

Conservation Meadow - Wet (sedge meadow) Statewide Seed Mix

Guid	Scientific Name	Common Name	Rate: PLS lb/acre	Rate: Seeds/sqft	Height (in.)	Successional Stage	Hydro- logic Zone	Pollinator Value	Bloom Time (month)	Notes - Wildlife Value, Regional Suitability (E.S. = Ecological Section)
G	<i>Bromus ciliatus</i>	fringed brome	1.5	5.51	24-48	M	S	None	7,8	Rare or not native across much of southern MN
G	<i>Calamagrostis canadensis</i>	bluejoint	0.05	5.00	24-60	L	S	None	6,7,8	Not appropriate for NW MN; replace with <i>C. stricta</i> (limited availability; obtain via combine-harvest)
G	<i>Carex comosa</i>	bristly sedge	0.4	4.41	20-50	M	E	None	7,8	
G	<i>Carex hystericina</i>	porcupine sedge	0.4	4.41	36	M	E	None	6,7	
G	<i>Carex interior</i>	interior sedge	0.01	0.14	24	L	S, M	None	6	
G	<i>Carex lacustris</i>	lake sedge	0.03	0.12	20-50	L	E, S	None	6,7,8	
G	<i>Carex prairea</i>	prairie sedge	0.06	1.85	36		S, M		6,7	
G	<i>Carex scoparia</i>	pointed broom sedge	0.05	1.60	24	L	S	None	6	If <i>C. rostrata</i> is available; substitute for <i>C. scoparia</i>
G	<i>Carex stipata</i>	awl-fruited sedge	0.17	2.10	36	L	S	None	6,7	
G	<i>Carex vulpinoidea</i>	fox sedge	0.14	5.00	36	E	S	None	8,9	
G	<i>Eleocharis palustris</i>	marsh spikerush	0.05	0.15	15	M	S	None	5,6,7,8	
G	<i>Elymus virginicus</i>	Virginia wild rye	2	3.09	48	M	S - MZ	None	7,8	
G	<i>Glyceria grandis</i>	tall manna grass	0.15	3.90	48-60	L	E	None	7	
G	<i>Glyceria striata</i>	fowl manna grass	0.1	3.30	36	M	S	None	7,8,9	
G	<i>Juncus nodosus</i>	knotted rush	0.02	7.35	24	E	S	None	7,8	
G	<i>Juncus tenuis</i>	path rush	0.04	15.00	6-12	L	S - MZ	None	7	
G	<i>Leersia oryzoides</i>	rice cut grass	0.25	3.10	48	E	S	None	8,9	
G	<i>Poa palustris</i>	fowl bluegrass	0.25	11.94	24	M	S, M	None	6,7,8,9	
G	<i>Scirpus atrovirens</i> (or <i>S. pallidus</i> , per MNPC)	dark green bulrush	0.12	20.28	60	E	S	None	6,7,8	
G	<i>Scirpus cyperinus</i>	woolgrass	0.05	31.22	60	E	S	Nests	8,9,10	Historically rare in most of E.S. 4 and 9
G	<i>Spartina pectinata</i>	prairie cordgrass	0.1	0.24	48-120	L	S	None	7,8,9	
Graminoids subtotal: 21										
F	<i>Anemone canadensis</i>	Canada anemone	0.03	0.09	12-24	L	S	Low	5,6,7	
F	<i>Asclepias incarnata</i>	swamp milkweed	0.24	0.43	21-48	L	S	High	6,7	
F	<i>Caltha palustris</i>	common marsh marigold	0.02	0.19	8-16	M	E	Medium	4,5	
A	<i>Doellingeria umbellata</i> (<i>Aster umbellatus</i>)	flat-topped aster	0.01	0.25	40-72	L	S, M	Medium	8,9	Rare in E.S. 9. Associated with groundwater seepage
A	<i>Eupatorium perfoliatum</i>	common boneset	0.02	1.30	36-60	L	S	High	8,9	
A	<i>Euthamia graminifolia</i>	grass-leaved goldenrod	0.01	1.00	24	M	M, MZ	Low	7,8,9	
