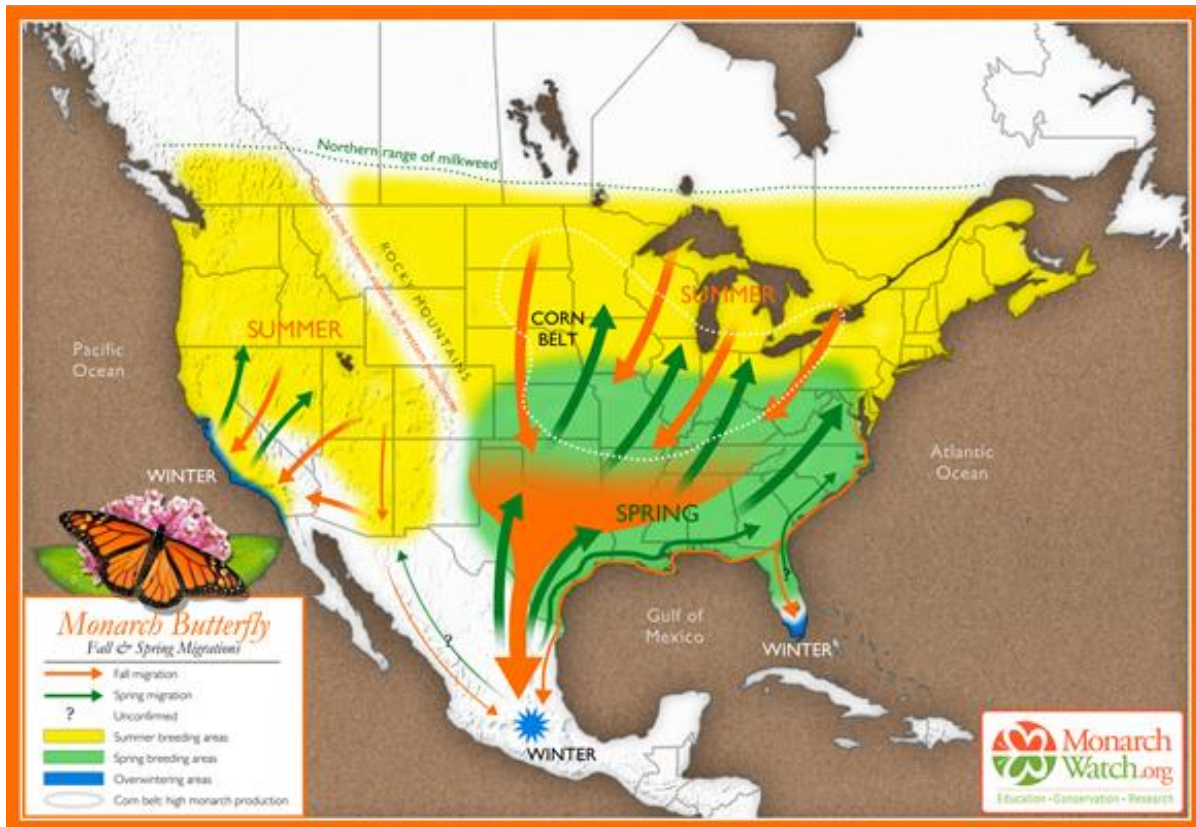


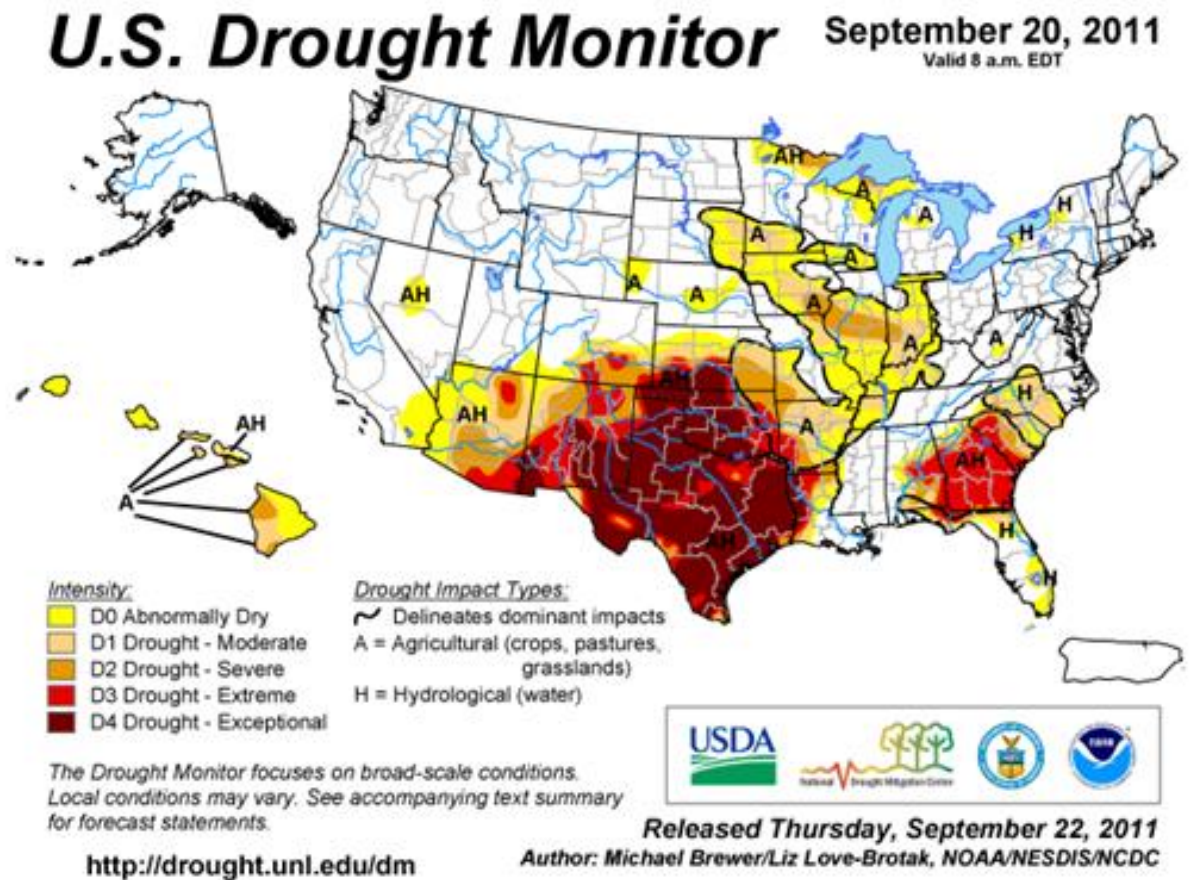
The Importance of Fall Nectar Plants for the Monarch Butterfly

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 how drought conditions can impact monarchs is the drought experienced in the fall of 2011. When monarchs start arriving in the Austin area as early as Sept 1st, 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 4th 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!

