

Customize Options to Suit Site Conditions

Xeric (dry)
 Mesic (medium)
 Hydric (wet)

 Prairie
 Savanna
 Wetland
 Woodland

 Long Term Program
 Short Term Program

Monarch Preferred Species

 Forage and Biomass (512) Planting

CHOOSE A RATE SPECIFICATION:

lbs/acre PLS (check a mix)
 Seeds/ft2 PLS (design a mix)

To override default cost, enter your cost in the applicable cell.



United States Department of Agriculture

Natural Resources Conservation Service

Criteria Revision Update 5/26/2020
Species Information Update 8/26/2021

CHOOSE YOUR GRASSES

↩ Input quantity ↲

Common Name	Scientific Name	Lbs / acre PLS	Seeds / ft2 PLS	Coefficient of Conservatism	Estimated Cost (\$/lb)	# Seeds / ft ² @ 1 lb. / ac	Pure Stand PLS Rate lbs / ac	% of Mix	Estimated Cost (\$/ac)	Functional Group
		Equivalent rate below								
1 Grama, Sideoats	<i>Bouteloua curtipendula</i>	0.80		7	\$9	4.4	8.0	11.5%	\$7	Perennial Warm Season Grass
	Rhizomatous		3.49							
2 Lovegrass, Sand	<i>Eragrostis trichodes</i>	0.14		5	\$75	35.6	1.0	16.5%	\$11	Perennial Warm Season Grass
	Bunch		4.98							
3 Junegrass, Prairie	<i>Koeleria macrantha</i>	0.040		7	\$75	33.6	1.0	4.4%	\$3	Perennial Cool Season Grass
	Bunch		1.35							
4 Bluestem, Little	<i>Schizachyrium scoparium</i>	1.20		5	\$12	5.9	6.0	23.2%	\$14	Perennial Warm Season Grass
	Bunch		7.03							
5 Dropseed, Composite	<i>Sporobolus compositus</i>	0.30		3	\$17	11.0	3.2	10.9%	\$5	Perennial Warm Season Grass
	Bunch		3.31							
6									\$0.00	
7									\$0.00	
8									\$0.00	
9									\$0.00	
10									\$0.00	
11									\$0.00	
12									\$0.00	
13									\$0.00	
14									\$0.00	
15									\$0.00	
16									\$0.00	
17									\$0.00	
18									\$0.00	
19									\$0.00	
20									\$0.00	
21									\$0.00	
22									\$0.00	
23									\$0.00	
24									\$0.00	
25									\$0.00	

25									\$0.00	
27									\$0.00	
28									\$0.00	
29									\$0.00	
30									\$0.00	
		Species Richness	lbs / acre PLS	seeds / ft ² PLS	Average CC	ESTIMATED GRAMINOID COST (\$/AC)			OST (\$/AC)	\$40
GRAMINOID TOTAL		5	2.48	20.15	5.4					

