

Plant Propagation Protocol for *Agrostis pallens*

ESRM 412 – Native Plant Production

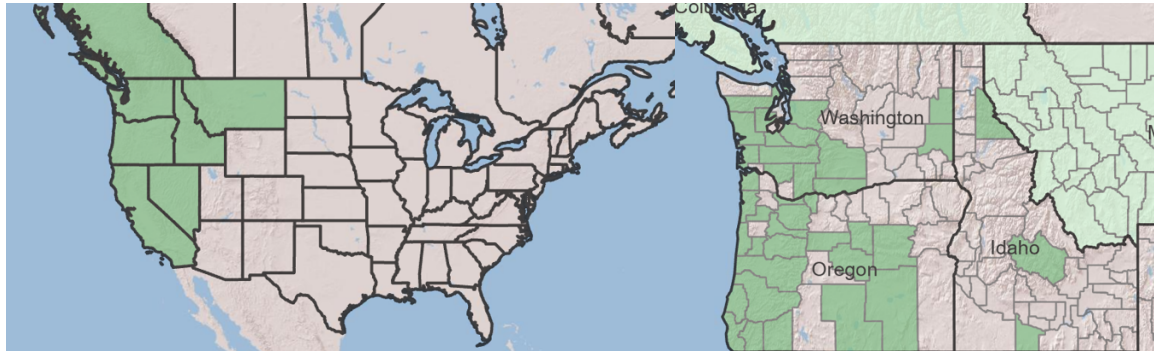
URL: <https://courses.washington.edu/esrm412/protocols/2022/AGPA8.pdf>



Source: California Native Plant Society⁵

North American Distribution

Pacific Northwest Distribution



Source: USDA Plant Database¹

TAXONOMY	
Plant Family	
Scientific Name	Poaceae/ Gramineae
Common Name	Grass
Species Scientific Name	
Scientific Name	<i>Agrostis pallens</i> Trin.
Varieties	<i>Agrostis pallens</i> Trin. var. <i>vaseyi</i> H. St. John
Sub-species	
Cultivar	
Common Synonym(s)	<i>Agrostis diegoensis</i> Vasey ¹ <i>Agrostis lepida</i> Hitchc. ¹
Common Name(s)	Seashore bentgrass, Thingrass
Species Code (as per USDA Plants database)	AGPA8
GENERAL INFORMATION	
Geographical range	Maps above depict the North American and Pacific Northwest Distribution
Ecological distribution	Meadows ³ , woodlands ³ , subalpine ecosystems ³ , forest ⁴ , coastal strand ⁵
Climate and elevation range	Elevation:200-3500 m ⁴ Climate: partial shade ¹ , high needed moisture/medium drought tolerance ¹ , high fire tolerance ¹ pH: 5.5-8 ¹ CaCO ₃ tolerance: none ¹
Local habitat and abundance	Grows well with almost any native trees or large shrubs as an understory plant ⁵ or with other grasses as in open fields and meadows ⁵ . Widespread and common throughout Washington, Oregon, California, Idaho, and Montana ⁵ .
Plant strategy type / successional stage	Stress-tolerator: this grass has high fire tolerance, grows in a variety of conditions/landscapes, can withstand mowing, and grows well alongside other grasses and plant types ⁹ .
Plant characteristics	Perennial grass ⁷ , medium leaf blade ² , can grow up to 2 feet high ¹ , 1-6 mm wide ⁴ , rhizomatous ⁷ , leaves are flat when they are young but roll toward the center with age ⁷ , green colored flowers with a slight purple tinge towards the ends ⁷ -11 cm long ⁷
PROPAGATION DETAILS: Seed⁶	
Ecotype	N/A
Propagation Goal	Plants

