



SEED A LEGACY

Pollinator Habitat Program



SOUTH DAKOTA MONARCH BUTTERFLY MIX

Species	Scientific Name	Suggested Seeding Rates	PLS lbs per acre	PLS seeds per sq ft	% of Mixture PLS	COC	Bloom Period	Pollinator Value
Big Bluestem	<i>Andropogon gerardii</i>	--	0.350	1.16	2.90%	5	--	--
Canada Wildrye	<i>Elymus canadensis</i>	--	0.500	1.31	3.27%	5	--	--
Little Bluestem	<i>Schizachyrium scoparium</i>	--	0.400	2.21	5.52%	4	--	--
Plains Oval Sedge	<i>Carex brevior</i>	0.01 - 0.05	0.030	0.45	1.12%	3	--	--
Prairie Junegrass	<i>Koeleria pyramidata</i>	--	0.050	2.66	6.64%	6	--	--
Sideoats Grama	<i>Bouteloua curtipendula</i>	--	0.400	1.46	3.65%	5	--	--
Western Wheatgrass	<i>Elymus smithii</i>	--	0.500	1.31	3.27%	3	--	--
Alfalfa	<i>Medicago spp.</i>	0.05 - 1.5	0.250	1.30	3.25%		2	5
Alsike Clover	<i>Trifolium hybridum</i>	0.01 - 0.1	0.140	2.19	5.46%		2	5
Anise Hyssop	<i>Agastache foeniculum</i>	0.003 - 0.015	0.010	0.33	0.83%	--	3	5
Blackeyed Susan	<i>Rudbeckia hirta</i>	0.01 - 0.1	0.060	2.17	5.42%	3	2	1
Blanketflower	<i>Gaillardia aristata</i>	0.04 - 0.2	0.120	0.51	1.28%	5	1	4
Canada Goldenrod	<i>Solidago canadensis</i>	0.001 - 0.005	0.002	0.33	0.81%	2	2	5
Canada Milkvech	<i>Astragalus canadensis</i>	0.02 - 0.15	0.060	0.37	0.93%	5	2	4
Canada Tick-trefoil	<i>Desmodium canadense</i>	0.01 - 0.03	0.030	0.06	0.15%	5	2	5
Clasping Coneflower	<i>Rudbeckia amplexicaulis</i> or <i>Dracopis amplexicaulis</i>	0.01 - 0.05	0.030	1.10	2.75%		1	2
Common Evening Primrose	<i>Oenothera biennis</i>	0.005 - 0.04	0.028	0.88	2.21%	1	2	4
Common Milkweed	<i>Asclepias syriaca</i>	0.03 - 0.08	0.060	0.11	0.28%	1	2	5
Common Mullein	<i>Verbascum thapsus</i>	0.001 - 0.008	0.001	0.15	0.37%	1	2	4
Crimson Clover	<i>Trifolium incarnetum</i>	0.1 - 2.0	1.100	3.78	9.45%	--	1	5
Deer Vetch	<i>Lotus unifoliolatus</i>	0.01 - 0.04	0.035	0.06	0.14%	3	3	4
False Sunflower	<i>Heliopsis helianthoides</i>	0.03 - 0.09	0.140	0.33	0.83%	4	2	5
Foxglove Beardstongue	<i>Penstemon digitalis</i>	0.01 - 0.03	0.015	0.14	0.34%	6	1	5
Gray Goldenrod	<i>Solidago nemoralis</i>	0.001 - 0.005	0.003	0.33	0.83%	--	3	4
Heath Aster	<i>Aster ericoides</i>	0.001 - 0.004	0.003	0.35	0.87%	3	3	5
Hoary Vervain	<i>Verbena stricta</i>	0.01 - 0.06	0.028	0.38	0.94%	8	2	5
Illinois Bundleflower	<i>Desmanthus illinoensis</i>	0.05 - 0.25	0.180	0.35	0.88%	5	2	5
Ironweed	<i>Vernonia fasciculata</i>	0.02 - 0.06	0.015	0.13	0.33%	4	2	5
Phacelia	<i>Phacelia tanacetifolia</i>	0.08 - 0.5	0.500	2.81	7.03%	--	1	5
Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>	0.05 - 0.1	0.050	0.25	0.63%	--	2	3
Late or Giant Goldenrod	<i>Solidago gigantea</i>	0.001 - 0.005	0.002	0.35	0.87%	3	3	5
Maximillian Sunflower	<i>Helianthus maximiliani</i>	0.01 - 0.05	0.080	0.36	0.90%	4	3	5
Mexican Hat	<i>Ratibida peduncularis</i>	0.02 - 0.08	0.020	0.34	0.85%	--	2	2
Missouri Goldenrod	<i>Solidago missouriensis</i>	0.001 - 0.007	0.002	0.29	0.72%	5	2	5
New England Aster	<i>Aster novae-angliae</i>	0.005 - 0.01	0.015	0.36	0.91%	4	3	5
Plains Sunflower	<i>Helianthus petiolaris</i>	0.01 - 0.05	0.020	0.05	0.13%	2	3	5
Prairie Sainfoin	<i>Onobrychis vicifolia</i>	0.5 - 2.0	1.500	1.04	2.60%	--	2	5
Purple Coneflower	<i>Echinacea purpurea</i>	0.05 - 0.2	0.150	0.40	1.00%	--	2	4
Purple Prairieclover	<i>Dalea purpurea</i>	0.04 - 0.15	0.100	0.73	1.82%	6	2	5
Rocky Mountain Bee Plant	<i>Cleome serrulata</i>	0.02 - 0.05	0.020	0.03	0.07%	--	2	5
Rough Gayfeather	<i>Liatris aspera</i>	0.01 - 0.03	0.015	0.09	0.24%	5	3	4
Sawtooth Sunflower	<i>Helianthus grosseserratus</i>	0.005 - 0.04	0.015	0.22	0.54%	4	3	5
Shell-leaf Penstemon	<i>Penstemon grandiflorus</i>	0.01 - 0.04	0.020	0.10	0.24%	5	1	5
Showy Milkweed	<i>Asclepias speciosa</i>	0.01 - 0.06	0.050	0.08	0.20%		2	5
Showy Partridgepea	<i>Chamaecrista fasciculata</i>	0.1 - 0.4	0.300	0.45	1.12%	1	2	5

