


Plant Propagation Protocol for *Carex canescens*
 ESRM 412 – Native Plant Production
 Protocol URL: <https://courses.washington.edu/esrm412/protocols/>

The plant and Pacific Northwest distribution



<http://hasbrouck.asu.edu/imglib/seinet/Cyperaceae/Carex-canescens-F-web-6-0.jpg>

TAXONOMY	
Plant Family	<i>Cyperaceae</i> (USDA, 2016).
Scientific Name	<i>Carex canescens</i> (USDA, 2016).
Common Name	Silvery Sedge (USDA, 2016).
Species Scientific Name	<i>Canescens</i> (USDA, 2016).
Scientific Name	<i>Carex canescens</i> L.
Genus	<i>Carex</i>
Species	<i>canescens</i>
Species Authority	Perennial (USDA, 2016).
Varieties	<i>Carex canescens</i> var. <i>canescens</i> , <i>Carex canescens</i> var. <i>robustior</i> Blytt ex (USDA, 2016).
Sub-species	<i>Carex canescens</i> L. ssp. <i>disjuncta</i> (Fernald) <i>Carex canescens</i> ssp. <i>canescens</i> , <i>Toivonen</i> , <i>Carex lapponica</i> O.F. Lang. (USDA, 2016).
Cultivar	
Common Synonym(s)	<i>Vignea canescens</i> (L.) Rchb. <i>Caricina canescens</i> (L.) St.-Lag. (USDA, 2016).
Common Name(s)	gray bog sedge gray sedge

	grey sedge disjunct hoary sedge silvery sedge carex disjoint (Michelle, 2008).
Species Code (as per USDA Plants database)	CACA11 (USDA, 2016).
GENERAL INFORMATION	
Geographical range	 <p>(USDA, 2016). The plant spreads through Ames Lake, Big Bear Creek, Cherry Creek, East Lake Washington, West Lake Washington, Evans Creek Griff Creek, Harris Creek, Lower Green River, Lower Puget Sound, Maury Island, Middle Green River, Juanita Creek, Little Bear Creek, McAleer Creek, Middle Puget Sound, Sammamish River, Snoqualmie River, Swamp Creek, Thornton Creek, East Fork Issaquah Creek, East Lake Sammamish, California, North America and beyond (USDA, 2016).</p>
Ecological distribution	The silvery sedge thrives in damp forests, wetlands, freshwater marshes, alpine meadows and swamps.
Climate and elevation range	I survive in Rainy and low plains; areas with an elevation of between 0-3000 feet and a mean temperature range of 10° F to 40° F (Michelle, 2008).
Local habitat and abundance	The sledge is native and abounds in temperate peat swamps and bogs, lowlands basin mires, wet and acid bogs, occasionally in sandy heaths. These include Austria, East European Russia, Germany, Netherland and France (Michelle, 2008).
Plant strategy type / successional stage	Low in seeds but can become a stressful weed. Compete with plants such as <i>Alopecurus aequalis</i> and <i>Ranunculus flammula</i> (Michelle, 2008).
Plant characteristics	Has active period of growth at summer and spring, regrowth rate is slow after harvest, C: N ratio is medium, rhizomatous growth form, a mature

	height of 2 feet, has a long lifespan and generally blooms at late spring (Gregory & Nortcliff, 2013).
PROPAGATION DETAILS	
Ecotype	Bogs and wet soils (Michelle, 2008).
Propagation Goal	Plant (Michelle, 2008).
Propagation Method	Seed (Michelle, 2008).
Product Type	Container (Plug) (Michelle, 2008).
Stock Type	Not type of stock was identified on literature search.
Time to Grow	Plant should be monitored for growth at spring and summer (Gregory & Nortcliff, 2013).
Target Specifications	2 to 2 half feet tall (Gregory & Nortcliff, 2013).
Propagule Collection Instructions	Seed should be soaked within 24 hours before planting them in a moist soil (Gregory & Nortcliff, 2013).
Propagule Processing/Propagule Characteristics	Seeds grow in bulk after the late spring blooming period (Michelle, 2008).
Pre-Planting Propagule Treatments	The seeds have physiological dormancy. However, presence of moisture during germination would reduce the dormancy. Seeds were cold stratified for 30 days. Seeds germinate at alternating temperatures of 20/10 C in the presence of light (Dumroese, Luna, Landis & US, 2009).
Growing Area Preparation / Annual Practices for Perennial Crops	The area for well growth of grey sedge should be moist with medium acidity condition and lots of organic compounds. Also, just enough sunlight will hasten growth (Michelle, 2008).
Establishment Phase Details	After growing mature seeds, growth of viable seeds may be deterred by the nature of soil, human activity and lack of sufficient light (Michelle, 2008).
Length of Establishment Phase	From the time of sowing, mature seeds take about 10 days to start germinating. Germination is generally slow (Dumroese et. al., 2009).
Active Growth Phase	The growth from germination to maturity is very slow. Active growth phase is between the 10 th day and the 2 nd month, after which the growth slows down for the maturity of the seeds (Dumroese et. al., 2009).
Length of Active Growth Phase	3 months (Dumroese et. al., 2009).
Hardening Phase	
Length of Hardening Phase	1 month (Dumroese et. al., 2009).
Harvesting, Storage and Shipping	Harvesting must occur within the prescribed time, seeds storage may be in soils. Planned shipping is often within the states (Dumroese et. al., 2009).

Length of Storage	Between 4 to 16 weeks before out-planting. This is when the lengths are about 10cm or slightly more (Dumroese et. al., 2009).
Guidelines for Out planting / Performance on Typical Sites	Out plant at when the plant heights are between 10 to 20 cm.
Other Comments	Cold stratification is often required, planting density per acre lie between 1700 to 4800 plants (Salley, Talbot & Brown, 2016).
INFORMATION SOURCES	
References	<p>Dumroese, R. K., Luna, T., Landis, T. D., & United States. (2009). <i>Nursery manual for native plants: A guide for tribal nurseries</i>. Washington, D.C.: U.S. Dept. of Agriculture, Forest Service.</p> <p>Gregory, P. J., & Nortcliff, S. (2013). <i>Soil conditions and plant growth</i>. Chichester, West Sussex, UK: Wiley-Blackwell.</p> <p>Michelle, A. (2008). <i>Carex canescens</i> <i>Fs.fed.us</i>. Retrieved 22 June 2016, from http://www.fs.fed.us/database/feis/plants/graminoid/carros/all.html</p> <p>Salley, S. W., Talbot, C. J., & Brown, J. R. (2016). The Natural Resources Conservation Service Land Resource Hierarchy and Ecological Sites. <i>Soil Science Society of America Journal</i>, 80(1), 1-9.</p> <p>United States Department of Agriculture. (2016). <i>Plants Profile for Carex canescens (Silver sedge)</i>. (2016). <i>Plants.usda.gov</i>. Retrieved 22 June 2016, from</p>

	http://plants.usda.gov/core/profile?symbol=CARO5
Other Sources Consulted	
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