Project 08S211 Annual Report - December 2000 By: Lois Dworshak

> Rocky Mountain National Park Cooperative Plant Materials Agreement

#### **INTRODUCTION**

This progress report covers the 2000 activities of the Upper Colorado Environmental Plant Center (UCEPC), Meeker, Colorado, with respect to Rocky Mountain Plant Material Agreement IA-1520-2-9001 that began in 1999. It addresses the primary activities of seed collection and conditioning, and seed production.

## **CONTRACT SPECIES EAST SIDE**

Common Name Grasses:	Scientific Name	Symbol	Accn. #
Mountain muhly	Muhlenbergia montana	MOMU	9070957
Sleepygrass	Stipa robusta	STVI	9070958
Junegrass	Koeleria cristata	KOCR	9070962

#### SEED PRODUCTION ON EAST SIDE SPECIES

### A. Mountain muhly

1) Established - experimental 6000 square foot plot planted at Headquarters in 1997

Production .32 g on 9-02-1998 1.00 lb on 9-09-1999 .94 g on 8-29- 2000

2) Planted .835 of an acre in Field 5A on June 20, 1999 and was interseeded on September 2000. No production to date.

# B. Sleepygrass

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Established - .5 acre in Field 10 in 1998. Two rows were added with the Planet Jr. on June 9, 1999. The contract goal was .2 acre but since the emergence was sporadic we have maintained the field size at .5 acre

Production .50 lb on 9-14- 1999 47.00 lb on 7-28-2000

## C. Junegrass

Field to be established in 2002

Total amounts of Park collection seed from 1999 and 2000 is 106 g cleaned seed

# Annual Report - 2000 Rocky Mountain Agreement - continued TARGETED SEED PRODUCTION SCHEDULE

Species	Acreage	2000	2001	2002	2003	2004
Mountain muhly	.5	Maintain	Harvest	Harvest	Remove	
Sleepygrass	.2	Harvest	Remove			
Junegrass	.2			Establish	Harvest	Harvest

#### **COLLECTION INFORMATION**

The following material was received from RMNP collectors in 2000 for the new east side project:

Species	Harvested	<b>Uncleaned Weight</b>	<b>Cleaned Weight</b>
Junegrass	8-22	579 g	22g

## PLANTS PROVIDED TO THE PARK

532 wild strawberry (*Fragaria vesca*) plants were picked up on July 26th for the restoration project of the Hidden Valley Ski Area, which was an additional contract. These were grown from seed collected in the park on August 27, 1999. The seeds were immediately cleaned using a blender, floating off the pulp and adding water, and letting the seed sink. The cleaned seed was placed in moist stratification, planted into trays in the UCEPC greenhouse on January 4, 2000 and transplanted into #3 Groove tube containers on March 6, 2000.

#### **DISCUSSION**

Project No. 08S211: Russ Haas visited us this year to discuss the status of the contract. Karl Cordova has been the contact person in 2000 since Mary Kay Watry, Resource Operations Supervisor, has taken over the facilitation of the Cooperative Agreement.

We suffered a hail storm in June with some effect on grass fields. The established field of *Stipa viridula* from the seed collection sent to us by the Park, has been identified as *Stipa robusta*. We have received official approval to continue field production from RMNP

All of the original West side contract seed fields have been removed except for three species, subalpine buckwheat, Rydberg penstemon, and oatgrass, which are being maintained and harvested by the Plant Center. We understand that past contract plant material is the property of RMNP. The remaining west side contract seed is in storage at the Plant Center.

Junegrass seed collection is still necessary for field establishment at the Plant Center.

# ROCKY MOUNTAIN NATIONAL PARK 2000 Annual Report prepared by UPPER COLORADO ENVIRONMENTAL PLANT CENTER Meeker, Colorado

#### **INTRODUCTION**:

Upper Colorado Environmental Plant Center (UCEPC) Project No. O8S211 (IA No. 1520-2-9001) cooperative plant materials agreement was signed September 9, 1999 by Rocky Mountain National Park, the USDA Natural Resources Conservation Service (USDA-NRCS), and the UCEPC. This agreement involves the collection and seed production of three grass species native to the East side of Rocky Mountain National Park. Targeted species are: mountain muhly (*Muhlenbergia mountana -* 9070957), Junegrass (*Koeleria cristata -* 9070962), and sleepy grass (*Stipa robusta -* 9070958)

#### ACCOMPLISHMENTS:

The field (0.8 acre) of mountain muhly (*Muhlenbergia montana*) that was planted for the new East side seed mix in 1999 was interseeded in 2000. The small experimental plot (10' by 20') of mountain muhly established in 1997 produced .94 lb cleaned seed this year, in addition to 1.0 lb the prior year. We have had park approval to continue production of the previously identified collection of green needlegrass (*Stipa viridula*) that has been identified as predominantly sleepy grass (*Stipa robusta*). This field produced 47 lb of cleaned seed in 2000. On July 26th, two seasonal park employees visited the center and picked up 532 wild strawberry (*Fragaria vesca*) plugs for the Hidden Valley Revegetation Project The following table include collection amounts from RMNP for the proposed Junegrass field, and harvested amounts from established plots.

#### **EAST SIDE SPECIES**

Scientific name Grasses:	Common name	Seed on hand	2000 Harvest Cleaned seed
Muhlenbergia montana	mountain muhly	2.90 lb	.94 lb
Koeleria cristata	Junegrass	78.00 (SC)	22.00 g (SC)
Stipa robusta	sleepy grass	47.50 lb	47.00 lb

(SC) Seed Collected from RMNP

<u>TECHNOLOGY DEVELOPMENTS</u>: Specific information on procedures and methods on seed cleaning or seeding rates can be requested for each species.