

Fourth Corner Nurseries

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NATIVE PLANTS OF NORTH AMERICA | WHOLESALE CATALOG

Ghost meadows: stress and ecological relationships in a time of rapidly changing climate

by Roger Fuller



A tall, lush, and flowering seacoast bulrush (*Bolboschoenus maritimus*) meadow in the foreground with the invasive phenolic-producing narrow-leaved cattail (*Typha latifolia*) looming in the background.

I was out tramping around in the mud one day. I spend a lot of time slogging through wetlands, particularly ones with a twice-daily push and pull of tide and river slowing sloshing back and forth. Working my way down the estuary from the tidal fresh zone, salty ocean gradually intrudes, and plant species begin dropping out, leaving behind those that can tolerate a little salt in their soil soup. Brackish tidal marshes in the Salish Sea are often dominated by several species of bulrush, including three-square, American, seacoast, river, and soft-stem bulrush. Anyway, on this particular early summer day the tide was out and I was slogging through the deep mud of middle marsh dominated by a mix of close cousins seacoast and river bulrushes (*Bolboschoenus maritimus* and *B. fluviatilis*).

The only problem was that this usually-lush meadow was short and remarkably brown for early July. Eventually I stopped to look around and it dawned on me that most of these perennial plants had already senesced, having produced no flowers or fruits. Even the still-green plants were browning at the tips, far too early in the season. I got down on my knees for a closer look and noticed that each plant had a small black hole near the base.

On plants that were still mostly green, dead brown tissue surrounded the hole and was creeping up the stem, while tissue browning was similarly spreading downward from the lifeless leaf tips. Across the space of about 50 acres, nearly every single stem of bulrush was dead or soon would be.

Collecting a few stems, I slit them open and found

larvae carving their way up the inside of the stem, and in dead stems I found silk-wrapped pupae. Placing them in a sealed plastic bag, in a few days the silk mummies cracked open, releasing small brown moths. Few west coast estuarine ecologists that I've spoken with have given much thought to insect herbivores, let alone even know that bulrush stem-boring moths exist. But why did 50 acres succumb at once to a native herbivore, a critter that is likely always present, even if seldom noticed? Having worked in many ecosystems, and in my own garden for that matter, I knew that full-grown plants, like trees for instance, generally don't just die when an insect attacks. The insect might be the proximal cause of death, the nail in the coffin, but the plant almost always shows other signs of accumulating stress that likely weakened it to the point that an insect could push it over the edge. A meadow of stressed-out plants might provide just the opportunity for a major outbreak of stem-boring moths.

(At this point, I should mention that the subsequent discussion is based mostly on speculation because we weren't monitoring the things that could have neatly documented what happened. Lots of lessons here, about monitoring the right and wrong things in restoration and stewardship projects, but that's a story for a different day.)

So, whence the stress that opened the door for the moth? Since this particular marsh-traipsing event, during which I discovered the ghost marsh, was in

(continued on page 10)

Greetings,

'Change is the only constant' is one of those adages (attributed to the Greek philosopher Heraclitus—thanks Google), that is easy to point out to others but often harder to embrace. One piece of recent news that has preoccupied me is the May 2019 Global Assessment by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The report hammers home the breadth of environmental change that is happening across the globe. The ecosystems that we, humans, and all species, depend on are in rapid decline. Though bleak the report isn't without hope. It offers evidence that conservation and restoration efforts do work and that there is still time to make a difference, IF people, towns, governments and societies are willing to embrace transformational change.



Given the stakes and the need for people to step up to the challenges of rapidly changing planet, we at Fourth Corner Nurseries are always asking if what we do matters, how to improve and how to make a bigger impact. The answers that we come back to are to champion biodiversity, promote genetic diversity, strive to improve quality and consistency, and listen to and gain inspiration from our customers. In this 37th year of operation we are excited to offer an ever-widening selection of trees and shrubs with more seed source options, a deeper inventory of bulbs and herbaceous perennials and the opportunity to pre-order a new line of plug products.

A notable change at the nursery is that our legendary propagator Rich Haard hung up his collecting pole and bucket and retired this past December at the spritely age of 80. We will miss his frenzied drive and resolute perseverance to track down seed or spore, as well as his ingenious propagation schemes. Rich truly embodied the pioneering spirit and his imprint on our nursery was profound and enduring. In this issue we share a few of our favorite photos of Rich in action.

We're committed to producing plants for a changing world; carefully curated wild plants that have roots deep in the past and the genetic diversity and resiliency to confront an unknown tomorrow. Thank you so much for your interest in and support of native plants. We wish you all a great summer and a prosperous year, and as always, look forward to working with, and serving you in the future.

Cheers,
Dylan
Dylan Levy-Boyd,
General Manager, Fourth Corner Nurseries

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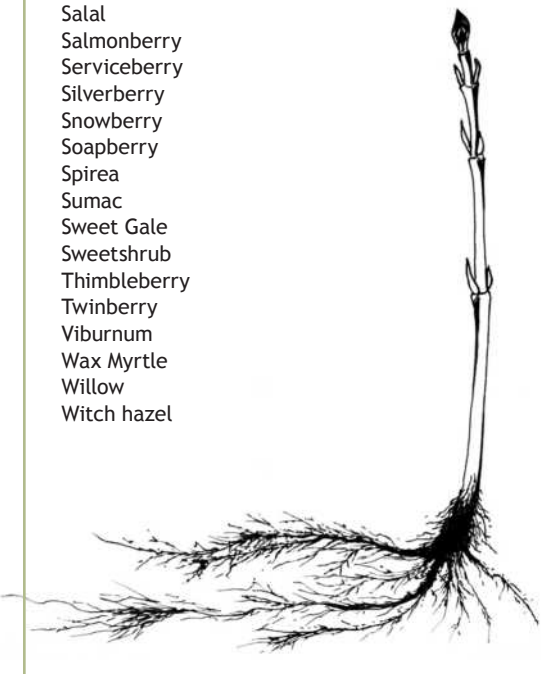
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COMMON NAME INDEX

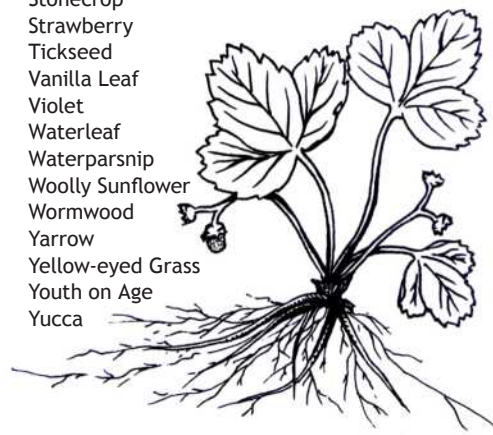
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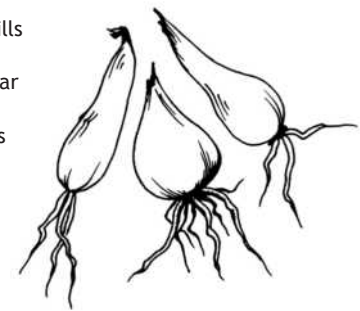


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PLUGS

Starting next year, we are offering the following species as plugs by pre-order only, with a minimum of 500 plants per species. Please place your order by the date below for finished plugs in 2020.

Species	Order by	See Description
<i>Abies amabilis</i> (Pacific Silver Fir)	October 1st	pg. 12
<i>Arbutus menziesii</i> (Pacific Madrone)	November 1st	pg. 4
<i>Calocedrus decurrens</i> (Incense Cedar)	October 1st	pg. 12
<i>Chamaecyparis nootkatensis</i> (Alaska Yellow Cedar)	October 1st	pg. 12
<i>Gaultheria shallon</i> (Salal)	January 1st, 2020	pg. 5
<i>Berberis [Mahonia] nervosa</i> (Cascade Oregon Grape)	August 1st *Coming up soon!	pg. 4
<i>Pinus monticola</i> (Western White Pine)	October 1st	pg. 12
<i>Pinus ponderosa</i> (Ponderosa Pine)	October 1st	pg. 12
<i>Rhododendron macrophyllum</i> (Pacific Rhododendron)	January 1st, 2020	pg. 6
<i>Tsuga mertensiana</i> (Mountain Hemlock)	October 1st	pg. 12
<i>Vaccinium membranaceum</i> (Black Huckleberry)	November 1st	pg. 8

FOR YOUR INFORMATION

Contact Information

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**Sales hours:
8 AM - 4 PM PST
Monday through Friday**

**Toll free: 800-416-8640
Fax: 888-506-1236**

Wetland Indicator Status

This edition of the Fourth Corner Nurseries catalog reflects the changes encompassed in the most recent 2016 National Wetland Plant List (NWPL). It is important to note that our catalog lists the wetland indicator status for each plant in the Western Valleys, Mountains and Coast region, even if the plant occurs in or is native to another region. If you are installing plants outside of this region, please consult the NWPL to confirm the status of your plant in the region in which it will be installed. Plants not listed on the NWPL for the Western Mountains, Valleys, and Coast region (indicated as NL in our catalog) either do not occur in our region, or have not been tested in our region.

To see the full list, including the indicator status of each plant across all ten regions, please visit: http://wetland-plants.usace.army.mil/nwpl_static/home/home.html

OBL - Obligate Wetland

Almost always occurs in wetlands.



FACW - Facultative Wetland

Usually occurs in wetlands, but may occur in non-wetlands.



FAC - Facultative

Occurs in wetlands and non-wetlands.



FACU - Facultative Upland

Usually occurs in non-wetlands, but may occur in wetlands.



UPL - Upland

Almost never occurs in wetlands.



NL - Not Listed

These plants are not listed in the Western Valleys, Mountains and Coast region of the NWPL.



A Note on Nomenclature

Several species have recently experienced name changes resulting from continuing research. We have listed plants by their current names, with previous or other commonly used names noted. Current names are from the PLANTS Database at <http://plants.usda.gov>.

Terms and Conditions

Pricing and order payment: Pricing is based on stock on hand and is in U.S. funds; availability and price may change without notice. Volume discounts are built into our pricing structure. Prices do NOT include shipping. Non-credit customers or customers placing contract growing orders must submit a 25% deposit within 10 days of the order being placed. The balance is due in full before shipping for all non-credit customers; unpaid orders will not be shipped and we will not be held liable for deterioration of your plants while we wait for payment. We accept Visa and Master Card. Any taxes arising from the purchase, including sales tax or any other local tax, are the responsibility of the Buyer.

Minimum orders: Minimum confirmed order for nursery stock is \$100.00 minimum. Plants are sold in multiples of 50.

Cancelations: A 25% restocking charge will be billed on all canceled or reduced orders after December 1st. Cancelations or reductions of quantity ordered must be in writing. An order may not be canceled after the preparation of the order for shipping. Orders may be cancelled by Fourth Corner Nurseries due to late payments.

Substitutions: If we are unable to supply the size plants that you have requested, we reserve the right to substitute the next available size without notice, unless you have requested in writing that you do not want substitutions. You will be charged for the size grade shipped.

Shipping: All nursery stock is shipped at the Buyer's risk and expense ex-warehouse, Bellingham, WA. Bare-root orders will be shipped by the method we think best unless you have specified otherwise. Orders are typically shipped UPS, truck freight, or delivered at cost. Orders may also be picked up at our nursery; please call a few days ahead to schedule a pickup. Tree and shrub orders held for shipping after April 1st must be prepaid in full and are subject to additional storage charges. We charge for shipping materials. Packing is included in the plant cost, however, orders not meeting the \$100 minimum for confirmed nursery stock will be charged \$50 to cover sub minimum order handling charges.

Claims: We take great care to provide quality healthy nursery stock. However, we can give no guarantee, expressed or implied, as to productivity or life span. Buyers assume responsibility of the plants as soon as they receive them. Any stock received in unsatisfactory condition must be reported to us in writing within 5 working days. Plant claims will be reviewed and credit issued where justified; at no time will we be responsible for more than the purchase price. We do not guarantee plants' survivability after leaving our care.

Non-guarantee: We do our best to fulfill all committed orders completely and on time, but will not be liable for delays or shortages that are out of our reasonable control due to: frost, heat waves, disease, flood, fire, labor shortages, errors in count, transport delays, or other circumstances beyond our control.



Rich casually collecting *Amelanchier alnifolia* (Serviceberry, Juneberry) seed

Grading

We take care to grade and ship high-quality, healthy plants, true to name and count. Height grades are measured from the soil line. Transplants are mostly but not always branched and have more developed root systems than seedlings. If you require special grading regarding branching or root systems, or quantities other than our standard bundle size, please ask and we will do our best to meet your needs for a small additional charge.

Seed Sourcing at Fourth Corner Nurseries

The lion's share of our plants are propagated from source identified seed. We take great pride and care in sustainably collecting the seed that we use from genetically diverse populations, and offer multiple seed sources of the most common restoration species. Knowing that much of the restoration work in our region is being done at low elevations surrounding the Puget Sound, we strive to offer at least one seed source from low elevation Puget Trough sites whenever possible.

Available sources for each species are listed in our catalog according to the EPA Level III Ecoregion from which the seed originates, two notable exceptions being: 1) conifers will be organized by the industry's tree seed zone maps; and 2) species for which the Level III Ecoregion is unknown will be organized by state. In the absence of species specific seed zones for native plants, Level III Ecoregions show promise as an approximate delimiter between populations under differing ecological conditions. If you prefer to use alternate seed zones, we are happy to work with you to determine if our specific collection sites conform to your project guidelines. We also continue to offer contract growing options which allow for propagation of particularly collected seed.

To view a map of the EPA Level III Ecoregions in the Pacific Northwest or the conifer seed zone maps, visit our website: fourthcornernurseries.com/seed-zone-maps/

Plant Availability

Each species listing is accompanied by a graphic displaying the months when that plant is generally available (indicated by green squares). A selection of grasses, sedges and rushes are available through the winter months for a slightly higher price, indicated by an additional color. Availability is subject to change.

Custom Propagation Services

If you have a project requiring plant species not listed in this publication, plants propagated from seed provenances other than those listed, or very large quantities of plants in a particular size, we encourage you to consider using our custom propagation services. We have extensive experience producing plants to meet special contract requirements. During the past ten years we have successfully completed growing contracts for the U.S. Forest Service, Seattle City Light, Seattle Metro, and the Washington Departments of Transportation, and Fish & Wildlife. Our experienced staff is always ready to discuss your plant needs—for question about trees, shrubs, perennials, and seed contact Dylan Levy-Boyd, dylan@fourthcornernurseries.com; for questions about plugs production contact Kelly Broadlick at kelly@fourthcornernurseries.com.

Unit Price
50 100 500 1000
A unit is one plant. All pricing is for individual plants based on total quantity purchased per species. Bare root plants are available in bundles of 50 only.

TREES & SHRUBS

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

A Note About Trees & Shrubs

Our trees and shrubs are propagated from source identified wild-collected seed. All stock is field grown and shipped bare root, unless noted in the species description. In early winter, once plants are fully dormant, they are dug, graded to size, counted and bundled for shipping.

Standard graded bare root seedling size classes (measured from soil line):

- 6-12"
- 12-18"
- 18-36"
- 36"+

Seedlings are grown in a bed for 1-2 years. Transplants are grown as seedlings for a year, then dug and replanted for at least one additional growing season. Transplants generally have a larger stem caliper, and more developed root system compared to seedlings, making them a good choice for out-planting.

Standard bundles contain 50 plants each. Some species require non-standard grading, due to growth habit or size (e.g. vining plants are often sold as 3"+ and 12"+). Prior to shipping, bare root stock are packed into bags and held in cold storage, oversized stock is bunkered into sawdust.

