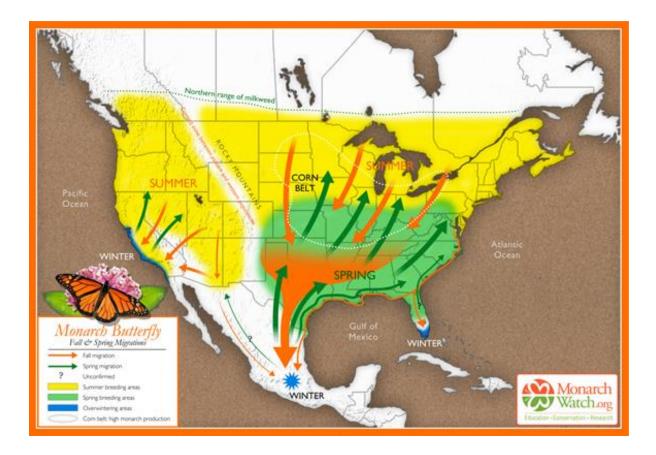


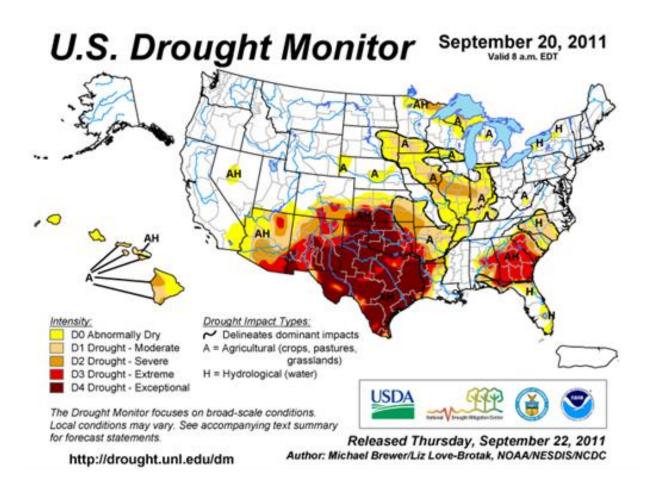
## The Importance of Fall Nectar Plants for the Monarch Butterfly

Compiled by Matt Morris - Zilker Botanical Garden

Texas has been called the "funnel state", because eastern North American monarchs fly through Texas on both legs of their migration. This happens every year in the spring and in the fall, and makes Texas a crucial place for monarch habitat.



Monarchs have been experiencing a dramatic population decline in the last few years. Issues like deforestation, abnormally cold and wet storms in their wintering grounds, drought, habitat loss and increased herbicide use in their summer breeding grounds are just a few of the contributing factors involved. All of these have detrimental effects on the monarch population. It is important for us to find ways to offset these problems whenever we can.



One example of where people can make a difference comes from the drought Texas experienced in the fall of 2011. When monarchs start arriving in the Austin area as early as Sept 1<sup>st</sup>, the drought conditions had greatly reduced the amount of wild nectar sources. This made it much harder for the monarchs to find the needed resources to fuel their migration south. Pollinator gardens and monarch waystations can provide the necessary resources for these wonderful creatures during extreme weather conditions. These oases are important for both legs of the monarch's migration but providing nectar resources for the fall migrating monarch is crucial.

Here is the reason why: In late summer, the 4<sup>th</sup> generation of monarchs is hatching throughout the Midwest and even in parts of Canada. It is these monarchs that will eventually head to Mexico to overwinter. The monarchs are shifting their focus from breeding to intense feeding for this trip. They search out nectar plants the entire time they are traveling the 2,500 miles to their winter roosting sites. They must build body fat to fuel migration and to survive the winter in Mexico; without good fat reserves they will not be able to make it to back to Texas in the spring to lay their eggs.

This graph indicates how much body fat (lipid mass) the typical monarch has in each month of the year. Look how fat reserves drop during the five months the monarchs are in Mexico!



Month

Photo and Graph © Journey North

Monarch waystations and pollinator gardens act like stepping stones for the migrating monarchs to refuel and continue their journey. Having these islands of nectar sources is particularly important within large areas of urban and agricultural development and especially important when abnormal weather patterns like the 2011 drought in Texas occur.

