

**Customize Options to Suit Site Conditions**

← Pick an Ecoregion

Meric (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
		Equivalent rate below								
*Select Plants <span>Click</span>	Growth Form									
1 <b>Bluestem, Big</b>	<i>Andropogon gerardii</i>	0.55		5	\$7	3.0	11.7	8.2%	\$4	Perennial Warm Season Grass
	Bunch		1.64							
2 <b>Gramma, Sideoats</b>	<i>Bouteloua curtipendula</i>	0.20		7	\$9	4.4	8.0	4.3%	\$2	Perennial Warm Season Grass
	Rhizomatous		0.87							
3 <b>Lovegrass, Sand</b>	<i>Eragrostis trichodes</i>	0.040		5	\$75	35.6	1.0	7.1%	\$3	Perennial Warm Season Grass
	Bunch		1.42							
4 <b>Switchgrass</b>	<i>Panicum virgatum</i>	0.30		4	\$8	9.2	4.0	13.7%	\$2	Perennial Warm Season Grass
	Rhizomatous		2.75							
5 <b>Bluestem, Little</b>	<i>Schizachyrium scoparium</i>	0.40		5	\$12	5.9	6.0	11.6%	\$5	Perennial Warm Season Grass
	Bunch		2.34							
6 <b>Indiangrass</b>	<i>Sorghastrum nutans</i>	0.25		4	\$6	3.9	9.0	4.8%	\$2	Perennial Warm Season Grass
	Bunch		0.98							
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	

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)	\$17
GRAMINOID TOTAL	6	1.74	10.01	5.0			

**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
1 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										
2 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										
3 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										
4 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 ->	Late										
5 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										
6 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										
7 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 ->	Mid										
8 Bumbleflower, 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										
9 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										
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-head)	<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	10.8%	\$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>Symphyotrichum 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>Symphyotrichum lateriflorum</i>	0.0050	0.46	2	\$600	91.8	0.4	2.3%	\$3	Perennial Forb	X
Input bloom period ->	Late										

24	Aster, New England	<i>Symphotrichum novae-angliae</i>	0.0020	0.048	4	\$300	24.2	1.4	0.2%	\$0.60	Perennial Forb	X
	Input bloom period ->	Late										
25	Spiderwort, Bluejacket (Ohio)	<i>Tradescantia ohiensis</i>	0.0010	0.0029	3	\$300	2.9	11.9	0.0%	\$0.30	Perennial Forb	
	Input bloom period ->	Early										
26	Verbena, Hoary	<i>Verbena stricta</i>	0.010	0.12	2	\$75	12.3	2.9	0.6%	\$0.75	Perennial Forb	X
	Input bloom period ->	Late										
27	Culver's Root	<i>Veronicastrum virginicum</i>	0.0010	0.28	6	\$1,200	275.5	0.1	1.4%	\$1	Perennial Forb	X
	Input bloom period ->	Mid										
28	Zizia, Golden (Alexander's)	<i>Zizia aurea</i>	0.020	0.088	6	\$120	4.4	7.9	0.4%	\$2	Perennial Forb	
	Input bloom period ->	Early										
29										\$0.00		
	Input bloom period ->											
30										\$0.00		
	Input bloom period ->											
31										\$0.00		
	Input bloom period ->											
32										\$0.00		
	Input bloom period ->											
33										\$0.00		
	Input bloom period ->											
34										\$0.00		
	Input bloom period ->											
35										\$0.00		
	Input bloom period ->											
36										\$0.00		
	Input bloom period ->											
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 <sup>2</sup> 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 <sup>2</sup> PLS	Coefficient of Conservatism	Estimated Cost (\$/lb)	# Seeds / ft <sup>2</sup> @ 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	0.094	8	\$225.00	6	6	0.0%	\$3	Sub-Shrub, Legume	X
	Input bloom period ->	Mid								\$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 <sup>2</sup> 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 <sup>2</sup> PLS	Average CC	Species Richness	Floristic Quality Index		ESTIMATED GRAND TOTAL COST (\$/AC)
<b>GRAND TOTAL</b>	2.70	20.1	4.8	35	28.6		\$345

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	10.0	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	20.0	20.1	Meets Criteria
<b>Requirements for sites on &gt;=5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	20.0	10.0	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	5.0	10.1	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	30.0	20.1	Does Not Meet Criteria
<b>Wildlife Special Purposes Escape and Nesting Cover Requirements</b>			
Wildlife monoculture native grass (PLS/ft <sup>2</sup> )	30.0	10.0	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	10.0	Meets Criteria
Forb & Shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft <sup>2</sup> , minimum	10.0	20.1	Meets Criteria
<b>Forb Only Interseeding on &lt; 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.1	Meets Criteria
<b>Grass and Forb Interseeding on &gt;= 5% slope</b>			
Grass Seeds/ft <sup>2</sup> , Minimum	10	10.0	Meets Criteria
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.1	Meets Criteria
Total Seeds/ft <sup>2</sup> , Minimum	15	20.1	Meets Criteria
<b>Forb Only Interseeding on &gt;= 5% slope</b>			
Forb & Sub-shrub Seeds/ft <sup>2</sup> , Minimum	2.5	10.1	Meets Criteria