

Conservation Prairie - Mesic Southwest Seed Mix

Guild	Scientific Name	Common Name	Rate: PLS lb/acre	Rate: Seeds/sqft	Height	Successional 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	1.5	5.51	36-96	L	M - D	Nests	8,9	
G	<i>Bouteloua curtipendula</i>	side-oats grama	0.9	1.98	12-36	M	MZ, D	Nests	7,8,9	
G	<i>Carex bicknellii</i>	Bicknell's sedge	0.08	0.50	36	L	MZ	None	6,7	
G	<i>Carex brevior</i>	short sedge	0.05	0.53	12	L	MZ, D	None	6,7	
G	<i>Elymus canadensis</i>	nodding wild rye	0.9	1.71	36-60	E	MZ, D	None	7,8	
G	<i>Elymus trachycaulus</i>	slender wheatgrass	0.9	2.27	24	M	MZ, D	None	6,7	
G	<i>Muhlenbergia racemosa</i>	marsh muhly grass	0.05	1.47	24	L	MZ, D	None	8,9	
G	<i>Nassella viridula</i>	green needle grass	0.44	1.70	12-48		M, MZ		5,6,7	
G	<i>Panicum virgatum</i>	switchgrass	0.16	0.80	24-84	M	M, MZ	None	7,8,9	
G	<i>Pascopyrum smithii</i>	western wheatgrass	0.5	1.30	12-36	M	MZ, D	None	7	
G	<i>Schizachyrium scoparium</i>	little bluestem	1.5	8.27	12-30	L	MZ, D	None	8,9	
G	<i>Sorghastrum nutans</i>	Indian grass	2	8.82	36-96	L	M	Nests	8,9	
G	<i>Spartina pectinata</i>	prairie cordgrass	0.1	0.24	48-120	L	S	None	7,8,9	
G	<i>Sporobolus heterolepis</i>	prairie dropseed	0.25	1.47	18-48	L	MZ	Nests	8,9	
Graminoids subtotal: 14										
F	<i>Allium stellatum</i>	prairie wild onion	0.05	0.20	6-12	M	MZ, D	Medium	6,7	
L	<i>Amorpha canescens</i>	lead plant	0.06	0.35	18-48	L	MZ, D	Very High	6,7,8	
F	<i>Anemone cylindrica</i>	long-headed thimbleweed	0.03	0.29	18-24	L	MZ, D	Low	6,7	
F	<i>Asclepias tuberosa</i>	butterfly milkweed	0.05	0.08	24-36	L	MZ, D	Very High	6,7,8	Not native in west part of E.S. 9
F	<i>Asclepias verticillata</i>	whorled milkweed	0.04	0.16	10-20	L	MZ, D	Very High	6,7,8,9	Rare in E.S. 4 north of Polk Co.
L	<i>Astragalus canadensis</i>	Canada milk vetch	0.06	0.40	12-48	M	MZ, D	Low	7,8	
L	<i>Chamaecrista fasciculata</i>	partridge pea	0.1	0.10	6-24	E	MZ, D	Very High	7,8,9	Restricted to sandy sites along MN River in E.S. 9
A	<i>Coreopsis palmata</i>	bird's foot coreopsis	0.5	1.84	12-30	L	MZ, D	Medium	7,8	
L	<i>Dalea candida</i>	white prairie clover	0.03	0.20	12-30	M	MZ, D	Medium	6,7,8	
L	<i>Dalea purpurea</i>	purple prairie clover	0.07	0.40	12-30	M	MZ, D	Very High	7,8	
L	<i>Desmodium canadense</i>	Canada tick trefoil	0.05	0.11	24-48	M	MZ	Low	7,8	Historically rare in E.S. 4
A	<i>Echinacea pallida</i> var. <i>angustifolia</i>	narrow-leaved purple coneflower	0.08	0.20	12-48	L	MZ, D	High	6,7	Not native in E.S. 4 north of Polk Co.
F	<i>Gentiana andrewsii</i>	bottle gentian	0.01	1.03	6-24	L	M, MZ	High	8,9	
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	
L	<i>Lespedeza capitata</i>	round-headed bush clover	0.06	0.18	12-24	M	MZ, D	Low	7,8	
A	<i>Liatris aspera</i>	rough blazing star	0.03	0.20	24-36	L	MZ, D	High	7,8,9	
A	<i>Liatris pycnostachya</i>	great blazing star	0.02	0.10	24-48	L	M, MZ	High	7,8	Not native north of Polk Co in E.S. 4
F	<i>Monarda fistulosa</i>	wild bergamot	0.04	0.90	24-48	M	MZ, D	Very High	7,8	
A	<i>Oligoneuron rigidum</i> (<i>Solidago</i>)	stiff goldenrod	0.03	0.50	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
A	<i>Prenanthes racemosa</i>	smooth rattlesnakeroot	0.02	0.15	36	M	M, MZ	Medium	7,8,9,10	
A	<i>Ratibida pinnata</i>	gray-headed coneflower	0.07	0.80	36-72	M	MZ	Medium	7,8,9	
F	<i>Rosa arkansana</i>	prairie rose	0.1	0.09	24	L	MZ, D	High	6,7,8	
A	<i>Rudbeckia hirta</i>	black-eyed susan	0.06	2.00	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	Rare in E.S. 9 south/west of MN River valley
A	<i>Symphyotrichum oolentangiense</i> (<i>Aster oolentangiensis</i>)	skyblue aster	0.02	0.59	36	M, L	MZ, D	High	8,9,10	
A	<i>Symphyotrichum ericoides</i> (<i>Aster</i>)	heath aster	0.01	0.73	12-36	M	MZ, D	High	8,9,10	
A	<i>Symphyotrichum laeve</i> (<i>Aster</i>)	smooth aster	0.03	0.60	31-54	L	MZ, D	High	8,9,10	
F	<i>Thalictrum dasycarpum</i>	tall meadow-rue	0.08	0.32	20-60	L	S	None	5,6,7	
F	<i>Tradescantia bracteata</i>	bracted spiderwort	0.03	0.11	12	M	MZ, D	High	5,6,7	In E.S. 4, not north of Polk Co.
F	<i>Verbena hastata</i>	blue vervain	0.07	2.50	24-72	M	S, M, MZ	Medium	7,8,9	
F	<i>Verbena stricta</i>	hoary vervain	0.05	0.50	18-36	M	D	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> (<i>V. palmata</i>)	bearded birdfoot violet	0.03	0.31	6	L	MZ, D	Low	4,5,6	Preferred food of regal fritillaries
F	<i>Zizia aurea</i>	golden alexanders	0.25	1.00	12-36	M	M, MZ	Low	4,5,6	
Forbs subtotal: 36										
Total Species Richness: 50			Total Seeding Rate: 11.6 lbs/acre 57 Seeds/sqft		Guild: 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)					
Total Cost/Acre: \$646			(Opt.) Cover Crop - Oats/Winter Wheat 3.2 lbs/acre 1.42 Seeds/sqft		PLS: Pure live seed (% pure * % viable / 100) (See, for example: https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf)					
Seed mix cost estimate based on 2013 pricing										
Successional stage: E = early M = mid L = late										
Hydrologic zone: E = emergent S = saturated M = moist MZ = mesic D = dry										
Source: State Seed Mix 35-541 with additions/substitutions selected from the Native Seed Mix Design Worksheet and other sources. For more information, see: nature.org/MNPrairieRestorationGuides .										