

Many people have heard about the amazing migration of North American monarch butterflies (*Danaus plexippus*) to Mexico, but [Florida has a breeding population that does not migrate](#). A warm climate and continuous growing season keep the species hanging around throughout the year in southern Florida. Monarchs migrating from Canada and the northeast, like many tourists, come to south Florida and stay, bolstering the Florida population. Although the cold winter



temperatures in the northern part of the state can kill monarchs, the northern Florida population is repopulated by monarchs from southern Florida and those migrating north from Mexico. Some of the northern Florida population is thought to join the eastern US migratory population that fly over the Gulf of Mexico. The migrating butterflies muster in October at the St. Marks National Wildlife Refuge situated in parts of Jefferson, Wakulla, and Taylor counties in North Florida. St. Marks is recognized as one of the top five viewing sites for monarch migration in the United States.



Monarchs as pollinators play an important role in maintaining biological diversity. Habitat loss, disease, parasites, and environmental contaminants have all contributed to the decline of many pollinators. Monarch larvae feed almost exclusively on milkweed plants. About [20 or so milkweed species](#) can be found in Florida. All are native except tropical milkweed, [Asclepias curassavica](#). The tropical milkweed is commonly found at retail nurseries and big box stores in the state. It is not the best food plant for monarch larvae, it is somewhat invasive, and should not be planted.



A pollinator planting for the monarchs should include native milkweed plants for the larvae to feed on but milkweed plants should only be about 3-4% of a planting (350 to 500 plants/acre). The bulk of the planting, about 50-75% of the stand, should be composed of a wide range of monarch preferred forbs and flowering shrubs/trees that will provide year-round nectar plants for the adults. See [Florida Plant Materials Fact Sheet No. 4](#) for guidance on seed mixtures.

Unfortunately, bulk quantities of ecotypes of the native milkweed species found in Florida are not commercially available. Non-ecotype seed of a few species is available. To ensure adequate amounts of Florida-adapted milkweed in pollinator plantings for monarchs, transplants (clusters of 5 or more on 2 ft center) will often be the best bet. The number of commercially available Florida native milkweed is limited; the Florida Association of Native Nurseries is bringing more species into commercial production through their new [Florida Milkweed Project](#).

The following species of native Florida milkweed and recommended nectar plants are currently listed as available on the Association of Florida Native Nurseries website as live plants (more Y's the more readily available). Ecotype and non-ecotype seed in bulk quantities of some species are also available (see bottom of table on p. 5 for links to seed and plant sources). See p. 5 for more guidance on developing a wildflower planting for monarch butterflies.