A	<i>Eutrochium maculatum</i> (<i>Eupatorium maculatum</i>)	spotted Joe pye weed	0.02	0.75	20-78	L	S	High	7,8,9	
A	<i>Helenium autumnale</i>	autumn sneezeweed	0.03	1.30	24-36	M	S	High	8,9,10	
F	<i>Iris versicolor</i>	northern blue flag	0.1	0.05	24-36	L	S, M	Low	5,6,7	Do not use in western half of E.S. 9
L	<i>Lathyrus palustris</i>	marsh vetchling			24	M	S, M	Medium	6,7,8	
A	<i>Liatris ligulistylis</i>	northern plains blazing star	0.05	0.18	18-36	L	S - MZ	High	8,9	
F	<i>Labelia siphilitica</i>	great lobelia	0.02	2.90	12-48	M	M	Very High	7,8,9	Not native north of Polk Co in E.S. 4
F	<i>Lycopus asper</i>	rough bugleweed	0.05	0.28	36	E	S, M	Low	6,7,8,9	
F	<i>Mimulus ringens</i>	blue monkey flower	0.01	6.80	24	M	S	Low	6,7,8,9	
F	<i>Pedicularis lanceolata</i>	swamp lousewort	0.04	0.65	6-18	M	M	Medium	8,9	
F	<i>Pycnanthemum virginianum</i>	Virginia mountain mint	0.06	5.10	12-36	L	S - MZ	High	6,7,8,9	Do not use in E.S. 4 north of Pennington Co
A	<i>Solidago gigantea</i>	giant goldenrod	0.02	1.50	72	L	S	High	8,9	
A	<i>Solidago riddellii</i>	Riddell's goldenrod	0.05	1.71	36	L	M	Very High	8,9,10	Calcareous (alkaline soils pH 7-8)
A	<i>Symphotrichum lanceolatum</i> (<i>Aster lanceolatus</i>)	eastern paniced aster	0.03	1.50	24-48	L	S	Medium	9,10	
A	<i>Symphotrichum novae-angliae</i> (<i>Aster</i>)	New England aster	0.06	1.45	36-54	L	S	Very High	9,10	
A	<i>Symphotrichum puniceum</i> (<i>Aster puniceus</i>)	red-stemmed aster	0.17	5.00	60	L	S	High	8,9,10	
F	<i>Thalictrum dasycarpum</i>	tall meadow-rue	0.01	0.11	20-60	L	S	None	5,6,7	
F	<i>Verbena hastata</i>	blue vervain	0.13	4.61	24-72	M	S - MZ	Medium	7,8,9	
A	<i>Vernonia fasciculata</i>	bunched ironweed	0.03	0.30	30-51	L	S	High	8,9	
F	<i>Veronicastrum virginicum</i>	Culver's root	0.01	4.20	36-72	L	S - MZ	Very High	7,8	
F	<i>Zizia aurea</i>	golden alexanders	0.25	1.00	12-36	M	M, MZ	Low	4,5,6	
Forbs subtotal: 26										
Total Species Richness: 47			Total Seeding Rate:	7.45	173					
Total Cost/Acre: \$1110			(Opt.) Cover Crop - Oats/Winter Wheat	7 lbs/acre	3.12 Seeds/sqft					
Seed mix cost estimate based on 2013 pricing			<p>Guid: 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)</p> <p>PLS: Pure live seed (% pure * % viable / 100) (See, for example: https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf)</p> <p>Successional stage: E = early M = mid L = late</p> <p>Hydrologic zone: E = emergent S = saturated M = moist MZ = mesic D = dry</p> <p>Source: State Seed Mix 34-271 with additions/substitutions selected from the Native Seed Mix Design Worksheet and other sources. For more information, see: nature.org/MNPrairieRestorationGuides.</p>							