

Conservation Prairie - Mesic Northwest Seed Mix

Guild	Scientific Name	Common Name	Rate: PLS lb/acre	Rate: Seeds/sqft	Height (in.)	Succes- sional Stage	Hydro- logic Zone	Pollinator Value	Bloom Time (month)	Notes - Wildlife Value, Regional Suitability (E.S. = Ecological Section)
G	<i>Andropogon gerardii</i>	big bluestem	1	3.67	36-96	L	M-D	Nests	8,9	
G	<i>Bouteloua curtipendula</i>	side-oats grama	1.2	2.64	12-36	M	MZ, D	Nests	7,8,9	
G	<i>Bromus kalmii</i>	kalm's brome	0.4	1.18	18-36	M	MZ, D	None	8,9	
G	<i>Carex bicknellii</i>	Bicknell's sedge	0.02	0.12	36	L	MZ	None	6,7	
G	<i>Carex brevior</i>	short sedge	0.2	2.13	12	L	MZ, D	None	6,7	
G	<i>Elymus canadensis</i>	nodding wild rye	1	1.91	36-60	E	MZ, D	None	7,8	
G	<i>Elymus trachycaulus</i>	slender wheatgrass	1	2.54	24	M	MZ, D	None	6,7	
G	<i>Hesperostipa spartea (Stipa)</i>	porcupine grass	0.42	0.11	48	L	D	None	5,6	
G	<i>Koeleria macrantha (pyramidata)</i>	junegrass	0.03	2.20	12-24	L	D	None		
G	<i>Panicum virgatum</i>	switchgrass	0.18	0.90	24-84	M	M, MZ	None	7,8,9	
G	<i>Schizachyrium scoparium</i>	little bluestem	1.5	8.28	12-30	L	MZ, D	None	8,9	
G	<i>Sorghastrum nutans</i>	Indian grass	1.2	5.29	36-96	L	M	Nests	8,9	
G	<i>Sporobolus heterolepis</i>	prairie dropseed	0.25	1.47	18-48	L	MZ	Nests	8,9	
<b>Graminoids subtotal: 13</b>										
F	<i>Agastache foeniculum</i>	blue giant hyssop	0.05	1.65	24-48	M	MZ, D	Very High	7,8,9,10	
F	<i>Allium stellatum</i>	prairie wild onion	0.03	0.12	6-12	M	MZ, D	Medium	6,7	
L	<i>Amorpha canescens</i>	lead plant	0.05	0.29	18-48	L	MZ, D	Very High	6,7,8	
L	<i>Amorpha nana</i>	fragrant false indigo	0.04	0.15	24		MZ, D	High	5,6,7	Food source for larvae of native silver spotted skipper butterfly
F	<i>Anemone cylindrica</i>	long-headed thimbleweed	0.03	0.29	18-24	L	MZ, D	Low	6,7	
F	<i>Asclepias verticillata</i>	whorled milkweed	0.04	0.16	10-20	L	MZ, D	Very High	6,7,8,9	
L	<i>Astragalus canadensis</i>	Canada milk vetch	0.06	0.37	12-48	M	MZ, D	Low	7,8	
L	<i>Dalea candida</i>	white prairie clover	0.06	0.42	12-30	M	MZ, D	Medium	6,7,8	
L	<i>Dalea purpurea</i>	purple prairie clover	0.09	0.50	12-30	M	MZ, D	Very High	7,8	
L	<i>Desmodium canadense</i>	Canada tick trefoil	0.08	0.17	24-48	M	MZ	Low	7,8	Historically rare in E.S. 4
A	<i>Echinacea pallida var. angustifolia</i>	narrow-leaved purple coneflower	0.08	0.15	12-48	L	MZ, D	High	6,7	
F	<i>Gentiana andrewsii</i>	bottle gentian	0.01	1.03	6-24	L	M, MZ	High	8,9	
F	<i>Geum triflorum</i>	prairie smoke	0.01	0.10	6-18	L	MZ, D	None	5,6	
L	<i>Glycyrrhiza lepidota</i>	wild licorice	0.07	0.10	12-36	M	MZ	Medium	6,7	
A	<i>Helianthus maximiliani</i>	Maximilian's sunflower	0.04	0.19	48-60	E	M, MZ	High	9,10	
A	<i>Heliopsis helianthoides</i>	ox-eye	0.06	0.14	24-60	M	MZ, D	Very Low	6,7,8	
A	<i>Liatris aspera</i>	rough blazing star	0.03	0.18	24-36	L	MZ, D	High	7,8,9	
A	<i>Liatris ligulistylis</i>	northern plains blazing star	0.03	0.11	18-36	L	S-MZ	High	8,9	