Recommended Florida Native Plant Species for Monarch Butterflies

Species name	Common name	Growth Habit	Wetland Status	Region of State*	Blooms**	Blooms**	Blooms**	Blooms**	Seed	Ecotype seed	Live Plants
<i>Asclepias humistata</i>	Pinewoods milkweed	forb/herb		N,C	Spr	Sum	Fall				Y
<i>Asclepias incarnata</i>	Swamp milkweed	forb/herb	OBL	C,S/ST		Sum	Fall		Y		YY
<i>Asclepias perennis</i>	Swamp milkweed	forb/herb	OBL	N,C	Spr	Sum	Fall				Y
<i>Asclepias tuberosa</i>	Butterfly weed	forb/herb		N,C,S/ST	Spr	Sum	Fall		Y		YY
<i>Asclepias verticillata</i>	Whorled milkweed	forb/herb		N,C,S/ST	Spr	Sum	Fall				Y
<i>Brickellia cordifolia</i>	Flyr's nemesis	forb/herb, subshrub		N		Sum	Fall				Y
<i>Carphephorus carnosus</i>	Pineland chaffhead	forb/herb	FACW	C,S		Sum	Fall				Y
<i>Carphephorus corymbosis</i>	Coastalplain chaffhead	forb/herb	FACU	N,C,S/ST		Sum	Fall			Y	YY
<i>Carphephorus odoratissimus</i>	Vanillaleaf	forb/herb	FACW	N,C		Sum	Fall				Y
<i>Carphephorus odoratissimus</i> va.r <i>subtropicanus</i>	Pineland purple or False vanillaleaf	forb/herb	FACW	C,S/ST		Sum	Fall				Y
<i>Carphephorus paniculatus</i>	Hairy chaffhead	forb/herb	FACW	N,C,S/ST							Y
<i>Conoclinium coelestinum</i> (= <i>Eupatorium coelestinum</i>)	Blue mistflower	forb/herb	FAC	N,C,S/ST		Sum	Fall		Y	Y	Y
<i>Coreopsis floridana</i>	Florida tickseed	forb/herb	FACW	N,C,S/ST			Fall	Win		Y	YY
<i>Coreopsis lanceolata</i>	Lanceleaf tickseed	forb/herb	UPL	N,C		Sum	Fall		Y	Y	YYYY
<i>Coreopsis basalis</i>	Goldenmane tickseed	forb/herb		N,C	Spr	Sum			YYYY	Y	
<i>Coreopsis leavenworthii</i>	Leavenworth's tickseed	forb/herb	FACW	N,C,S/ST	Spr	Sum	Fall		YYYY	Y	YYYY
<i>Dalea pinnata</i>	Summer farewell	forb/herb		N,C,S/ST		Sum	Fall			Y	Y
<i>Echinacea purpurea</i>	Eastern purple coneflower	forb/herb	FAC	N	Spr	Sum	Fall		YYYY		YY
<i>Eryngium integrifolium</i>	Blueflower eryngo	forb/herb	FACW	N		Sum	Fall			Y	Y
<i>Eryngium prostratum</i>	Creeping eryngo	forb/herb	FACW	N,C	Spr	Sum	Fall				YY
<i>Eryngium yuccifolium</i>	Rattlesnake master	forb/herb	FACW	N,C,S/ST		Sum	Fall		Y	Y	YY
<i>Eupatorium fistulosum</i>	Joepyeweed	forb/herb	FACW	N,C		Sum			Y		
<i>Eupatorium perfoliatum</i>	Common boneset	forb/herb	FACW	N,C		Sum			Y	Y	
<i>Gaillardia pluchella</i>	Blanketflower	Forb/herb	UPL	N,C,S/ST	Spr	Sum	Fall		YYYY	Y	YYYY
<i>Helianthus angustifolius</i>	Narrowleaf sunflower	forb/herb	FACW	N,C,S			Fall		Y	Y	YY
<i>Helianthus radula</i>	Stiff sunflower	forb/herb	FAC	N,C			Fall			Y	YY
<i>Liatris chapmanii</i>	Chapman's gayfeather	forb/herb		N,C,S/ST			Fall				Y
<i>Liatris elegans</i>	Pinkscale gayfeather	forb/herb		N,C			Fall			Y	