CHOOSE YOUR FORBS/LEGUMES											
↩ Input quantity ↪											
Common Name *Select Plants	Scientific Name *Select Bloom Period below Scientific Name	Lbs / acre PLS	Seeds / ft ² PLS	Coefficient of Conservatism	Estimated Cost (\$/lb)	# Seeds / ft ² @ 1 lb. / ac	Pure Stand PLS Rate lbs / ac	% of Mix	Estimated Cost (\$/ac)	Functional Group	Monarch Preferred
		Equivalent rate below									
1 Milkvetch, Canadian	<i>Astragalus canadensis</i>	0.020	0.11	7	\$120	5.7	6.1	0.4%	\$2	Perennial Forb, Legume	
Input bloom period -> Mid											
2 Partridge Pea	<i>Chamaecrista fasciculata</i>	0.15	0.17	1	\$25	1.1	30.7	0.6%	\$4	Annual Forb, Legume	
Input bloom period -> Mid											
3 Prairie Clover, White	<i>Dalea candida</i>	0.010	0.070	9	\$90	7.0	5.0	0.2%	\$0.90	Perennial Forb, Legume	X
Input bloom period -> Mid											
4 Prairie Clover, Purple	<i>Dalea purpurea</i>	0.030	0.19	8	\$45	6.2	5.6	0.6%	\$1	Perennial Forb, Legume	X
Input bloom period -> Late											
5 Bundleflower, Illinois	<i>Desmanthus illinoensis</i>	0.10	0.14	4	\$45	1.4	25.1	0.5%	\$5	Perennial Forb, Legume	
Input bloom period -> Mid											
6 Ticktrefoil, Showy	<i>Desmodium canadense</i>	0.10	0.20	5	\$150	2.0	17.3	0.7%	\$15	Perennial Forb, Legume	
Input bloom period -> Mid											
7 Milkweed, Common	<i>Asclepias syriaca</i>	0.020	0.029	0	\$120	1.5	23.8	0.1%	\$2	Perennial Forb	X
Input bloom period -> Mid											
8 Milkweed, Butterfly	<i>Asclepias tuberosa</i>	0.010	0.016	5	\$300	1.6	22.2	0.1%	\$3	Perennial Forb	X
Input bloom period -> Mid											
9 Coreopsis, Lanceleaf Tickseed	<i>Coreopsis lanceolata</i>	0.20	1.47	5	\$1,280	7.3	4.8	4.9%	\$256	Perennial Forb	X
Input bloom period -> Mid											
10 Coneflower, Eastern Purple	<i>Echinacea purpurea</i>	0.10	0.24	6	\$45	2.4	14.4	0.8%	\$5	Perennial Forb	X
Input bloom period -> Mid											
11 Blazing Star, Dense	<i>Liatris spicata</i>	0.010	0.040	7	\$150	4.0	8.7	0.1%	\$2	Perennial Forb	X
Input bloom period -> Mid											
12 Bergamot, Wild	<i>Monarda fistulosa</i>	0.030	0.83	4	\$150	27.5	1.3	2.7%	\$5	Perennial Forb	X
Input bloom period -> Late											
13 Goldenrod, Stiff	<i>Oligoneuron rigidum</i>	0.010	0.15	4	\$225	15.1	2.3	0.5%	\$2	Perennial Forb	X
Input bloom period -> Late											
14 Beardtongue, Foxglove	<i>Penstemon digitalis</i>	0.0050	0.24	4	\$150	47.8	0.7	0.8%	\$0.75	Perennial Forb	
Input bloom period -> Early											
15 Cinquefoil, Tall	<i>Potentilla arguta</i>	0.010	0.84	10	\$120	84.5	0.4	2.8%	\$1	Perennial Forb	
Input bloom period -> Mid											
16 Mountainmint, Narrowleaf	<i>Pycnanthemum tenuifolium</i>	0.010	1.39	4	\$450	138.8	0.3	4.6%	\$5	Perennial Forb	X
Input bloom period -> Late											
17 Mountainmint, Virginia (Common)	<i>Pycnanthemum virginianum</i>	0.0010	0.081	5	\$450	80.8	0.4	0.3%	\$0.45	Perennial Forb	X
Input bloom period -> Late											
18 Coneflower, Pinnate Prairie (Gray-headed)	<i>Ratibida pinnata</i>	0.010	0.14	4	\$60	14.3	2.4	0.5%	\$0.60	Perennial Forb	
Input bloom period -> Mid											
19 Susan, Black-eyed	<i>Rudbeckia hirta</i>	0.063	2.17	2	\$45	34.4	1.0	7.2%	\$3	Biennial Forb	X
Input bloom period -> Mid											
20 Susan, Browneyed	<i>Rudbeckia triloba</i>	0.010	0.13	3	\$90	12.9	2.7	0.4%	\$0.90	Biennial Forb	X
Input bloom period -> Late											
21 Goldenrod, Gray (Field)	<i>Solidago nemoralis</i>	0.0030	0.33	3	\$600	110.2	0.3	1.1%	\$2	Perennial Forb	X
Input bloom period -> Late											
22 Aster, Smooth Blue	<i>Symphotrichum laeve</i>	0.0020	0.037	8	\$300	18.4	1.9	0.1%	\$0.60	Perennial Forb	X
Input bloom period -> Late											