## Fall Pollinator Plants for the Austin Area

When choosing plants, always choose natives first!

Some of these plants may not be found in local nurseries but can be ordered from online sources.

\* Indicates a top nectar choice of monarch butterflies

Common Name	Scientific Name	Bloom Time	Native to
Α			
Ageratum	Ageratum houstonianum	June - Frost	Mexico, Central America
American Germander	Teucrium canadense	March – Dec.	US Native
Anacacho Orchid Tree	Bauhinia lunarioides	March – Oct.	Texas, Mexico
Anise Hyssop	Agastache foeniculum	April – Nov.	US Native
Apache Plume	Fallugia paradoxa	May – Dec.	US, Mexico
Argentine Senna	Senna corymbosa	June – Nov.	Mexico, South America
Autumn Sage	Salvia greggi	March – Nov.	US Native
'Autumn Joy' sedum	Sedum telephium	Sept. – Nov.	North America, Europe
В	Scientific Name	Bloom Time	Native to
Barbados Cherry	Malpighia glabra	March – Dec.	Texas to South America
Bastardia	Bastardia viscosa	Feb. – Dec.	Texas
Bee Brush	Aloysia gratissima	March – Dec.	Texas, New Mexico, Mexico
Betony Leaf Mistflower	Conoclinium betonicifolium	May – Dec.	US Native
Black eyed Susan	Rudbeckia hirta angustifolia	May – Nov.	US Native
Blackfoot Daisy	Melampodium leucanthum	March – Nov.	US Native
*Blue Mistflower	Conoclinium coelestinum	July – Dec.	US Native
Blue Mist Shrub	Caryopteris incana	July – Nov.	Asia
*Blue Porter weed	Stachytarpheta urticifolia	June – Dec.	Caribbean, South America
Blue Sage	Salvia azurea	Aug. – Nov.	US Native
Bog Sage	Salvia uliginosa	May – Nov.	South America
Brownfoot	Perezia wrightii	May – Nov.	US Native
Bush Sunflower	Simsia calva	April – Nov.	US Native
Bushy Lippia	Lippia alba	March – Oct.	Texas, Florida
Butterfly Bush	Buddleia davidii	May – Dec.	China, Japan
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С	Scientific Name	Bloom Time	Native to
Cardinal Feather	Acalypha radians	April – Nov.	Texas Native
Catmint	Nepeta mussinii	April – Dec.	Europe, Asia, and Africa
Calylophus	Calylophus berlandieri	March – Oct.	US, Mexico
Chocolate Daisy	Berlandiera lyrata	April – Dec.	US Native
Clustered bushmint	Hyptis alata	May – Nov.	US Native
*Common Bonset	Eupatorium perfoliatum	June – Nov.	US Native
Common Sneezeweed	Helenium autumnale	July - Oct	US Native
*Common Sunflower	Helianthus annus	July – Nov.	US Native

