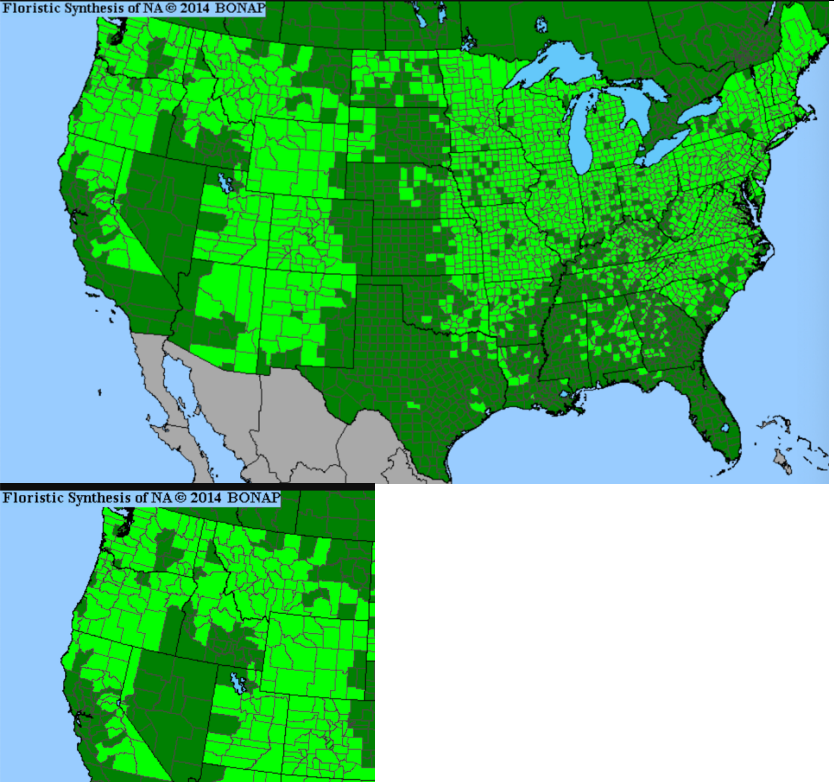


Plant Propagation Protocol for *Fragaria virginiana*

ESRM 412 – Native Plant Production

URL: [https://courses.washington.edu/esrm412/protocols/\[year\]/\[USDA Species Code.pdf\]](https://courses.washington.edu/esrm412/protocols/[year]/[USDA Species Code.pdf])

TAXONOMY	
Plant Family	
Scientific Name	Rosaceae
Common Name	Rose family
Species Scientific Name	
Scientific Name	<i>Fragaria virginiana</i> Duchesne
Varieties	<i>Fragaria virginiana</i> Duchesne var. <i>canadensis</i> (Michx.) Farw., <i>Fragaria virginiana</i> Duchesne var. <i>australis</i> Rydb., <i>Fragaria virginiana</i> Duchesne var. <i>platypetala</i> (Rydb.) H.M. Hall, <i>Fragaria virginiana</i> Duchesne var. <i>illinoensis</i> A. Gray, <i>Fragaria virginiana</i> Duchesne var. <i>terrae-novae</i> (Rydb.) Fernald & Wiegand, <i>Fragaria virginiana</i> Duchesne var. <i>ovalis</i> (Lehm.) R.J. Davis, <i>Fragaria virginiana</i> Duchesne var. <i>glauca</i> S. Watson,
Sub-species	
Cultivar	
Common Synonym(s)	<i>Fragaria virginiana</i> Duchesne var. <i>canadensis</i> (Michx.) Farw., <i>Fragaria virginiana</i> Duchesne var. <i>australis</i> Rydb., <i>Fragaria virginiana</i> Duchesne var. <i>platypetala</i> (Rydb.) H.M. Hall, <i>Fragaria virginiana</i> Duchesne var. <i>illinoensis</i> A. Gray, <i>Fragaria virginiana</i> Duchesne var. <i>terrae-novae</i> (Rydb.) Fernald & Wiegand, <i>Fragaria virginiana</i> Duchesne var. <i>ovalis</i> (Lehm.) R.J. Davis, <i>Fragaria virginiana</i> Duchesne var. <i>glauca</i> S. Watson, <i>Fragaria virginiana</i> Duchesne ssp. <i>virginiana</i>, <i>Fragaria virginiana</i> Duchesne ssp. <i>platypetala</i> (Rydb.) Staudt, <i>Fragaria virginiana</i> Duchesne ssp. <i>grayana</i> (Vilm. ex J. Gay) Staudt, <i>Fragaria virginiana</i> Duchesne ssp. <i>glauca</i> (S. Watson) Staudt
Common Name(s)	Virginia Strawberry
Species Code (as per USDA Plants database)	FRVI
GENERAL INFORMATION	

