

Customize Options to Suit Site Conditions

▼ ← Pick an Ecoregion

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
*Select Plants	Growth Form	Equivalent rate below								
1 Grama, Sideoats	<i>Bouteloua curtipendula</i> Rhizomatous	0.40	1.74	7	\$9	4.4	8.0	8.6%	\$4	Perennial Warm Season Grass
2 Lovegrass, Sand	<i>Eragrostis trichodes</i> Bunch	0.070	2.49	5	\$75	35.6	1.0	12.3%	\$5	Perennial Warm Season Grass
3 Junegrass, Prairie	<i>Koeleria macrantha</i> Bunch	0.020	0.67	7	\$75	33.6	1.0	3.3%	\$2	Perennial Cool Season Grass
4 Bluestem, Little	<i>Schizachyrium scoparium</i> Bunch	0.60	3.51	5	\$12	5.9	6.0	17.4%	\$7	Perennial Warm Season Grass
5 Dropseed, Composite	<i>Sporobolus compositus</i> Bunch	0.15	1.65	3	\$17	11.0	3.2	8.2%	\$3	Perennial Warm Season Grass
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)	\$20
GRAMINOID TOTAL		5	1.24	10.07	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	0.6%	\$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	0.8%	\$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	0.3%	\$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	0.9%	\$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	0.7%	\$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	1.0%	\$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	7.3%	\$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	1.2%	\$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	0.2%	\$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	4.1%	\$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	0.7%	\$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	1.2%	\$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	4.2%	\$1	Perennial Forb	
Input bloom period -> Mid											
16 Mountainmint, Narrowleaf	<i>Pycnanthemum tenuifolium</i>	0.010	1.39	4	\$450	138.8	0.3	6.9%	\$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	0.4%	\$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	0.7%	\$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	10.7%	\$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	0.6%	\$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	1.6%	\$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	0.2%	\$0.60	Perennial Forb	X
Input bloom period -> Late											

23	Aster, Calico	<i>Symphotrichum lateriflorum</i>	0.0050		2	\$600	91.8	0.4	2.3%	\$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	0.6%	\$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	1.4%	\$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	0.4%	\$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			
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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						\$0.00			
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	2.20	20.2	4.9	34	28.5		\$347

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	10.1	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	20.0	20.2	Meets Criteria
Requirements for sites on >=5% slope			
Grass Seeds/ft ² , Minimum	20.0	10.1	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	30.0	20.2	Does Not Meet Criteria
Wildlife Special Purposes Escape and Nesting Cover Requirements			
Wildlife monoculture native grass (PLS/ft ²)	30.0	10.1	Does Not Meet Criteria

Illinois NRCS 420 Wildlife Habitat Planting Diverse Grass and Forb Stand (>15 desirable Species) Interseeding ½ Rate			
Requirement	Criteria	Mix	Criteria Met
Grass and Forb Interseeding on < 5% slope			
Grass Seeds/ft ² , Minimum	5.0	10.1	Meets Criteria
Forb & Shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft ² , minimum	10.0	20.2	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	10.1	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft ² , Minimum	15	20.2	Meets Criteria
Forb Only Interseeding on >= 5% slope			
Forb & Sub-shrub Seeds/ft ² , Minimum	2.5	10.1	Meets Criteria