Cosmos	Cosmos Spp.	April – Nov.	US, Mexico, South America
*Cowpen Daisy	Verbesing encelioides	April – Nov.	US, Mexico
, ,			
D			Native to
Damianita	Chrysactinia mexicana	April – Oct.	US, Mexico
Desert Globemallow	Sphaeralcea ambigua	Feb. – Nov.	US, Mexico
Desert Marigold	Baileya multiradiata	March – Nov.	US, Mexico
E			
Evergreen Sumac	Rhus virens	July – Oct.	US, Mexico
F	Scientific Name	Bloom Time	Native to
Fall Aster	Symphyotrichum oblongifolium	Sept Nov.	US Native
Fire Bush	Hamelia patens	July – Nov.	Mexico, Central and South Americ
Flame Acanthus	Anisacanthus quadrifidus var.	June – Nov.	Texas, Mexico
Frog Fruit	Phyla nodiflora	March – Nov.	US, Central America
*Frostweed	Verbesina virginica	Sept. – Nov.	US Native
G	Scientific Name	Bloom Time	Native to
*Gayfeather	Liatris mucronata	Sept – Nov.	US Native
Globe Amaranth	Gomphrena globosa	April – Nov.	Central and South America
Golden ball leadtree	Leucaena retusa	April – Oct.	N. Mexico, Texas, Mexico
*Golden Eye Daisy	Viguiera dentata	Sept – Nov.	Texas, New Mexico, Arizona
Gregg Dalea	Dalea greggii	May – Oct.	N. Mexico, Texas, Mexico
*Gregg's Mistflower	Conoclinium greggii	June – Nov.	Arizona, N. Mexico, Texas
Grey Golden Aster	Heterotheca latifolia	Aug. – Nov.	US, Mexico
Grey Globemallow	Sphaeralcea incana	June – Oct.	Arizona, N.Mexico, Texas
Grey Goldenrod	Solidago nemoralis	June – Oct.	US, Canada
Н	Scientific Name	Bloom Time	Native to
Heath Aster	Aster ericoides	Aug. – Nov.	US Native
Hymonoxis	Tetraneuris scaposa	March – Nov.	US, Mexico
<u> </u>	Scientific Name	Bloom Time	Native to
Indian Mallow	Abutilon fruitiosa	June – Dec.	US Native
Indigo Spires Salvia	Salvia longespicata x farinacea	May – Nov.	Hybrid
J	Scientific Name	Bloom Time	Native to
*Jack in the Bush	Chromolaena odorata	Aug – Nov.	Southern US, Central America
1/		Dia any Thur	Blading to
Kidpowwood	Scientific Name	Bloom Time	Native to
Kidneywood	Eysenhardtia texana	May – Nov.	Texas, Mexico
L	Scientific Name	Bloom Time	Native to
Late flowering Boneset	Eupatorium serotinum	Aug. – Nov.	US Native
Lindheimer Senna	Cassia lindheimeriana	June – Oct.	Arizona, New Mexico, Texas
Μ	Scientific Name	Bloom Time	Native to
Marigold	Tagets Spp.	April – Dec.	US, Mexico, South America

Marsh Fleabane	Pluchea odorata var. odorata	June – Nov.	US Native
*Maximillian Sunflower	Helianthus maximiliani	Aug. – Nov.	US Native
Mealy Blue Sage	Salvia farinacea	March – Nov.	US Native
Mexican Bush Sage	Salvia Leucantha	Aug. – Nov.	Central America, Mexico
Mexican Hat	Ratibida columnaris	May – Nov.	US, Mexico
*Mexican Flame Vine	Senecio confuses	May – Dec.	Mexico
Mexican Marigold Mint	Tagetes lucida	Aug. – Nov.	Mexico, Central America
Mexican Oregano	Lippia graveolens	June – Nov.	Mexico
Mexican Orchid Tree	Bauhinia mexicana	June – Nov.	Mexico
*Mexican sunflower	Tithonia rotundifolia	June – Nov.	Mexico, Central America
Mexican Shrimp Plant	Justicia brandegeeana	June- Nov.	Mexico
Mountain Sage	Salvia regla	July – Nov.	West Texas, Mexico
Р	Scientific Name	Bloom Time	Native to
Paloverde	Parkinsonia aculeata	April – Oct.	Arizona, Texas, Mexico
Partridge Pea	Chamaecrista fasciculata	June – Oct.	US Native
Pentas	Pentas lanceolata	April - frost	Africa
Periwinkle	Vinca Spp.	May – Nov.	Europe, Asia, Africa
Pigeonberry	Rivina humilis	March – Nov.	US, Central and South America
Plains Fleabane	Erigeron modestus	April – Nov.	US Native
Plumbago	Plumbago auriculata	June – Nov.	South Africa
*Prairie goldenrod	Solidago nemoralis	July – Nov.	US Native
*Prairie Verbena	Glandularia bipinnatifida	, March – Oct.	US, Mexico
Pride of Barbados	Caesalpinia pulcherima	June – Nov.	Central/South America
Purple Cone flower	Echinacea purpurea	May - Oct	US, Canada
Pyramid bush	Melochia tomentosa	, May – Nov.	US, Central / South America
•			
R	Scientific Name	Bloom Time	Native to
Rock Rose	Pavonia lasiopetala	April – Nov.	Mexico, US Native
Rock Penstemon	Penstemon baccharifolius	July – Oct.	Texas, Mexico
Roemer's Mimosa	Mimosa roemeriana	April – Nov.	Oklahoma, Texas
Rose Mock Vervain	Glandularia canadensis	Feb. – Nov.	US Native
*Roosevelt Weed	Baccharis neglecta	Sept – Oct.	Arizona, New Mexico, Texas
Roughstem rosinweed	Silphium radula	June – Nov.	US Native
Russian Sage	Perovskia atriplicifolia	May – Nov.	Asia
-			
S	Scientific Name	Bloom Time	Native to
Sedum	Sedum Spp.	Aug – Nov.	US, Asia, China
Shrub Daisy	Euryops pectinatus	June – Nov.	Africa
Shrubby Blue Sage	Salvia ballotiflora	May – Nov.	Texas
Simpson's rosinweed	Silphium simpsonii	July – Nov.	Florida
*Skeleton Leaf Goldeneye	Viguiera stenoloba	June – Nov.	US Native
Sky Blue Aster	Symphyotrichum oolentangiense	Sept. – Nov.	US Native
Stokes Aster	Stokesia laevis	May – Nov.	US Native
Summer Phlox	Phlox paniculata	, June - Oct	US, Canada
Sweet Almond Verbena	Aloysia vigata	May – Dec.	South America
т	Scientific Name	Bloom Time	Native to

