## Sheep Mountain Grassland Restoration Project on the Lolo National Forest

## 2011 Accomplishments

This project was initiated in 2007 to test restoration methods on one acre of montane grass/forb grassland in western Montana. The original condition of the grassland was infestation by cheatgrass (*Bromus tectorum*). Prior to a fall herbicide treatment with Plateau, we used a line-intercept sampling method and calculated a 67% frequency of cheatgrass using 123 points in the acre plot. In the fall of 2008, we calculated 0% frequency under the same methodology. In mid-June of 2009, 2010, and 2011 we measured a 28, 31, and 24% frequency of cheatgrass, respectively. Plot monitoring occurred on June 28, 2011 (Figures 1 and 2).

In 2011, the frequency of cheatgrass changed little from the previous two years. Therefore, we did not retreat the cheatgrass. We did pull spotted knapweed *(Centaurea stoebe)* adjacent to the plot in June and sprayed the adjacent road for knapweed into the site in the fall. However, native forbs were more abundant in FY11 than in previous years.

Monitoring, reports, and herbicide costs were \$3,500. Additional days were used to collect native seed for the Lolo Forest on four sites and \$3,000 dollars were sent to the USFS Coeur d' Alene Nursery to grow-out native seeds for increase for future revegetation projects.



Figure 1. Native forbs and grasses were robust in 2011.



Figure 2. This is the weediest area in the plot however native plant diversity increased this year from past years.

Year awarded: initial award in 2007

Project completion: 2011

Report number: 4

Expenditures (through 10/2010): NFN3 funding •FY07 funding \$14,000, spent \$14,000; \$0 remaining •FY09 funding \$5,750, spent \$5,750; \$0 remaining •FY10 funding \$5,000, spent \$5,000; \$0 remaining •FY11 funding \$6,500, spent \$6,500; \$0 remaining •Total funding \$31,250, total spent \$31,250; •\$0 remaining

Partners/contractors/cooperators: Lolo Forest Native Plant Coordinator, Missoula District Weed Coordinator, Regional Office Restoration Botanist, and Couer d' Alene Nursery Manager

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