Current Availability and Pricing is posted at www.fourthcornernurseries.com

Acer circinatum (Vine Maple)

Small deciduous tree native to Pacific Northwest forests. Red fall color, irregular growth habit with multiple stems to 25-35'. Has excellent soil binding and erosion control capabilities. Tolerates sun or shade. Closely related to Japanese maples. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.40	1.26	.84	.70						
		12-18"	1.50	1.35	.90	.75						
		18-36"	1.90	1.71	1.14	.95						
		36"+	3.80	3.42	2.28	1.90						
Transplant	plug+1	12-18"	2.90	2.61	1.74	1.45						
		18-36"	3.10	2.79	1.86	1.55						

Acer glabrum v. douglasii (Douglas Maple)

Small deciduous tree to 35'. Prefers drier sites, sun or shade. Leaves are wine-red in fall, twigs and buds red in winter. Has excellent soil binding, erosion control capabilities. Grows from British Columbia and Alberta south to California and east to Montana and Wyoming. Provenance: 02-Puget Lowland, 15-Northern Rockies

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.20	1.08	.72	.60						
		12-18"	1.30	1.17	.78	.65						
		18-36"	1.60	1.44	.96	.80						
		36"+	1.60	1.44	.96	.80						

Acer macrophyllum (Bigleaf Maple)

Grand deciduous shade tree to 100' for large open spaces. Rapid growth quickly provides shade and large woody debris for stream banks. Flowers are an early nectar source. Bright yellow fall color. Has excellent soil binding, erosion control capabilities. Native from British Columbia to California. Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.20	1.08	.72	.60						
		18-36"	1.40	1.26	.84	.70						
		36"+	1.40	1.26	.84	.70						

Alnus incana ssp. tenuifolia (Mountain Alder, Thinleaf Alder)

Native nitrogen-fixing shrub or small tree to 35', with attractive white bark. Prefers moist ground, most commonly found east of the Cascades; widespread across western North America. Provenance: 09-E.Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.50	1.35	.90	.75						
		18-36"	1.70	1.53	1.02	.85						
		36"+	1.70	1.53	1.02	.85						

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Alnus rubra (Red Alder)

Rapid-growing native deciduous tree to 80-100'. Nitrogen-fixing pioneer species on mineral soils, yellow fall color. Native from Alaska to California, Idaho, and Montana. Provenance: ALRU3-Nooksack, ALRU4-PugetSound, ALRU5-UpperChehalis, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.20	1.08	.72	.60						
		18-36"	1.40	1.26	.84	.70						
		36"+	1.40	1.26	.84	.70						
Transplant		18-36"	1.40	1.26	.84	.70						
		P-1	1.48	1.33	.88	.74						
Plug		Styro-15	1.48	1.33	.88	.74						

Alnus viridis ssp. sinuata (Sitka Alder)

Native shrub or small tree to 20-25'. Nitrogen-fixer with good ornamental or urban buffer tree potential; tolerates wide variety of soil and light conditions. Tolerates salt spray in shoreline plantings. Has excellent soil binding, erosion control capabilities. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.20	1.08	.72	.60						
		18-36"	1.40	1.26	.84	.70						
		36"+	1.40	1.26	.84	.70						

Amelanchier alnifolia (Serviceberry)

Lovely shrub from 6-20' tall on moist to dry well-drained sites. Showy white flowers, edible fruit. An important shrub for wildlife habitat. Tolerates salt spray in shoreline plantings. Has excellent soil binding, erosion control capabilities. Native across most of northern North America. Provenance: 02-Puget Lowland, 03-Willamette Valley, 09-E.Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		6-12"	1.20	1.08	.72	.60						
		12-18"	1.40	1.26	.84	.70						
		18-36"	2.00	1.80	1.20	1.00						
		36"+	2.00	1.80	1.20	1.00						
Transplant		12-18"	1.60	1.44	.96	.80						
		18-36"	2.00	1.80	1.20	1.00						

Amelanchier utahensis (Utah Serviceberry)

Forms a shrub or small tree 6-12' tall. Deciduous, blooms in May with clusters of white flowers. Purplish-black fruits stay on the shrub longer than A. alnifolia. Plants provide cover, nesting sites, and food for birds. Generally found on dry, rocky sites above 5,000' from Wyoming to Oregon and south to New Mexico and California. Provenance: UT

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		6-12"	1.20	1.08	.72	.60						
		12-18"	1.40	1.26	.84	.70						
		18-36"	2.00	1.80	1.20	1.00						

Arbutus menziesii (Pacific Madrone)

A striking broad-leaved evergreen tree with a spreading canopy, white flowers, red berries, and exfoliating cinnamon red bark that reveals lime green layers underneath. Native to the western edge of North America, this tree is most commonly found on well drained slopes. Grows to 90'. Provenance: 02-Puget Lowland
*Limited quantities available this year.
**Available by pre-order only next year. Order by November 1st for 2020 plugs.
Available in plug trays only; inquire for pricing

Aronia melanocarpa (Black Chokeberry)

Eastern North America with white flowers and dark purple fruits. Grows well in sunny or partially shady moist sites. Our seed source is not from North America. Provenance: EU

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.40	1.26	.84	.70						
		12-18"	1.60	1.44	.96	.80						
		18-36"	1.80	1.62	1.08	.90						

Note: Berberis [Mahonia] often defoliate during transplanting; once new roots are established they will quickly re-foliate.

Berberis [Mahonia] aquifolium (Tall Oregon Grape, Hollyleaved Barberry)

A Northwest native shrub with shiny evergreen foliage, yellow flowers and dusty blue berries. Berries eaten by birds and mammals, nectar by pollinators, flowers attract native bees. Prefers moist to dry well-drained soil in full sun to partial shade. Tolerates salt spray in shoreline plantings. Grows to 3-7' in height, strongly rhizomatous. Provenance: 02-Puget Lowland, 03-WillametteValley,

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	3-6"	1.30	1.17	.76	.65						
		6-12"	1.60	1.44	.96	.80						
		12-18"	1.70	1.53	1.02	.85						
		18-36"	1.70	1.53	1.02	.85						
		12"+	1.70	1.53	1.02	.85						
Transplant		12-18"	1.70	1.53	1.02	.85						

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Berberis [Mahonia] nervosa (Cascade Oregon Grape, Cascade Barberry)

Rhizomatous, evergreen shrub with yellow flowers in early spring followed by blue berries, which are eaten by birds and mammals. Grows in dry to moist well-drained soil in partial to full shade. Native from Washington to California, and northern Idaho. Provenance: 02-Puget Lowland
**Available by pre-order only. Order by August 1st for 2020 plugs.
Available in plug trays only; inquire for pricing

Berberis [Mahonia] repens (Creeping Oregon Grape, Creeping Barberry)

Evergreen groundcover for sun or part shade, yellow flowers early spring followed by blue berries eaten by birds and wildlife; 12-18" tall. Flowers attract native bees. Native from the Pacific states to the Rockies. Provenance: 15-Northern Rockies, UT

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		1-3"	1.30	1.17	.78	.65						
		3-6"	1.50	1.35	.90	.75						
		6-12"	1.60	1.44	.96	.80						

Betula occidentalis (Water Birch)

Attractive small tree or large clump-forming shrub to 30' tall with reddish-brown bark. Found along streams and in moist forests, Alaska to California, east of the Cascades. Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.30	1.17	.78	.65						
		18-36"	1.60	1.44	.96	.80						
		36"+	1.60	1.44	.96	.80						

Betula papyrifera (Paper Birch)

Widespread across northwestern North America, this native deciduous tree grows to 100'. White peeling bark in older plants and oval to round leaves with golden fall color make this an attractive ornamental or restoration species. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		12-18"	1.30	1.17	.78	.65						
		18-36"	1.60	1.44	.96	.80						
		36"+	1.60	1.44	.96	.80						

Calycanthus occidentalis (Western Sweetshrub)

Attractive California native shrub 6-12' with fragrant, deep red flowers May-August. Deer resistant, grows in sun to part shade, common in riparian habitats. Provenance: 05-Sierra Nevada

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		6-12"	1.10	.99	.66	.55						
		12-18"	1.30	1.17	.78	.65						
		18-36"	1.40	1.26	.84	.70						

Carya ovata (Shagbark Hickory)

Large deciduous tree native to the eastern US, growing to 90'. Shaggy bark peels off of straight trunk. Nuts are edible. Provenance: PA

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		3-6"	1.50	1.35	.90	.75						
		6-12"	1.60	1.44	.96	.80						

Ceanothus sanguineus (Redstem Ceanothus)

Deciduous shrub to 9' tall, with red stems and white flowers. Difficult to grow in a container. Found on gravelly soil in southern British Columbia to California, eastward to Montana. Provenance: 02-Puget Lowland, 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling		6-12"	1.30	1.17	.78	.65						
		12-18"	1.40	1.26	.84	.70						
		12"+	1.40	1.26	.84	.70						
Transplants		12-18"	1.40	1.26	.84	.70						

Ceanothus velutinus (Mountain Balm, Snowbrush)

This aromatic shrub, native to western North America, grows to 3-12' depending on conditions. An attractive, evergreen ornamental with fragrant white flowers. Prefers sunny or partially shaded conditions, drought tolerant. Nitrogen-fixing capabilities allow the species to thrive in nutrient-poor soils. Difficult to grow in a container. Important host plant and nectar source for butterflies. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.30	1.17	.78	.65						
		12-18"	1.40	1.26	.84	.70						
		18-36"	1.50	1.35	.90	.75						

TREES & SHRUBS

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Cercis canadensis (Eastern Redbud)

Pea family, multi-stemmed deciduous tree with pink blossoms. Grows 20-30'. Low maintenance, deer resistant; attracts butterflies. Eastern US, southern Ontario and central Mexico.



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.26	.84		.70				
	12-18"				1.44	.96		.80				

Celtis occidentalis (Common Hackberry)

Deciduous tree from 60-100'. Native from Utah eastward. Tolerant of alkaline soils, heat and drought.



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.10	.99		.66		.55		
	12-18"				1.20	1.08		.72		.60		

Cercocarpus ledifolius (Curl-Leaf Mountain Mahogany)

NL

Shrub or small tree to 30' with time. Evergreen foliage accents white bark; drought-deciduous in extreme conditions. Most widely distributed Mountain Mahogany, native to inland northwest, south to California, Arizona, and Baja California. Provenance: UT

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.30	1.17		.78		.65		

Cercocarpus montanus v. montanus (Alderleaf Mountain Mahogany)

NL

Shrub or small tree, growing 8-20', native to interior western states to edge of plains states. Attractive semi-evergreen leaves, does well in cold, dry sites. Provenance: CO

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.30	1.17		.78		.65		

Clematis ligusticifolia (Western White Clematis)

Climbing vine native east of the Cascades and throughout the western United States with small white flowers and puffy white seed heads. Used for erosion control in intermittent stream areas of the arid west as it tolerates moisture as well as drought. Provenance: 10-Columbia Plateau



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6"+				1.20	1.08		.72		.60		

Cornus alternifolia (Alternateleaf dogwood)

NL

Eastern US native large shrub to 25 feet tall common in forest understories. Also known as Pagoda dogwood for its horizontal branching and flat-topped crown. White flowers in mid-may and fruit eaten by birds, fall foliage is maroonish. Provenance: LA

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.40	1.26		.84		.70		
	12-18"				1.50	1.35		.90		.75		

Cornus mas (Cornelian Cherry Dogwood)

NL

Used as a specimen shrub, hedge or trained into a small tree this Eurasian native is prized for its ornamental qualities. Clusters of yellow flowers bloom before leaves emerge. Fruits are edible, though can be sour. Provenance: EU

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production, inquire about availability



Rich going to great heights after the always elusive *Salix scouleriana* (Scouler's willow)

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Cornus stolonifera [sericea] (Redtwig Dogwood, Red Osier Dogwood)

Thicket-forming native shrub with dark red stems, white flower clusters, white berries. Great wildlife and erosion-control plant. Grows to 10-14' tall, often used as an ornamental. Native across most of North America. Our Puget Lowland strain is disease resistant here. Provenance: 02-Puget Lowland, 03-Willamette Valley, 09-E. Cascade Slope/Foothills



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	12-18"				1.10	.99		.66		.55		
	18-36"				1.20	1.08		.73		.60		
	36"+				1.20	1.08		.73		.60		

Corylus cornuta v. californica (Beaked Hazelnut)

Small tree or multistem shrub to 25' tall in sun or shade. Excellent wildlife plant; nuts are food for birds and squirrels. Coppices quickly after disturbance. Native from British Columbia south through the coastal states to California. Provenance: 02-Puget Lowland, 09-E. Cascade Slope/Foothills, 77-North Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				3.00	2.70		1.80		1.50		
	12-18"				3.00	2.70		1.80		1.50		
	18-36"				3.00	2.70		1.80		1.50		
Transplant												
	12-18"				3.00	2.70		1.80		1.50		
	18"+				3.00	2.70		1.80		1.50		

Crataegus douglasii (Douglas Hawthorn, Black Hawthorn)

Shrubby tree to 30' tall with large thorns, white flowers in early spring, and black fruit. Excellent wildlife plant; flowers attract butterflies and fruit attracts birds. Commonly found along streams throughout most of northern North America. Provenance: 02-Puget Lowland, 03-Willamette Valley, 05-Sierra Nevada, 09-E. Cascade Slope/Foothills 10-Columbia Plateau



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.20	1.08		.72		.60		
	12-18"				1.30	1.17		.78		.65		
	18-36"				1.40	1.26		.84		.70		
Transplants												
	12+				1.40	1.26		.84		.70		

Dasiphora fruticosa (Shrubby Cinquefoil)

Small shrub to 3-4', with yellow flowers, drought tolerant. Ours is seed grown native, not a cultivar. Native from the western states and across the northern tier of the continent. Provenance: 77-North Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
Transplant												
	12"+				1.50	1.35		.90		.75		

Elaeagnus communtata (Silverberry)

Rhizomatous deciduous shrub to 5-10' tall with silvery foliage and fragrant flowers. Native to the Rocky Mountain region from the Yukon to Utah. Nitrogen-fixing and drought tolerant, this shrub is often used in reclamation sites or hedgerows and windbreaks where a shorter stature is desirable. Provenance: ND



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.20	1.08		.72		.60		
	12-18"				1.40	1.26		.84		.70		

Frangula [Rhamnus] purshiana (Cascara Buckthorn)

Small tree with glossy green deciduous leaves, reaching 40'. Excellent ornamental potential. Prefers moist soils in full sun to partial shade. Birds like the black fruit, and beavers rarely bother this tree in stream bank plantings. Grows from British Columbia south to California, east through Idaho and Montana. Provenance: 02-Puget Lowland, 03-Willamette Valley



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.20	1.08		.72		.60		
	12-18"				1.30	1.17		.78		.65		
	18-36"				1.60	1.44		.96		.80		
Transplant												
	12"+				1.60	1.44		.96		.80		

Fraxinus latifolia (Oregon Ash)

Northwest native deciduous tree to 60'. A true wetland tree with bright green, pinnately compound leaves. Wildlife enjoy seeds. British Columbia south through California, primarily west of Cascade Range. Provenance: 02-Puget Lowland, 03-Willamette Valley



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	1-0				6-12"	1.20	1.08	.72		.60		
	2-0				12-18"	1.40	1.26	.84		.70		
					18-36"	1.50	1.35	.90		.75		
					36"+	1.50	1.35	.90		.75		
Transplant												
					18-36"	1.60	1.44	.96		.80		

Gaultheria shallon (Salal)

Broad-leaved evergreen shrub native to the western coast states. Bears teardrop white flowers and edible, blueberry-like fruit. Prefers at least partial shade, grows to 4'.



Provenance: 02-Puget Lowland

*Limited quantities available this year.

**Available by pre-order only next year. Order by January 1st for 2020 plugs.

Available in plug trays only; inquire for pricing

Hamamelis virginiana (American Witchhazel)

Fall-blooming, deciduous shrub or small tree, Grows to 15' with equal spread. Prefers moist soils. Native to eastern North America. Often used as rootstock.



Provenance: PA

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.60	1.44		.96		.80		

Holodiscus discolor (Ocean Spray)

Deciduous shrub to 8-15', with creamy white flowers in long clusters, orange fall color. Provides nectar for pollinators, larval food for many butterfly species, and seeds for birds. One of our most beneficial native shrubs for landscape use. Prefers partial shade to full sun and well-drained soil. Tolerates salt spray in shoreline plantings. Native from British Columbia south to California and Arizona, east to Montana.



Provenance: 02-Puget Lowland, 03-Willamette Valley, 09-ECascadeSlope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	1-0				6-12"	1.40	1.26	.84		.70		
					12-18"	1.50	1.35	.90		.75		
	2-0				18-36"	1.60	1.44	.96		.80		

Lonicera hispidula (Pink Honeysuckle)

West Coast native trailing, deciduous vine with pink flowers and red fruits. Grows to 6', sun to shade, drought tolerant. Hummingbirds like the flowers, other birds the red berries. Can climb, or use as groundcover.



Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6"+				1.40	1.26		.84		.70		

Lonicera involucrata (Black Twinberry, Twinberry Honeysuckle)

Deciduous shrub 6-14' in height. Yellow flowers and purplish-black fruit are great for wildlife. This shrub is fast growing and provides excellent erosion control. Prefers moist, open to partially shaded sites. Tolerates salt spray in shoreline plantings. Grows throughout the western states and across Canada. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
	6-12"				1.20	1.08		.72		.60		
	12-18"				1.30	1.17		.78		.65		
	18-36"				1.40	1.26		.84		.70		

TREES & SHRUBS

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Morella pensylvanica (Northern Barberry) NL

Attractive evergreen shrub to 10-30' tall, with glossy aromatic leaves. Prefers sunny, medium to dry conditions. Tolerates salt spray in shoreline plantings. Wax used in making candles.

Provenance: OH

Available	J	F	M	A	M	J	J	A	S	O	N	D

In production; inquire for availability

Myrica gale (Sweet Gale) OBL

Deciduous shrub 3-4' tall. Found along margins of bogs, estuaries, and lakes across northern North America; leaves emit sweet scent when rubbed.

Coppices quickly after disturbance, waxy fruits eaten by birds in winter. Tolerates salt spray in shoreline plantings.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.60	1.44	.96	.80
	12-18"	1.70	1.53	1.02	.85
Transplants	12"+	1.80	1.62	1.26	.90

Oemleria cerasiformis (Indian Plum, Osoberry) FACU

Our earliest native spring bloomer, reaching 12-18' with white flowers and purple fruit. Male and female flowers on separate plants. A bird favorite. This is one of our most attractive and beneficial native shrubs for landscape use. Coppices quickly after disturbance, best in moist rich soil, sun to partial shade. Grows west of the Cascades and Sierras, from British Columbia to California.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	1-0	6-12"	1.20	1.08	.72	.60
		12-18"	1.30	1.17	.78	.65
	2-0	18-36"	1.50	1.35	.90	.75
		36"+	1.50	1.35	.90	.75
Transplant		18-36"	1.60	1.44	.96	.80

Philadelphus lewisii (Mock Orange) NL

An attractive, hardy native with fragrant, white flowers; attracts butterflies. Prefers a sunny well-drained site. Grows to 8-12' tall from British Columbia and Alberta south to California, Idaho, and Montana.

Provenance: 02-Puget Lowland, 03-Willamette Valley, 10-Columbia Plateau, 15-Northern Rockies

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.20	1.08	.72	.60
	12-18"	1.30	1.17	.78	.65
	18-36"	1.40	1.26	.84	.70

Physocarpus capitatus (Pacific Ninebark) FACW

Tall shrub with attractive leaves and beautiful creamy-white pom-pom flower clusters in spring. Benefits wildlife with cover, nesting sites, and food. Fibrous roots have excellent soil binding qualities. Prefers moist ground in sun to partial shade; 15-18'. Grows from Alaska south to California, and in Idaho.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	1-0	6-12"	1.20	1.08	.72	.60
		12-18"	1.30	1.17	.78	.65
	2-0	18-36"	1.40	1.26	.84	.70
Transplants		18-36"	1.40	1.26	.84	.70

Populus balsamifera ssp. trichocarpa (Black Cottonwood) FAC

Western North American deciduous tree. Fast growing to 120'. Likes deep moist soils and full sun.

