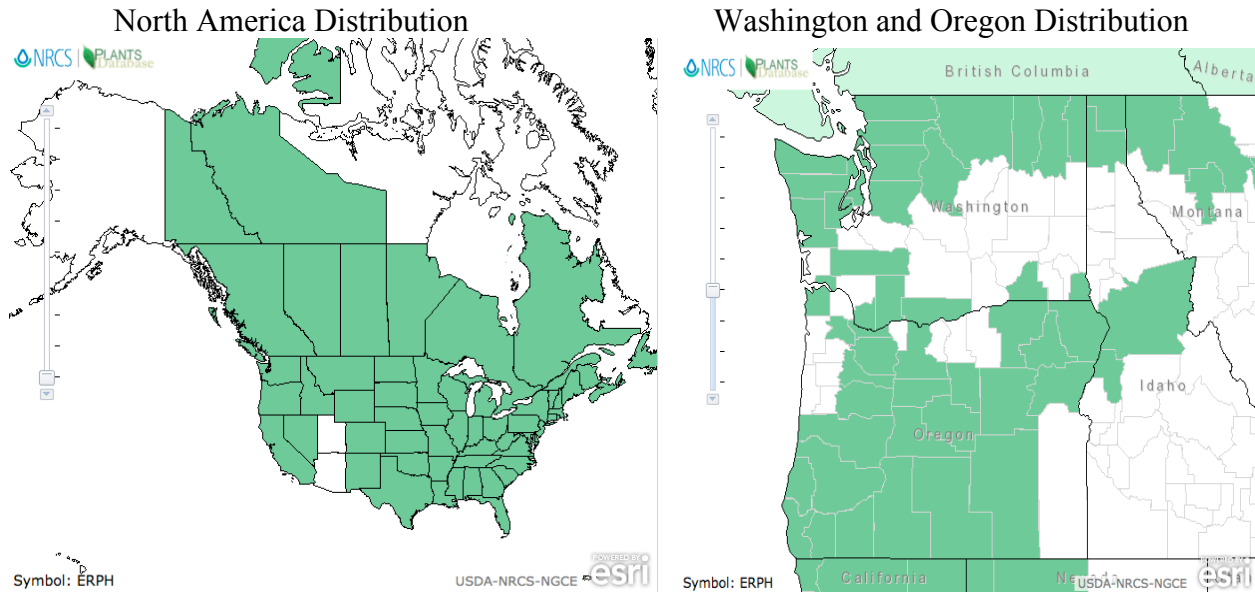


Plant Propagation Protocol for *Erigeron philadelphicus*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/ERPH.pdf>



Source: USDA PLANTS Database

TAXONOMY	
Plant Family	
Scientific Name	Asteraceae / Compositae
Common Name	Aster family
Species Scientific Name	
Scientific Name	<i>Erigeron philadelphicus</i> L.
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	<i>Tessenia philadelphica</i> (Linnaeus) Lunell, Amer. Midl. Naturalist 5: 59. 1917. <i>Erigeron amplexicaulis</i> Desfontaines, Tabl. Ecole. Bot., ed. 3. 401. 1829. <i>Erigeron hyemalis</i> Rafinesque, Fl. Ludov. 65. 1817. <i>Erigeron philadelphicus</i> Linnaeus, <i>forma angustatus</i> Victorin & J. Rousseau, Contr. Inst. Bot. Univ. Montreal 36: 61. 1940. <i>Erigeron philadelphicus</i> Linnaeus, <i>forma purpureus</i> (Aiton) Farwell, Amer. Midl. Naturalist 11: 70. 1928. ⁹
Common Name(s)	Philadelphia fleabane, Philadelphia daisy

