

Project Number COPMC-S-0107-CR
Annual Report 2001
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LASSEN VOLCANIC NATIONAL PARK
COOPERATIVE AGREEMENT

INTRODUCTION:

This report covers the activities of the Upper Colorado Environmental Plant Center as they relate to Interagency Project Number IA9000-01-004 for the production of seed materials for Lassen Volcanic National Park. The original agreement called for the establishment and production of a single material, blue wildrye, through fiscal year 2003. This agreement was signed into effect in June of 2001. A second material, California brome, was later added to the agreement through an amendment signed into effect in September of 2001. This amendment added the production of California brome through fiscal year 2003 for Lassen.

ACTIVITIES:

The two products were given the following accession numbers for identification and tracking purposes:

Blue wildrye	<i>Elymus glaucus</i>	9070984
California brome	<i>Bromus carinatus</i>	9070985

Blue wildrye was collected during the 2000 growing season by Bitterroot Restoration and was shipped to UCEPC for planting during 2001. A message following the shipment from Bitterroot indicated the seed had been cleaned and treated with a 5% bleach solution for 5 minutes to help reduce the mold which was detected on the seed after collection and prior to shipment (see attachment). Upon receipt, UCEPC prepared to plant the seed, but on the date of planting, discovered the seed to be too "fluffy" for proper distribution. As a result, UCEPC further cleaned the seed and sent a sample to the Colorado State Seed Laboratory for analysis of purity, germination, off type seeds and to see if they detected the worms, which Bitterroot had prior to planting. The seed test results were completed on July 27, 2001 and no worms were noted (see report).

On September 4, 2001, 1 acre of Lassen Volcanic National Park blue wildrye was planted. A very good stand was noted in October.

The California brome was collected during the 2000 and 2001 growing seasons and samples of each collection were sent to the Colorado Seed Laboratory in the fall of 2001. The reports were completed on October 19, 2001. The collection from 2000, while having the best germination, had a very high percent of other crop seed, at nearly 3%. Since the collections occurred in Lassen, conversations with Russ Haas indicated it would be all right to plant the brome with the blue wildrye seed in it without concern of crop contamination from that species. The other two lots, LAV02 and LAV03, had a high amount of visible head smut. As a result, only a small amount of LAV03 seed was planted, along with the entire LAV01 seed lot. Each material was treated with "Vitavax" for head smut control.

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On November 16, 2001, 4.8 rows of LAV01 California brome were planted. An additional 65 feet of LAV03 seed was planted in the southeast portion of row 5. Both materials were treated for head smut control at 2 grams per pound of seed treated. A planting rate of 36 PLS seeds per foot of row was achieved with the Planet Junior seeding of the 4.8 rows. A hoe was used to plant the last 65 feet.

RESULTS:

Field Establishment

Blue wildrye	<i>Elymus glaucus</i>	Seeded 1 acre on September 4, 2001 with Planet Junior
California brome	<i>Bromus carinatus</i>	Seeded 0.18 acre on November 16, 2001 with Planet Junior and 65 feet of SE part of row with a hoe

SUMMARY:

During the first year of Interagency Agreement number 9000-01-004, two species were tested by the Colorado Seed Laboratory, identified for purity, germination, off type seeds and dormancy. This information provided a basis for the selection of seed lots for the establishment of seed production fields at UCEPC. Seed lot selections were made and successfully planted in 2001 for seed increase for future revegetation uses at Lassen Volcanic National Park.