Continued on back

Species	Scientific Name	Suggested Seeding Rates	PLS lbs per acre	PLS seeds per sq ft	% of Mixture PLS	COC	Bloom Period	Pollinator Value
Showy-wand Goldenrod	<i>Solidago speciosa</i>	0.001 - 0.008	0.005	0.49	1.23%	7	3	5
Smooth Blue Aster	<i>Aster laevis</i>	0.005 - 0.02	0.010	0.23	0.58%	5	3	4
Stiff Goldenrod	<i>Solidago rigida</i>	0.01 - 0.02	0.015	0.23	0.58%	3	3	5
Stiff Sunflower	<i>Helianthus pauciflorus</i>	0.01 - 0.04	0.015	0.25	0.64%	5	2	4
Tall Boneset	<i>Eupatorium altissimum</i>	0.006 - 0.025	0.007	0.13	0.32%	3	3	4
Tall Cinquefoil	<i>Drymocallis arguta</i>	0.003 - 0.008	0.010	0.85	2.12%	6	2	3
Upright Coneflower	<i>Ratibida columnifera</i>	0.02 - 0.08	0.060	1.02	2.54%	3	2	2
Western Yarrow	<i>Achillea millefolium</i>	0.01 - 0.05	0.030	1.96	4.91%	2	1	2
White Prairieclover	<i>Dalea candida</i>	0.05 - 0.2	0.050	0.35	0.87%	6	2	5
Wild Bergamot	<i>Monarda fistulosa</i>	0.01 - 0.03	0.022	0.64	1.61%	3	2	5
Rice Hulls - Filler for low seeding rate mixtures		--	1.000	0.00	0.00%	--	--	--
Grasses Total:			2.230	10.550	26.36%			
Wildflower/Forb/Legume Total:			5.393	29.466	73.64%			
Filler Total:			1.000	0.000	0.00%			
Total Mixture:			8.623	40.016	100.00%			

COC = Coefficient of Conservatism

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Native Seed Designation

Bloom Period	Wildflowers Used in Mixture	% PLS Seeding Rate of Mix
1 = April to May	7	26.01%
2 = June to July	27	38.66%
3 = August to October	14	8.96%
Total :	48	

4.35 Pollinator Value