

**Great Basin Native Plant Selection and Increase Project  
FY 2002 Annual Report**

**Project Title:** Establishment and Maintenance of Certified Foundation (G1) Seed

**Project Location:** NRCS Aberdeen, ID Plant Materials Center

**Principal Investigators:** Loren St. John, Center Manager  
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**Description of Project:** To produce Certified Foundation (G1) seed of Maple Grove Lewis flax, Anatone bluebunch wheatgrass, Snake River Plains Germplasm fourwing saltbush and Northern Cold Desert Germplasm winterfat to facilitate commercial production. Evaluate procedures for production of rooted cuttings of fourwing saltbush. Establish demonstration planting near Boise, ID.

**Status Report:**

**Seed Production**

**Maple Grove Flax** - Seeded 1.8 acres field 3 on May 31, 2002. July 29 evaluation: Plant height 5 - 15 cm tall, good vigor. Plan to harvest summer, 2003.

**Anatone bluebunch wheatgrass** - Seeded 1.0 acres field 11 on May 31, 2002. July 29 evaluation: good, healthy full stand developing. Plant height 8 - 12 cm. Seedling vigor appears to be better than Goldar. Plan to harvest summer, 2003.

**Snake River Plains Germplasm fourwing saltbush** - Produced approximately 70 pounds (seed analysis pending). Shipped 25 pounds Certified seed from 2001 harvest. Provided 500 Certified cuttings to Washington grower (he reported 17 percent rooting success).

**Northern Cold Desert Germplasm winterfat** - Produced approximately 28 pounds (seed analysis pending). Shipped 8 pounds Certified seed from 2001 harvest.

**Propagation Studies**

**Propagation of rooted fourwing saltbush from cuttings**

Four cutting dates and percent rooting in ( ):

March 21, 2002	(0 %)
August 19, 2002	(50 %)
September 6, 2002	(4 %)
October 7, 2002	(14 %)

Timing of cutting harvest and morphology of cutting seem to be most important factor.

**Greenhouse seedling establishment study:** to evaluate fourwing saltbush seedling emergence based upon number of propagules planted per cell (5 versus 10 per cell) and to identify number of days to emergence, growth rates and transplant dates.

Seed planted September 30, 2002. Maximum emergence within 3 weeks. 5 seed plots averaged 10.5 % emergence. 10 seed plots averaged 8.5 % emergence.

Seedlings transplanted to 40 inch<sup>3</sup> containers on November 11, 2002. Currently average 3 to 18 cm in height. Will continue to maintain plants to evaluate growth rates and maturity.

Special note: 75 percent of seedlings had red stems and 25 percent had white stems at transplant. Could this be an indication of sex? Will monitor.

#### **Establishment of Demonstration Planting near Boise**

Field visit with Mike Pellant and Nancy Shaw on October 24, 2002 to locate site. Planting site determined to be old demonstration nursery at Orchard test site (just inside north boundary).

BLM burned site in fall of 2002. PMC to apply Roundup spring, 2003 and proposed planting planned for fall, 2003. Need to identify accessions and prepare planting plan.