Range Restoration

Converting Sagebrush Dominated Rangeland into Forage

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Why Spend Time and Money to Reduce Sagebrush and Weeds?

- Increase forage quality and quantity
- Sagebrush pastures yield 50-200 lb of feed/acre
- Perennial grasses and forbs can yield 400 to 1000 lb of feed/acre
- Less expensive than buying land
- Land costs from $500 to $5000/acre
- Converting sage into forage costs about $150-$250/acre
- With GIP and DWR cost share it is under $100/acre

Benefits of Restoration: Increased Forage

- 40 acres producing 100 lb/acre with 60% utilization will feed 2.2 cows for a month
- 40 acres producing 900 lb/acre with 60% utilization will feed 20 cows for a month

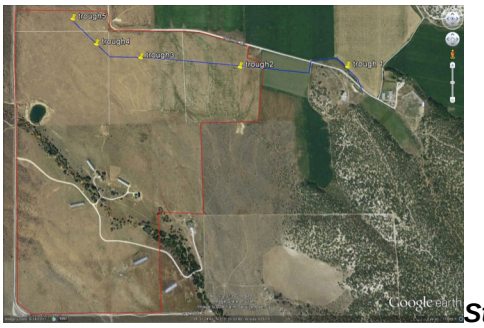
Keys to Success

- Weed Management: Control of Cheat Grass, Bulbous Blue Grass, Knapweed, White Top, Thistle
- Forage Establishment: 1) Seed selection; 2) Seed bed prep; 3) Timing or planting and 4) Good spring and summer moisture
- Rest Period: No grazing for a year or more after planting;
- Management: Short grazing periods with adequate rest periods

JDP Ranch Pasture Restoration: A Case Study

Goals:

1. Convert 229 acres of low producing sagebrush, cheatgrass and bulbous bluegrass pasture into a sustainable rotationally grazing pasture, with perennial grasses and legumes that will produce 500-1000 lb dry matter/acre.
2. Complete this project with little or no out of pocket expenses.



Steps for Restoration

- Develop a plan and budget
- Site evaluation: 1) sagebrush and understory cover; 2) assess weed populations
- Fencing and water developments
- Sprayed sagebrush and weeds with 2-4,D and Roundup
- 2 way chain harrowt o prepare seedbed
- Drill seed (crested wheat, intermediate wheat, sainfoin, alfalfa, forage kochia)
- Install waterline and 5 troughs
- Cross fenced into 40 acre pastures

Overview

- Project was started July 2010 and completed June 2011
- Pastures rested until May 2012
- First year of grazing provided 60 AU for 2.5 months = 150 AUM
- The equivalent of 590 lbs of feed/acre on a dry year, enough feed for 200 ewes for a month on 40 acres
- Out of pocket expenses totaled less than $50/acre

Budget

Practic	Cost/ unit	Quanti	Units	Total cost	GIP cost	Producer cost
Fence	1.3	8970	ft	11661.00	5830.50	5830.50
Pipeline	2.06	5783	ft	11912.98	5956.49	5956.49
Troughs	1	6000	gal	6000.00	3000.00	3000.00
Chemical Roundup	13.85	229	ac	3171.65	1585.83	1585.83
Chemical application	8	229	ac	1832.00	916.00	916.00
Chemical 2, 4-D	7.6	229	ac	1740.40	870.20	870.20
Chemical application	8	229	ac	1832.00	916.00	916.00
Chain Harrow	39.2	172	ac	6742.40	3371.20	3371.20
Range Seeding drill	20	229	ac	4580.00	2290.00	2290.00
Seed	30	229	ac	6870.00	3435.00	3435.00
Broadcast seed	10	229	ac	2290.00	1145.00	1145.00
Total				$58,632.88	$29,316.22	$29,316.22

Conclusion:

Increased forage production from 100 lbs/acre to over 900 lbs/acre for $50/acre plus tractor hours and labor. And Happy Cows

Project Team

- Tom Tippets (UDAF, GIP)
- Kendall Bagley (NRCS/DWR)
- Soren Nielsen (NRCS)
- Jason Vernon (DWR)
- Chad Dewey (Eco-life)
- JDP Ranch Family