

UNITED STATES DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service
Corvallis, Oregon

UNITED STATES DEPARTMENT OF INTERIOR
U. S. Fish and Wildlife Service
Corvallis, Oregon

and

OREGON STATE UNIVERSITY
Agricultural Experiment Station
Corvallis, Oregon

NOTICE OF RELEASE OF BASKETT SLOUGH
CALIFORNIA OATGRASS
Selected Class of Natural Germplasm

CALIFORNIA OATGRASS (*Danthonia californica* Boland.)

From Baskett Slough, Polk County, Oregon

Plant Symbol: DACA3

Accession Number: 9040747

The Natural Resources Conservation Service, U.S. Department of Agriculture; the U. S. Fish and Wildlife Service, Department of Interior; and the Oregon State Agricultural Experiment Station announce the pre-varietal selected class release of a natural ecotype of California oatgrass (*Danthonia californica* Boland.).

As a "Selected" class release, this native grass will not be given a name, but will be referred to as "the Baskett Slough germplasm" of California oatgrass to document its original collection location.

Origin: Seed of 9040747 was collected at Baskett Slough National Wildlife Refuge, Polk County, Oregon. Longitude: 123 deg. 15 min. West; Latitude: 45 deg. 00 min. North. Township: 7 South. Range: 4 West. Soils: Steiwer silt loam, moderately deep, well-drained and Chehulpum silt loam, shallow, well-drained low, foothill soil. Plant community: Oregon white oak savanna/ grassland bald. USDA plant hardiness zone: 8b. Ecoregion: Willamette Valley. MLRA: A2. Elevation: 350 – 500 feet above mean sea level. Average annual precipitation: 48 inches. Growing season: 235 days average.

Description: California oatgrass is long-lived, native perennial bunchgrass. It naturally occurs from southern British Columbia to southern California, and east to Montana and New Mexico. It is found in wet to dry meadows, oak savannas, rocky ridges, coastal

prairies, grassy balds, and up to 4500 feet in southern California mountains, especially in Ponderosa pine woodlands. It generally grows in full-sun. The grass stems are up to three feet in height, glabrous, tending to disarticulate at the lower nodes. The sheaths are glabrous and pilose at the throat. Self-fertilized seed initiates at the nodes between the sheath and stem. The leaf blades are usually two to eight long and flat, the new blades may be involute and glabrous. The panicle consists of two to five spikelets on a slender pedicel, up to one inch long. California oatgrass also produces cross-pollinated seed. While moderately slow to establish, and a low seed producer, it tolerates wet, cool winter, summers droughts, and heavy grazing by domestic livestock.

Method of Selection: 9040747 was selected from an assembly of 59 California oatgrass ecotypes evaluated at the Corvallis Plant Materials Center from 1982 to 1999. It was selected for its overall good vigor and high seed production compared to other oatgrass ecotypes in this evaluation, and an accessible central Willamette Valley indigenous prairie location. There was no apparent limiting disease or insect pests exhibited during this evaluation. This selection shows great promise for conservation uses and ecosystem restoration in western Oregon.

Ecological Impact Assessment: California oatgrass will have a beneficial ecological impact when used on areas within its natural ecosystems. It is a native grass species to Oregon and Washington, and is not considered a weedy species and is not known to have any toxic properties to domestic livestock, wildlife, or humans. It did not volunteer or spread in the PMC test plots or fields. A further review of the current literature did not indicate any invasive qualities for the intended area and type of conservation/restoration use.

Anticipated Conservation and Restoration Uses: The potential uses for the Baskett Slough germplasm (9040747) California oatgrass are erosion control along roadsides and other critical areas (upland and wetland sites), native plant ecosystem diversity, grassland and prairie restoration, rangeland/woodland planting, and wildlife habitat.

Potential Area of Adaptation: The primary area for intended conservation use is the Willamette Valley of Oregon, and adjacent foothills, associated tributary watersheds in western Oregon, below 1250 feet elevation. Secondary area of intended use is the Umpqua Valley of southern Oregon, below 1500 feet elevation; Clark and Cowlitz Counties in southwestern Washington, including the Kalama and Lewis River watersheds and adjacent foothills, below 1000 feet elevations.

Potential Soil Adaptation: California oatgrass prefers shallow to deep silt loam and clay loam, well drained to moderately well-drained soils. It may tolerate less well-drained soils and short term flooding during winter.

Seed Maintenance: Generations are G0 through G3. G0 equals parental population(s) at Origin. G1 equals the first generation (seed from G0 used to establish G1 agronomic seed increase, tagged). G2 is the second generation (seed from G1 certified stand used to

establish G2 agronomic seed increase, tagged). G3 is the seed from G2 certified stand, tagged. Growers may produce two generations: G2 and G3. G2 is grown from G1 seed and G3 from G2 seed. Seed may be harvested from production fields for up to ten years as recommended by USDA NRCS, Corvallis PMC, Corvallis Oregon.

A high percentage of seed can exhibit both physical and physiological dormancy. Specific guidelines have been developed for the collection of G1 seed, at the origin (G0) for appropriate genetic representation of the population.

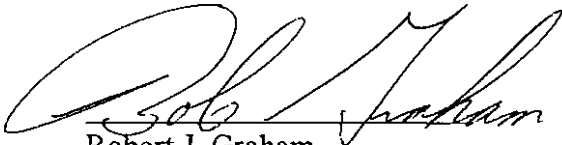
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Prepared by:

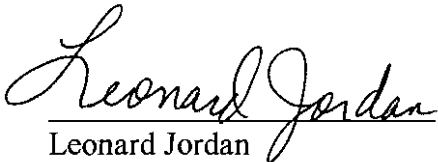
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SIGNATURE PAGE for Baskett Slough selection California oatgrass
(*Danthonia californica*)




Robert J. Graham
State Conservationist, Oregon
Natural Resources Conservation Service

Date: 10/3/00



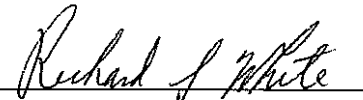
Leonard Jordan
State Conservationist, Washington
Natural Resources Conservation Service

Date: 9/27/00



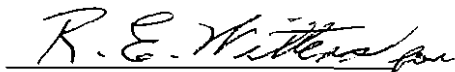
James E. Houk
Project Leader
Willamette Valley National Wildlife Refuge Complex
U.S. Fish and Wildlife Service

Date: 9/20/00

for 
Diane E. Gelburd

Director, Ecological Sciences
Natural Resources Conservation Service

Date: 5/10/01



Thayne R. Dutson
Director, Agricultural Experiment Station
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Date: 1-24-01