

### 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 <sup>2</sup> @ 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	0.80	3.49	7	\$9	4.4	8.0	11.5%	\$7	Perennial Warm Season Grass
2 Lovegrass, Sand	<i>Eragrostis trichodes</i> Bunch	0.14	4.98	5	\$75	35.6	1.0	16.4%	\$11	Perennial Warm Season Grass
3 Junegrass, Prairie	<i>Koeleria macrantha</i> Bunch	0.040	1.35	7	\$75	33.6	1.0	4.4%	\$3	Perennial Cool Season Grass
4 Bluestem, Little	<i>Schizachyrium scoparium</i> Bunch	1.20	7.03	5	\$12	5.9	6.0	23.1%	\$14	Perennial Warm Season Grass
5 Dropseed, Composite	<i>Sporobolus compositus</i> Bunch	0.30	3.31	3	\$17	11.0	3.2	10.9%	\$5	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 <sup>2</sup> 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 <small>*Select Plants</small>	Scientific Name <small>*Select Bloom Period below Scientific Name</small>	Lbs / acre PLS	Seeds / ft <sup>2</sup> PLS	Coefficient of Conservatism	Estimated Cost (\$/lb)	# Seeds / ft <sup>2</sup> @ 1 lb. / ac	Pure Stand PLS Rate lbs / ac	% of Mix	Estimated Cost (\$/ac)	Functional Group	Monarch Preferred
			Equivalent rate below									
1	Milkweed, Common <small>Input bloom period -&gt;</small>	<i>Asclepias syriaca</i> Mid	0.031	0.046	0	\$120	1.5	23.8	0.1%	\$4	Perennial Forb	X
2	Milkweed, Butterfly <small>Input bloom period -&gt;</small>	<i>Asclepias tuberosa</i> Mid	0.020	0.032	5	\$300	1.6	22.2	0.1%	\$6	Perennial Forb	X
3	Milkvetch, Canadian <small>Input bloom period -&gt;</small>	<i>Astragalus canadensis</i> Mid	0.010	0.057	7	\$120	5.7	6.1	0.2%	\$1	Perennial Forb, Legume	
4	Partridge Pea <small>Input bloom period -&gt;</small>	<i>Chamaecrista fasciculata</i> Late	0.15	0.17	1	\$25	1.1	30.7	0.6%	\$4	Annual Forb, Legume	
5	Coreopsis, Lanceleaf Tickseed <small>Input bloom period -&gt;</small>	<i>Coreopsis lanceolata</i> Mid	0.10	0.73	5	\$1,280	7.3	4.8	2.4%	\$128	Perennial Forb	X
6	Prairie Clover, White <small>Input bloom period -&gt;</small>	<i>Dalea candida</i> Mid	0.030	0.21	9	\$90	7.0	5.0	0.7%	\$3	Perennial Forb, Legume	X
7	Prairie Clover, Purple <small>Input bloom period -&gt;</small>	<i>Dalea purpurea</i> Mid	0.15	0.94	8	\$45	6.2	5.6	3.1%	\$7	Perennial Forb, Legume	X
8	Bundleflower, Illinois <small>Input bloom period -&gt;</small>	<i>Desmanthus illinoensis</i> Mid	0.10	0.14	4	\$45	1.4	25.1	0.5%	\$5	Perennial Forb, Legume	
9	Coneflower, Eastern Purple <small>Input bloom period -&gt;</small>	<i>Echinacea purpurea</i> Mid	0.15	0.36	6	\$45	2.4	14.4	1.2%	\$7	Perennial Forb	X
10	Alumroot <small>Input bloom period -&gt;</small>	<i>Heuchera richardsonii</i> Early	0.0020	0.51	8	\$900	252.5	0.1	1.7%	\$2	Perennial Forb	
11	Bergamot, Wild <small>Input bloom period -&gt;</small>	<i>Monarda fistulosa</i> Mid	0.040	1.10	4	\$150	27.5	1.3	3.6%	\$6	Perennial Forb	X
12	Beardtongue, Foxglove <small>Input bloom period -&gt;</small>	<i>Penstemon digitalis</i> Early	0.015	0.72	4	\$150	47.8	0.7	2.4%	\$2	Perennial Forb	
13	Cinquefoil, Tall <small>Input bloom period -&gt;</small>	<i>Potentilla arguta</i> Late	0.010	0.84	10	\$120	84.5	0.4	2.8%	\$1	Perennial Forb	
14	Mountainmint, Narrowleaf <small>Input bloom period -&gt;</small>	<i>Pycnanthemum tenuifolium</i> Late	0.0030	0.42	4	\$450	138.8	0.3	1.4%	\$1	Perennial Forb	X
15	Coneflower, Pinnate Prairie (Gray-head) <small>Input bloom period -&gt;</small>	<i>Ratibida pinnata</i> Mid	0.020	0.29	4	\$60	14.3	2.4	0.9%	\$1	Perennial Forb	
16	Susan, Black-eyed <small>Input bloom period -&gt;</small>	<i>Rudbeckia hirta</i> Mid	0.063	2.17	2	\$45	34.4	1.0	7.1%	\$3	Biennial Forb	X
17	Goldenrod, Gray (Field) <small>Input bloom period -&gt;</small>	<i>Solidago nemoralis</i> Late	0.0030	0.33	3	\$600	110.2	0.3	1.1%	\$2	Perennial Forb	X
18	Aster, Calico <small>Input bloom period -&gt;</small>	<i>Symphotrichum lateriflorum</i> Late	0.0040	0.37	2	\$600	91.8	0.4	1.2%	\$2	Perennial Forb	X
19	Aster, New England <small>Input bloom period -&gt;</small>	<i>Symphotrichum novae-angliae</i> Late	0.0050	0.12	4	\$300	24.2	1.4	0.4%	\$2	Perennial Forb	X
20	Verbena, Hoary <small>Input bloom period -&gt;</small>	<i>Verbena stricta</i> Late	0.030	0.37	2	\$75	12.3	2.9	1.2%	\$2	Perennial Forb	X
21	Zizia, Golden (Alexander's) <small>Input bloom period -&gt;</small>	<i>Zizia aurea</i> Early	0.070	0.31	6	\$120	4.4	7.9	1.0%	\$8	Perennial Forb	
22	<small>Input bloom period -&gt;</small>									\$0.00		



	lbs / acre PLS	seeds / ft <sup>2</sup> PLS	Average CC	Species Richness	Floristic Quality Index		ESTIMATED GRAND TOTAL COST (\$/AC)
<b>GRAND TOTAL</b>	3.49	30.4	4.8	26	24.5		\$237

Illinois NRCS 420 Wildlife Habitat Planting Implementation Requirements Full Seeding			
Requirement	Criteria	Mix	Criteria Met
<b>Requirements for sites on &lt; 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	10.0	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	5.0	10.2	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	20.0	30.4	Meets Criteria
<b>Requirements for sites on &gt;=5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	20.0	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	5.0	10.2	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	30.0	30.4	Meets Criteria
<b>Wildlife Special Purposes Escape and Nesting Cover Requirements</b>			
Wildlife monoculture native grass (PLS/ft <sup>2</sup> )	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
<b>Grass and Forb Interseeding on &lt; 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	5.0	20.1	Meets Criteria
Forb & Shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.2	Meets Criteria
Total Seeds/ft <sup>2</sup> , minimum	10.0	30.4	Meets Criteria
<b>Forb Only Interseeding on &lt; 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.2	Meets Criteria
<b>Grass and Forb Interseeding on &gt;= 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	10	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.2	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	15	30.4	Meets Criteria
<b>Forb Only Interseeding on &gt;= 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.2	Meets Criteria

Illinois NRCS 420 Wildlife Habitat Planting: Pollinator and Monarch Full Seeding Requirements			
Requirement	Criteria	Mix	Criteria Met
<b>All mixes</b>			
Spring Blooming Forbs & Shrubs, Minimum	3	3	Meets Criteria
Summer Blooming Forbs & Shrubs, Minimum	3	5	Meets Criteria
Fall Blooming Forbs & Shrubs, Minimum	3	5	Meets Criteria
Tall Grass Species in the Mix (Big Bluestem, Indiangrass, or Switchgrass)	Absent	Absent	Meets Criteria
<b>Requirements for sites on &lt; 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Maximum	5	20.1	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	15	10.2	Does Not Meet Criteria
Total Seeds/ft <sup>2</sup> , Minimum	20	30.4	Meets Criteria
<b>Requirements for sites on &gt;=5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	10	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	30	10.2	Does Not Meet Criteria
Total Seeds/ft <sup>2</sup> , Minimum	40	30.4	Does Not Meet Criteria
<b>Additional Requirement for Monarch Plantings</b>			
Milkweed % PLS seeds/ft <sup>2</sup> , Minimum	1.5%	0.3%	Does Not Meet Criteria
Monarch preferred Forbs % PLS seeds/ft <sup>2</sup> , Minimum	60.0%	70.4%	Meets Criteria

Illinois NRCS 420 Wildlife Habitat Planting: Pollinator and Monarch Interseeding 1/2 Rate			
Requirement	Criteria	Mix	Criteria Met
<b>All mixes</b>			
Spring Blooming Forbs & Shrubs, Minimum	3	3.0	Meets Criteria
Summer Blooming Forbs & Shrubs, Minimum	3	7.0	Meets Criteria
Fall Blooming Forbs & Shrubs, Minimum	3	6.0	Meets Criteria
Tall Grass Species in the Mix (Big Bluestem, Indiangrass, or Switchgrass)	Absent	Absent	Meets Criteria
<b>Grass and Forb Interseeding on &lt; 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Maximum	2.5	20.1	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	7.5	10.2	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	10.0	30.4	Meets Criteria
<b>Grass and Forb Interseeding on &gt;= 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	5	20.1	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	15.0	10.2	Does Not Meet Criteria
Total Seeds/ft <sup>2</sup> , Minimum	20.0	30.4	Meets Criteria
<b>Additional Requirement for Monarch Plantings</b>			
Milkweed % PLS seeds/ft <sup>2</sup> , Minimum	1.5%	0.3%	Does Not Meet Criteria
Monarch preferred Forbs % PLS seeds/ft <sup>2</sup> , Min	60.0%	70.4%	Meets Criteria
<b>Forb Only Interseeding on &lt; 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	7.5	10.2	Meets Criteria
<b>Forb Only Interseeding on &gt;= 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	15.0	10.2	Does Not Meet Criteria