<b>T</b> - U		A !	
Tall verbena	Verbena bonariensis	April – Nov.	South America
Texas Green eyes	Berlandiera betonicifolia	April – Dec.	US Native
*Texas Lantana	Lantana urticoides	April - Nov.	Mexico, Texas
Texas Vervain	Verbena halei	May – Nov.	US Native
Trailing Lantana	Lantana montevidensis	Feb. – Dec.	South America
Tropical Sage	Salvia coccinea	March – Dec.	US Native
Tube Tongue	Justicia pilosella	April – Oct.	Texas, New Mexico
Turk's Cap	Malvaviscus arboreus	May – Dec.	US, Mexico
V	Scientific Name	Bloom Time	Native to
Velvet leaf	Wissadula halosericea	April – Dec.	US Native
Verbena	Verbena canadensis	April – Nov.	US Native
*Viburnum Mistflower	Eupatorium viburnoides	Oct. – Dec.	Mexico
Vinca	Vinca minor	April – Nov.	Europe, Asia, Africa
W	Scientific Name	Bloom Time	Native to
Western Ironweed	Vernonia baldwinii	Aug. – Nov.	US Native
*White Mistflower	Eupatorium havanensis	Sept. – Nov.	Texas, Mexico, Cuba
Wingstem	Verbesina alternifolia	Aug. – Oct.	US Native
Wild Shrimp Plant	Yeatesia platystegia	June –Oct.	Texas
Woolly Bee Brush	Aloysia macrostachya	March – Dec.	US, Mexico
Woolly Ironweed	Vermonia lindheimeri	June – Nov.	Texas, Mexico
Wright's Skullcap	Scutellaria wrightii	April – Nov.	Oklahoma, Texas
Y	Scientific Name	Bloom Time	Native to
Yellow Cestrum	Cestrum aurantiacum	June – Nov.	Guatemala
Yellow Bells	Tecoma stans	April – Nov.	US, Central and South America
		F	,
Z	Scientific Name	Bloom Time	Native to
Zexmenia	Wedelia hispida	May – Nov.	Texas, North Mexico
Zinnia	Zinnia linearis	April – Nov.	Southern US, Mexico to S. Americ

## Information for this article was found at the following websites

http://monarchwatch.org/

http://www.learner.org/jnorth/

http://www.fs.fed.us/wildflowers/pollinators/documents/Monarch\_Butterfly.pdf

http://www.nativeplantproject.com/butterflygardening.pdf

http://nationalbutterflycenter.org/

http://naba.org/

http://www.wildflower.org/