Geographical range	 <p>Light green = species present and not rare Dark green = species present in state and native</p>
Ecological distribution	<i>F. virginiana</i> occurs in open woods and meadows to streambanks, plains and mountains
Climate and elevation range	Warm 60-80 degrees, sunny, 3,940 feet and 10,830 feet
Local habitat and abundance	
Plant strategy type / successional stage	Strawberry plants are runners
Plant characteristics	Forb/herb
PROPAGATION DETAILS	
Ecotype	Lodgepole Forest margin, Glacier National Park, Flathead Co., MT.
Propagation Goal	plants
Propagation Method	vegetative
Product Type	Bareroot (field grown)
Stock Type	Bareroot plants
Time to Grow	1 year
Target Specifications	Height: 5 cm Caliper: n/a Root System: Bareroot transplant with well developed root system.
Propagule Collection Instructions	Vegetative Propagation Method: Spring or fall divisions Type of Cutting: Divisions. 30 to 50 plants with stolons are placed in a raised bed.

Propagule Processing/Propagule Characteristics	
Pre-Planting Propagule Treatments	
Growing Area Preparation / Annual Practices for Perennial Crops	Outdoor nursery in raised bed that is equal parts: well rotted cow manure, sand, and soil mix.
Establishment Phase Details	Transplants establish in raised bed in 2 weeks.
Length of Establishment Phase	2 weeks
Active Growth Phase	Hundreds of plants can be generated in one growing season. These are outplanted as bareroot material or can be potted into containers.
Length of Active Growth Phase	2 weeks
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	Total Time To Harvest: 1 year Harvest Date: Spring or fall Storage Conditions: Overwinter in raised bed in the outdoor nursery under snow cover.
Length of Storage	4 months
Guidelines for Outplanting / Performance on Typical Sites	
Other Comments	Seed Propagation Method: Direct Seeding, not tried. Seed Processing: Seeds are collected when the fruits turn red in mid summer. Seeds are cleaned by maceration using a Dyb-vig cleaner, and is washed and screened. Seed longevity is estimated at 3 years. Seed dormancy is classified as physiological dormancy. Seed Treatments: A minimum of a 85 day cold, moist stratification is recommended for this species. Germination occurs at 21C. Seeds are lightly covered with medium
INFORMATION SOURCES	
References	Luna, Tara; Potter, Rachel; Corey, Susan; Evans, Jeff; Wick, Dale; Johnson, Kathy. 2008. Propagation protocol for production of Bareroot (field grown) <i>Fragaria virginiana</i> Duchesne plants Bareroot plants; USDI NPS - Glacier National Park West Glacier, Montana. In: Native Plant Network. URL: https://NativePlantNetwork.org (accessed 2023/05/02). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.

Other Sources Consulted	
Protocol Author	Tara Luna
Date Protocol Created or Updated	

Luna, Tara. *Fragaria (Virginiana)* - RNGR.

<https://npn.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=rosaceae-fragaria-184>.

New England Wild Flower Society (<http://plantfinder.nativeplanttrust.org>). “Fragaria Virginiana.” *New England Wild Flower Society*,

<https://plantfinder.nativeplanttrust.org/plant/Fragaria-virginiana>.

USDA Plants Database, <https://plants.usda.gov/home/basicSearchResults?resultId=0f834ccc-7dc4-4883-bdbc-0631042e3562>.