Provenance: 03-Willamette Valley, POTR2-PugetSound, POTR7-Yakima

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	12-18"	1.00	.90	.60	.50
	18-36"	1.10	.99	.66	.55
	36"+	1.10	.99	.66	.55

Populus tremuloides (Quaking Aspen) FACU

North American native tree to 90'. White bark and heart-shaped "quaking" leaves make it nice as a small grove. Spreads by rhizomes.

Provenance: 15-Northern Rockies

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	12-18"	1.60	1.44	.96	.80
	18-36"	1.80	1.62	1.08	.90
	36"+	1.80	1.62	1.08	.90

Prunus pumila v. besseyi (Western Sandcherry) NL

Deciduous, suckering shrub 4-6' tall and wide. White flowers in spring, cherry-like, edible dark purple fruit in summer. Leathery grey-green leaves turn red and purple in autumn. Native to Oregon, Utah, and the Rockies east through the Midwest.

Provenance: NE

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.30	1.17	.78	.65
	12-18"	1.50	1.35	.90	.75
	18-36"	1.80	1.62	1.08	.90

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Prunus emarginata (Bitter Cherry) FACU

Western North American shrub or small tree, reaching 45' in height. Common in moist forests, along streams, and in open areas. Bright red fruit is wildlife food.

Provenance: 02-Puget Lowland, 09-E.Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.30	1.17	.78	.65
	12-18"	1.50	1.35	.90	.75
	18-36"	1.80	1.62	1.08	.90
	36"+	1.80	1.62	1.08	.90

Prunus virginiana v. melanocarpa (Black Chokecherry) FACU

Shrub or small tree to 20'; native to western North America. Black fruits are favored by birds. Commonly found in moist sites east of the Cascades.

Provenance: 03-Willamette Valley, 15-Northern Rockies

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.10	.99	.66	.55
	12-18"	1.20	1.08	.72	.60
Transplants	12"+	1.20	1.08	.72	.60

Purshia tridentata (Antelope Bitterbrush) NL

Semi-evergreen shrub with gray leaves that grows 4-5' tall and has cream colored flowers. Grows in the desert in eastern Washington and from British Columbia to California, east to Montana, Colorado, and New Mexico.

Provenance: CA

Available	J	F	M	A	M	J	J	A	S	O	N	D

In production; inquire for availability

Quercus garryana (Garry Oak, Oregon White Oak) FACU

Our coastal oak, native from British Columbia to California. A broad, gnarled deciduous tree to 80' tall. Acorns are wildlife food. Prefers good drainage.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	2-0	6-12"	1.50	1.35	.90	.75
		12-18"	1.60	1.44	.96	.80
		18-36"	1.80	1.62	1.08	.90

Rhamnus purshiana (Cascara Buckthorn) please see Frangula purshiana

Rhododendron macrophyllum (Pacific Rhododendron) FACU

This broad-leaved evergreen shrub, with large clusters of showy pink flowers, is the state flower of Washington. Inhabits dry, open forests and edges. Prefers some shade, grows to 24'.

Provenance: 02-Puget Lowland

*Limited quantities available this year.

**Available by pre-order only next year. Order by January 1st for 2020 plugs.

Available in plug trays only; inquire for pricing

Rhus glabra (Smooth Sumac) NL

North American native rhizomatous shrub to 15' tall, prefers sun and well-drained soil. Bright orange-red fall color, red berries are good wildlife food. Will spread to form a thicket, control erosion.

Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.00	.90	.60	.50
	12-18"	1.10	.99	.66	.55
	18-36"	1.20	1.08	.72	.60

Rhus trilobata (Skunkbrush Sumac) NL

Western native drought tolerant shrub to 6' tall. Small flower clusters lead to fuzzy orange fruits.

Provenance: CO, UT

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.40	1.26	.84	.70
	12-18"	1.60	1.44	.96	.80



Rich seeding plants in our field

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Ribes aureum (Golden Currant) FAC

Attractive deciduous shrub to 9' tall, with fragrant yellow flowers and fruit that attracts birds. Found east of the Cascades in moist to dry sites, and across much of the United States.

Provenance: 10-Columbia Plateau, 13-Central Basin & Range

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.30	1.17	.78	.65
	12-18"	1.50	1.35	.90	.75
	18-36"	1.70	1.53	1.02	.85
Transplant	12"+	1.70	1.53	1.02	.85

Ribes bracteosum (Stink Currant) FAC

Sun or shade loving shrub, 4-8', of stream banks and wet places. Broad maple-like leaves with pungent but not unpleasant odor. Long clusters of white and greenish-yellow flowers in May and June followed by dusty blue-black berries, which are eaten by birds and small mammals. Native from coastal southeast Alaska southward to the northwest coast of California. Grows on both sides of the Cascades in Washington.

Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	2-0	6-12"	1.50	1.35	.90	.75
		12-18"	1.70	1.53	1.02	.85
Transplant		12"+	1.80	1.62	1.08	.90

Ribes cereum (Wax Currant) NL

Native deciduous shrub to 6' tall, with white to light pink flowers and red fruit. Found east of the Cascades in dry sunny locations. Also grows across much of the western United States and into British Columbia.

Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.30	1.17	.78	.65
	12-18"	1.50	1.35	.90	.75
	18-36"	1.70	1.53	1.02	.85

Ribes divaricatum (Black Gooseberry, Spreading Gooseberry) FAC

Heavily thorned small shrub from moist to wet habitats west of the mountains, Washington to California. Black fruit is wildlife food. Good for hedgerow, wildlife, and barrier plantings.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D

Seedling	6-12"	1.30	1.17	.78	.65
	12-18"	1.50	1.35	.90	.75
	18-36"	1.70	1.53	1.02	.85

Ribes lacustre (Swamp Gooseberry, Prickly Currant) FAC

North American prickly shrub 2-4' tall, with pale red flowers and black fruit. Prefers moist to wet sites in partial shade.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D

TREES & SHRUBS

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Rosa pisocarpa (Peafruit Rose, Cluster Rose)

Western rose native from British Columbia to northern California with clusters of pink flowers and small, pear-shaped red hips. Rhizomatous, grows 6-8'; likes moist habitats, full sun to part shade. Good for erosion control, wildlife, and barrier plantings. Can handle some drought.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.10	.99	.66	.55						
		12-18"	1.20	1.08	.72	.60						
	2-0	18-36"	1.30	1.17	.78	.65						

Rosa rugosa (Rugosa Rose) Non-native

Introduced shrubby rose with pink or white fragrant flowers and large red hips. Good for urban plantings. Full sun to light shade.

Provenance: EU

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.20	1.08	.72	.60						
		12-18"	1.30	1.17	.78	.65						
		18-36"	1.50	1.35	.90	.75						
		36"+	1.50	1.35	.90	.75						

Rosa woodsii (Woods' Rose)

Rhizomatous, thicket-forming rose with fragrant pink flowers, June-August, and clusters of red hips. Native across Canada, and east of the Cascades south through the Sierras in California, and eastward to the Dakotas, Nebraska, and Minnesota. Grows in wide variety of habitats, as a pioneer plant on disturbed sites, to open bluffs and meadows, and even as understory in open forests.

Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.20	1.08	.72	.60						
		12-18"	1.30	1.17	.78	.65						
	2-0	18-36"	1.40	1.26	.84	.70						
		36"+	1.40	1.26	.84	.70						

Rubus leucodermis (Blackcap Raspberry, Whitebark Raspberry)

Western North American prickly shrub to 5' tall, with tasty black fruit. Not rhizomatous, but arching branches will root at the tip to form new clumps. Tolerates dry rocky soils, partial shade.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	3-6"	1.20	1.08	.72	.60							
	6-12"	1.40	1.26	.84	.70							
	12"+	1.50	1.35	.90	.75							

Rubus parviflorus (Thimbleberry)

Vigorous shrub to 5-8'; rhizomatous, with good soil binding properties. A common plant with showy white flowers and edible red fruit, beneficial for wildlife. Tolerates salt spray in shoreline plantings. Prefers moist to dry soil in sun or partial shade. Native across western North America, and from the Great Lakes to Hudson Bay.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	6-12"	1.30	1.17	.78	.65							
	12-18"	1.40	1.26	.84	.70							
	18-36"	1.50	1.35	.90	.75							

Rubus spectabilis (Salmonberry)

Native to the west coast of North America, this shrub grows 6-10', with reddish-purple flowers and edible fruit. Flowers are an important early nectar source. Rhizomatous and thicket-forming in moist to wet conditions.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	1-0	6-12"	1.10	.99	.66	.55						
		12-18"	1.20	1.08	.72	.60						
		18-36"	1.30	1.17	.78	.65						
		36"+	1.30	1.17	.78	.65						
Transplant	12"+	1.30	1.17	.78	.65							

Rubus ursinus (Pacific Blackberry)

Our only native blackberry—a prickly vine, with long trailing stems rooting at the tip, white flowers, and tasty black berries. Common along the coast and in lowland clearings, from British Columbia to California, Idaho and Montana. Tolerates salt spray in shoreline and bluff plantings. Good for erosion control.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	3-12"	1.30	1.17	.78	.65							
	12"+	1.40	1.26	.84	.70							

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Salix amygdaloides (Peachleaf Willow)

A medium sized multi-trunked tree reaching 50'. Native from the east slope Cascades across the northern plains to New York. Important for controlling erosion along streambanks.

Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
In production, inquire about availability												

Salix bebbiana (Bebb Willow)

Common willow in wet to dry sites. Shrubby, to 12' tall. Native from the Cascades to the Rockies, and across the northern states to New England.

Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							

Salix exigua (Narrowleaf Willow, Sandbar Willow)

Western North American native willow commonly found on sandy steambanks and lakeshores. In Washington, only present east of the Cascades. Quick to form thickets and stabilize steambanks, can be aggressive under some conditions. Grows to 20'.

Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							

Salix geyeriana (Geyer Willow)

Western North American native willow to 15' tall for wet habitats. Provides food for small birds and mammals, which eat buds, shoots, leaves, and catkins.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							

Salix hookeriana (Hooker Willow, Dune Willow)

A coastal wet habitat willow with cottony leaves and stems. Has a shrubby growth form reaching 20' tall, and produces a good spring bloom.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.10	.99	.66	.55							
	36"+	1.10	.99	.66	.55							
Transplants	18-36"	1.10	.99	.66	.55							

Salix lucida ssp. lasiandra (Pacific Willow)

Shrubby tree to 40-60' tall with elongated leaves, and yellow-green bark. Excellent soil binding and wildlife enhancing properties. Likes wet habitats. Grows across North America.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.10	.99	.66	.55							
	36"+	1.10	.99	.66	.55							
Transplants	18-36"	1.10	.99	.66	.55							

Salix piperi (Hooker Willow, Dune Willow) please see Salix hookeriana



Learning the Haard-way: collecting pounds of fireweed seed is not an easy job

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Salix prolixia (MacKenzie's Willow)

Shrubby willow to 25'; common along rivers and creeks in western North America from the lowlands up into the mountains. Blooms early spring, food source for early pollinators, roots help prevent erosion.

Provenance: 02-Puget Lowland, 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							

Salix rigida (MacKenzie's Willow) please see Salix prolixia

Salix scouleriana (Scouler's Willow)

Fast-growing, multi-stemmed tree common on the coast and inland in moist to dry conditions in gravelly soils, full sun to partial shade. Drought and salt spray tolerant. Grows 30-50' tall. Has excellent soil binding, erosion control capabilities. Rapidly colonizes burned areas. Early spring bloom feeds pollinators.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							
Transplant	18"-36"	1.20	1.08	.72	.60							

Salix sessilifolia (Northwest Sandbar Willow)

Native streambank willow with strong running roots. Excellent erosion control qualities. Grows to about 25' tall.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.20	1.08	.72	.60							
	36"+	1.20	1.08	.72	.60							

Salix sitchensis (Sitka Willow)

Our most common shrubby willow, coast to mountains. Tolerates wide range of soil and moisture conditions in full sun to partial shade. Excellent erosion control qualities. Grows 3-24'.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	12-18"	1.00	.90	.60	.50							
	18-36"	1.10	.99	.66	.55							
	36"+	1.10	.99	.66	.55							
Transplants	18-36"	1.10	.99	.66	.55							

Willows for Restoration

All of our bare root willows are propagated directly from seed collected yearly from wild populations. The ecological advantages of this approach (vs. stock derived purely from hardwood cuttings) are: 1) enhanced genetic variability bestowed by sexual recombination, and 2) automatic inclusion of both males and females—ensuring that the new planting will be self-sustaining.

Willows can be variable in their morphology. We identify our stock carefully, but our *Salix lucida* ssp. *lasiandra*, for example, may look somewhat different than the plants in your area due to natural variation within the species.

Sambucus caerulea (Blue Elderberry) please see Sambucus nigra ssp. caerulea

Sambucus nigra ssp. caerulea (Blue Elderberry)

Northwest native shrub 15-20' tall, with showy white flower clusters that attract butterflies and hummingbirds. Blue fruit is wildlife food and can be made into jellies and wines. Prefers moist to dry soils in sun to partial shade. Fast-growing once established, provides some erosion control.

Provenance: 02-Puget Lowland, 03-Willamette Valley, 09-E. Cascade Slope/Foothills, 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling	crown	1.10	.99	.66	.55							
	small	1.20	1.08	.72	.60							
	large	1.70	1.53	1.02	.85							

Sambucus racemosa (Red Elderberry)

One of the best shrubs for wildlife. A dense, pyramidal shrub with clusters of creamy-white flowers that attract butterflies and hummingbirds. Red fruit is loved by many bird species. Vigorous, to 20'. Tolerates salt spray in shoreline plantings, provides some erosion

TREES & SHRUBS

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Shepherdia argentea (Silver Buffaloberry)

Deciduous shrub with both silvery-gray bark and foliage growing to 20'. Native from the intermountain west to the western plains states. Dioicous (separate males and females), with thorns. Tolerates poor, alkaline soils and very hardy. Provenance: 15-Northern Rockies



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												

Shepherdia canadensis (Russett Buffaloberry, Soapberry)

Nitrogen-fixing deciduous shrub to 15' tall with russet leaves and stems, tiny yellow flowers and red berries eaten by birds. Male and female flowers on separate plants. Prefers well-drained sites in sun or partial shade. Coastal strain is relatively fast-growing, tolerates salt spray. Interior strain is very slow-growing. Provenance: 15-Northern Rockies



Available	J	F	M	A	M	J	J	A	S	O	N	D

In production inquire about availability

Sorbus scopulina (Greene's Mountain Ash)

Western North American shrub to 12' tall, with white flower clusters May-July, and orange-red fruit in September. The fruit persists through the winter, and is an important food source for birds. Prefers sun and medium-moist conditions. Grows from the foothills to the subalpine. Lovely in bloom, and spectacular in autumn with foliage in shades of orange to maroon, and colorful fruit. Provenance: 04-Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
Transplant												

Sorbus sitchensis (Sitka Mountain Ash)

Small shrub 3-12', with leaves divided into 7-11 leaflets. Grows from mid elevations to subalpine in the mountains of the Pacific Northwest. White flowers in late spring, berry clusters ripen to red, hang on after the leaves have fallen in autumn. Autumn leaf color vibrant orange to red. Berries are an important food source for migrating birds. Provenance: 77-North Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												

Spiraea densiflora var. splendens (Subalpine Spirea) NL

Low shrub to 3' tall with pink flowers. Likes moist conditions in sun or partial shade. Native to the mountains in western North America. Provenance: 04-Cascades, 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
Transplant												

Spiraea douglasii (Hardhack Spirea)

Deciduous shrub native to western North America, grows 6-12' tall with showy pink flowers. Prefers wet habitats, sea level to subalpine, spreading vigorously by rhizomes. Competes favorably with reed canary grass. Tolerates salt spray in shoreline plantings. Provenance: 02-Puget Lowland, 03-Willamette Valley



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
Transplant												

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Spiraea lucida [betulifolia] (Shinyleaf Spirea)

Low native shrub 2-3' with beautiful ornamental qualities, soft green foliage and white flower clusters in early summer. Dry, sunny to partially shaded conditions. Drought tolerant. Provenance: 77-North Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
Transplants												

Symphoricarpos albus (Common Snowberry)

Common deciduous shrub to 4-7' tall with persistent white fruit, which is an important winter food source for birds. Spreading by rhizomes, this shrub provides excellent erosion control and is tolerant of a wide range of conditions from wet to dry, full sun to mostly shady. Tolerates salt spray in shoreline plantings. Native across most of North America. Provenance: 02-Puget Lowland, 03-Willamette Valley, 10-Columbia Plateau, 15-Northern Rockies



Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												
Transplant												

Symphoricarpos hesperius (Trailing Snowberry) NL

Prostrate shrub with light pink flowers and white berries. Native in Pacific coast states and Idaho woodlands. Provenance: 04-Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Transplant												

Symphoricarpos mollis please see Symphoricarpos hesperius

Symphoricarpos occidentalis (Western Snowberry)

Deciduous shrub found in moist places east of the Cascades. Small white berries often cling through winter to provide food for wildlife. Native east of the Cascades in Washington, southern British Columbia to Utah and east to the Atlantic coast. Provenance: ND



Available	J	F	M	A	M	J	J	A	S	O	N	D

In production, inquire about availability

Symphoricarpos orbiculatus (Coralberry)

Deciduous, dense shrub with arching stems, pinkish-white flowers June-July, and showy clusters of coral-red berries in the fall. Berries persist through winter, attracting birds. Grows 2-5' tall, full to part sun, well-drained soil, although it tolerates a wide range of soil types. Spreads by runners. Native from the Great Plains eastward to the central Atlantic coast, with scattered populations in Utah. Provenance: PA



Available	J	F	M	A	M	J	J	A	S	O	N	D

In production, inquire about availability

UNIT PRICE
GRADE SIZE 50 100+ 500+ 1000+

Symphoricarpos oreophilus v. utahensis (Utah Snowberry) NL

Deciduous shrub reaching 5' in height, with pink flowers June-August, and white fruits. Found in open sites generally between the Cascade and Sierra mountain ranges and the Rocky Mountains, with some spillover in eastern Montana. Grows from the foothills to high elevations, tolerates light shade, some drought. Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												

Vaccinium membranaceum (Black Huckleberry)

Choice berries are sought after for baking, preserving, and trailside snacking across the western United States. Fruit is shiny and black when ripe. Deciduous shrub, grows to 6'. Provenance: 04-Cascades
*Limited quantities available this year.
**Available by pre-order only next year. Order by November 1st for 2020 plugs.
Available in plug trays only; inquire for pricing



Vaccinium ovatum (Evergreen Huckleberry)

West coast evergreen shrub, densely bushy to 6-8' tall, light pink flowers and purplish-black berries. Most common in semi-open woods, in soils high in organic matter. A lovely shrub for ornamental plantings. Has excellent soil binding, erosion control capabilities, tolerant of salt spray. Cloned from selected western Washington lowland plants. Available in containers only. Provenance: WA



Available	J	F	M	A	M	J	J	A	S	O	N	D
2" pots												

Vaccinium parvifolium (Red Huckleberry)

Deciduous huckleberry found in the shaded understory of western forests. Prefers moist soil with plenty of organic matter, fruits better with more sunshine. Cloned from selected northwestern Washington lowland plants. Available in containers only. Provenance: WA



Available	J	F	M	A	M	J	J	A	S	O	N	D
2" pots												

Viburnum ellipticum (Oval Leaved Viburnum, Common Viburnum) NL

Northwest native deciduous shrub to 12' tall, with white flowers, black fruit, and reddish fall color. Found in dry, open woodlands in southern Washington to northern California, but can tolerate moist sites with dappled shade. Drought tolerant, good restoration plant for dry sites. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Seedling												

Viburnum opulus v. americanum (American Cranberry Bush)

Native across Canada and northern tier of United States in moist to swampy habitats. Shrubby growth to 8-12' tall and wide with white lacecap flowers in late spring, drooping clusters of cranberry-like fruits in the fall. Plants attract birds and butterflies. Provenance: PA



Available	J	F	M	A	M	J	J	A	S	O	N	D

In production, inquire about availability



North Cascades Audubon Society

promoting conservation of birds and other wildlife in Whatcom County

Field Trips
See our calendar online for dates & times

Monthly Programs: September-May
4th Tuesday at 7 pm, 121 Prospect Street

www.northcascadesaudubon.org







Native Plants & Birds
The best home for a bird is a native plant. Discover easy ways to support birds in your backyard!