A	<i>Liatris pycnostachya</i>	great blazing star	0.06	0.24	24-48	L	M, MZ	High	7,8	
F	<i>Monarda fistulosa</i>	wild bergamot	0.03	0.77	24-48	M	MZ, D	Very High	7,8	
A	<i>Oligoneuron rigidum (Solidago)</i>	stiff goldenrod	0.03	0.45	12-60	M	MZ, D	Very High	8,9	
F	<i>Pedicularis canadensis</i>	wood betony	0.01	0.12	12		M - D		4,5,6	Hemiparasitic
F	<i>Potentilla arguta</i>	tall cinquefoil	0.03	2.53	24	L	MZ, D	Medium	6,7,8,9	
A	<i>Prenanthes racemosa</i>	smooth rattlesnakeroot	0.02	0.15	36	M	M, MZ	Medium	7,8,9,10	
F	<i>Pycnanthemum virginianum</i>	Virginia mountain mint	0.04	3.00	12-36	L	S-MZ	High	6,7,8,9	
A	<i>Ratibida columnifera</i>	prairie coneflower	0.06	0.93	24-36	M	MZ, D	Medium	7,8	
F	<i>Rosa arkansana</i>	prairie rose	0.2	0.18	24	L	MZ, D	High	6,7,8	
A	<i>Rudbeckia hirta</i>	black-eyed susan	0.07	2.20	12-36	E	MZ	Very Low	7,8,9,10	
A	<i>Solidago speciosa</i>	showy goldenrod	0.01	0.35	12-50	M	MZ	Very High	8,9	
A	<i>Symphotrichum novae-angliae (Aster)</i>	New England aster	0.01	0.24	36-54	L	S	Very High	9,10	
A	<i>Symphotrichum ericoides (Aster)</i>	heath aster	0.01	1.10	12-36	M	MZ, D	High	8,9,10	
A	<i>Symphotrichum laeve (Aster laevis)</i>	smooth aster	0.03	0.61	31-54	L	MZ, D	High	8,9,10	
F	<i>Thalictrum dasycarpum</i>	tall meadow-rue	0.12	0.48	20-60	L	S	None	5,6,7	
F	<i>Tradescantia bracteata</i>	bracted spiderwort	0.05	0.18	12	M	MZ, D	High	5,6,7	
F	<i>Verbena hastata</i>	blue vervain	0.09	2.91	24-72	M	S - MZ	Medium	7,8,9	
F	<i>Veronicastrum virginicum</i>	Culver's root	0.01	2.94	36-72	L	S - MZ	Very High	7,8	
F	<i>Viola pedatifida</i>	bearded birdfoot violet	0.04	0.41	6	L	MZ, D	Low	4,5,6	Preferred food of regal fritillaries
F	<i>Zizia aurea</i>	golden alexanders	0.17	0.70	12-36	M	M, MZ	Low	4,5,6	
<b>Forbs subtotal: 32</b>										
<b>Total Species Richness: 45</b>			<b>Total Seeding Rate: 10.4 59</b>		<b>Guild:</b> G = grasses and grasslike species F = forbs (flowering plants) A = flowering plants in the Aster family (Asteraceae) L = nitrogen fixing plants in the legume family (Fabaceae)					
<b>Total Cost/Acre: \$836</b>			<b>(Opt.) Cover Crop - 2.5 lbs/acre 1.12</b>		<b>PLS:</b> Pure live seed (% pure * % viable / 100) (See, for example: <a href="https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf">https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf</a> )					
Seed mix cost estimate based on 2013 pricing			Oats/Winter Wheat Seeds/sqft		<b>Successional stage:</b> E = early M = mid L = late					
					<b>Hydrologic zone:</b> E = emergent S = saturated M = moist MZ = mesic D = dry					
					<b>Source:</b> State Seed Mix 35-441 with additions/substitutions selected from the Native Seed Mix Design Worksheet and other sources. For more information, see: <a href="http://nature.org/MNPrarieRestorationGuides">nature.org/MNPrarieRestorationGuides</a> .					