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<i>Liatris garberi</i>	Garber's gayfeather	forb/herb	FACW	C,S/ST		Sum	Fall			Y	Y
<i>Liatris gracilis</i>	Slender gayfeather	forb/herb	FACU	N,C,S/ST		Sum	Fall			Y	Y
<i>Liatris spicata</i>	Dense gayfeather	forb/herb	FACU	N,C,S/ST		Sum	Fall		Y	Y	YYYY
<i>Liatris tenuifolia</i>	Shortleaf gayfeather	forb/herb		N,C,S/ST			Fall			Y	Y
<i>Lobelia cardinalis</i>	Cardinalflower	forb/herb	FACW	N,C	Spr	Sum	Fall		YY		Y
<i>Monarda punctata</i>	Spotted beebalm	forb/herb	FACU	N,C,S/ST		Sum	Fall		YY	Y	YYY
<i>Penstemon multiflorus</i>	Manyflowered penstemon	forb/herb		N,C,S/St	Spr	Sum			Y	Y	Y
<i>Phlox drummondii</i>	Annual phlox	forb/herb		N,C	Spr	Sum			YYYY	Y	
<i>Phlox nivalis</i>	Trailing phlox	forb/herb		N,C	Spr	Sum				Y	
<i>Oenothera speciosa</i>	Showy evening primrose or Pink ladies	forb/herb		N,C	Spr	Sum		Win	YYY	Y	
<i>Rudbeckia flugida</i>	Orange coneflower	forb/herb	FACW	N		Sum	Fall		YYY	Y	
<i>Rudbeckia hirta</i>	Blackeyed Susan	forb/herb	FACU	N,C,S/ST	Spr	Sum			YYYY	Y	YYYY
<i>Rudbeckia mohrii</i>	Mohr's coneflower	forb/herb	OBL	N		Sum	Fall			Y	
<i>Rudbeckia mollis</i>	Softhair coneflower	forb/herb		N		Sum					Y
<i>Salvia coccinea</i>	Tropical sage	Forb/herb		N,C,S/ST	Spr	Sum	Fall	Win (S/St)	YYYY		YYY
<i>Salvia lyrata</i>	Lyreleaf sage	Forb/herb	FACU	N,C,S	Spr			Win	YYY	Y	YY
<i>Salvia misella</i>	Creeping sage	Forb/herb		C,S/ST	Spr	Sum	Fall	Win			Y
<i>Silphium ateriscus</i>	Rosinweed	forb/herb		N,C,S		Sum	Fall		YY	Y	YY
<i>Silphium compositum</i>	Kidneyleaf Rosinweed	forb/herb		N,C	Spr	Sum	Fall		Y		Y
<i>Solidago canadensis var. scabra (=S. altissima)</i>	Canada goldenrod	forb/herb	FACU	N			Fall		Y	Y	Y
<i>Solidago fistulosa</i>	Pinebarren goldenrod	forb/herb	FAC	N,C,S/ST		Sum	Fall				Y
<i>Solidago odora</i>	Anisescented goldenrod	forb/herb		N,C		Sum	Fall			Y	Y
<i>Solidago odora var. chapmanii</i>	Chapman's goldenrod	forb/herb		C,S/ST		Sum	Fall				Y
<i>Solidago sempervirens</i>	Seaside goldengrod	forb/herb	FACW	N,C,S/ST							Y
<i>Solidago stricta</i>	Wand goldenrod	forb/herb	OBL	N,C,S/ST			Fall		Y	Y	Y
<i>Symphotrichum carolinianum</i>	Climbing aster	forb/herb	OBL	N,C,S/ST	Spr	Sum	Fall	Win			Y