<http://www.northcascadesaudubon.org/conservation/native-plants-birds/>



Only landlubbers collect *Physocarpus capitatus* (Pacific nine-bark) on land. Rich loves picking from a boat.



Marsh moth attack. Fifty acres of bulrush died, each with a small dark hole near the stem base, showing where moth larvae had begun to hollow out the stem.

2015 so my first thought was salt. You might recall that in 2015 precipitation quantities weren't too abnormal, but the warm winter meant it mostly came as rain, not snow. Without much snowpack, flows in Puget Sound rivers began dropping below normal as early as March, and by summer were at record lows. In July, the Stillaguamish river, whose estuary hosted the dead marsh, was running at 15-20% of its long-term median. July being the heart of the tidal wetland growing season, a massive drop in freshwater input means the salty tide can push higher up the system. Indeed, we measured soil salinities that were two to three times higher than normal across the entire estuary, and plant productivity declines of 35-40% in most places (Fuller 2018). For *B. maritimus* there was also generally a failure to flower and set seed. Interestingly, the extreme 2015 flows were not much worse than what is projected to be common sometime around 2050 (Mauger et. al. 2015).

But that wasn't the only likely source of stress. At this site, restoration had happened three years earlier, restoring normal tidal flow to the wetland which had once been diked and farmed. We had expected, and observed, some marsh decline because part of the meadow was at a lower elevation pre-restoration than it would normally occur under natural tidal flooding. But the big 2015 die-back was a big surprise and got us thinking about stress. Several indicators suggested that soil physical and chemical conditions post-restoration may have led to unusually high levels of soil saturation that could have triggered chemical stresses like redox potential, with implications for oxygen availability, toxic hydrogen sulfide, and other biogeochemical cycles like N and Fe (Fuller 2017). Alas, we weren't monitoring the indicators that would have documented sources of stress, because stress wasn't something contemplated in our monitoring plan.

In 2017, I observed another, smaller dieback of less than 10 acres of bulrush, also caused by the hungry little moth. The river was running relatively high that spring, so salinity wasn't an issue. Indeed, the freshwater-loving cattails, particularly the non-native narrow-leaved cattail (*Typha angustifolia*) had exploded in the same area and were tall and lush. So why the dead bulrush? The absence of obvious stressors pushed me to contemplate competition, and the rapidly expanding and robust non-native cattail. A quick lit search found a conveniently specific greenhouse study testing the allelopathic effects of narrow-leaved cattail on river bulrush (Jarchow and Cook 2009). When both were grown together (as seacoast and river bulrush were growing with the cattail in the dieback wetland), the cattail had a substantial allelopathic effect on bulrush, but when activated carbon was added to the soil to absorb the cattail's phenolics, the bulrush was able to curtail cattail growth by competing effectively for resources. Native cattails (*T. latifolia*) also produce phenolics, but different ones to which its native marsh neighbors appear to have adapted.

So, perhaps the 2017 moth-triggered bulrush dieback was facilitated by soil chemical stress induced by the very rapid expansion of the non-native and allelopathic narrow-leaved cattail. Yet another ex-

ample of interesting ecological shenanigans that I wasn't prepared to monitor.

Plants are part of broad, diverse communities of organisms that include not just other plants, herbivores, and other animals, but a particularly wide spectrum of fungal and bacterial microbes. Ecology in the U.S. has a long history of examining the individual organism as an independent player, succeeding or failing based on its own aptitudes...a sort of "rugged individualist" scientific philosophy that undoubtedly stems from the same cultural and economic philosophy that came to dominate U.S. society as it pushed west across the continent. Since the 1980's, research began to really unravel the remarkably complex, and frequently microscopic interactions of ecosystems, revealing for example the importance of endophytic and epiphytic microbial communities to the health, productivity, and life of individual plants. The success of an individual seems to have a great deal to do with its biotic partnerships.

For example, Rusty Rodriguez found that our beloved native dunegrass (*Leymus mollis*) can grow in coastal wetlands and dunes because it hosts an endophytic fungal partner that imparts salt tolerance (Rodriguez et. al. 2008), i.e. it reduces salt stress so much that dunegrass can grow and indeed thrive where most plants succumb to stress. (As a fascinating aside, the fungal partnership is passed maternally, with the seed coat being "infected" with the appropriate fungus.) Dunegrass that grows in habitats that lack salt, don't host that particular fungal partnership.

One way in which long-lived and relatively slow-evolving trees can keep up an effective chemical defense against short-lived and rapidly-evolving fungal pathogens and insect herbivores is to team up with just-as-rapidly-evolving fungal symbionts. Our native Douglas fir hosts a tiny fungi called *Rhizoctonia parkeri* within its leaves which appears to produce a toxin in response to insect herbivory that protects the tree (Carroll 1988). Another interesting study of tropical trees found important relationships between the bacteria in the phyllosphere (the leaf realm) and individual tree fitness traits like height, diameter, growth rate, longevity, wood density, leaf mass, and leaf N and P content (Kembel et. al. 2014). Differences like that at the individual scale obviously will affect ecosystem-scale processes and services provided to humans.

Study after study have shown that the rate of growth and the health of individual organisms depends in large part on the ecological relationships that individuals form, particularly with their internal and external microbiome. One of the most well-known examples in the plant world is the importance of mycorrhizal relationships. Since our own internal and external microbiome has been shown to be so critical to our own health, it should hardly come as a surprise that the same holds true for other organisms. And yet, this is a hot bed of research and discovery right now.

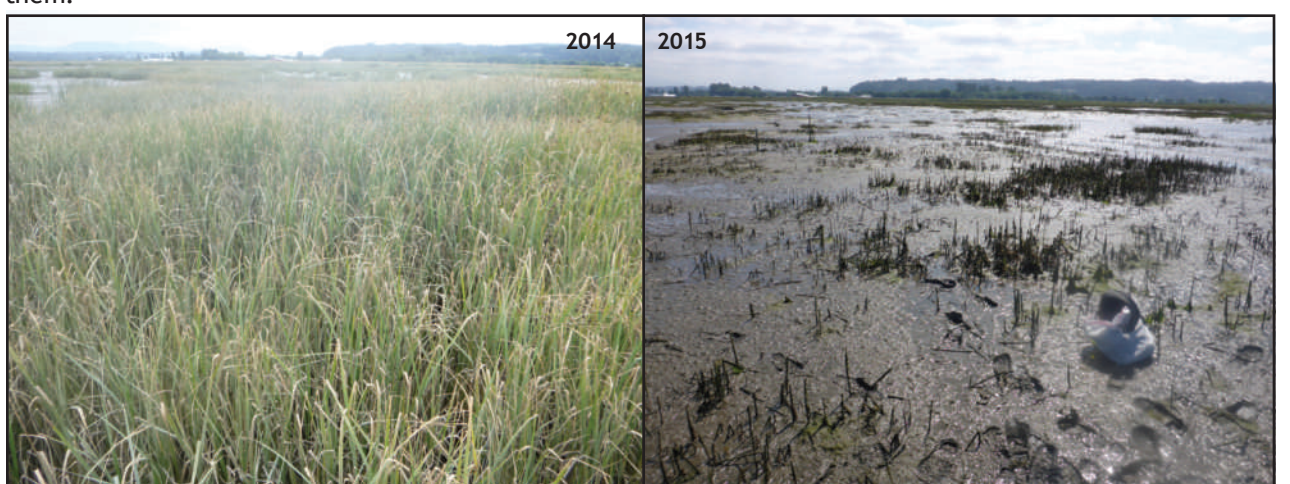
Research is also beginning to examine the question of what happens when high stress levels hit organisms and their microbiome. For example, the effect of stress on the foundational plant of Gulf Coast tidal marshes, smooth cordgrass (*Spartina alternifolia*), found that plants stressed by the Deepwater Horizon oil spill experienced disassociation of the leaf and root fungal endophytes that healthy plants host (Kandalepas et. al. 2015). This brings to mind the well-documented phenomenon of coral bleaching in response to heat stress. When under severe stress, some organisms seem to lose many of the key microbial partnerships that sustain and protect them.

Which brings us back to contemplating the possible effects of climate change in ecosystems. We understand the basic impacts of climate change quite well because they follow fairly simple physical and biological rules: temperature rises, and that affects local precipitation as well as ecosystem water dynamics (things like runoff and evapotranspiration). But I think the timing of impacts and the real surprises of climate change will manifest as a result of the myriad indirect impacts on biotic interactions. By tweaking the dials on temperature and water dynamics, all manner of known and unknown ecological interactions are tweaked in different and sometimes contrasting or unpredictable ways, with the potential to result in apparently rapid and substantial ecological change. We saw 50 acres of tidal marsh disappear in 2015, a year of low summer river flow and extremely high soil salinity. But it wasn't the low snowpack that killed the plants, it was a moth.

Plant species, and all organisms, operate within a dynamic but somewhat predictable matrix of stress that determines which environments will support the species. A little more of this or that stress, and the species distribution changes. Plants develop critical partnerships with other organisms that enable them to survive and thrive in their environments. And, as with humans, when plants come under significant stress, their ability to ward off disease, pathogen, and herbivore is reduced. I think the significant ecological impacts and surprises we face from climate change will often come as a result of the way climate change tweaks the dials on all the existing relationships and sources of stress in the world of a plant. Slightly increased stress pressure from multiple directions, or the addition of one new source of stress may push a plant over a survival threshold. And when that plant forms both the basic physical structure and the biological foundation for an ecosystem, such as the bulrushes of the brackish tidal middle marsh, the entire system may collapse in short order.

As practitioners, climate change and its unknown future impacts should be incorporated into how we approach our work. The first step is acknowledging that stresses on the natural resources we steward will continue to increase substantially in the future, not just from climate change, but also from other stresses related to the demands of our burgeoning population and economy. The second step is considering deeply what this means for our restoration and stewardship projects. Knowing that sources of stress will increase in the future should give us greater impetus to reduce the stresses we know about today. Sources of stress like invasive species are obvious, and we should perhaps take them more seriously in light of climate change. Species diversity matters a great deal at all levels from microbes to carnivores, and we need to become less focused on the success of individual species and more focused on the health, diversity, and functioning of the larger system. The soils on many restoration sites have been modified by past land use, particularly agriculture, and may have substantially altered physical structure, microbial communities, drainage, and nutrient conditions that will place stress on restored vegetation communities. Restoration projects should more carefully consider land use legacy effects on soil, and address them in the design phase.

We need to think critically about how stresses interact with each other, and how climate change may magnify the stress load by small tweaks to multiple stressors. For example, at the site described in this story, there are herbivores (snow geese) whose grubbing for bulrush rhizomes loosens soil, increasing erosion during winter storms. Climate change



Photos of the same monitoring plot in 2014 and 2015, showing the extent of marsh die-back, caused by the stem-boring moth.

is increasing herbivore populations and raising the sea level, increasing the disturbance from both herbivores and wave erosion. Summer river flows are declining, increasing soil salinities and stress on bulrushes. There is also a legacy of a levee system that has re-routed freshwater and it's suspended sediment away from marshes, sediment that could rebuild those eroding marshes and freshwater that could decrease salt intrusion.

There are many sources of stress, many vulnerabilities to climate change, and many opportunities for us to improve our stewardship and restoration programs to account for climate change. It's time we got a little more strategic.

Roger Fuller coordinates the restoration and stewardship program at the Padilla Bay National Estuarine Research Reserve. He can be reached at rfuller@padillabay.gov

References:
Carroll, G. 1988. Fungal Endophytes in Stems and Leaves: From Latent Pathogen to Mutualistic Symbiont. *Ecology*. 69.1:2-9. <https://doi.org/10.2307/1943154>

Fuller, R.N. 2017. Lessons learned from monitoring the Port Susan Restoration Project. Report prepared for The Nature Conservancy. 6pp. Contained as Appendix 1 in Fuller 2018 referenced below.

Fuller, R.N. 2018. Port Susan Bay Estuary Restoration Project: Final Monitoring Report. Report prepared for The Nature Conservancy. 91pp. https://salishsearestoration.org/wiki/Port_Susan_Restoration

Jarchow, M.E. and B.J. Cook. 2009. Allelopathy as a Mechanism for the Invasion of *Typha angustifolia*. *Plant Ecology*. Volume 204, No. 1, pp113-124. <http://www.jstor.org/stable/40305750>

Kandalepas D., M.J. Blum, S.A. Van Bael. 2015. Shifts in Symbiotic Endophyte Communities of a Foundational Salt Marsh Grass following Oil Exposure from the Deepwater Horizon Oil Spill. *PLoS ONE* 10.4. doi:10.1371/journal.pone.0122378

Kembel, S.W., T.K. O'Connor, H.K. Arnold, S.P. Hubbell, S.J. Wright, and J.L. Green. 2014. Relationships between phyllosphere bacterial communities and plant functional traits in a neotropical forest. *PNAS*. 111.38.13715-13720.

Mauger, G.S., J.H. Casola, H.A. Morgan, R.L. Strauch, B. Jones, B. Curry, T.M. Busch Isaksen, L. Whitley Binder, M.B. Krosby, and A.K. Snover. 2015. State of Knowledge: Climate Change in Puget Sound. Report prepared for the Puget Sound Partnership and the National Oceanic and Atmospheric Administration. Climate Impacts Group, University of Washington, Seattle. doi:10.7915/CIG93777D

Rodriguez, R.J., J. Henson, E. Van Volkenburgh, M. Hoy, L. Wright, F. Beckwith, Y. Kim, R.S. Redman. 2008. Stress tolerance in plants via habitat-adapted symbiosis. *International Society of Microbial Ecology. The ISME Journal*. 2008.2.404-416. doi:10.1038/ismej.2007.106

Harvest Brodiaea and the Bounty of the Balds

by Abe Lloyd

By Mid-June, the last camas flowers have usually fallen, their green leaves withered, and the grass around them is parched golden under the long day's sun. All around the Salish Sea the plants of thin soiled, treeless "balds" prepare for the dry summer by setting seed and retreating to subterranean perennial parts. Visiting a bald on an island at the mouth of the Skagit River, I was surprised by a final flush of color. Amongst camas seed pods, dry moss, and crisp licorice fern fronds were the vital tones of orchid, orobanche, onion, and brodiaea.

Edible roots grace numerous bald species including Spring Gold (*Lomatium utriculatum*) Common Camas (*Camassia quamash*), two species of onions (*Allium acuminatum*, *A. cernuum*) and brodiaeas. I was especially keen to have my first taste of brodiaea. Both Harvest Brodiaea (*Brodiaea coronaria*) and White Brodiaea (*Triteleia hyacinthina*) were present but this account is limited to the slightly earlier flowering, shallower rooted and easier to harvest Brodiaea.

Harvest Brodiaea is an herbaceous perennial that grows from a small spherical to ovate corm $\frac{1}{4}$ - $\frac{1}{2}$ inch in diameter. Several linear basal leaves emerge early in the spring and a single leafless flowering stalk 2-12 inches tall arises as the soil begins to dry in late spring and the leaves wilt. One to ten flowers are clustered in an umbel that is subtended by the remnants of the papery sheath which protects the embryonic flowers (similar to onion flowers) but ruptures as the flowers mature. Each flower is 1-2 inches long with 6 blue to purple tepals and a greenish white striped tube. Seed capsules filled with black seeds form in the early summer and the seeds are shaken out of the capsules by heavy wind or animals.

Harvest Brodiaea ranges from southern Vancouver Island to Southern California and has the largest range of the 19 species in its genus (all in Western North America). The Comox valley on Vancouver Island is the northern extent of its range and it is commonly found in prairies and thin soiled rocky balds throughout the islands and mainland region surrounding the Salish Sea. Further from the coast Harvest Brodiaea is less common, but a few populations are found in the Thompson and Fraser River valleys in British Columbia, the rocky slopes of the upper Skagit (Ross Lake) and Thurston County outwash prairies in Washington; the Lower Columbia and Willamette valleys in Oregon host sporadic populations as well. From the Siskiyou southward, Harvest Brodiaea once again becomes more common and can be found in both wet and dry sites including yellow pine forests, riparian wetlands, and grasslands.

