

**MESA VERDE NATIONAL PARK
2000 Annual Report
prepared by**

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INTRODUCTION: The Upper Colorado Environmental Plant Center (UCEPC) entered into an agreement with Mesa Verde National Park on September 26, 1990. This agreement was amended in 1995 and involves a total of 19 species, with 1342 lb. of seed production and 5172 live plants. Targeted species with (PLS) pounds and number of transplants (T) desired are: 9024897 *Pascopyron smithii* (western wheatgrass) 160 PLS, 9024892 *Elymus trachycaulus* spp. *trachycaulus* (slender wheatgrass) 840 PLS, 9024893 *Leymus salinus* (salina wildrye) 67 PLS, 9024881 *Poa fendleriana* (muttongrass) 104 PLS, 9024883 *Achillea millefolium* (yarrow) 50 PLS, 9024870 *Aster glaucodes* (blueleaf aster) 3 PLS, 9024873 *Chrysopsis villosa* (hairy golden aster) 38 PLS, 9024886 *Artemisia ludoviciana* (Louisiana sage) 65 PLS, 9070862 *Penstemon linarioides* (low penstemon) 500 (T), *Lupinus caudatus* (spur lupine) 500 (T), *Oenothera caespitosa* (evening primrose) 500 (T), 9024869 *Amelanchier, utahensis* (Utah Serviceberry) 25 (T), 9024874 *Cercocarpus montanus* (mountain mahogany) 3 PLS and 500 (T), 9024898 *Symphoricarpos oreophilus* (snowberry) 4 PLS and 700 (T), 9024895 *Quercus gambelii* (gambel oak) 10 PLS and 250 (T), 9024878 *Atriplex canescens* (fourwing saltbush) 950 (T), 9024872 *Purshia tridentata* (antelope bitterbrush) 13 PLS and 800 (T), 9024899 *Pinus edulis* (pinyon pine) 10 PLS and 445 (T), and 9024880 *Juniperus osteosperma* (Utah juniper) 2 (T). The agreement was put on hold in 1997 and no new work was initiated for live plant production. The agreement remained on hold in 1998. Two amendments to the agreement were approved in 1999. A new Interagency Agreement and an amendment were approved in 2000. One trip to the park was made by plant center personnel in 2000, to provide information, deliver seed and help with a planting. All seed lots of Mesa Verde materials were updated for germination in 1999. Large lots of the 25 species collected by the park in 1999 were cleaned and all lots were returned to the park in 2000. Live plant production for the park in 2000 involved; gambel oak, Utah serviceberry, mountain mahogany, mountain snowberry, blueleaf aster and fourwing saltbush. The contract seed production for the park does not continue beyond 2000.

ACCOMPLISHMENTS: Seed was harvested from the following species at the UCEPC in 2000. Seed was provided for the park three times in 2000.

<u>SEED HARVEST</u>		<u>SEED PROVIDED FOR THE PARK</u>	
Species	Clean seed		Seed PLS
Muttongrass	29.0 lb	Slender wheatgrass	16.7 lb
Slender wheatgrass	13.0 lb	Muttongrass	14.1 lb
Yarrow	52.0 g	Western wheatgrass	10.3 lb
Salina wildrye	3.0 g	Salina wildrye	10.3 lb
Hairy golden aster	19.0 g	Louisiana sage	6.9 lb
		Yarrow	4.6 lb
		Hairy golden aster	4.6 lb
		Mountain mahogany	0.2 lb
		Utah serviceberry	0.3 lb

TECHNOLOGY DEVELOPMENTS: Native Plant Mats grown in the plant centers greenhouse were placed on soil in 2000. Two soil materials were used and notes were taken on species of grasses and forbs present, canopy cover, type of mat used, rooting and suitability for rolling and unrolling.