

Utility Meadow - Wet-mesic (wet prairie) Statewide 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 - Forage & Wildlife Value, Regional Suitability (E.S. = Ecological Section)	Forage Value and Plant Info Links
G	<i>Andropogon gerardii</i>	big bluestem	1.5	5.50	36-96	L	M, MZ, D	Nests	8,9	High quality forage species	http://plants.usda.gov/plantguide/pdf/pg_ange.pdf http://extension.missouri.edu/p/M181-15
G	<i>Beckmannia syzigachne</i>	American slough grass	1.5	27.6	24	E	S	None	6,7,8	Valuable wetland forage species; can be grazed and hayed; seeds provide food for wildlife; serves as nurse crop	http://plants.usda.gov/factsheet/pdf/fs_besy.pdf Jacobson 2005
G	<i>Bromus ciliatus</i>	fringed brome	1.5	6.05	24-48	M	S	None	7,8	Rare or not native across much of southern MN; palatable to wildlife and livestock	http://www.fs.fed.us/database/feis/plants/graminoid/broci/all.html
G	<i>Elymus canadensis</i>	nodding/Canada wild rye	4	7.64	36-60	E	MZ, D	None	7,8	Good forage value early in season; less so after it matures	http://www.fs.fed.us/database/feis/plants/graminoid/elycan/all.html
G	<i>Elymus trachycaulus</i>	slender wheatgrass	4	10.15	24	M	MZ, D	None	6,7	Palatable; grazed by wildlife & livestock	http://www.fs.fed.us/database/feis/plants/graminoid/elytra/all.html
G	<i>Elymus virginicus</i>	Virginia wild rye	4	6.17	48	M	S - MZ	None	7,8	Palatable, productive and nutritious forage for livestock and wildlife	http://plant-materials.nrcs.usda.gov/pubs/stpmcfs0758.pdf
G	<i>Panicum virgatum</i>	switchgrass	0.4	2.05	24-84	M	M, MZ	None	7,8,9	Productive, high quality hay; biofuels; value to wildlife as well	http://plants.usda.gov/factsheet/pdf/fs_pavi2.pdf http://www.uwex.edu/ces/forage/pubs/switchgrass.pdf http://extension.missouri.edu/p/M181-23
G	<i>Poa palustris</i>	fowl bluegrass	1.6	76.4	24	M	S, M	None	6,7,8,9	Serves as nurse crop; low palatability; may substitute equivalent amount of seeds with more palatable species as budget allows	http://plants.usda.gov/java/charProfile?symbol=POPA2 Jacobson 2005
G	<i>Sorghastrum nutans</i>	Indian grass	1.5	6.6	36-96	L	M	Nests	8,9	High to fair forage value; wildlife value	http://plants.usda.gov/factsheet/pdf/fs_sonu2.pdf
Graminoids subtotal: 9											
F	<i>Asclepias incarnata</i>	swamp milkweed	0.06	0.1	21-48	L	S	High	6,7	Low palatability but high wildlife/pollinator value	http://plants.usda.gov/java/charProfile?symbol=ASIN
L	<i>Dalea purpurea</i>	purple prairie clover	0.09	0.5	12-30	M	MZ, D	Very High	7,8	Good forage quality, but low yield; excellent forage but can be overgrazed	http://npj.uwpress.org/content/5/2/152.full.pdf http://www.plant-materials.nrcs.usda.gov/pubs/kspmcpg7796.pdf
L	<i>Desmodium canadense</i>	Canada tick trefoil	0.09	0.19	24-48	M	MZ	Low	7,8	Historically rare in E.S. 4. Can improve forage quality of native grasses; relatively high yield	http://npj.uwpress.org/content/5/2/152.full.pdf
A	<i>Heliopsis helianthoides</i>	ox-eye	0.09	0.2	24-60	M	MZ, D	Very Low	6,7,8	Forage quality ranges from poor to good	http://plants.usda.gov/plantguide/pdf/pg_hehe5.pdf
A	<i>Liatris pycnostachya</i>	great blazing star	0.02	0.1	24-48	L	M, MZ	High	7,8	<i>Liatris</i> spp. have fair to good forage value & wildlife benefit	http://plants.usda.gov/factsheet/pdf/fs_lipu.pdf
A	<i>Rudbeckia hirta</i>	black-eyed susan	0.07	2.49	12-36	E	MZ	Very Low	7,8,9,10	Moderately grazed by cattle	http://www.fs.fed.us/database/feis/plants/forb/rudhir/all.html
F	<i>Verbena hastata</i>	blue vervain	0.1	3.5	24-72	M	S - MZ	Medium	7,8,9	Uncertain, but likely limited to moderate forage value; seeds and nectar are food source for birds, pollinators	https://plants.usda.gov/factsheet/pdf/fs_veha2.pdf http://www.illinoiswildflowers.info/wetland/plants/bl_vervain.htm
Forbs subtotal: 7											
Total Species Richness: 16			Total Seeding Rate:		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)						
			20.5 lbs/acre	155.2 Seeds/sqft	PLS: Pure live seed (% pure * % viable / 100) (See, for example: https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf)						
Total Cost/Acre: \$323			(Opt.) Cover Crop - Oats/Winter Wheat	11.14 Seeds/sqft	Successional stage: E = early M = mid L = late						
Seed mix cost estimate based on 2013 pricing			25 lbs/acre		Hydrologic zone: E = emergent S = saturated M = moist MZ = mesic D = dry						
Source: State Seed Mix 33-262 with additions/substitutions selected from the Native Seed Mix Design Worksheet and other sources. For more information, see: nature.org/MNPrairieRestorationGuides .											