 months after treatment