

## Appendix J Stag Fire (2001) Rehabilitation Summary

The 2001 Stag Fire burned the northeastern edge of the McIntyre Pasture and a small adjacent pasture next to the Ichaina Ranch, called the Horse Pasture, within the Stag Mountain Allotment. Most of the burn area occurred in the adjoining Deeth Allotment to the east (see Map 2 in Appendix A).

Following the fire, portions of the burn area were seeded and fenced. The lower part of the burn within the Horse Pasture was seeded with Idaho fescue, bluebunch wheatgrass, and Wyoming big sagebrush. A monitoring site labeled SMDR was established to measure the recovery of this seeded area. In addition, Wyoming big sagebrush seeds were aerially seeded on the upper part of the burn area with a monitoring site labeled SMWI established to measure the recovery of this area. This upper part of the burn area, which was within the McIntyre Pasture, was fenced to rest the burn area from livestock use which allowed the larger part of the pasture outside the burn area to be grazed by livestock. The newly fenced area of the burn is called Wendy's Exclosure.

A rehabilitation objective was established that described the minimum level of vegetative recovery needed to stabilize the burn area and allow the area to be reopened to livestock use. The rehabilitation objective called for the establishment of an average of three (3) perennial grasses/square meter (M<sup>2</sup>) with credit also given for the regrowth of native perennial plants (native release) that survived the fire. From 2002 – 2004, data were collected on plant densities at the monitoring sites. The 2004 data from the two monitoring sites are summarized below.

<b>Table J1: Stag Fire Rehabilitation Summary – Perennial Grass Densities/Square Meter for SMDR and SMWI Study Sites</b>			
Date: 2002 - 2004			
Study Site and Year	Seeded/M <sup>2</sup>	Native Release/M <sup>2</sup>	Total/M <sup>2</sup>
<b>SMDR</b>			
2004	2.92	16.32 (5.6) <sup>1</sup>	19.24 (8.52) <sup>1</sup>
<b>SMWI</b>			
2004	No Grass Seeded	42.76 (11.56) <sup>1</sup>	42.76 (11.56) <sup>1</sup>

<sup>1</sup> The numbers in parentheses are grass densities adjusted to be equivalent to medium sized perennial bunchgrasses. For example, a density of 5 thickspike wheatgrass plants (medium height but small basal area), or a density of 3 Sandberg bluegrass (short height and somewhat small basal area) were judged to be equivalent to 1 medium sized bunchgrass.

The densities of seeded and native release plants in 2004, the last year that data were collected, are as follows:

### **SMDR Study Site -**

Seeded species per square meter: Idaho fescue-0.24, bluebunch wheatgrass-1.64, and Wyoming big sagebrush-0.06. Crested wheatgrass-1.04 was not supposed to be in the seed mix.

Native release species per square meter: Sandberg bluegrass-9.44, Thurber needlegrass-0.30, Basin wildrye-0.14, squirreltail grass-0.96, and thickspike wheatgrass-5.48. There were also numerous forbs and other shrubs present. The 2004 data indicated the rehabilitation objective had been achieved.

**SMWI Study Site –**

Seeded species per square meter: Wyoming big sagebrush-0.60.

Native release species per square meter: Sandberg bluegrass-6.98, bluebunch wheatgrass-0.02, Idaho fescue-0.06, Needlegrasses-1.74, Thickspike wheatgrass-29.74, Basin wildrye-0.16, squirreltail grass-0.56, sedges-3.38, Indian ricegrass-0.12, and bitterbrush-0.06. There were also numerous forbs and other shrubs present. The 2004 data indicated the rehabilitation objective had been achieved.