# WILDFLOWER PLANTINGS

# **CONSERVATION MANAGEMENT SHEET - Biology Series**

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## **Natural Resources Conservation Service**



# Michigan



Wildflower Planting

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# What is a Wildflower Planting?

A wildflower planting is a stand of native perennial wildflowers which are adapted to the soil and site conditions. Once established, wildflowers enhance the diversity and beauty of the landscape, furnish food and cover for wildlife, and control erosion.

#### What a Wildflower Planting Does

These plantings provide important food and cover for many species of wildlife along with adding diversity and beauty to the landscape. Wildflowers provide year-round,

low growing protective cover from predators and the weather. The flowers provide seeds for birds and small mammals, as well as nectar and pollen for pollinating insects. The herbaceous plants provide food for grazers and important areas for insect production.

#### Where Wildflower Plantings Apply

Wildflower plantings apply to a wide range of locations including ditchbanks, odd areas, areas around buildings and trees, near woodlots, wet areas, or in place of manicured lawns. Wildlife plantings are beneficial to farmers and landowners in areas where native wildflowers are lacking or natural diversity is low. Wildflower plantings vary in size from small patches to up to several acre areas.

#### Where to Get More Assistance

Additional local assistance may be obtained from the local office of a Michigan Conservation District or the USDA Natural Resources Conservation Service (NRCS) office at:

#### **Planting Criteria**

Planting Elements:

- 1. Select wildflower species which are adapted to the drainage, soil type, and sunlight for the area you choose for the planting (see chart). Locate plantings in a manner which will connect with other habitat types if possible. These habitats include woodland, old fields, wetlands, or grasslands. For attracting butterflies, locate the planting in the full sunlight and near a source of moisture.
- 2. Select wildflower species which are native to Michigan and will spread the blooming season for as long as possible for the pollinators. Plants can be established from seed or from transplants. Transplants from the wild are not recommended and are illegal in some cases.

### **Considerations for Planting**

1. Proper site preparation is essential for successful establishment of wildflower plantings. Plan to remove existing vegetation by smothering, cultivating, herbiciding, or employing a combination of these techniques. It may take up to

- one full growing season to remove the competition from the area.
- 2. Prepare the seedbed by removing at least 50 percent of the dead vegetation from the soil surface. Do not disturb below the soil surface as you may stimulate growth from weed seeds. If the soil is loose, firm up the area with a lawn roller or cultipacker.
- 3. Plant in the spring, or in the summer or fall if it is possible to water the area after seeding.
- 4. When planting, use a whirlwind seeder, spread by hand, or use a drill. When using a seeder or by hand, divide the seed into two batches and cover the area twice to ensure adequate seed distribution. Lightly rake or roll after seeding, but do not cover the seed more than the depth of the seeds. Lightly mulch potentially erosive sites with oat or wheat straw. Water if necessary for 4 to 6 weeks after planting.
- 5. Warm season grasses such as little bluestem, big bluestem, or indiangrass may be added to the seeding mixture to replicate native prairies.

#### **Other Considerations**

Consider pollinating insects and birds when designing the wildflower plantings. Butterflies need both host plants for the larva stages and nectar and pollen sources for the adults. Place plantings in sunny areas with a source of moisture nearby. Since pollinators such as bees need nectar and pollen sources throughout the summer, consider a combination of plant species which will bloom throughout much of the summer

A number of effects to environmental conditions will occur on areas where a wildflower planting is established. A

consideration of these effects will allow for incorporation of companion planning elements to achieve an ecosystem-wide conservation plan for the area in which the wildflower planting is established. Effects to be considered include:

Sheet and Rill Erosion - RUSLE: Wind Erosion - WEQ, Ephemeral Gully (tons/ac/yr.), increased plant productivity and diversity, improved food requirements, increased wildlife habitat suitability, improved wildlife cover/shelter, greater wildlife diversity, improved aesthetics, and improved human social relations in rural areas.