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<i>Symphotrichum elliottii</i>	Elliott's aster	forb/herb	OBL	N,C,S/ST		Sum	Fall			Y	Y
<i>Tradescantia ohioensis</i>	Ohio spiderwort	forb/herb	FAC	N,C,S	Spr	Sum	Fall	Win	YYYY	Y	YY
<i>Vernonia gigantea (altissima)</i>	giant ironweed	forb/herb	FAC	N,C,S		Sum	Fall		YYYY	Y	Y
<i>Veronia angustifolia</i>	Tall ironweed	forb/herb	FAC	N,C,S		Sum	Fall		YY	Y	Y
<i>Vachellia farnesiana (=Acacia farnesiana)</i>	Sweet acacia	shrub/tree	FACU	S/ST	Spr			Win			Y
<i>Amorpha fruticosa</i>	False indigobush	shrub, tree	FACW	N, C, S/ST	Spr	Sum					Y
<i>Ardisia escallonoides</i>	Marlberry	shrub, tree		C,S/ST	Spr	Sum	Fall	Win			YY
<i>Asimina paviflora</i>	Small-fruited pawpaw	shrub, tree	FACU	N,C,S	Spr						Y
<i>Cephalanthus occidentalis</i>	Common buttonbush	shrub, tree	OBL	N,C,S/ST		Sum	Fall				YYYY
<i>Cercis canadensis</i>	American redbud	shrub, tree	UPL	N,C	Spr			Win (C)			YY
<i>Crataegus aestivalis</i>	Mayhaw	shrub, tree	OBL	N	Spr						Y
<i>Crataegus flavus</i>	Yellow hawthorne, Summer haw	shrub, tree	UPL	N	Spr						Y
<i>Crataegus marshallii</i>	Parsley haw	Shrub, tree	FACW	N,C	Spr						Y
<i>Erythrina herbacea</i>	Coral bean	shrub, tree		N,C,S/ST	Spr	Sum					YYY
<i>Halesia diptera</i>	Two Wing Silverbell	shrub, tree	FAC	N	Spr						Y
<i>Hamelia patens</i>	Firebush	shrub, tree	FACu	C,S/ST	Spr	Sum	Fall	Win			YYYY
<i>Ilex cassine</i>	Dahoon holly	shrub, tree	FACW	N,C,S/ST	Spr						YYYY
<i>Ilex glabra</i>	Inkberry	shrub, tree	FACW	N,C,S/ST	Spr						YYY
<i>Ilex opaca</i>	American holly	shrub, tree	FAC-	N,C,S	Spr						Y
<i>Ilex vomitoria</i>	Yaupon	shrub, tree	FAC	N,C	Spr						YYYY
<i>Itea virginica</i>	Virginia willow or Virginia sweetspire	shrub, tree	FACW+	N,C,S/ST	Spr	Sum					YY
<i>Malus angustifolia</i>	Southern crabapple	shrub, tree		N	Spr						Y
<i>Passiflora incarnata</i>	Purple passionflower, Maypop (vine)	vine		N,C,S/ST	Spr	Sum	Fall				Y
<i>Passiflora suberosa</i>	Corkystem passionflower	vine	UPL	C,S/ST	Spr	Sum	Fall	Win			Y
<i>Prunus angustifolia</i>	Chickasaw plum	shrub, tree		N,C	Spr						YYYY
<i>Prunus caroliniana</i>	Carolina laurelcherry	shrub, tree	FACU	N,C	Spr						Y

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<i>Prunus caroliniana</i>	Carolina laurelcherry	shrub, tree	FACU	N,C	Spr						Y
<i>Prunus serotina</i>	Black cherry	shrub, tree	FACU	N,C	Spr						YY
<i>Prunus umbellata</i>	Flatwoods plum	shrub, tree		N,C,S	Spr						YYYY

*Florida climatic zone boundaries (rjgbt) from 26 Ecological Communities of Florida, 1989, p. 146, Soil and Water Conservation Society, Gainesville, FL.

**Flowering Period: Spring – March, April, May; Summer – June, July, August; Fall – September, October, November; and Winter – December, January, February.

Some Sources of Plants and Seed (other suppliers may be used if they have suitable materials):

Association of Florida Native Nurseries	www.afnn.org
Ernst Conservation Seed	www.ernstseed.com
Florida Wildflower Growers Cooperative	www.floridawildflowers.com
Roundstone Native Seed	www.roundstoneseed.com

Additional Guidance on Planting for Monarch Butterflies:

- Milkweed plants should only be about 3-4% of a planting or between 350 to 500 plants/acre; the bulk of the planting, about 50-75% of the stand, should be composed of a wide range of monarch preferred forbs and flowering shrubs/trees.
- Transplant milkweed in clusters of 5 or more on 2 ft center; transplant any time after danger of frost if irrigation available, otherwise during the summer rainy season after herbaceous material planted.
- Mixtures of herbaceous material should be planted at the rate of 40 and 60 live seed per square foot with no more than 25% of the seed mix being made up of a native warm season grass seed. For guidance on seed mixtures see [Florida Plant Materials Fact Sheet No. 4](#).
- The Florida Wildflower Foundation recommends the following planting windows for seed: North Florida – mid-September through mid-November; Central Florida – mid-October through early January; South/Subtropical Florida – November through mid-January.
- Flowering shrubs and trees are needed to provide food during the winter and early spring for adult monarchs who overwinter in Florida.
- When planting shrubs and trees, a minimum of 4 plants of each species should be planted in each planting block with a total of no more than 24 shrubs or trees total per ½ acre planting block. These plants should be planted at the same time as the seed mixture and clustered together or planted in a hedgerow fashion.



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