Species Code (as per USDA Plants database)	ERPH
GENERAL INFORMATION	
Geographical range	Widely distributed throughout Washington and North America ⁴ In Canada ranges from Labrador to British Columbia, south to Florida and California ³
Ecological distribution	Moist, open forests, thickets, stream banks, roadsides, clearings; scattered at low to middle elevations. ⁵
Climate and elevation range	Can occur in elevations between 20' - 5531' ⁷
Local habitat and abundance	Found in wet meadows and grassy openings, some similar species include <i>Erigeron pulchellus</i> , <i>Erigeron quercifolius</i> , <i>Erigeron strigosus</i> , and <i>Erigeron pumilis</i> ⁸
Plant strategy type / successional stage	Weedy species ⁴ , tolerant of alkaline soils ³ , can tolerate maritime exposure ³
Plant characteristics	Stems 20-70 cm tall, with long spreading hairs or hairless. Basal leaves lance shaped, coarsely toothed, hairy, short stalked ⁵ Biennial and perennial forb ⁸
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug), bare root
Stock Type	
Time to Grow	
Target Specifications	Should reach mature height of 2.8 ft and minimum root depth of 10 inches in a wild land setting ⁸
Propagule Collection Instructions	Collect seeds in the last half of May due to early flowering ⁶ Seeds can be hand collected by plucking "puffs" as they ripen on plants ¹
Propagule Processing/Propagule Characteristics	3,000,000 seeds per pound ⁸
Pre-Planting Propagule Treatments	Seed is dormant and requires cold-moist stratification of 90-120 days before seed will germinate ¹
Growing Area Preparation / Annual Practices for Perennial Crops	Plants grow in calcareous and clay soils in the wild and need well drained soils ² Plants should receive full sunlight but can tolerate dappled shade ⁸
Establishment Phase Details	For best establishment, starts plugs in greenhouse in the winter and then transplant into a field in early spring ¹
Length of Establishment Phase	4 weeks ²
Active Growth Phase	During spring and summer ⁸
Length of Active Growth Phase	
Hardening Phase	
Length of Hardening Phase	

Harvesting, Storage and Shipping	Plants self sow freely when in suitable positions ³ Multiple harvests may be necessary since ripening varies over a period of weeks, small scale plots can be harvested using handheld vacuum sucking off seeds from plants as they ripen ¹
Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	Bloom period occurs mid spring ⁸
Other Comments	This plant has the potential of becoming weedy or invasive in some regions, consult with your local NRCS office before planting ⁸ Source ¹ is propagation information on <i>Erigeron decumbens</i> since information on <i>Erigeron philadelphicus</i> was difficult to acquire.
INFORMATION SOURCES	
References	See below
Other Sources Consulted	
Protocol Author	Zainab Junejo
Date Protocol Created or Updated	06/05/17

References

¹Bartow, A. 2015. *Seed production manual for the Pacific Northwest*. USDA-NRCS Corvallis Plant Materials Center, Corvallis, OR.

²"Erigeron Philadelphicus." *Puget Prairie Plants*. The Evergreen State College, 21 May 2012. Web. 22 May 2017.
http://wikis.evergreen.edu/pugetprairieplants/index.php/Erigeron_philadelphicus#Propagation

³"Erigeron Philadelphicus - L." *PFAF*. Plants for a Future, n.d. Web. 22 May 2017.
<http://pfaf.org/User/Plant.aspx?LatinName=Erigeron+philadelphicus>

⁴Knoke, Don, and David Giblin. "Erigeron Philadelphicus." *WTU Herbarium Image Collection*. Burke Museum of Natural History & Culture, n.d. Web. 22 May 2017.
<http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Erigeron&Species=philadelphicus>.

⁵MacKinnon, A, J Pojar, and P B Alaback. *Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia and Alaska*. Lone Pine Publishing, 2004. Print.

⁶McDonald, Clinton C. "A Study of Seed Development in Three Species of *Erigeron* with Special Reference to Apogamy." *Bulletin of the Torrey Botanical Club* 54.6 (1927): 479-97. Print.

⁷"Philadelphia Fleabane." *Calscape*. California Native Plant Society, n.d. Web.
[http://calscape.org/Erigeron-philadelphicus-var.-philadelphicus-\(\)](http://calscape.org/Erigeron-philadelphicus-var.-philadelphicus-())

⁸USDA, NRCS. 2017. The PLANTS Database (<http://plants.usda.gov>, 22 May 2017). National Plant Data Team, Greensboro, NC 27401-4901 USA

⁹Wunderlin, Richard, Bruce Hansen, and Alan Franck. "Erigeron Philadelphicus." *ISB: Atlas of Florida Plants*. University of South Florida, 2017. Web.
<http://florida.plantatlas.usf.edu/Plant.aspx?id=2201>

Other Sources Consulted

"Erigeron Philadelphicus L." *Go Botany*. New England Wildflower Society, n.d. Web.
<https://gobotany.newenglandwild.org/species/erigeron/philadelphicus/>