[x] Soil, [x] Water, [x] Air, [x] Plants, [x] Animals, [x] Human Socio-economics.

#### Maintenance

Weed control will be required for 2 to 3 years following the planting of seedlings.

Many wildflowers will not bloom for the second and third year. Mow the area to a height of 4 to 6 inches for the first year. Over time, remove any undesirable species which become established

Burning or mowing the wildflower planting every 2 to 3 years is necessary for long-term success and maintenance. Burning is usually conducted in early spring and removes the accumulated plant litter and releases vital nutrients. Burning also favors the wildflowers and warm season grasses and sets back the undesirable cool season competitors.

#### **For More Information**

For additional information regarding wildflower plantings, contact the local Soil Conservation District office or local office of the Wildlife Division of the Michigan Department of Natural Resources.

**Wildflowers for Dry Sites** 

			Sunlight		Blooming
Common Name	Scientific Name	Color	Needs*	Height	Season
Black-eyed Susan	Rudbeckia hirta	yell/brn	f-p	1-3 ft	Jun-Aug.
Butterfly weed	Asciepias tuberosa	orange	f-p	2-3 ft	July-Aug.
Common milkweed	Asclepias syriaca	purple	f-p-s	3-5 ft	June-Aug
Gray-headed coneflower	Ratibida pinnata	yellow	f	3-5 ft	July-Sept.
Hairy Beardstongue	Penstemon hirsutus	wht/lav	f-p	1-2 ft	May-July
Lance-leaved coreopsis	Coreopsis lanceolate	yellow	f	1-2 ft	May-Aug.
Leadplant	Amorpha canescens	violet	f	2-4 ft	June-July
Maximillian sunflower	Helianthus maximillani	yellow	f	2-5 ft	AugOct.
New England aster	Aster novae-angliae	purple	f	1-4 ft	SeptOct.
Prairie milkweed	Aslepias sullivanti	rose-purple	f	2-5 ft	June-July
Purple coneflower	Echinacea pupurea	purple	f-p	2-4 ft	July-Aug.
Rattlesnake master	Eryngium yuccifolium	white	f	3-5 ft	July-Sept.
Rough blazingstar	Liatrus aspera	purple	f-p	2-4 ft	July-Sept.
Round headed bushclover	Lespedeza capitata	white	f-p	2-3 ft	Aug-Sept.
Smooth aster	Aster laevis	lavender	f	2-3 ft	AugSept.
Stiff goldenrod	Solidage rigida	yellow	f	1-3 ft	July-Aug.
Wild bergamot	Monarda fistulosa	pink-lav	f	2-3 ft	June-July
Wild lupine	Lupinus perennis	blu-lav	f-p-s	1-2 ft	June-July

# Wildflowers for Moderate Sites

Common Name	Scientific Name	Color	Sunlight Needs*	Height	Blooming Season
Black-eyed Susan	Rudbeckia hirta	yell/brn	f-p	1-3 ft	June-Aug.
Blazingstar	Liatruss spp.	purple	f-p	2-4 ft	July-Sept.
Butterflyweed	Asclepias tuberosa	orange	f-p	2-3 ft	July-Aug.
Hairy beadstongue	Penstemon hirsutus	wht/lav	f-p	1-2 ft	May-July
Lance-leaved coreopsis	Coreopsis lanceolata	yellow	f	1-2 ft	May-Aug.
Leadplant	Amorpha canescens	violet	f	2-4 ft	June-July
New England aster	Aster novae-angliae	rose/purp	f-p-s	1-4 ft	SeptOct.
Ox-eye sunflower	Heliopsis helianthoides	yellow	f	2-3 ft	July-Sept.
Pale purple coneflower	Echinacea pupurea	rose	f-p	2-4 ft	July-Aug.
Stiff goldenrod	Solidago rigida	yellow	f	2-5 ft	AugSept.
Wild bergamot	Monarda fistulosa	lavender	f	2-3 ft	June-July
Wild lupine	Lupinus perennis	blu-violet	f-p-s	1-2 ft	June-July
Yellow coneflower	Ratibida pinnata	yellow	f	2-3 ft	June-July