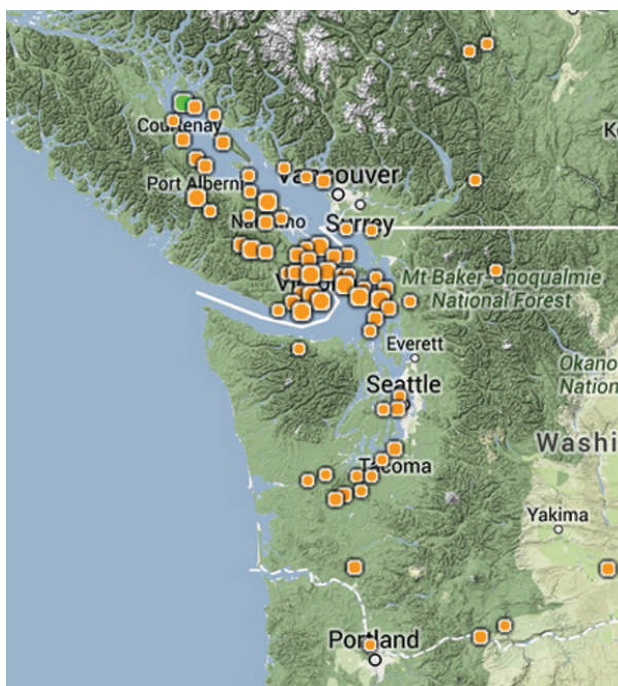
At the time of first European contact, the Coast Salish collected Harvest Brodiaea. Captain George Vancouver's naturalist Archibald Menzies wrote in his May 28, 1792 journal "On the Point near the Ship [Restoration Point, Puget Sound] where...a few families of Indians live in very Mean Huts or Sheds formed of slender Rafters & covered with Mats. Several of the women were digging on the Point which excited my curiosity to know what they were digging for & found it to be a little bulbous root of the liliaceous plant which on searching about for the flower of it I discovered to be a new Genus of the Triandria monogyna [i.e. *Brodiaea*]. This root with the young shoots of Raspberries & a species of Barnacles formed at this time the chief part of



Harvest Brodiaea (*Brodiaea coronaria*)



Brodiaea coronaria Harvest fl bulb Craft Island



Brodiaea coronaria range



Brodiaea coronaria Harvest

their wretched subsistence (in Pojar and Mackinnon 1994)." However, there is almost no mention of the traditional food value of Harvest Brodiaea among later ethnobotanical studies of the Coast Salish (Turner and Bell 1971) or Indigenous peoples in British Columbia or Washington. Knowledge of other brodiaea species ranges from vague recollections of use among the Thompson (Turner et al. 1990) and Okanagan (Turner et al. 1980) to precise knowledge and active harvest among some Sahaptin people (Hunn 1990).

Further south, the ethnobotanical knowledge of Harvest Brodiaea is more vivid. In Oregon, several Athabaskan speaking peoples know the plant as 'small camas' due to the similarity in appearance and use (Notes on Ethnobotany of Western Oregon). In California, the corms are traditionally eaten by the Atsugewi, Miwok, Pomo, Kashaya, Yurok, Yana, and other Native American groups (Native American Ethnobotany). Research by ethnobotanist Kat Anderson (2005) has shown that traditional techniques of harvesting and tending patches of brodiaea and onions actually increases their abundance. By all accounts, the roots of Harvest Brodiaea are dug in the late spring while flowering and boiled or baked in earth ovens before being eaten.

I boiled a few corms for 10 minutes in unsalted water to give myself an unadulterated taste of the little morsels. They quickly softened and I found their texture and flavor very similar to a boiled potato. The skins were tough and I spit them out. All the remaining roots went into the garden to multiply for future meals.

The genus *Brodiaea* honors Scottish Botanist James Brodie (1744-1824) and the species epithet *coronaria* means "used for garlands" in Latin. I can't think of a nicer garnish for my next meal of brodiaea.

T. Abe Lloyd is an adjunct instructor at Western Washington University and Whatcom Community College where he teaches courses related to natural history and ethnobotany. He is the author of *Wild Berries of Washington and Oregon* (Lone Pine) and keeps a foraging blog called "Wild Harvests" (www.arcadianabe.blogspot.com) where he chronicles more of his foraging adventures and experiments.

References
Anderson, M. Kat 2005. "Tending the Wild, Native American Knowledge and the Management of California's Natural Resources." University of California Press, Berkeley CA.

Biota of North American Program (BONAP)- North American Plant Atlas- *Brodiaea*. <http://www.bonap.org/>

Calflora- *Brodiaea coronaria*. <https://www.calflora.org/>

Consortium of Pacific Northwest Herbaria- *Brodiaea coronaria*. <http://www.pnwherbaria.org/>

Notes on Ethnobotany of Western Oregon <https://ethnobotany-westernoregon.wordpress.com/2012/05/28/harvest-lily-brodiaea-coronaria/>

Hoover, Robert F. 1939. "A Revision of the Genus *Brodiaea*." *American Midland Naturalist* Vol. 22, No. 3.

Hunn, Eugene 1990. "Nch'i-Wana 'The Big River', Mid-Columbia Indians and Their Land." University of Washington Press, Seattle WA.

Native American Ethnobotany- *Brodiaea coronaria*. <http://naeb.brit.org/>

Oregon Flora Project- *Brodiaea coronaria*. <http://www.oregonflora.org/>

Pojar and MacKinnon 1994. "Plants of the Pacific Northwest Coast, Washington, Oregon, British Columbia, & Alaska". Lone Pine, Vancouver BC.

Turner, Nancy J. and Marcus Bell 1971. "The Ethnobotany of the Coast Salish." *Economic Botany*.

Turner et al. 1990. "Thompson Ethnobotany, Knowledge and Usage of Plants by the Thompson Indians of British Columbia." *Royal British Columbia Museum Memoir* No. 3.

Turner, Nancy J., Randy Bouchard, and Dorothy I. D. Kennedy. 1980. "Ethnobotany of the Okanagan-Colville Indians of British Columbia and Washington." *British Columbia Provincial Museum Occasional Papers Series* No. 21.

WTU Herbarium- *Brodiaea coronaria*. <http://biology.burke.washington.edu/herbarium/imagecollection.php>

CONIFERS

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

General information about conifers

Rather than being selected for timber production, our conifers are grown from woods-run (wild collected) seed from the lowest elevation sources available. They may not be the straightest or the tallest, but these trees contain all of the genetic diversity that our iconic PNW forests have to offer, ensuring the best chance for establishing resilient, long-lived plant communities.

Conifers are available as plugs or plug transplants (P-1). Plug sizing is based on volume. For example, a plug-15 has 15 cubic inches of soil volume. Height varies, but typical height ranges are described in the chart below. Standard bundles contain 50 plants each.

Conifer plugs are stored frozen and should be allowed to thaw before planting. Once plugs thaw their shelf-life is limited; please plant as soon as possible after thawing.

Abies amabilis (Pacific Silver Fir)

This tall forest tree grows from southeastern Alaska to western British Columbia and south to northwestern California. It ranges from sea level in the north to above 3000' in the Cascades, and above 7000' in the southern end of the range. The old common name for this tree—lovely fir (amabilis means lovely)—is quite fitting; the grey bark with horizontal resin blisters and dark green flat needles clothing the branches are quite lovely.

*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.
Seed Zone: ABAM-2 at 1000' elevation (0-1500' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-6												

Abies grandis (Grand Fir)

The most common true fir of the lowlands, with glossy, deep green needles, grand fir provides important cover, nesting sites, and seeds for birds, squirrels, and other wildlife. Maximum height 200-250'. Native from British Columbia south to California, Idaho, and Montana. Seed Zone: ABGR-5 and ABGR-3 at 500-1000' elevation (0-1000' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-10												
Plug-15												

Callitropsis (Chamaecyparis) nootkatensis (Alaska Yellow Cedar)

Long-lived conifer with pendulous branches, blueish-green leaves and shaggy grey bark. Found in moist to wet sites in coastal montane forests from 2000-7500' in the Oregon and Washington Cascades down to sea level in Southeast Alaska. Its strong and light wood was used by many coastal peoples to make bows, paddles, and tool handles.

*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.
Seed Zone: Indian Lake, BC

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-15												

Calocedrus decurrens (Incense Cedar)

This "beautiful cedar" (the meaning of Calocedrus) makes a handsome landscape tree with aromatic wood that resists decay and insects. Native from the dry side of the Oregon Cascades through southern California and Mexico, this tree grows biggest in moist, well-drained, fertile soil but will tolerate hot, dry sites with poor soil. Prefers full sun to light shade. Fire and drought tolerant. Grows to 120' tall.

*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.
Seed Zone: Oregon (old seed zone 262) at 500' elevation

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-15												

Picea sitchensis (Sitka Spruce)

Lowland conifer reaching 120-200' tall, common in wet habitats. Fast growing, with dense root systems for erosion control. Provides important wild-life habitat and shade for streams. Native from Alaska south to California. Tolerates salt spray in shoreline plantings. Seed Zone: PISI-4 at 1000-1500' elevation (only one elevation band exists)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-10												
Plug-15												

Pinus contorta v. contorta (Shore Pine)

Two-needled pine with rounded stature to 40'. Adaptable to many soil types, from moist areas around lakes and bogs west of the Cascades to well-drained or nutrient-poor locations. Tolerates salt spray along shorelines. Native from Alaska south to northern California.

Seed Zone: PICO-6 at 500' elevation (0-1000' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-15												

Pinus monticola (Western White Pine)

This five-needled pine grows from BC to California and east to Montana, found at higher elevations in the southern part of its range but down to sea level in Washington and BC. An important timber species, this tree has been hugely impacted by white pine blister rust. Our seed is collected from trees with naturally occurring resistance. Grows to 120' tall.

*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.
Seed Zone: WA/ID/MT- rust resistant

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-15												

Pinus ponderosa (Ponderosa Pine)

Long-lived tree native to the western United States. Grows 55-90' tall, drought tolerant, found in wide variety of soils, from fine textured to rocky, shallow to deep. The seeds are eaten by many birds, and the needles provide food for grouse.

*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.
Seed Zone: PIPO-5 at 2500' elevation (2000-3000' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-15												

Pseudotsuga menziesii (Douglas Fir)

Fast-growing, long-lived tree with densely set, soft needles that are dark green to blue-green in color. Native to western North America. Grows to 70-250' in height, preferably in deep, moist soil and full sun. Seed Zone: PSME-4 and PSME-7 at 200-500' elevation (0-1000' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-6												
Plug-10												
Plug-15												

Thuja plicata (Western Red Cedar, Canoe Cedar)

A magnificent tree along the coast with drooping branches. Shade tolerant but not dependent. Grows to 80-200' tall in moist to wet soils. Native from southeastern Alaska to the northern coast of California.

Seed Zone: THPL-2 at 100-500' elevation (0-2000' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-10												
Plug-15												

Tsuga heterophylla (Western Hemlock)

An important conifer in western forests, tolerant of sun or shade in well-drained soil. Recognized by its graceful pendant branches and spire-like drooping crown. Grows to 200' tall.

Seed Zone: TSHE-3 at 0-500' elevation (0-1200' band)

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-10												
Plug-15												

Tsuga mertensiana (Mountain Hemlock)

A lovely tree, with its graceful form, spire crown, and needles that look like little stars on the hanging branches. Can grow to 100' but often only grows to 20-30'. Generally a mountain tree, it is native from sea level to 3000' in Alaska south through the West Coast mountains to over 8000' in Sequoia National Park. Shade tolerant, grows best in cool, moist sites.

Seed Zone: Vancouver Island, BC
*Limited quantities available this year.
**Available by pre-order only next year- order by October 1st.

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug-6												
P-2												

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

A quick guide to deciphering conifer seed zones:

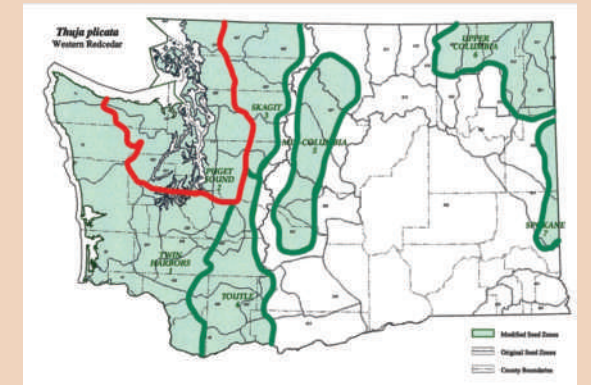
Species-specific seed zones were developed for many of our native conifers by the US Forest Service and the Washington State Department of Natural Resources in 2002. These research-based zones are better guidelines for seed transfer than generic ecoregions, and we use them whenever they are available. Despite their usefulness, these seed zones can be a bit confusing. Unlike the old conifer seed zones (developed in 1966), the new zone boundaries, zone names and numbers, and elevation bands are different for each species. We list the zone numbers, elevation of the collection, and relevant elevation band for each of our offerings. The seed zone for Thuja plicata is broken down below as an example.

Thuja plicata has seven seed zones in Washington state. Our seed is from the Puget Sound-2 zone, outlined in red on the map below.

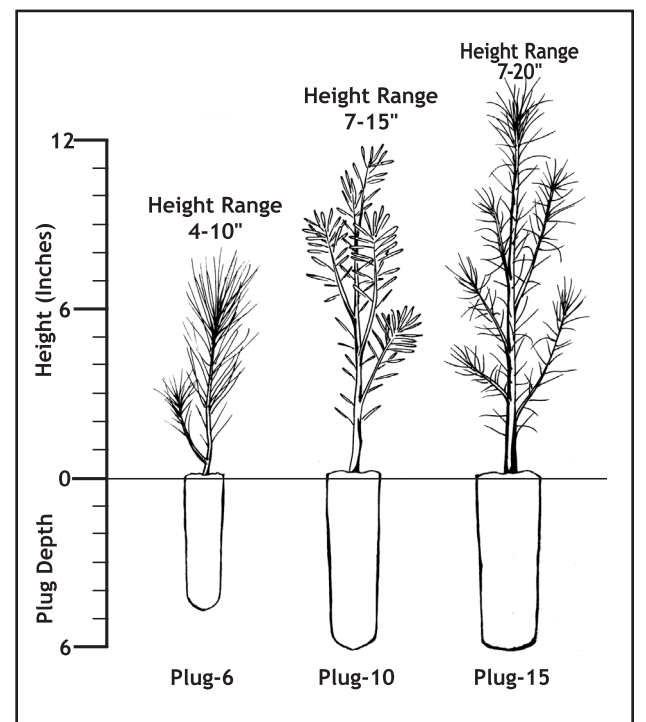
THPL-2 at 100-500' elevation (0-2000' band)

The seed collection was made between 100-500' in elevation.

Thuja plicata has 2000' elevation bands, so these trees can be safely planted at appropriate sites between 0-2000'.



Seed zone maps for each species are available on our website at fourthcornernurseries.com/seed-zone-maps/



Rich in the early years of Fourth Corner Nurseries

HERBACEOUS PERENNIALS

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

A Note About Perennials

Our herbaceous perennial species are propagated from source identified wild-collected seed. All stock is field grown and shipped bare root unless noted. Plants are available in the fall as they senesce and begin to go dormant for winter, and again in early spring before regrowth of their main flowering stem. This window is specific to each species, so please review the availability calendar and check with us to determine the best time to receive your order. Our hardiest species are available through the winter as well, with species-appropriate storage techniques: freezing, refrigeration, or digging to order. Standard bundles contain 50 plants each.

Please order by November 1 for winter perennial orders to accommodate our digging and processing schedule.

