

United States Department of Agriculture



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MARYLAND BULLETIN NO. MD 190-9-1

SUBJECT: ECS – Approved Maryland Native Wildflower Mixes.

Purpose. To provide native grass/wildflower mixes approved for use with Conservation Cover (327).

Expiration Date. September 30, 2009.

The attached document, *Maryland Native Wildflower Mixes*, provides guidance and recommendations for developing a custom grass-wildflower mix for use with the Maryland practice standard Conservation Cover (327). The guidance does not replace the mixes in the Conservation Cover standard, but provides additional recommendations that enhance biodiversity.

Use of these mixes is approved until further notice.

If you have questions, please contact Steve Strano, State Biologist at 443-482-2928 or steve.strano@md.usda.gov.

A handwritten signature in black ink, appearing to read "Anne M. Lynn".

ANNE M. LYNN
State Resource Conservationist

Attachment

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MARYLAND NATIVE WILDFLOWER MIXES

Approved Custom Grass-Wildflower Mixes for Conservation Cover (327)

The following tables provide seeding recommendations for developing a custom grass-wildflower mix for Conservation Cover (327). The wildflower mixes may also be used as substitutes for mix 8 of the Maryland Conservation Cover practice standard. All of the species listed are Maryland native species. The grasses were selected because they are relatively non-competitive in a mix of grasses and forbs. The grasses all have a bunch-type growth form, and are suitable for sites with low fertility. The wildflower mixes contain species that support beneficial insects, and have been selected to provide flowering throughout most of the growing season. The composition of the wildflower mixes was selected to provide a target diversity-to-cost ratio. Select the appropriate mix for the soil moisture conditions of the site. Refer to the Maryland *Warm-Season Grasses Job Sheet* for establishment, maintenance, and management of the planting.

SEEDING RATES FOR WILDFLOWER PLANTINGS

The following rates are the total mix rate for the grass or wildflower portion of the planting. The higher grass seeding rates are for sites where soils have a higher risk of erosion, or for excessively dry or infertile sites. These rates are not intended for sites where the Critical Area Planting practice standard applies.

Planting Type	Grass Mix Seeding Rate (lb/ac PLS ¹)	Wildflower Mix Seeding Rate (lb/ac PLS ¹)
Conservation Cover Grasses with Wildflowers	4 – 6	0.5
Wildflower Meadow	2 – 3	4

GRASSES FOR MARYLAND NATIVE WILDFLOWER MIXES

Select at least 3 grasses, at least 2 of which are a warm-season grass. At least 50 percent of the grasses, by weight, should be warm-season grasses.

Common Name	Scientific Name	Warm or Cool Season	Soil Drainage Class ²	Remarks
Big Bluestem	<i>Andropogon gerardii</i>	W	E – MW	Tallest (6 – 8 feet) of the grasses listed here. Prefers dry sites.
Broomsedge	<i>Andropogon virginicus</i>	W	E – SP	Often volunteers in idle crop fields with low fertility and low pH.
Deertongue	<i>Dicanthelium clandestinum</i>	W	E – SP	Usually slow to establish, but tolerates a wide range of site conditions.
Little Bluestem	<i>Schizachyrium scoparium</i>	W	E – MW	Similar in appearance to broomsedge. Prefers dry sites.
Purpletop	<i>Tridens flavus</i>	W	E – MW	Best suited for dry, sandy areas or sites with shallow soils. Does not compete well with CSG or heavy weed pressure.
Canada Wild Rye	<i>Elymus canadensis</i>	C	E – MW	Both species prefer partial shade. Seedlings are vigorous and establish quickly, but are not highly competitive with other grasses. Good in a mix with WSG & forbs, but will not persist if prescribed burning is used.
Virginia Wild Rye	<i>Elymus virginicus</i>	C	MW – P	

MARYLAND NATIVE WILDFLOWER MIX – MESIC SITES

Approved mix for Maryland Conservation Cover practice standard (327) mix 8. This mix is appropriate for a wide range of soil moisture conditions, including sites with the following drainage classes²: well drained, moderately well drained, somewhat poorly drained, and poorly drained.

The recommended seeding rate is 0.5 lb/ac PLS as part of a grass planting, and 4.0 lb/ac PLS for a wildflower meadow or similar type of planting¹.