# **Wildflowers for Wet Sites**

G V	G I III N	G 1	Sunlight	TT 1 1 .	Blooming
Common Name	Scientific Name	Color	Needs*	Height	Season
Blue vervain	Verbena hastata	blu/purp	f-p	2-4 ft	July-Sept.
Boneset	Eupatorium perfoliatum	white	f-p	3-4 ft.	July-Aug.
Cardinal flower	Lobelia cardinalis	red	f-p	2-4 ft.	July-Sept.
Great blue lobelia	Lobelia siphilitica	blu-violet	f-p	1-4 ft	Aug-Sept.
Marsh marigold	Caltha palustris	yellow	f	1-2 ft.	AprJune
New England aster	Aster novae-angliae	rose/purp	f-p-s	1-4 ft	SeptOct.
Spotted Joe pye-weed	Eupatorium maculatum	rose	f	2-6 ft	July-Sept.
Swamp milkweed	Asclepias incarnata	lavender	f	2-4 ft	July-Aug.
Wild iris	Iris shrevei	purple	f	2-3 ft	June

#### Wildflowers for Woodlands

Common Name	Scientific Name	Color	Sunlight Needs*	Height	Blooming Season
Cardinal flower	Lobelia cardinalis	red	f-p	3 ft	July-Sept.
Common milkweed	Asclepias syrica	rose-purp	f-p-s	3-5 ft	June-Aug.
Fireweed	Epilobium angustifolium	pink	f-p	2-4 ft	July-Aug.
Jack-in-the-pulpit	Arisaema triphyllum	grn-purple	p-s	1-2 ft	AprJune
Large-flowered trillium	Trillium grandiflorum	wht-pink	p-s	1ft	AprJune
Spotted touch-me-not	Impatiens biflora	orange	p-s	2-5 ft	July-Sept.
Solomon's seal	Polygonatum biflorum	yellow	p-s	1-3 ft	May-June
Turk's-cap lily	Lillium michiganense	orange	f-p	1-3 ft	July-Aug.
Wild columbine	Aquilega canadensis	red	f-p	1-2 ft	May-June
Wild lupine	Lupinus perennis	blu-violet	f-p-s	1-2 ft	June-July
For woodland edges					
Butterfly weed	Aslepias tuberosa	orange	f-p	2-3 ft	July-Aug.
False Solomon's seal	Smilacina racemosa	white	p-s	1-3 ft	June-July
Wild columbine	Aquilega canadensis	red	f-p	1-2 ft	May-June
Wild geranium	Geranium maculatum	lavender	p-s	1-2 ft	AprMay
Woodland sunflower	Helianthus divaricatus	yellow	f-p	2-6 ft	July-Sept.

#### \*Sunlight needs:

f=full sunlight; p=partial sunlight; s=shade

# This Conservation Information Sheet Originally Prepared By:

Lynn Sampson, State Biologist, USDA NRCS (MI) &

Lisa Schabenberge, Biologist

Mark Sargent, Private Lands Wildlife Habitat Biologist, MDNR

**Technical Review By:** Lynn Sampson State Biologist, USDA NRCS (MI)

Refer	ence/File Indexes		
Topic	Application:	Resource Series:	References:
[ ] [X]	Construction Design	[ ] Agronomy [X] Biology	USDA-NRCS National Biology Handbook
[ ]	Fact	[ ] Engineering	USDA NRCS (MI) Conservation Practice Associations
[X]	Information	[ ] Forestry	# 645 Wildlife Upland Habitat Management
[ ]	Management	[ ] Hayland	# 342 Critical Area Planting
[ ]		[ ] Livestock	#512 Pasture and Hayland Planting
[ ]		[ ] Pastureland	#327 Conservation Cover
		[ ] Recreation	USDA NRCS (MI) Associated Conservation Sheets:
		[ ] General	FOCS (MI) Reference Number:
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