Abronia latifolia (Coastal Sand Verbena) NL

Prostrate, fleshy, mat-forming perennial with bright yellow flowers in round-topped clusters. Commonly found on west coast beaches. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Achillea millefolium (Common Yarrow) FACU

North American native perennial herb, to 1-3' tall. Soft fern-like foliage; white or pink flower clusters attract butterflies. Rhizomatous and drought tolerant nature making an effective as well as attractive erosion control. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Achlys triphylla (Vanilla Leaf) NL

Attractive rhizomatous groundcover composed of three fan-shaped leaves atop a slender stalk, with a showy 1-2" spike of tiny white flowers in spring. Dried foliage smells like vanilla. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling 1.25

Agastache occidentalis (Western Giant Hyssop) NL

Native perennial redolent of licorice complete with its sweetish flavor, purple flowers attract butterflies. Found in vernal wet areas east of the Cascades. Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Allium cernuum (Nodding Onion) FACU

Small wild onion native across most of North America with nodding umbels of pink flowerets. Grows 4-20" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Please see our BULB section for more Allium species

Angelica lucida (Sea Watch) FAC

Stout perennial of saltwater shorelines, reaching 5' with large divided leaves and showy carrot-like flowers. Found in moist areas along the Pacific Coast and sporadically in New England. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Anaphalis margaritacea (Western Pearly Everlasting) FACU

North American native perennial with attractive white flower clusters, woolly gray-green foliage. Rhizomatous and drought tolerant, effective for erosion control, also a good butterfly plant. Grows 1-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Antennaria microphylla (Littleleaf Pussytoes) NL

Mat-forming perennial with white-woolly leaves, and white to pink-tinged flower clusters on 2-12" stems. Does well in dry sites with full sun to partial shade. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Antennaria rosea (Rosy Pussytoes) FACU

Generally found in the mountainous areas of the western United States, the northern Great Plains, and Alaska. Mat-forming perennial with white-woolly leaves, and pink flower clusters on 2-12" stems. Does well in dry sites with partial sun to partial shade. Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Aquilegia flavescens (Yellow Columbine) NL

North American native perennial to 2' tall, with showy pale yellow flowers. Found in moist, open to partially shaded sites east of the Cascades. Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Aquilegia formosa (Western Columbine) FAC

Western North American native perennial to 3' tall, with showy reddish-orange and yellow flowers. Found in moist, sunny to partially shaded sites. Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Argentina egedii (Pacific Silverweed) please see *Potentilla anserina*

Armeria maritima (Sea Thrift) FAC

Saltwater shorelines perennial with tufted narrow leaves and globular pink flowers. Attracts native pollinators. Drought tolerant. The native species exhibits twisted leaves and flowering stems distinctive from commercial varieties. Grows 6-12" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Arnica chamissonis (Leafy Arnica) FACW

Native across Canada and the western United States, this herbaceous perennial has cheerful yellow daisy flowers. Prefers moist meadows and thickets. Grows 1-3'. Provenance: 77-North Cascades, CO

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Arnica cordifolia (Heart-leaf Arnica) NL

Yellow-flowered, rhizomatous perennial with heart shaped leaves that grows to 2'. Found in woodlands and meadows at mid to high elevation in Western North America from Alaska to New Mexico. Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Artemisia suksdorfii (Coastal Mugwort, Coastal Wormwood) FACU

Northwest native perennial with clustered stems to 4' and leaves green above and cottony white below. Pleasing sage scent when brushed. Common near the coast on bluffs and on rocky, gravelly, or sandy beaches. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Aruncus dioicus (Goatsbeard, Bride's Feathers) FACU

Circumboreal, from southern British Columbia to northern California, this 3-6' tall perennial has showy plumes of white flowers. Flowers in sun or shade. Grows in damp to wet rocky areas, stream banks, meadows, and forest openings, from low elevation up into the mountains. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Asarum caudatum (Wild Ginger) FACU

Groundcover in moist shady areas redolent of edible ginger. Curious maroon flowers hide under heart-shaped leaves. Rhizomatous, can form large mats. Grows from sea level to about 3000', from southern British Columbia south to northwestern California, Idaho, and Montana. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling 1.50

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Asclepias fascicularis (Narrowleaf Milkweed) FAC

Long, narrow leaves and large clusters of white to pale lavender flowers in summer distinguish this milkweed. Grows 2-4' tall. Native from southeastern Washington south through California and adjacent Idaho, Nevada, and Utah, in open fields and meadows. More tolerant of clay soil and garden conditions than most milkweeds. Provenance: 03-Willamette Valley, 05-Sierra Nevada

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Asclepias speciosa (Showy Milkweed) FAC

Widespread across western North America in drier habitats. Rhizomatous perennial with pink to reddish-purple flowers, grows to 4'. Found commonly east of the Cascades in moist, loamy to sandy soil. Showy fragrant flowers attract butterflies and other pollinators. Provenance: 03-Willamette Valley, 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Rhizome .80 .54 .40

Aster subspicatus (Douglas Aster) please see *Symphotrichum subspicatum* v. *subspicatum*

Balsamorhiza deltoidea (Deltoid Balsamroot) NL

Northwest perennial with basal leaves and large yellow sunflower-like flowers. Prefers dry sunny habitats at low elevations, from southern British Columbia to California. Transplants best in the fall. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Campanula rotundifolia (Harebells, Bluebell Bellflower) FACU

Delicate bellflower with tiny heart-shaped leaves and attractive large blue bells. Found from sea level to mountain meadows. Grows 4-12" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Castilleja hispida (Harsh Paintbrush) NL

Bright red to red-orange flowered paintbrush with cut-leaved foliage commonly found in lowland meadows to the subalpine. Grows both sides of the Cascades, British Columbia to Oregon, as far east as Montana. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Chamerion [Epilobium] *angustifolium* (Fireweed) FACU

Widespread North American native perennial to 4-6' tall, with showy pink flowers, good for honey production and butterflies. Strong rhizomes provide excellent erosion control. Common in sunny, dry to moist disturbed areas. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Corydalis scouleri (Scouler's Fumewort) FAC

Ornate perennial resembling overgrown bleeding heart with delicate foliage and elongate pink blooms. Explosive seed pods add additional excitement. Prefers moist woodland sites. Grows 2-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability



Rich strolling around to find seeds

HERBACEOUS PERENNIALS

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Coreopsis lanceolata (Lanceleaf Tickseed)

Yellow blooming perennial that grows to 2' tall. Likes hot, dry, poor soil areas and flowers April to July. Native to most of North America.



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Dicentra formosa (Western Bleeding Heart, Pacific Bleeding Heart)

West Coast native herbaceous perennial with strong rhizomes, fern-like leaves, showy reddish-pink flowers. Likes moist, shady sites, from southern British Columbia to central California. Grows 1-2' tall. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Echinacea angustifolia (Narrow-leaved Coneflower)

Prairie wildflower to 2-3' with showy pink-purple flowers. Commonly used as a medicinal plant, also attracts butterflies. Native from the Rocky Mountains eastward through the Midwest and south to Texas. Provenance: ID

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Echinacea purpurea (Eastern Purple Coneflower)

North American prairie wildflower with showy purple flowers on 2-3' stalks. Medicinal, good cut flower, and attracts butterflies. Prefers full sun. Native from the Midwest to the East Coast. Provenance: ID

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Equisetum hyemale (Rough Horsetail, Scouringrush Horsetail) please see GRASSES, SEDGES, RUSHES

Erigeron glaucus (Seaside Daisy, Seaside Fleabane)

This coastal perennial has low, multi-branched stems with succulent, evergreen leaves, grows 2-12" tall and 1 1/2-2' wide, with showy pink to lavender daisy flowers with yellow centers. Native to Oregon and California coasts, growing on dunes, bluffs, and beaches. Provenance: 01-Coast Range



Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Erigeron philadelphicus (Philadelphia Fleabane)

Widespread North American wildflower with small, but numerous showy pink flowers. Prefers moist, sunny locations from the lowlands to the mountains. Not a long-lived plant, but will bloom prolifically and reseed itself freely. Growing 1- 4' tall. Provenance: 77-North Cascades



Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Erigeron speciosus (Showy Fleabane, Aspen Fleabane)

Showy plant with large lavender daisy-like flowers from late spring into the summer. Native in the Pacific Northwest and the Rocky Mountains, in sunny, dry to moist woodland openings from foothills to mid-elevations in the mountains. Grows 1-3' tall. Provenance: 02-Puget Lowland

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Eriophyllum lanatum (Oregon Sunshine, Woolly Sunflower)

Low, spreading woolly herb with bright yellow daisy-like flowers that attract butterflies. Prefers dry, open habitats across the western states to southwestern British Columbia. Grows 4-20" tall. Provenance: 02-Puget Lowland, 03-WillametteValley

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Fragaria chiloensis (Coastal Strawberry, Beach Strawberry)

West Coast groundcover with shiny dark green leaves, white flowers, and edible berries. Spreads vigorously by stolons. Common along the coast on beaches and rocky bluffs, from Alaska south to California. Thrives in sunny conditions. Drought tolerant. Provenance: 01-Coast Range



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Fragaria vesca ssp. bracteata (Woodland Strawberry)

North American groundcover native to western states. Strongly stoloniferous, with white flowers and small edible berries. Good for shady areas. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Fragaria virginiana ssp. platypetala (Virginia Strawberry)

Western North American groundcover with white flowers and edible berries. Found in forest openings and meadows. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Frasera albicaulis var. columbiana (Whitestem Frasiera, Columbia Frasiera)

This pale blue tinted-flower grows 12-30" tall, with narrow, silver-edged leaves. Found in open plains to mid-elevation areas in the mountains east of the Cascades in Washington and Oregon. Provenance: 04-Cascades

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Gaillardia aristata (Blanket Flower)

Showy yellow and orange sunflower-like flowers on 1-2' stems characterize this wildflower. Grows in sunny, moist to dry areas widespread across western and northern North America. Provenance: 02-Puget Lowland

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Geum macrophyllum (Largeleaf Avens)

North American perennial with short rhizomes and cheerful yellow flowers, reaching 3' in height. Found in forests and open areas. Reseeds prolifically. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Geum triflorum (Prairie Smoke)

Beautiful wildflower with a basal rosette of fern-like foliage, soft pink nodding flowers on 4-18" stems, and a puff of pink 'smoke' for a seed head. Prefers sunny dry sites. Native to most of North America. Provenance: 10-Columbia Plateau



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Glehnia leiocarpa (Beach Carrot, American Silvertop, American Glehnia)

Prostrate, taprooted perennial found along sandy shorelines and dunes. Thick, leathery, spreading leaves green above and white-woolly on undersides, with white flowers May-July. Grows along the coast from Alaska to northern California. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Grindelia integrifolia (Puget Sound Gumweed)

Robust native perennial of Pacific coastal areas with showy yellow flowers, 3-4' tall. Late season bloomer, salt spray tolerant. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Heracleum maximum (Cow Parsnip)

North American native perennial with large, lobed leaves and striking 6' stems topped with large white flower clusters. Attracts beneficial insects and many insect-eating bird species. Named after Hercules from the Greek because of its large size. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Heuchera micrantha (Small Flowered Alumroot, Crevice Alumroot)

Evergreen foliage and numerous sprays of tiny white flowers on stems to 2' tall. Found along stream banks and in rock crevices from southern British Columbia to California, and Idaho. Provenance: 02-PugetLowland

NL

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Hydrophyllum tenuipes (Pacific Waterleaf)

Rhizomatous, spreading, herbaceous plant for shady, moist sites that can dry out in late summer. Large, fuzzy leaves with sharp-pointed leaflets and clusters of lovely creamy flowers in mid to late spring add interest. Native from southern British Columbia to northwestern California. Grows 8-32" tall. Provenance: 02-Puget Lowland



Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Iris chrysophylla (Yellowleaf Iris)

NL

Striking native iris; creamy white flowers with yellow stripe and maroon veining on 8" to 1' stems. Found in open woodlands in western Oregon and California. Provenance: 78-Klamath Mountains

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Iris douglasiana (Douglas Iris)

NL

Pale pink to purple flowers with yellow center stripe on sepals; 1-2' tall branched stems. Native in open grassy areas in Oregon south to California. Provenance: 01-Coast Range

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Iris missouriensis (Western Blue Flag Iris)



White to blue flowers on 1-2' tall branched stems. Grows from sea level to high in the mountains. Native to the western half of the United States. Provenance: 01-Coast Range

Available	J	F	M	A	M	J	J	A	S	O	N	D
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In production; inquire for availability

Iris setosa (Alaska Wild Iris)

NL

Wild iris of northern latitudes with stout leaves and stems to 2', dark blue flowers. Prefers a moist or wet sunny location. Provenance: SE Alaska

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54

Iris tenax (Oregon Iris, Toughleaf Iris)

NL

Showy western native iris with blue to purple flowers on 1' tall stems, found in sunny locations. Native from southern Washington to northern California. Provenance: 01-Coast Range, 02-Puget Lowland, 03-WillametteValley

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54

Lathyrus japonicus v. maritimus (Beach Pea)



Perennial with trailing stems up to 4' and reddish-purple flowers, found on sandy and gravelly beaches of the Pacific Coast, Great Lakes, and Hudson Bay. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Lomatium utriculatum (Spring Gold)

NL

Deep green ferny basal foliage emerges in the fall in preparation for the bright lemony yellow flowers that begin a long blooming season in early spring. West side species found on lowland coastal balds. Grows 4-24" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45



Rich staging seed during fall planting

HERBACEOUS PERENNIALS

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Lupinus littoralis (Seashore Lupine) NL

Prostrate lupine of seashores and dunes with clusters of blue and white flowers and 2' stems. Salt and drought tolerant. Native from southwestern British Columbia to northwestern California.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Lupinus polyphyllus (Bigleaf Lupine) FAC

Tall lupine to 4' tall with spikes of showy blue flowers. Fixes nitrogen to enhance poor soils. Wide-spread across the western and northeastern United States.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Lupinus rivularis (Riverbank Lupine) FAC

Lupine found in coastal meadows and riverbanks. Reddish-brown stems with violet-blue flowers. Shrubby plant to 3 1/2' tall. Native from southern British Columbia to northern California.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Lysichiton americanus (Skunk Cabbage) please see AQUATICS

Maianthemum dilatatum (False Lily-of-the-Valley) FAC

Low growing native perennial, rhizomatous and shade loving. Grows 2-4". Clusters of tiny white flowers hover above deep green heart shaped foliage. Common in rich, shady areas.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Mentha arvensis (Wild Mint, Field Mint) FACW

Rhizomatous plant in the mint family, grows 6-24" tall, and is strongly aromatic. Purple flowers are good for butterflies, seeds eaten by wildlife. Common in wet places, sun or partial shade, across North America.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Mertensia platyphylla (Broadleaf Bluebells) NL

Bell-shaped light blue wildflowers on 1-2' leafy stems. Spreads slowly by rhizomes. Stream banks and moist forest habitats, sun to part shade. Native to Washington and Oregon.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Mimulus guttatus (Yellow Monkeyflower, Seep Monkeyflower) OBL

A showy, highly variable wildflower native to western North America with red-spotted yellow flowers. Also known as Erythranthe guttata. Grows in a wide variety of moist habitats from salt spray areas along the Pacific Ocean, deserts, high in the mountains, and even on toxic copper mine tailings. Pollinated by bumblebees. Both annual and perennial forms occur. Grows 2-30" tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Mimulus lewisii (Purple Monkeyflower) FACW

Showy fuchsia-colored monkeyflower found in moist subalpine meadows and stream sides. A good butterfly and hummingbird plant, adds interest and wildlife value to ornamental ponds. Native to western North America. Grows 1-3' from a sturdy, branching rhizome.

Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Monardella odoratissima (Mountain Monardella) UPL

Western native perennial with fragrant foliage and lavender flowers. Prefers dry, sunny areas, especially east of the Cascades in the steppe and montane zone. Attracts butterflies and bees. Grows 4-20" tall.

Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Oenanthe sarmentosa (Water Parsley) Please see our AQUATICS section

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Oplopanax horridum (Devil's Club) FAC

Northwest deciduous shrubby perennial with upright prickly stems to 9' tall. This member of the Ginseng family has large primordial-looking leaves, greenish-white flowers, and bright red berries in showy clusters in the fall. Prefers moist, partially shady to shady sites. Common Alaska south to Oregon, east to Montana. Available only in containers.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

In production; inquire for availability

Oxalis oregana (Woodland Sorrel, Redwood-Sorrel) FACU

This western version of the shamrock makes a good low maintenance groundcover, 2-8" tall, with light pink flowers for shady sites. Native along the West Coast, from southern British Columbia to northern California. Also available in containers.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon cardwellii (Cardwell's Penstemon, Cardwell's Beardtongue) NL

Mat-forming shrubby Penstemon to 12" tall, with showy, blue-purple flowers that likes sun and well drained soils. Blooms May to early August. Grows in forest openings and rocky slopes at mid-elevations in the mountains of southwest Washington south through Oregon.

Provenance: WA

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon davidsonii (Davidson's Penstemon) NL

Western shrubby, mat-forming penstemon with pink-lavender flowers, grows 3-6" tall. Found on dry rocky slopes at mid- to high elevations from coastal British Columbia and the Coast and Cascade Mountains to the Sierras in California.

Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon fruticosus (Shrubby Penstemon) NL

Low evergreen shrub to 2' tall, with pink to purple flowers that attract pollinators and hummingbirds. Native eastern British Columbia to Alberta, south east of the Cascades to Oregon, east to Montana and Wyoming in dry exposed areas.

Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon newberryii (Mountain Pride) NL

Shrubby, mat-forming up to 1' tall plant with tubular lavender flowers. Rocky outcrops and talus slopes at mid to high elevations in southern Oregon and northern California.

Provenance: 05-Sierra Nevada

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon ovatus (Broadleaf Penstemon, Eggleaf Beardtongue) NL

Bright blue flowered penstemon with deep green, glossy spade-shaped leaves, grows 1'-3' tall. Ranges from woodland to sunny slopes, British Columbia to Oregon.

Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon procerus (Small-flowered Penstemon) FAC

Penstemon with dense whorls of lovely blue to purple flowers. Native across Canada and south through California to Colorado from mid to high elevations in the mountains. Prefers dry, sandy to gravelly soils. Grows 4-12" tall.

Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon richardsonii (Cutleaf Penstemon) NL

An unusual penstemon with dissected leaves and bright pink flowers. Native from British Columbia south through Washington and Oregon, generally east of the Cascades. This beautiful pollinator-attractor is drought tolerant, often found in open rocky habitats. Grows 8-32" tall.

Provenance: 10-Columbia Plateau

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

In production; inquire for availability

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Penstemon serrulatus (Cascade Penstemon, Serrulate Penstemon) FACU

Beautiful wildflower with showy pinkish-purple to deep blue flowers, on stems 8-28" tall. Prefers sun or partial shade, moderate moisture. Native from southern Alaska to northern Oregon, in and west of the Coast-Cascade Mountains to sea level. Blooms June to early August.

Provenance: 77-NorthCascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Penstemon speciosus (Royal or Showy Penstemon) NL

An evergreen perennial, growing 2' tall, with 1-2" sky-blue to light purple flowers in late spring and summer. Grows in dry meadows, scrub, and slopes at mid to high elevations on the east side of Washington south through California, Nevada and Idaho. Drought tolerant, attracts many pollinators.

Provenance: 09-ECascadeSlope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Petasites frigidus v. palmatus (Western Coltsfoot) FACW

Rhizomatous perennial 1-2' tall, with large palmate leaves and white to pinkish flowers March to July. Common in wet areas in low to mid elevation forests and openings along the west coast, Maine, a sprinkling in the Great Lakes region, and north through Canada.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Plantago maritima v. juncoides (Sea Plantain, Goose Tongue) FACW

Common West Coast perennial with fleshy linear leaves, and 2-10" flower spikes May to July, found on seashores and salt marshes. An important food source for waterfowl, also edible for people. Also found along north-eastern seaboard.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Potentilla anserina (Pacific Silverweed) OBL

A quickly spreading groundcover with attractive yellow flowers and leaves with silvery undersides. Found along edges of lakes and streams, wet meadows, and on sandy beaches. Salt-tolerant for shoreline plantings. Native on the west coast of the U.S., New York and New England, and across Canada.

