

CORVALLIS PLANT MATERIALS CENTER  
NATURAL RESOURCES CONSERVATION SERVICE  
CORVALLIS, OREGON  
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**THE 2008 LASSEN VOLCANIC NATIONAL PARK ANNUAL REPORT:**  
*Kings Creek Revegetation Project*

**I. Brief Background of Project**

The Corvallis Plant Materials Center (PMC) entered into a new agreement with Lassen Volcanic National Park in 2006 to provide native plant materials for revegetation in the King's Creek area. It was agreed that the PMC would produce a minimum of 3700 container plants including 700 legume plugs, 2500 sedge and rush plugs, 500 grass plugs and 1800 containers of one shrub species. Activities in 2008 included propagation and delivery of 3671 plants. PMC staff also traveled to the Park to collect more manzanita cuttings.

**II. Accessions Involved**

Table 1. Accessions involved in the Kings Creek Revegetation Project.

<b>Species</b>	<b>Common name</b>	<b>Code</b>	<b>Accession</b>	<b>Activity in 2008<sup>1</sup></b>
Juncus balticus	Baltic rush	JUBA	9079507	Pxn, dlv
Carex abrupta	abruptbeak sedge	CAAB2	9079503	Pxn, dlv
Carex staminiformis	Shasta sedge	CAST7	9079506	Pxn, dlv
Lupinus obtusilobus	satin lupine	LUOB	9079501	Pxn, dlv
Deschampsia cespitosa	tufted hairgrass	DECE	9079500	Pxn, dlv
Arctostaphylos nevadensis	pinemat manzanita	ARNE	9079498	Pxn, dlv, col

<sup>1</sup>- pxn= plant production, dlv= delivered plant materials, col= collected plant materials

**III. Experimental Propagation**

There was no experimental propagation in 2008.

**IV. Plant Propagation**

*Arctostaphylos nevadensis* cuttings that were collected in the fall of 2007 were kept in a cooler until the end of January. On January 25, 2008, cuttings were removed from the coolers. Stems were stripped of lower leaves, re-cut, dipped in a 0.8% IBA powder, and stuck into 6" deep propagation flats filled with perlite. Flats were placed on heat mats set at 70° (F) in an unheated greenhouse. The flats did not get watered the first three days in the greenhouse and all cuttings desiccated and died. More cuttings were taken in the fall of 2008 and will be grown (and watered!) in 2009.

On December 18, 2007, 32 racks of Ray Leach “stubby” cone-tainers filled with moistened media (Sunshine #4, a special peat-based soil-less mix) were sown with seeds of *Carex abrupta*, *Carex staminiformis*, and *Juncus balticus* and lightly covered with fine vermiculite. Seeded flats were placed in polyethylene bags and moved into a walk-in cooler (36-38° F) for four months. After stratification, they were moved to a heated greenhouse. Seedlings emerged within two to four weeks. *C. abrupta* seeds had lower than expected germination (about 30%). The other species had expected germination rates (about 60-80%).



Figure 1. PMC staff member, Vanessa East, taking cuttings at Lassen Volcanic National Park, October 16, 2008.

On May 15, 2008, 15 racks of Ray Leach “stubby” cone-tainers filled with moistened media (Sunshine #4, a special peat-based soil-less mix) were sown with seeds of *Lupinus obtusilobus* and *Deschampsia caespitosa*. Before sowing, lupine seeds were lightly scarified by rubbing them on sandpaper and then were inoculated with a Lupine specific rhizobium. Flats were placed in a heated greenhouse. On June 1, 2008 all plants were moved from the greenhouse to a shadehouse. Plants were watered overhead daily or as needed and were monitored for pests and diseases. In late August, plants were watered less to prepare them for delivery and transplanting.

Some pots of manzanita that were produced last year were returned to the PMC after delivery to the park in the fall of 2007. These plants were placed in a walk-in cooler throughout the winter and then were moved to a covered shed in early May. Keeping the

plants drier and relatively cool (to prevent root rot) was of high concern. When spring rains had let up, plants were moved to a lathhouse. These plants were also delivered to the park in the fall of 2008.

## **VI. Delivery of Plant Materials.**

On September 3, 2008, PMC staff traveled to the park to deliver the plants. Plants were unloaded at a high elevation horse corral near the planting site.

Table 2. Plants that were delivered to the park on September 3, 2008.

<b>Species</b>	<b>Code</b>	<b>Accession</b>	<b>Amount Delivered</b>	<b>Size</b>
Juncus balticus	JUBA	9079507	1273	7" plugs
Carex abrupta	CAAB2	9079503	601	7" plugs
Carex staminiformis	CAST7	9079506	469	7" plugs
Lupinus obtusilobus	LUOB	9079501	646	7" plugs
Deschampsia cespitosa	DECE	9079500	556	7" plugs
Arctostaphylos nevadensis	ARNE	9079498	126	40 cc D40