Propagation Method	Seed
Product Type	Propagules
Stock Type	N/A
Time to Grow	Little information was available on out planting but seedling typically grow within 10-14 days after planting and after one season will start to produce seeds ⁶
Target Specifications	10-12 inches ⁶
Propagule Collection Instructions	Flowers bloom in mid spring and the seed period is June-August which is the time when collection should be done ¹⁰ , seed abundance is low ¹ ,
Propagule Processing/Propagule Characteristics	Seed density: 8,000,000 per pound ¹ Seed longevity: commercial <i>Agrostis</i> seed can typically be stored for over one year ⁸
Pre-Planting Propagule Treatments	Do not need stratification ¹ or treatment ⁸ . The seeds can be held in cold, dry storage for over one year prior to planting with little to no change in germination rate. ⁸
Growing Area Preparation / Annual Practices for Perennial Crops	Seeds do not need to be started as plugs due to moderate seedling vigor ⁶ , plant in medium or fine textured soil with partial shade ¹ , seed bed should be firm can be planted alone or with other native grasses without effecting performance
Establishment Phase Details	Sow at 0.5 ounces per 1000 square feet ⁶ , water the seedbed by hand with fine spray ⁶ , water every day until the seedlings appear ⁶ , best time to plant is between September and April (depending on temperature of planting location) but can also be seeded in summer with irrigation ⁹
Length of Establishment Phase	germination should then occur and seedling should be expected within 10-14 days after planting ⁶
Active Growth Phase	actively grows in spring and summer ¹ , for the first 4-6 weeks after planting short, frequent watering is required if there is no rainfall to maintain the desired moisture ⁹
Length of Active Growth Phase	6 months ⁹
Hardening Phase	N/A
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	There is almost no information about harvesting, storing, or shipping seedlings. It is nearly entirely about the harvesting, storage, and shipping of seeds.
Length of Storage	As stated above, there is little to no information on the storage of seedling, but seeds can be held in cold, dry storage for over one year ⁸ .
Guidelines for Outplanting / Performance on Typical Sites	There is little/no specific information on how seeds perform at typical sites after out planting but when

	seeds are planted directly in the field, they do well because of their quick germination rate ⁶
Other Comments	N/A
INFORMATION SOURCES	
References	See below
Other Sources Consulted	See below
Protocol Author	Elizabeth Leitz
Date Protocol Created or Updated	05/24/22

References:

¹ USDA NRCS National Plant Data Team. *Agrostis pallens* Trin. 24 May 2022.

<<https://plants.usda.gov/home/plantProfile?symbol=AGPA8>>

²West Coast Turf. *West Coast Native Bentgrass- Agrostis pallens*. 24 May 2022.

<<https://www.westcoastturf.com/West-Coast-Native-Bentgrass>>

³Las Pilitas Nursery. *Agrostis pallens*. 24 May 2022.

<<https://www.laspilitas.com/nature-of-california/plants/1309--agrostis-pallens>>

⁴The Jepson Herbarium, University of California, Berkeley. *Agrostis pallens, Dune Bent Grass*.

24 May 2022. <https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=12310>

⁵California Native Plant Society. *Thingrass: Agrostis pallens*. 24 May 2022.

<[https://calscape.org/Agrostis-pallens-\(Thingrass\)?srchr=sc57ef796f9221f](https://calscape.org/Agrostis-pallens-(Thingrass)?srchr=sc57ef796f9221f)>

⁶Amme, David. *Creating a Native California Meadow*. Grasslands, A Publication of the California Native Grass Association, Vol 13, pp 9-11, 2003. 24 May 2022.

<<https://ucanr.edu/repository/fileaccess.cfm?article=114188&p=NCQSOS>>

⁷Montana Field Guide. *Leafy Bentgrass- Agrostis pallens*. 25 May 2022.

<<https://fieldguide.mt.gov/speciesDetail.aspx?elcode=PMPOA041M0>>

⁸Symbios Research and Restoration. *Grasses: Agrostis exarata Trin*. Growing and Using Native Plants in the Northern Interior of B.C. pp 31-33, 2003. 25 May 2022.

<https://www.env.gov.bc.ca/fia/documents/native_seed_manual/7agrostis_exarata.pdf>

⁹Stover Seed. *California Native All Purpose Seed Mixture*. 25 May 2022.

<<https://shop.stoverseed.com/products/california-native-all-purpose-grass-seed-mixture>>

¹⁰Hitchcock, A.S. Manual of the Grasses of the United States. 1971. 25 May 2022.

Other Sources Consulted:

Vance, Nan., Neill, Andrew., Morton, Frank. *Native grass seedling and forb planting establishment*. Native Plants Journal, Vol. 7(1): 35-46. 2006. 25 May 2022.

