Project Number 08S240 Annual Report 2001 Prepared by Steve Parr

# GRAND TETON NATIONAL PARK COOPERATIVE AGREEMENT

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### **INTRODUCTION:**

This report covers the activities related to the cooperative agreement between Upper Colorado Environmental Plant Center and Grand Teton National Park. The fully executed agreement, Interagency Agreement Number 1211-01-002, was formally signed in September of 2001. The agreement calls for the production of five grass species through fiscal year 2005 for revegetation uses within Grand Teton National Park.

## **ACTIVITIES:**

Upper Colorado Environmental Plant Center (UCEPC) had established a 1.1-acre field of basin wildrye on October 5, 1999. In addition, four other species were targeted for seed increase. Blue wildrye, bluebunch wheatgrass, slender wheatgrass and prairie Junegrass were targeted for seed increase by UCEPC for revegetation purposes for several highway projects within Grand Teton National Park. On July 25, 2001, a meeting was held at Jackson Hole, Wyoming between Grand Teton Park personnel, UCEPC staff, Wyoming Department of Transportation and Bridger-Teton National Forest staff to coordinate seed collection, species selection and general increase efforts for the area in close proximity to Jackson Hole.

Collection efforts in Grand Teton were to focus on three species, prairie Junegrass, slender wheatgrass and blue wildrye. Grand Teton seed previously produced by UCEPC was to have been used if possible for the increase effort. Seed test results on bluebunch wheatgrass and slender wheatgrass seed held in inventory at UCEPC was to determine whether seed of those two species could be used from inventory rather than from collection. Seed was sent to Colorado State University Seed Laboratory for analysis in March of 2001.

Test results indicated no germination for slender wheatgrass and 32% and 26% germination for two lots of bluebunch wheatgrass. As a result of the seed tests, slender wheatgrass was also targeted for collection, but bluebunch produced in 1992 was used to establish a one-acre field on August 29, 2001. A good to fair stand, (70-80%), was noted in October, but vigor was less than two plantings of different species on either side, blue wildrye and nodding brome for other project partners. Seed production is expected from both the bluebunch field and the basin wildrye field in 2002.

Listed below are the species by accession and the clean weights of collected seed.

Basin wildrye	9070974	No collection
Bluebunch wheatgrass	9024810	No collection
Blue wildrye	9070983	14 pounds
Prairie Junegrass	9070986	41 grams
Slender wheatgrass	9070982	12.5 pounds

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Two additional non-contract materials were collected by Park employees and cleaned by UCEPC.

Carex species	not accessioned	5.93 pounds
Northern sweetvetch	not accessioned	0.82 pounds

Targeted species, production acreage and seed quantities are listed below.

Species		Acreage	Quantities
Elymus cinereus	Basin wildrye	1.1	1000 lb
Elymus glaucus	Blue wildrye	1.0	600 lb
Elymus trachycaulus	Slender wheatgrass	1.0	1200 lb
Koeleria macrantha	Prairie Junegrass	0.5	200 lb
Pseudoroegneria spicata	Bluebunch wheatgrass	1.0	400
lb			

## **RESULTS:**

#### **Production Activities**

Basin wildrye Field Established Production	October 5, 1999	1.1 acre
1100000	2000 2001	no harvest 13 lb
Bluebunch wheatgrass Field Established	August 29, 2001	1.0 acre

### **SUMMARY:**

In fiscal year 2001, a formal agreement between Grand Teton National Park and Upper Colorado Environmental Plant Center was initiated. The agreement calls for the production of five grass species through fiscal year 2005. One of those species was established in a prior agreement, but produced seed for the first time this year. Basin wildrye, which has a good production potential, produced very little seed in its first year. Investigations through soil analysis may be necessary to determine whether any nutrient or micronutrient deficiencies exist, including adequate mycorrhizal associations with plant roots. Bluebunch wheatgrass which was produced by UCEPC for Grand Teton in a previous agreement was used as the source seed for a one acre planting conducted in August 2001.