

# Cutler Meadows Vegetation Restoration Project on the Gallatin National Forest

## 2011 Accomplishments

The Gallatin National Forest and Yellowstone National park acquired approximately 2,000 acres of abandoned farm lands over the past 20 years along the northern boundary of Yellowstone National park. Four hundred acres of this are targeted for restoration on the Gallatin National Forest. Ongoing native grass restoration continues at both Cutler Meadows and Beattie Gulch. Restoration is intended to reduce exotic plants, re-establish native vegetation, and ultimately to restore and enhance wildlife habitat.

Historically, Cutler Meadows was tilled and irrigated as a hayfield until the Forest Service acquired the land in 1999. However, in the absence of irrigation the site became dominated by weeds and early successional species. The area was plowed and seeded with native grass cultivars in 2007. The effort was unsuccessful, and cheatgrass and other weeds reinvaded the fields. In 2010, the decision was made to replicate some of the revegetation techniques that appeared to be working in Beattie Gulch. This strategy included limiting the amount of bare soil exposed at any one time, planting in strips to control wind erosion, and enhancing existing native vegetation.

Forty-five acres in the center of Cutler Meadows was plowed and seeded to barley in 2010 to break up the fire hazard presented by the thick continuous mat of dried cheatgrass and weedy mustard dominating the site. Excellent cheatgrass control was obtained throughout the growing season and into the fall in the barley fields. The north end of Cutler Meadows was burned later that year to remove the thick layer of thatch.

In the spring of 2011, the contractor plowed and planted barley on 32 acres. He sprayed weeds on 21 acres and mowed weeds on approximately 45 acres to release existing perennial grasses. We also established several small native grass trials to test revegetation options. Due to extremely high water the Yellowstone River flooded a portion of the planting strips resulting in an amazing flush of lambquarters in those areas. In the fall of 2011, the contractor prepared a seedbed and planted winter wheat on approximately 24 acres, partly in areas where the barley had died out and partly to enlarge the total area being prepared for native grass establishment.

### Summary of Accomplishments in 2011:

- Plowed and planted barley (32 ac)
- Plowed and planted winter wheat (24 ac)
- Weed treatments and spot seeding (66 ac)
- Test trials of seeding native grasses



*Overview of strip planting approach to reclamation in Cutler Meadow*

**Year awarded: 2010**

**Project completion: 2013**

**Report number: 2 of 4**

**Expenditures (through 4/2011): \$84 K (NFS funding) obligated to contractors**

**Partners: Northern Region Native Plant Program, Yellowstone National Park, NRCS, USFS Coeur d'Alene Nursery**

**Contractors: Troy Smith – Arrowhead Excavating (planting) and Menard Construction Inc. (fencing)**

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