23	Aster, Calico	<i>Symphotrichum lateriflorum</i>	0.0050		2	\$600	91.8	0.4	1.5%	\$3	Perennial Forb	X	
	Input bloom period ->	Late		0.46									
24	Aster, New England	<i>Symphotrichum novae-angliae</i>	0.0020		4	\$300	24.2	1.4	0.2%	\$0.60	Perennial Forb	X	
	Input bloom period ->	Late		0.048									
25	Spiderwort, Bluejacket (Ohio)	<i>Tradescantia ohiensis</i>	0.0010		3	\$300	2.9	11.9	0.0%	\$0.30	Perennial Forb		
	Input bloom period ->	Early		0.0029									
26	Verbena, Hoary	<i>Verbena stricta</i>	0.010		2	\$75	12.3	2.9	0.4%	\$0.75	Perennial Forb	X	
	Input bloom period ->	Late		0.12									
27	Culver's Root	<i>Veronicastrum virginicum</i>	0.0010		6	\$1,200	275.5	0.1	0.9%	\$1	Perennial Forb	X	
	Input bloom period ->	Mid		0.28									
28	Zizia, Golden (Alexander's)	<i>Zizia aurea</i>	0.020		6	\$120	4.4	7.9	0.3%	\$2	Perennial Forb		
	Input bloom period ->	Early		0.088									
29										\$0.00			
	Input bloom period ->												
30										\$0.00			
	Input bloom period ->												
31										\$0.00			
	Input bloom period ->												
32										\$0.00			
	Input bloom period ->												
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37										\$0.00			
	Input bloom period ->												
38										\$0.00			
	Input bloom period ->												
39										\$0.00			
	Input bloom period ->												
40										\$0.00			
	Input bloom period ->												
			Species Richness	lbs / acre PLS	seeds / ft ² PLS	Average CC	ESTIMATED FORB COST (\$/AC)			COST (\$/AC)	\$324		
FORBS/LEGUMES TOTAL			28	0.94	10.02	4.7							

CHOOSE YOUR VINE OR Sub-Shrub PLANT SPECIES													
	Common Name	Scientific Name Flowering Period	Lbs / acre PLS	Seeds / ft ² PLS	Coefficient of Conservatism	Estimated Cost (\$/lb)	# Seeds / ft ² @ 1 oz. / ac	Pure Stand PLS Rate lbs / ac	% of Mix	Estimated Cost (\$/ac)	Functional Group	Monarch Preferred	
													Equivalent rate below
1	Leadplant	<i>Amorpha canescens</i>	0.015		8	\$225.00	6	6	0.0%	\$3	Sub-Shrub, Legume	X	
	Input bloom period ->	Mid		0.094									
2										\$0.00			
	Input bloom period ->												
3										\$0.00			
	Input bloom period ->												
4										\$0.00			
	Input bloom period ->												
5										\$0.00			
	Input bloom period ->												
			Species Richness	Lbs / acre PLS	seeds / ft ² PLS	Average CC	ESTIMATED VINE & WOODY COST (\$/AC)			COST (\$/AC)	\$3		
VINE & WOODY PLANT TOTAL			1	0.02	0.09	8.0							

	lbs / acre PLS	seeds / ft ² PLS	Average CC	Species Richness	Floristic Quality Index		ESTIMATED GRAND TOTAL COST (\$/AC)
GRAND TOTAL	3.44	30.3	4.9	34	28.5		\$368

Illinois NRCS 420 Wildlife Habitat Planting Implementation Requirements Full Seeding			
Requirement	Criteria	Mix	Criteria Met
Requirements for sites on < 5% slope			
Grass Seeds/ft ² , Minimum	10.0	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	20.0	30.3	Meets Criteria
Requirements for sites on >=5% slope			
Grass Seeds/ft ² , Minimum	20.0	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	30.0	30.3	Meets Criteria
Wildlife Special Purposes Escape and Nesting Cover Requirements			
Wildlife monoculture native grass (PLS/ft ²)	30.0	20.1	Does Not Meet Criteria

Illinois NRCS 420 Wildlife Habitat Planting Diverse Grass and Forb Stand (>15 desirable Species) Interseeding 1/2 Rate			
Requirement	Criteria	Mix	Criteria Met
Grass and Forb Interseeding on < 5% slope			
Grass Seeds/ft ² , Minimum	5.0	20.1	Meets Criteria
Forb & Shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft ² , minimum	10.0	30.3	Meets Criteria
Forb Only Interseeding on < 5% slope			
Forb & Sub-shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria
Grass and Forb Interseeding on >= 5% slope			
Grass Seeds/ft ² , Minimum	10	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	15	30.3	Meets Criteria
Forb Only Interseeding on >= 5% slope			
Forb & Sub-shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria