

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 Gramma, Sideoats	<i>Bouteloua curtipendula</i>	0.28		7	\$9	4.4	8.0	5.9%	\$3	Perennial Warm Season Grass
	Rhizomatous		1.22							
2 Bluestem, Little	<i>Schizachyrium scoparium</i>	0.45		5	\$12	5.9	6.0	12.8%	\$5	Perennial Warm Season Grass
	Bunch		2.63							
3 Lovegrass, Sand	<i>Eragrostis trichodes</i>	0.033		5	\$75	35.6	1.0	5.7%	\$2	Perennial Warm Season Grass
	Bunch		1.17							
4									\$0.00	
5									\$0.00	
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)	\$10
GRAMINOID TOTAL		3	0.76	5.03	5.7					

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	Milkweed, Common Input bloom period -> Mid	0.031	0.046	0	\$120	1.5	23.8	0.2%	\$4	Perennial Forb	X
2	Milkweed, Butterfly Input bloom period -> Mid	0.020	0.032	5	\$300	1.6	22.2	0.2%	\$6	Perennial Forb	X
3	Milkvetch, Canadian Input bloom period -> Mid	0.010	0.057	7	\$120	5.7	6.1	0.3%	\$1	Perennial Forb, Legume	
4	Wild Indigo, Blue Input bloom period -> Early	0.010	0.0055	0	\$150	0.6	63.5	0.0%	\$2	Perennial Forb, Legume	
5	Doll's Daisy, White Input bloom period -> Mid	0.010	0.59	5	\$166	58.8	0.6	2.9%	\$2	Perennial Forb	X
6	Partridge Pea Input bloom period -> Late	0.26	0.30	1	\$25	1.1	30.7	1.4%	\$7	Annual Forb, Legume	
7	Aster, New England Input bloom period -> Mid	0.0030	0.073	4	\$300	24.2	1.4	0.4%	\$0.90	Perennial Forb	X
8	Coreopsis, Lanceleaf tickseed Input bloom period -> Mid	0.15	1.10	5	\$1,280	7.3	4.8	5.3%	\$192	Perennial Forb	X
9	Prairie Clover, White Input bloom period -> Mid	0.050	0.35	9	\$90	7.0	5.0	1.7%	\$5	Perennial Forb, Legume	X
10	Prairie Clover, Purple Input bloom period -> Mid	0.20	1.25	8	\$45	6.2	5.6	6.1%	\$9	Perennial Forb, Legume	X
11	Bundlflower, Illinois Input bloom period -> Mid	0.26	0.36	4	\$45	1.4	25.1	1.8%	\$12	Perennial Forb, Legume	
12	Coneflower, Eastern Purple Input bloom period -> Mid	0.25	0.61	6	\$45	2.4	14.4	2.9%	\$11	Perennial Forb	X
13	Oxeye, Smooth (False Sunflower) Input bloom period -> Late	0.10	0.24	4	\$60	2.4	14.7	1.2%	\$6	Perennial Forb	X
14	Alumroot Input bloom period -> Early	0.0020	0.51	8	\$900	252.5	0.1	2.4%	\$2	Perennial Forb	
15	Blazing Star, Dense Input bloom period -> Mid	0.010	0.040	7	\$150	4.0	8.7	0.2%	\$2	Perennial Forb	X
16	Bergamot, Wild Input bloom period -> Mid	0.040	1.10	4	\$150	27.5	1.3	5.3%	\$6	Perennial Forb	X
17	Goldenrod, Stiff Input bloom period -> Late	0.020	0.30	4	\$225	15.1	2.3	1.5%	\$5	Perennial Forb	X
18	Beardtongue, Foxglove Input bloom period -> Early	0.015	0.72	4	\$150	47.8	0.7	3.5%	\$2	Perennial Forb	
19	Cinquefoil, Tall Input bloom period -> Mid	0.0070	0.59	10	\$120	84.5	0.4	2.9%	\$0.84	Perennial Forb	
20	Mountainmint, Narrowleaf Input bloom period -> Late	0.0070	0.97	4	\$450	138.8	0.3	4.7%	\$3	Perennial Forb	X
21	Mountainmint, Virginia (Common) Input bloom period -> Late	0.0010	0.081	5	\$450	80.8	0.4	0.4%	\$0.45	Perennial Forb	X
22	Coneflower, Pinnate Prairie (Gray-head) Input bloom period -> Mid	0.050	0.72	4	\$60	14.3	2.4	3.5%	\$3	Perennial Forb	

23	Susan, Black-eyed	<i>Rudbeckia hirta</i>	0.063		2	\$45	34.4	1.0	10.5%	\$3	Biennial Forb	X	
	Input bloom period ->	Mid		2.17									
24	Susan, Browneyed	<i>Rudbeckia triloba</i>	0.050		3	\$90	12.9	2.7	3.1%	\$5	Biennial Forb	X	
	Input bloom period ->	Late		0.64									
25	Goldenrod, Gray (Field)	<i>Solidago nemoralis</i>	0.0050		3	\$600	110.2	0.3	2.7%	\$3	Perennial Forb	X	
	Input bloom period ->	Late		0.55									
26	Aster, Smooth Blue	<i>Symphotrichum laeve</i>	0.0020		8	\$300	18.4	1.9	0.2%	\$0.60	Perennial Forb	X	
	Input bloom period ->	Late		0.037									
27	Aster, Calico	<i>Symphotrichum lateriflorum</i>	0.0030		2	\$600	91.8	0.4	1.3%	\$2	Perennial Forb	X	
	Input bloom period ->	Late		0.28									
28	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									
29	Verbena, Hoary	<i>Verbena stricta</i>	0.030		2	\$75	12.3	2.9	1.8%	\$2	Perennial Forb	X	
	Input bloom period ->	Mid		0.37									
30	Culver's Root	<i>Veronicastrum virginicum</i>	0.0010		6	\$1,200	275.5	0.1	1.3%	\$1	Perennial Forb	X	
	Input bloom period ->	Mid		0.28									
31	Zizia, Golden (Alexander's)	<i>Zizia aurea</i>	0.070		6	\$120	4	8	1.5%	\$8	Perennial Forb		
	Input bloom period ->	Early		0.31									
32	Boneset, False	<i>Brickellia eupatorioides</i>	0.010		6	\$600	12	3	0.6%	\$6	Perennial Forb	X	
	Input bloom period ->	Mid		0.12									
33	Senna, American (Wild)	<i>Cassia hebecarpa</i>	0.20		9	\$80	0.5	68	0.5%	\$16	Perennial Forb		
	Input bloom period ->	Mid		0.10									
34	Coneflower, Pale Purple	<i>Echinacea pallida</i>	0.10		7	\$90	2	18	0.9%	\$9	Perennial Forb	X	
	Input bloom period ->	Mid		0.19									
35	Eryngo, Button (Rattlesnake Master)	<i>Eryngium yuccifolium</i>	0.050		7	\$90	3	14	0.6%	\$5	Perennial Forb	X	
	Input bloom period ->	Late		0.13									
36	Joe Pye Weed, Sweetscented	<i>Eutrochium purpureum</i>	0.010		5	\$300	15	2	0.7%	\$3	Perennial Forb	X	
	Input bloom period ->	Late		0.15									
37	Compassplant	<i>Silphium laciniatum</i>	0.10		5	\$225	0.2	159	0.1%	\$23	Perennial Forb	X	
	Input bloom period ->	Late		0.022									
38	Aster, Skyblue	<i>Symphotrichum oolentangiense</i>	0.0050		7	\$300	23	2	0.6%	\$2	Perennial Forb	X	
	Input bloom period ->	Late		0.12									
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)	\$367		
FORBS/LEGUMES TOTAL			38	2.21	15.49	5.0							

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	2.98	20.6	5.1	42	33.0		\$381

Illinois NRCS 420 Wildlife Habitat Planting: Pollinator and Monarch Full Seeding Requirements			
Requirement	Criteria	Mix	Criteria Met
All mixes			
Spring Blooming Forbs & Shrubs, Minimum	3	3	Meets Criteria
Summer Blooming Forbs & Shrubs, Minimum	3	11	Meets Criteria
Fall Blooming Forbs & Shrubs, Minimum	3	4	Meets Criteria
Tall Grass Species in the Mix (Big Bluestem, Indiangrass, or Switchgrass)	Absent	Absent	Meets Criteria
Requirements for sites on < 5% slope			
Grass Seeds/ft ² , Maximum	5	5.0	Meets Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	15	15.6	Meets Criteria
Total Seeds/ft ² , Minimum	20	20.6	Meets Criteria
Requirements for sites on >=5% slope			
Grass Seeds/ft ² , Minimum	10	5.0	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	30	15.6	Does Not Meet Criteria
Total Seeds/ft ² , Minimum	40	20.6	Does Not Meet Criteria
Additional Requirement for Monarch Plantings			
Milkweed % PLS seeds/ft ² , Minimum	1.5%	0.4%	Does Not Meet Criteria
Monarch preferred Forbs % PLS seeds/ft ² , Minimum	60.0%	76.5%	Meets Criteria

Illinois NRCS 420 Wildlife Habitat Planting: Pollinator and Monarch Interseeding 1/2 Rate			
Requirement	Criteria	Mix	Criteria Met
All mixes			
Spring Blooming Forbs & Shrubs, Minimum	3	3.0	Meets Criteria
Summer Blooming Forbs & Shrubs, Minimum	3	14.0	Meets Criteria
Fall Blooming Forbs & Shrubs, Minimum	3	8.0	Meets Criteria
Tall Grass Species in the Mix (Big Bluestem, Indiangrass, or Switchgrass)	Absent	Absent	Meets Criteria
Grass and Forb Interseeding on < 5% slope			
Grass Seeds/ft ² , Maximum	2.5	5.0	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	7.5	15.6	Meets Criteria
Total Seeds/ft ² , Minimum	10.0	20.6	Meets Criteria
Grass and Forb Interseeding on >= 5% slope			
Grass Seeds/ft ² , Minimum	5	5.0	Does Not Meet Criteria
Forb & Sub-shrub Seeds/ft ² , Minimum	15.0	15.6	Meets Criteria
Total Seeds/ft ² , Minimum	20.0	20.6	Meets Criteria
Additional Requirement for Monarch Plantings			
Milkweed % PLS seeds/ft ² , Minimum	1.5%	0.4%	Does Not Meet Criteria
Monarch preferred Forbs % PLS seeds/ft ² , Min	60.0%	76.5%	Meets Criteria
Forb Only Interseeding on < 5% slope			
Forb & Sub-shrub Seeds/ft ² , Minimum	7.5	15.6	Meets Criteria
Forb Only Interseeding on >= 5% slope			
Forb & Sub-shrub Seeds/ft ² , Minimum	15.0	15.6	Meets Criteria