

**SYMPOSIUM - INTEGRATING WEED CONTROL AND RESTORATION ON GREAT  
BASIN RANGELANDS**

**SPECIES SELECTION, SEED PROCUREMENT AND  
TRUAX DRILL MODIFICATIONS**

**USDA-NRCS, ABERDEEN PLANT MATERIALS CENTER  
Dan Ogle and Loren St. John**

The cooperators of the “Integrating Weed Control and Restoration on Great Basin Rangelands” Project selected the test species for studies based on the most common species found in Wyoming big sagebrush plant communities throughout the Great Basin - Snake River Regions. All seed procurement, mixing and planting of experiments were coordinated by USDA-NRCS, Aberdeen Plant Materials Center (PMC) personnel. Experiment 1 involved replicated plot plantings using the Truax drill in fall of 2003 and 2004 at eight locations in Idaho, Nevada, Oregon and Utah. Experiment 2 involved small replicated hand planted plots at the same locations. Experiment 3 involved seeding mixtures on large 10 acre plots in Nevada in fall 2005. The cooperators of the Project decided to use the Truax Rough Rider Drill to seed Experiments 1 and 3 because the drill was considered the best available technology for rangeland seedings. The drill is a major improvement over older rangeland drills because of better control of seeding depth. The Truax drill was delivered to the PMC in September 2003 and PMC staff completed modifications to the drill prior to seeding. Additional modifications were made in 2004 and 2005 to further improve seed placement. Drill modifications included replacement of seed drop tubes, installation of wind-shields around seed cups, reconstruction of seed boots, toe-in of disk openers to widen slot for seed placement, improved calibration adjustment, press wheel adjustments, and the addition of alternate row broadcast seeders for species requiring surface planting. All modifications and the cooperative efforts of PMC and Truax Company personnel have resulted in significant improvement in performance of the Truax Rough Rider Drill under field operation conditions.

Key Words: Species Selection; Seed Procurement; Truax Rough Rider Drill