Provenance: 02-Puget Lowland

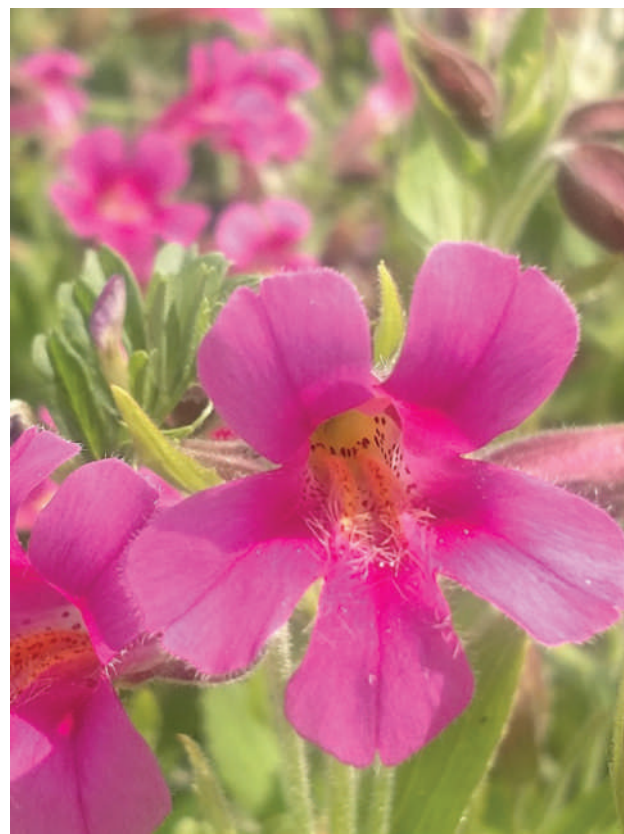
Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Potentilla gracilis (Graceful Cinquefoil, Slender Cinquefoil) FAC

Western North American wildflower with palmately compound leaves and yellow flowers. Grows 1-2' tall. Found in moist meadows from the lowlands to the mountains.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												



Mimulus lewisii (Purple Monkeyflower)

HERBACEOUS PERENNIALS

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Potentilla pacifica (Pacific Silverweed) please see **Potentilla anserina**

Prunella vulgaris (Self Heal)

North American low growing perennial with short rhizomes and purple to pink flowers. Has medicinal value. Prefers moist sites, sun or shade. Provenance: 02-Puget Lowland, 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Ranunculus occidentalis (Western Buttercup)

Showy buttercup of lowland balds and Garry Oak meadows, from Alaska south to California and Nevada. Grows 6-16" tall. Prefers moist soil; spreading, goes dormant in summer. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Rudbeckia alpica (Showy Coneflower, Wenatchee Mountain Coneflower)

Unusual perennial with summer flowers in a black cone that attracts birds when seeds are mature. Grows to 2-6'. A medicinal plant native to the western states. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Sedum divergens (Spreading Stonecrop, Pacific Stonecrop)

Deep green compact leaves of this West Coast spreading stonecrop are offset by bright sprays of yellow flowers that attract butterflies. Provenance: 09-ECascadeSlope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sedum lanceolatum ssp. nesioticum (Spearleaf Stonecrop)

Compact stonecrop with football-shaped leaves topped by bright yellow flowers in late spring. Common on rocky balds along the coast and inland. Native to the northwest and southeast corners of Washington and north into British Columbia. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sedum oreganum (Oregon Stonecrop)

Succulent creeping perennial found on coastal bluffs and rocky mountain slopes from Alaska south along the coast to the northwest corner of California. Starry yellow flowers in spring and summer attract butterflies. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sedum spathulifolium (Broadleaf Stonecrop)

Bluish-green succulent foliage develops red highlights in the winter and bright yellow flowers that attract butterflies in the late spring. Native from southern British Columbia to California. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sidalcea campestris (Meadow Checkerbloom)

Western Oregon and Puget Sound wildflower with beautiful white or light pink flowers. Found in open meadows and fields. Grows 2-6' tall. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedlings .80 .54 .40

Sidalcea hendersonii (Henderson's Checkerbloom)

Taprooted perennial that sends up spikes of miniature pink hollyhock-like flowers. Found in wet meadows and tidal marshes along the coast from Alaska to Oregon. Grows 2-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedlings .80 .54 .40

Sidalcea malviflora ssp. virgata (Dwarf Checkerbloom, Rose Checkermallow)

Clump-forming, taprooted perennial, stems trailing and freely rooting. Spikes of pink flowers provide nectar for pollinators. In prairies and meadows west of Cascades, from Oregon to California, and Thurston County. Species of concern in Washington. It is an endangered species in Washington. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Sisyrinchium californicum (Yellow-eyed Grass)

Coastal wildflower with iris-like leaves in a slowly expanding clump and beautiful yellow flowers, 6-12" tall, from British Columbia to California. Likes early spring moisture, will spread by seed. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sisyrinchium idahoense (Western Blue-eyed Grass)

Wildflower with beautiful blue flowers and iris-like leaves, 6-12" tall, in a slowly expanding clump. Likes early spring moisture. Native to the western states and British Columbia. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sium suave (Hemlock Waterparsnip)

North American native perennial with white carrot-type flowers, common in low marshy ground and shallow water. Adds interest and wildlife value to ornamental ponds. Grows 2-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Solidago canadensis var. lepida (Canada Goldenrod) please see **Solidago lepida**

Solidago lepida [S. canadensis var. lepida] (Western Canada Goldenrod)

North American native perennial with showy yellow flower spikes in late summer that attract butterflies and pollinators. Common in moist to dry areas. Wide tolerance of soil conditions and rhizomatous roots make this a good choice for erosion control. Grows 2-5' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Sparganium emersum (Simplestem Bur-reed) please see **AQUATICS**

Stachys chamissonis v. cooleyae [S. cooleyae] (Coastal Hedge-nettle)

Rhizomatous perennial 2-3' tall, with pink flowers in mid-summer that attract butterflies and hummingbirds. Common in moist clearings from Alaska to coastal California. Containerize for ornamental ponds. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

In production; inquire for availability

Stachys cooleyae (Cooley's Hedge-nettle) please see **Stachys chamissonis v. cooleyae**

Symphotrichum (Aster) eatonii (Eaton's Aster)

Wildflower with blue-purple flowers, attracts butterflies, prefers moist conditions. Grows up to 3'. Adds color and wildlife value to ornamental ponds. Native west of the Rocky Mountains from Canada to New Mexico. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

In production; inquire for availability



Rich in a field of Symphyotrichum (Aster subspicatus) subspicatum v. subspicatum (Douglas Aster), a bit too early to collect seeds

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Symphotrichum subspicatum v. subspicatum [Aster subspicatus] (Douglas Aster)

West coast native aster of moist habitats, especially estuaries. Grows 3-4' tall branching stems and many purple flowers attract butterflies. Tolerates salt spray in shoreline plantings. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .70 .47 .35

Tellima grandiflora (Fringecup, Bigflower Tellima)

Rhizomatous perennial with small white flowers with fringed petals fading to pink, April to July. Prefers partial shade, commonly found in moist woods and along stream banks. Found from Alaska south to California, west of the Cascade crest, sea level to mid elevation in the mountains. Grows 1-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Tolmiea menziesii (Youth on Age, Piggyback-plant)

Northwest rhizomatous perennial to 2' tall, with small pinkish-brown flowers in spring. Found in moist shady habitats. Spreads by little plantlets on the parent leaves. Native from southern British Columbia to northern California at low elevations. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Typha latifolia (Common Cattail) please see **GRASSES, SEDGES, RUSHES**

Vancouveria hexandra (Inside-out Flower)

Rhizomatous woodland perennial with delicate white flowers in May and June. Common in moist, shady forests from the south Puget Trough in Washington, western Oregon, and northwestern coastal California. Grows 12-18" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Veronica americana (American Speedwell), please see **AQUATICS**

Viola adunca (Prairie Violet, Hookedspur Violet)

Deep purple violet of low elevation prairies and rocky coastal outcrops. Heart-shaped deep green leaves, grows to 4" tall. Widespread from southern Alaska across Canada, and the western states. Blooms April to August. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60

Viola nuttallii v. praemorsa (Canary Violet)

Bright yellow flowering violet occurring in uplands and prairies of the Pacific Northwest. Fuzzy green gray leaves. Sprouts form short rhizomes. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

Viola palustris (Marsh Violet)

Spreading pale lavender violet of wet marshy areas. Native across Canada and south through the western United States. Grows to 8" tall. Blooms May to July. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .80 .54 .40

Yucca glauca (Small Soapweed)

Evergreen perennial with tough sword-shaped leaves and greenish-white flowers in tall clusters. Native from Montana and N. Dakota south to Texas and across to Arizona. Easy to grow and long lived, drought tolerant; grows 18" tall and 24-36" wide, mature plants bloom late spring, early summer. Provenance: CO

Available	J	F	M	A	M	J	J	A	S	O	N	D
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Bare-root seedling .90 .60 .45

GRASSES, SEDGES, RUSHES

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

A Note About Graminoids

Our graminoids and wetland emergent species are propagated from source identified wild-collected seed and cuttings. All stock is field grown and shipped bare root. Plants are available while they are actively growing from spring through fall. This window is specific to each species, so please check with us to determine the best time to receive your order. Some robust rhizomatous species are also available through winter as noted.

Standard bundles contain 50 plants each. Shoot heights are trimmed to 12", or as specified. All bare root stock is dug to order, packed into bags and shipped immediately. It is helpful to remember that these plants are perishable -- treat them like lettuce. Their survival depends on being harvested, transported, and transplanted during cooler temperatures, with adequate water after planting. Please be ready to care for your plants as soon as they arrive. We cannot ensure survival after plants have left our care.

Bolboschoenus [Scirpus] maritimus (Cosmopolitan Bulrush)

Rhizomatous rush with strong triangular culms to 5'. Fresh or brackish marshes, 0-1' deep, across the United States, except the southeast. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Bromus carinatus (California Brome)

Western North American grass found in moist to dry meadows. May be short-lived, but will reseed under favorable conditions. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex amplifolia (Big-leaf Sedge)

Western sedge with impressive large broad leaves, flowering spikes to 4'. Attractive for ornamental ponds. Prefers moist soil. Provenance: 15-Northern Rockies

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex aperta (Columbian Sedge)

Northwest native rhizomatous sedge for wet areas. Grows 2-3' tall. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex aquatilis v. dives [C. sitchensis] (Sitka Sedge)

West coast sedge, from Alaska to northwestern California, tufted on short rhizomes with pretty, drooping flower heads. Attractive for ornamental ponds. Common in wet meadows, marshes and lake shores. Grows 1-4' tall. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex athrostachya (Slenderbeak Sedge)

Western North American tufted sedge found in seasonally wet meadows. Tolerant of late summer drought. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex comosa (Bristly Sedge, Longhair Sedge)

Attractive sedge of freshwater marshes and wet meadows. Occurs sporadically across North America. Listed as sensitive in the state of Washington. Grows 1 1/2-3' tall. Does not have long rhizomes, so not suitable for sites subject to siltation. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex densa (Dense Sedge)

West Coast tufted sedge of seasonal wetlands and wet meadows at low elevations. Listed as sensitive in the state of Washington. Grows 1-3' tall. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Carex exsiccata (Western Inflated Sedge)

Large tufted sedge, sometimes with short rhizomes, 1-3' tall. Found in wet meadows, lake shores, seasonal pools in winter, usually in shallow water, 0-12", sea level to mid-elevation in the mountains. Can dominate communities, good species for restoration. Grows west of Cascades in Washington and Oregon, found on the east side occasionally; British Columbia to California and Montana. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex lenticularis (Lakeshore Sedge) please see C. kelloggii

Carex kelloggii [lenticularis] (Lakeshore Sedge)

Tufted sedge found in wet, sunny or partially shaded sites. Native across most of North America, except for midwestern and southern states. Grows 1-3' tall. Stays green in winter. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex leptopoda (Slender-foot Sedge, Taperfruit Shortscale Sedge)

The most common sedge found in western Washington and Oregon moist forest understory habitats. The most frequently encountered member of the *Carex deweyana* complex. Grows from British Columbia and Alberta south through our western states, Washington to Montana down to Arizona and New Mexico. Grows 1-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex lyngbyei (Lyngbye's Sedge)

Large, rhizome forming sedge, common along saltwater shorelines from Alaska to northern California. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex macrocephala (Largehead Sedge)

Rhizomatous sedge found on sandy seashores, from Alaska to Oregon. Flowering heads large, 2-3" on 0.5-1.5' tall plant. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex mertensii (Merten's Sedge)

Densely tufted sedge, with attractive flowering spikes, found in dry to moist habitats of the northwest, from Alaska through British Columbia and Alberta south to northern California. Excellent ornamental and rain garden potential. Grows 1-2.5' tall. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex nebraskensis (Nebraska Sedge)

Common sedge in wet areas east of the Cascades into the western Plains states. Tolerant of disturbances. Grows 1-3' tall. Provenance: ID

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					



Rich in the early years of Fourth Corner Nurseries in our field of graminoids

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Carex obnupta (Slough Sedge)

West Coast evergreen sedge for moist to wet freshwater or brackish sites, 0-12" depth; rhizomatous and vigorous. Attractive sedge for shade or sun. In shallow water, creates important egg-laying habitat for amphibians. Containerize for ornamental ponds. Grows 2-3' tall. Provenance: 01-Coast Range, 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33	(Apr-Nov)				
Bare-root seedling				.80	.60	.46	.43	(Dec-Mar)				

Carex pachystachya (Chamisso Sedge)

Common western North American tufted sedge found in the transition zone from wet to dryish open habitats. Great potential rain garden species. Grows 0.5-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex pansa (Sand Dune Sedge)

West Coast rhizomatous sedge with sharply triangular stems found along sandy shorelines. Important species for helping stabilize sandy beaches. Has been used as a substitute for lawn grass in well-drained soils. Grows 0.5-1.5' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex stipata (Sawbeak Sedge, Awlfruit Sedge)

North American native sedge forming solid clumps in moist areas. Attractive light green foliage, flowering stems to 4'. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33	(Apr-Nov)				
Bare-root seedling				.90	.65	.55	.45	(Dec-Mar)				

Carex tumulicola (Splitawn Sedge)

Western native tufted sedge with slowly-expanding rhizomes. Found in sunny dry meadows and open forests. Grows 1-3' tall. Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex unilateralis (Lateral Sedge)

Western native rhizomatous sedge found in shallow or seasonal wetlands. Grows ADD 1-2.5' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Carex utriculata (Northwest Territory Sedge)

Widespread North American sedge with lovely foliage, triangular stems, and flowering heads to 4'. Rhizomatous, forms large stands in perennially wet freshwater sites. In shallow water, creates important egg-laying habitat for amphibians. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Carex vesicaria (Blister Sedge) please see *Carex exsiccata*, these are distinct species; *C. exsiccata* grows in western Washington, and *C. vesicaria* is its very similar counterpart in eastern Washington.

Carex vulpinoidea (Fox Sedge)

Clumping sedge found in moist meadows, marshes and ditches in habitats scattered across the United States. Great potential rain garden plant. More common east of the Cascades but ours is from a Whatcom County population. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Danthonia californica (California Oatgrass)

Bunchgrass found in moist to dry, sunny meadows across western North America. Grows 1-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Danthonia spicata (Poverty Oatgrass)

Widespread North American bunchgrass found in moist to dry, sunny meadows. Grows 0.5-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

GRASSES, SEDGES, RUSHES

GRADE	SIZE	UNIT PRICE				
		50	100+	500+	1000+	

Deschampsia caespitosa (Tufted Hairgrass)



Tufted grass native to marshes and wet prairies across much of North America. Attractive narrow foliage and 1-1.5' tall flowering plumes. Can handle salt spray.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37		.33				

Distichlis spicata (Seashore Saltgrass, Inland Saltgrass)



Rhizomatous grass found in salt marshes and also dry upland areas across much of the western United States. An important food source for waterfowl, host plant for butterfly larvae (Wandering Skipper), and erosion control in estuaries. Inland strains are extremely drought tolerant, and may be invasive in some situations.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Eleocharis palustris (Common Spikerush)



Widespread North American emergent with narrow dark green culms, rhizomatous and mat-forming in shallow freshwater habitats, from 0-2' deep. Creates important egg-laying habitat for amphibians. Containerize for ornamental ponds. Grows 1-2' tall.

Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Elymus glaucus (Blue Wildrye)



Drought tolerant native bunchgrass for sunny to partially shaded sites. Native across much of North America. Great for interplanting with trees and shrubs in restoration plantings to cover bare soil. Populations are genetically variable regarding leaf color and density. Grows 1-6' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Equisetum hyemale (Rough Horsetail, Scouringrush Horsetail)



Rhizomatous horsetail, evergreen with unbranched stems. Widespread across North America in moist areas, grows 2-4' tall. Horsetails are one of our oldest plants, originating about 350 million years ago, and at that time they were over 40' tall! Horsetails absorb heavy metals and can be used in phytoremediation; they can be invasive in some situations.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Festuca idahoensis ssp. roemerii (Roemer's Fescue)



Native bunchgrass for coastal areas from southern British Columbia to northern California with attractive, finely textured leaves. Grows 1-3' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Glyceria grandis (Reed Mannagrass)



Rhizomatous grass found in freshwater habitats (0-1' deep) across most of North America. Creates important egg-laying habitat for amphibians. Grows up to 6' tall, in sun or shade.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Glyceria occidentalis (Northwestern Mannagrass)



This Mannagrass grows in freshwater habitats, and can live in permanent water as deep as 12". Other habitats are marshes and seasonal pools. It grows quickly, has underground stems and floating leaves that reduce erosion around lakes and streams. It is used in stormwater management. It occurs in British Columbia and south through the western states to California and Nevada.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Glyceria striata [G. elata] (Tall Mannagrass)



Clumping grass with rhizomes found in freshwater habitats across North America. Grows to 6' tall, in sun or shade, versatile and good for soil stabilization.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

GRADE	SIZE	UNIT PRICE				
		50	100+	500+	1000+	

Hierochloa odorata [Anthoxanthum hirtum] (Sweetgrass) NL

Aromatic grass traditionally used in crafts and spiritual ceremonies in both the Old and New World. From cultivation. Grows 1-2.5' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Hordeum brachyantherum (Meadow Barley)



Attractive clumping native grass, a common component of salt marshes and moist meadow habitats across the western United States and Canada. Grows 1-2.5' tall. Prefers moist soils but tolerates dry conditions as well.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus acuminatus (Tapertip Rush)



Common tufted rush found in lake margins and meadows that remain wet all year. Grows across North America, primarily on the West Coast and east of the Mississippi; 1-2.5' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus arcticus ssp. littoralis [J. balticus] (Baltic Rush)



North American rush, strongly rhizomatous, common in brackish marshes, tide flats, salt marshes, and freshwater habitats from lowlands up into the subalpine, in 0-12" of water. Grows 1-3' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus articulatus (Jointleaf Rush)



Common in freshwater wetlands and brackish marshes across much of North America. Grows 0.5-1.5' tall.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus balticus (Baltic Rush) please see Juncus arcticus ssp. littoralis

Juncus bolanderi (Bolander's Rush)



Common West Coast rhizomatous rush of wet meadows and marshes, both freshwater and brackish, with dark colored, spherical flower heads. Creates important egg-laying habitat for amphibians. Grows 0.5-2.5' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus effusus ssp. pacificus (Pacific Rush)



Tufted rush with short rhizomes, found in moist to wet habitats, with water depths from 0-2'. Grows 1-3' tall with flowers below the tip of the stem. This is the native subspecies of Juncus effusus in western North America. Not weedy and monoculture forming like the widely spread European subspecies.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					
Bare-root seedling				.80	.60	.46	.43					

Juncus ensifolius (Daggerleaf Rush)



Widespread rhizomatous rush with iris-like leaves. Found in freshwater habitats without deep standing water. Grows 1-2' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

GRADE	SIZE	UNIT PRICE				
		50	100+	500+	1000+	

Juncus oxymeris (Pointed Rush)



Beautiful Northwest rush with iris-like leaves, common west of the Cascades in wet meadows and lake shores, sometimes where it dries out in late summer. Strong rhizomes are important for erosion control and sediment retention. Grows from British Columbia to California, 1-3' tall. Potential rain garden plant.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus patens (Spreading Rush)



West Coast native rhizomatous rush. Excellent choice for wetland habitats that may dry out in late summer. Potential rain garden plant, grows 1-3' tall.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus supiniformis (Hairyleaf Rush)



Compact rush, growing horizontally and rooting at the nodes. Common in estuarine and freshwater wetlands and ditches, often where inundated in the winter, drier in late summer. Native from Alaska south to northern California, grows 0.5-1' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Juncus tenuis (Slender Rush)



Common tufted rush in habitats across North America that are saturated in the winter but dry out in the summer. Potential rain garden plant. Grows 0.5-2' tall.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Koeleria macrantha (Prairie Junegrass) NL

Silvery green spike seed heads grow to 1-2' on this perennial bunchgrass. Found from British Columbia south to northern Mexico, east to Ontario and Delaware. Junegrass grows mostly in sandy to rocky soils in sagebrush deserts, prairies, and open forests to subalpine ridges.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.57	.47	.37	.33					

Leersia oryzoides (Rice Cutgrass)



Rhizomatous perennial grass forms thick stands. Widespread distribution across North America. Grows to 3' tall in wet ditches and floodplain areas.

Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Leymus mollis [Elymus mollis] (Dune Wild Rye)



Robust clump-forming perennial grass with strong rhizomes. Grows 3-5' tall on coastal dunes and beaches, and freshwater beaches; helps prevent beach erosion. Native from Alaska across Canada, south from coastal Washington to the central coast of California, the Great Lakes area, and New England.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					

Melica subulata (Alaska Oniongrass) NL

Lovely tall stature, from clumps with short rhizomes found in dry to moist meadows and forests. Has an edible bulb-like corm resembling but not tasting like onions. Grows from Alaska south through western Canada and the western U.S. to California.

Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling				.70	.53	.44	.41					



Rich collecting *Schoenoplectus tabernaemontani* (Softstem Bulrush) seed



Clean seed of *Schoenoplectus tabernaemontani* (Softstem Bulrush) being planted in the field by Rich

GRASSES, SEDGES, RUSHES

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Schoenoplectus [Scirpus] acutus v. acutus (Hardstem Bulrush) **OBL**
 Bold, strongly rhizomatous bulrush, with dark green stems reaching 6'+ in standing water with depths up to 5'. Containerize for ornamental ponds. Widespread across North America; also used for wastewater filtration. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.57		.47		.37		.33				(May-Nov)
Bare-root seedling		.90		.65		.55		.45				(Dec-Apr)

Schoenoplectus [Scirpus] americanus (Threesquare, American Bulrush) please see *Schoenoplectus pungens*.

Schoenoplectus [Scirpus] maritimus please see *Bolboschoenus maritimus*

Schoenoplectus pungens [Scirpus americanus complex] (Threesquare bulrush, Chair-maker's rush) **OBL**

Widespread rhizomatous bulrush with triangular stems to 3' tall. Found in fresh or brackish marshes and wet habitats throughout North America. Tolerates inundation of 0-16". This species was long considered indistinct from *S. americanus*, but is now recognized as a separate species within the *Scirpus americanus* complex. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.70		.53		.44		.41				

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Schoenoplectus tabernaemontani [Scirpus lacustris, S. validus] (Softstem Bulrush) **OBL**
 Widespread wetland plant across North America, spreading vigorously by rhizomes, saline and freshwater habitats, with 0-3' water depth. Grows to 6' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.70		.53		.44		.41				(May-Nov)
Bare-root seedling		.90		.65		.55		.45				(Dec-Apr)

Scirpus cyperinus (Wool Grass) **OBL**
 Graceful tufted rush for brackish and freshwater habitats, attractive flowering plumes reaching 4-6'. Creates important egg-laying habitat for amphibians. Excellent for ornamental ponds. Scattered populations across the Pacific Northwest. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.57		.47		.37		.33				

Scirpus microcarpus (Small Fruited Bulrush) **OBL**
 Common flat-leaved rhizomatous bulrush in wet meadows and shallow freshwater, 0-18", across western and northern North America. An important wildlife plant. Creates egg-laying habitat for amphibians. Grows 2-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.57		.47		.37		.33				

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Sparganium emersum (Simplestem Bur-reed) please see **AQUATICS**

Triglochin maritima (Seaside Arrowgrass) **OBL**
 Rhizomatous perennial with fleshy, grass-like leaves and spikes of yellowish flowers. Common in tidal marshes and mudflats along the coasts, and across North America in freshwater moist meadows. Grows 1-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.70		.53		.44		.41				

Typha latifolia (Common Cattail) **OBL**
 Widespread across North America; perennial with long, flat leaves, persistent seed spike to 6' tall, found in all types of shallow water habitats. Provides good cover and food for wildlife, but does tend to take over. Also used for water quality treatment. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.57		.47		.37		.33				(Apr-Nov)
Bare-root seedling		.90		.65		.55		.45				(Dec-Mar)

AQUATICS

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

A Note About Aquatics

Our emergent aquatic species are propagated from source identified wild-collected seed and cuttings.

Standard bundles contain 50 plants each. All stock is grown in wet boxes. It is helpful to remember that these plants are fragile. Their survival depends on being ready to care for your plants as soon as they arrive. We cannot ensure survival after plants have left our care.

Alisma triviale (Northern Water Plantain) **OBL**

An emergent perennial in mud and shallow freshwater wetlands (0-2') with long-stemmed oval leaves from basal rosette. Delicate branching stems to 3' of white flowers in summer. Provides important food and habitat for waterfowl, fish, and wildlife. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug		2.00										

Comarum palustre [Potentilla palustris] (Purple Marshlock, Marsh Cinquefoil) **OBL**

Circumboreal, especially in northern regions; lake and stream margins, wet meadows, and bogs from sea level to subalpine. Prostrate stems, sometimes floating, to 3' from sturdy rhizomes. Flowers 1", dark red to purple in summer. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug		2.00										

Lysichiton americanus (Skunk Cabbage) **OBL**

The giant golden spathes lurking around the swamp amongst huge fleshy leaves are unmistakable. Swamp Lantern is another common name. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug		1.50										

Menyanthes trifoliata (Buckbean) **OBL**

Western North America and again in the Great Lakes region across to Maine and Newfoundland. White flowers in May and June. Stems 6-18" long. Shallow water in bogs, ponds, and lakes. Thick, creeping rhizomes, with leaves and stems that rise up out of the water 6-12". Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug		2.00										

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Nuphar lutea ssp. polysepala (Rocky Mountain Pond-lily) **OBL**

Aquatic perennial with floating or submerged heart-shaped leaves and thick rhizomes 3-6' long. Single, waxy yellow flowers floating on long stalks from the rhizomes. Grows in lakes and slow-moving water from Alaska south through western British Columbia, down to California and across to the Rocky Mountains, from lowlands up into the montane. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Plug		4.00										

Oenanthe sarmentosa (Water Parsley) **OBL**

White flowered perennial with stems up to 3' along stream sides and in shallow-water wetlands. Creates important egg-laying habitat for amphibians. Adds interest and wildlife value to ornamental ponds. Native from Alaska south to California, and west of the Coast-Cascade Mountains. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.80		.54		.40						

Sagittaria latifolia (Broadleaf Arrowhead, Wapato) **OBL**

An emergent, rhizomatous perennial that grows to 4' in shallow freshwater wetlands (6-12" deep) across North America, and produces white or bluish edible tubers that were a food source for many indigenous people. Emergent leaves arrow-shaped, submerged leaves linear, from a basal rosette, white flowers in late summer and early fall. The seeds and tubers offer food for many different birds, muskrats, and beavers, while the foliage provides cover for fish and aquatic insects. Used in phytoremediation; the plant extracts over-abundant nutrients and heavy metals from sediment and water. Provenance: 02-Puget Lowland, 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Tuber		1.00										



Rich with his *Sagittaria latifolia* (Broadleaf Arrowhead, Wapato) tubes in his homemade pond

GRADE	SIZE	UNIT PRICE		
		50	100+	200+

Sparganium emersum (Simplestem Bur-reed) **OBL**

Circumboreal rhizomatous perennial for wet ground with up to 3' of standing freshwater. Provides excellent habitat for wildlife and also takes up pollutants readily in bioswales and water quality detention ponds. Stems and leaves float, grows to 6' in length. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.90		.60		.47						

Veronica americana (American Speedwell) **OBL**

Common blue flowered perennial in wetlands, stream edges, and other wet habitats across North America, except absent from the U.S. southeast. Grows from a creeping rhizome, with stems 4-36" long, prostrate to ascending, sometimes partially submerged. Blooms May to July. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling		.80		.54		.40						



Tube of *Lysichiton americanus* - Skunk Cabbage



Sparganium emersum (Simplestem Bur-reed)

BULBS, RHIZOMES, TUBERS

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

A Note About Bulbs, Rhizomes and Tubers

All our bulb, rhizome, and tuber offerings are propagated from carefully tracked seed collections, and we only grow species plants, not hybrid varieties. Large are blooming size and are typically four or more growing seasons old. Smalls (available for some species) are 2-3 years old and may not bloom in the first year. Most bulbs are harvested in late summer and available for sale through the fall. Fall is the optimal time to replant your bulbs—for best quality and assurance please place your order in Spring but no later than September 15th so that we can dig and prepare your order while the bulbs are dormant. We have taken many precautions to ensure our bulb stock is healthy, and free of nematodes and viruses. Standard bundles contain 50 plants each.

Allium acuminatum (Taper-tip Onion, Hooker's Onion) NL

Delightful rose-colored flowers, typical onion scent. Found in open, rocky sites from the Pacific Coast to the Rockies. Grows 4-12" tall. Easily divided. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Large												

Allium ampletens (Narrowleaf Onion) UPL

Pink to white nearly spherical clusters of flowers on 8-15" stems. Native from British Columbia south to California, on both sides of the Cascade Mountains crest. Grows in open meadows and dry slopes. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Large												

Please see our **HERBACEOUS PERENNIALS** section for more **Allium** species

Brodiaea please also see **Dichelostemma** or **Triteleia**

Brodiaea coronaria (Crown Brodiaea) FACW

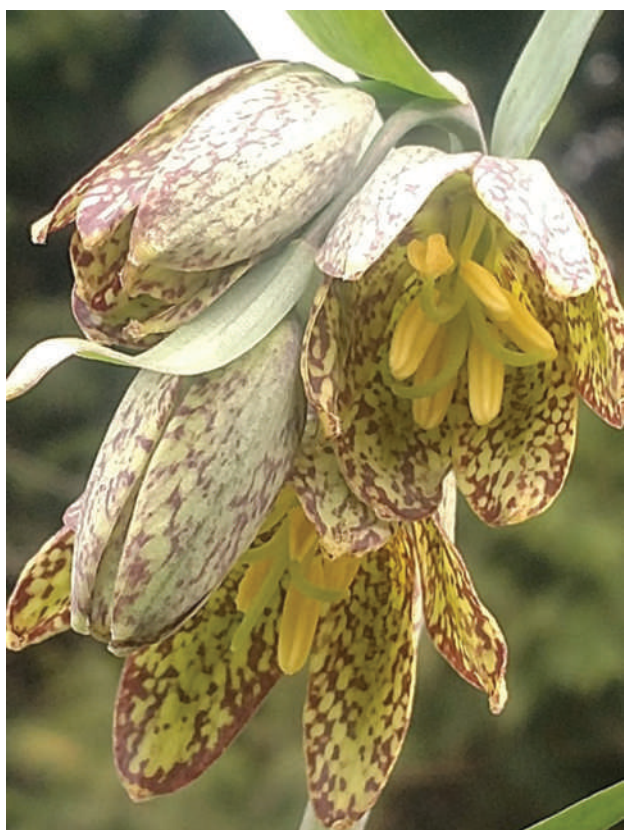
Beautiful bell-shaped purple flowers bloom June to July. Native from Washington to California, grows up to 18" tall. Produces many offsets. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Large												

Camassia leichtlinii ssp. suksdorfii (Suksdorf's Large Camas) FACW

Edible bulb, with showy 2-4' stems of blue flowers. Native from British Columbia to California and Nevada. Likes "spring wet, summer dry" conditions. Provenance: 03-Willamette Valley

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												



Fritillaria affinis (Checker Lily)

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Camassia quamash spp. maxima (Common Camas) FACW

Bright to deep bluish-violet flower spikes with deeply buried bulbs. Generally found in deep soils in wet meadows, fields, and rocky, coastal bluffs, from southern British Columbia through the western states. Likes "spring wet, summer dry" conditions. Grows 1-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Delphinium menziesii (Menzies' Larkspur) NL

Deep blue larkspur with a white face native to coastal bluffs and prairies of the Pacific Northwest. Grows 1-3' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Delphinium nuttallii (Upland Larkspur) FACU

Stunning deep blue northwest Delphinium associated with Garry Oak meadows. Found on coastal bluffs and lowland outwash prairies in Washington and Oregon. Grows 1-2' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Delphinium troliifolium (Columbian Larkspur) NL

Deep blue Delphinium with white highlights appearing in moist woods and along stream banks from the Columbia River Gorge to the northern coast of California. Grows 2-4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Dodecatheon hendersonii (Broad-leaved Shooting Star, Mosquito Bills) NL

Lovely wildflower with ovate leaves found in grassy meadows with well-drained soil, from southern British Columbia to California. Cyclamen-like flowers are a beautiful magenta. Grows 4-20" tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Dodecatheon pulchellum (Darkthroat Shooting Star) FACW

Easy to grow western native found from coastal balds rocky outcrops up into alpine meadows. Numerous magenta flowers, with backswept petals like little rockets, top a rosette of fleshy lance-shaped leaves. Likes "spring wet, summer dry" conditions, sunny or partially shaded sites. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Bare-root seedling												

Erythronium grandiflorum (Yellow Avalanche Lily) FACU

Native to the western states, this bulb has graceful yellow lily flowers emerging early in the spring. Emerges at snowline in alpine meadows. Grows 8-12" tall. Provenance: 77-North Cascades

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												



Erythronium grandiflorum (Yellow Avalanche Lily)

GRADE	SIZE	UNIT PRICE			
		50	100+	500+	1000+

Fritillaria affinis (Checker Lily) NL

Pendant flowers, mottled purple and green. Found in open grassy areas and lightly shaded forest openings, across the PNW and beyond from Washington to California, and Idaho. Grows 1-2' tall. Best in moist cool spot with good drainage. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Fritillaria pudica (Yellow Bells, Johnny Jump Up) NL

Eastern Cascades to Rocky Mountain native bulb with delicate fragrant yellow flowers that usher in spring. Grows 4-12" tall. Provenance: 05-Sierra Nevada

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Lilium columbianum (Columbia Lily) NL

Northwest lily has bright orange flowers with dark speckles and lovely fragrance. Native from Washington to northern California, Montana. Grows to 4' tall. Provenance: 02-Puget Lowland

Available	J	F	M	A	M	J	J	A	S	O	N	D
Small												
Large												

Triteleia grandiflora v. grandiflora [Brodiaea douglasii] (Large flower Triteleia) NL

Bright blue umbels grace meadows and hillsides most commonly east of the Cascades in Washington and Oregon, east to Montana and Utah. Provenance: 09-E. Cascade Slope/Foothills

Available	J	F	M	A	M	J	J	A	S	O	N	D
Large												

Triteleia [Brodiaea] hyacinthina (Fool's Onion, White Brodiaea) FAC

Large clusters of lovely white flowers on 1-3' stems. Prefers spring wet, summer dry conditions. Native from British Columbia to California, Idaho. Potential rain garden plant. Provenance: 78-Klamath Mountains

Available	J	F	M	A	M	J	J	A	S	O	N	D
Large												



Rich scaling up production of checker lily (*Fritillaria affinis*)



Fourth Corner Nurseries