Common Name	Scientific Name	% by Weight ³	Bloom Period	Flower Color	Indicator Status ⁴	% by Seed ⁵
American Senna	<i>Senna hebecarpa</i>	20.0%	Summer	Yellow	FAC	1.6%
Aromatic Aster	<i>Symphyotrichum oblongifolium</i>	0.5%	Late Summer – Early Fall	Purple	NI	1.3%
Black-eyed Susan	<i>Rudbeckia hirta</i>	3.0%	Summer	Yellow	FACU-	18.0%
Bur Marigold	<i>Bidens aristosa</i>	10.0%	Late Summer – Early Fall	Yellow	FACW	5.0%
Common Milkweed	<i>Asclepias syriaca</i>	0.5%	Summer	Pink	NI	1.3%
Flat-topped White Aster	<i>Doellingeria umbellata var. umbellata</i>	0.5%	Late Summer	White	FACW	1.5%
Golden Tickseed	<i>Coreopsis tinctoria</i>	2.0%	Late Spring	Yellow	FAC-	24.6%
New England Aster	<i>Symphyotrichum novae-angliae</i>	0.5%	Late Summer	Purple	FACW-	2.1%
Ohio Spiderwort	<i>Tradescantia ohiensis</i>	0.5%	Spring – Summer	Blue	FAC	3.3%
Partridge Pea	<i>Chamaecrista fasciculata</i>	20.0%	Summer	Yellow	FACU	5.0%
Showy Tick Trefoil	<i>Desmodium canadense</i>	10.0%	Summer	Purple	FAC	2.8%
Smooth Oxeye	<i>Heliopsis helianthoides</i>	15.0%	Summer – Early Fall	Yellow	NI	6.7%
Spotted Joe-Pye Weed	<i>Eupatoriadelphus maculatus</i>	1.0%	Summer	Purple	FACW	7.6%
Stiff Goldenrod	<i>Oligoneuron rigidum var. rigidum</i>	1.0%	Late Summer	Yellow	UPL	3.8%
Tall White Beard Tongue	<i>Penstemon digitalis</i>	3.0%	Late Spring	White	FAC	4.6%
Wild Bergamot	<i>Monarda fistulosa</i>	1.0%	Summer	Pink	UPL	4.8%
Wild Blue Lupine	<i>Lupinus perennis</i>	5.0%	Late Spring	Blue	NI	0.4%
Wild False Indigo	<i>Baptisia australis</i>	1.0%	Late Spring	Purple	NI	1.1%
Zigzag Aster	<i>Symphyotrichum prenanthoides</i>	0.5%	Late Summer	Blue	FAC	1.3%
<i>The following alternative species can be used in place of similar species in the mesic mix:</i>						
Calico Aster	<i>Symphyotrichum lateriflorum var. lateriflorum</i>	0.5%	Summer	White	FACW-	
Canada Goldenrod	<i>Solidago canadensis</i>	1.0%	Late Summer	Yellow	FACU	
Purple Bergamot	<i>Monarda media</i>	1.0%	Summer	Pink	NI	
Smooth Blue Aster	<i>Symphyotrichum laeve</i>	0.5%	Summer	Purple	NI	

MARYLAND NATIVE WILDFLOWER MIX – DRY SITES

Approved mix for Maryland Conservation Cover practice standard (327) mix 8. This mix is appropriate for a wide range of soil moisture conditions, including sites with the following drainage classes²: Excessively drained, somewhat excessively drained, and well drained.

The recommended seeding rate is 0.5 lb/ac PLS as part of a grass planting, and 4.0 lb/ac PLS for a wildflower meadow or similar type of planting¹.

Common Name	Scientific Name	% by Weight ³	Bloom Period	Flower Color	Indicator Status ³	% by Seed ⁴
American Senna	<i>Senna hebecarpa</i>	20.0%	Summer	Yellow	FAC	2.1%
Aromatic Aster	<i>Symphyotrichum oblongifolium</i>	1.0%	Late Summer – Early Fall	Purple	NI	3.6%
Black-eyed Susan	<i>Rudbeckia hirta</i>	3.0%	Summer	Yellow	FACU-	24.0%
Butterfly Milkweed	<i>Asclepias tuberosa</i>	6.0%	Summer	Orange	NI	2.1%
Common Milkweed	<i>Asclepias syriaca</i>	2.0%	Summer	Pink	NI	7.1%
Gray Goldenrod	<i>Solidago nemoralis</i>	1.0%	Late Summer	Yellow	NI	5.1%
Ohio Spiderwort	<i>Tradescantia ohioensis</i>	0.5%	Spring – Summer	Blue	FAC	4.4%
Partridge Pea	<i>Chamaecrista fasciculata</i>	20.0%	Summer	Yellow	FACU	6.6%
Showy Tick Trefoil	<i>Desmodium canadense</i>	16.0%	Summer	Purple	FAC	5.9%
Smooth Blue Aster	<i>Symphyotrichum laeve</i>	1.0%	Summer	Purple	NI	5.1%
Smooth Oxeye	<i>Heliopsis helianthoides</i>	18.0%	Summer – Early Fall	Yellow	NI	10.6%
Stiff Goldenrod	<i>Oligoneuron rigidum var. rigidum</i>	1.0%	Late Summer	Yellow	UPL	5.1%
Tall White Beard Tongue	<i>Penstemon digitalis</i>	4.0%	Late Spring	White	FAC	8.1%
White Heath Aster	<i>Symphyotrichum ericoides</i>	0.5%	Summer – Early Fall	White	FACU	1.8%
Wild Bergamot	<i>Monarda fistulosa</i>	1.0%	Summer	Pink	UPL	6.5%
Wild Blue Lupine	<i>Lupinus perennis</i>	4.0%	Late Spring	Blue	NI	0.4%
Wild False Indigo	<i>Baptisia australis</i>	1.0%	Late Spring	Purple	NI	1.5%
<i>The following alternative species can be used in place of similar species in the dry mix:</i>						
Purple Bergamot	<i>Monarda media</i>	1.0%	Summer	Pink	NI	

Notes

1 – Native grasses and wildflowers should be purchased by weight in pure live seed (PLS).

2 – Drainage classes are published in county soil survey manuals. E – Excessively drained; W – Well drained; MW – Moderately well drained; SP – Somewhat poorly drained; P – Poorly drained.

3 – Order mixes using the percent by weight column. The wildflower proportions were selected to provide a target diversity-to cost ratio.

4 – Region I wetland indicator status; NI = no indicator status.

5 – Approximate percentage of species in mix based on number of seeds; this is provided for informational purposes.