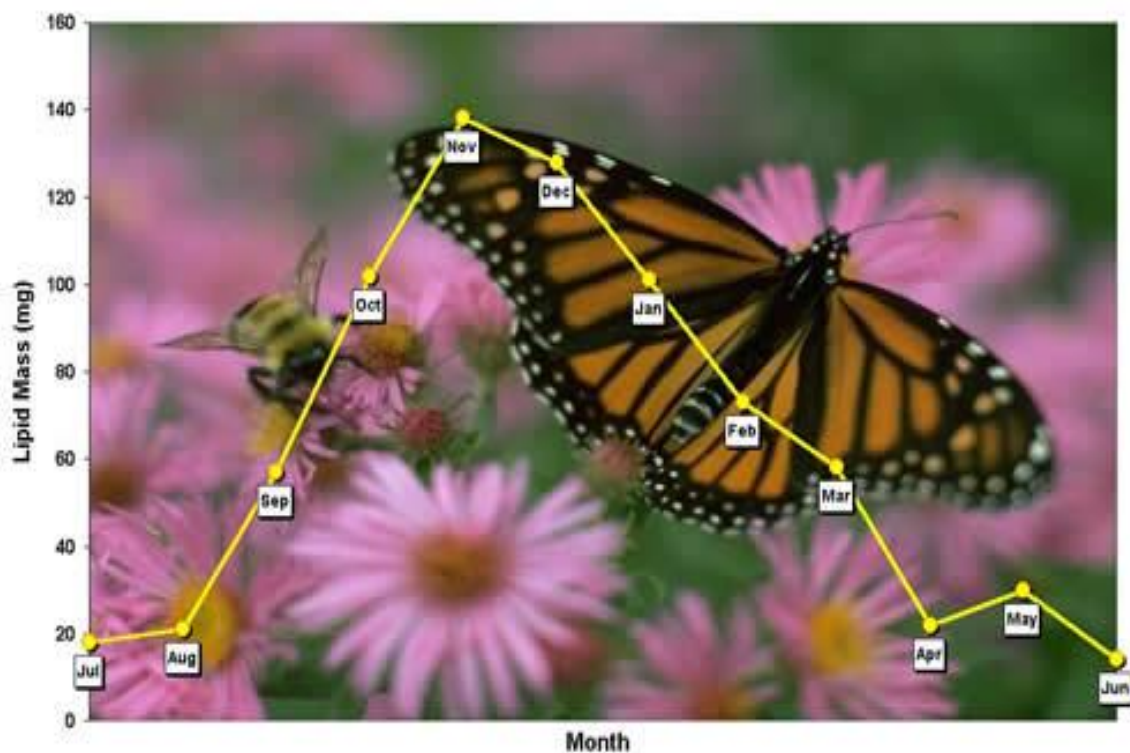


Photo and Graph © Journey North

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

Desert Globemallow	<i>Sphaeralcea ambigua</i>	Feb. – Nov.	US, Mexico
Desert Marigold	<i>Baileya multiradiata</i>	March – Nov.	US, Mexico
E			
Evergreen Sumac	<i>Rhus virens</i>	July – Oct.	US, Mexico
F	Scientific Name	Bloom Time	Native to
Fall Aster	<i>Symphyotrichum oblongifolium</i>	Sept. - Nov.	US Native
Fire Bush	<i>Hamelia patens</i>	July – Nov.	Mexico, Central and South America
Flame Acanthus	<i>Anisacanthus quadrifidus var.</i>	June – Nov.	Texas, Mexico
Frog Fruit	<i>Phyla nodiflora</i>	March – Nov.	US, Central America
*Frostweed	<i>Verbesina virginica</i>	Sept. – Nov.	US Native
G	Scientific Name	Bloom Time	Native to
*Gayfeather	<i>Liatris mucronata</i>	Sept – Nov.	US Native
Globe Amaranth	<i>Gomphrena globosa</i>	April – Nov.	Central and South America
Golden ball leadtree	<i>Leucaena retusa</i>	April – Oct.	N. Mexico, Texas, Mexico
*Golden Eye Daisy	<i>Viguiera dentata</i>	Sept – Nov.	Texas , New Mexico, Arizona
Gregg Dalea	<i>Dalea greggii</i>	May – Oct.	N. Mexico, Texas, Mexico
*Gregg's Mistflower	<i>Conoclinium greggii</i>	June – Nov.	Arizona, N. Mexico, Texas
Grey Golden Aster	<i>Heterotheca latifolia</i>	Aug. – Nov.	US, Mexico
Grey Globemallow	<i>Sphaeralcea incana</i>	June – Oct.	Arizona, N.Mexico, Texas
Grey Goldenrod	<i>Solidago nemoralis</i>	June – Oct.	US, Canada
H	Scientific Name	Bloom Time	Native to
Heath Aster	<i>Aster ericoides</i>	Aug. – Nov.	US Native
Hymonoxis	<i>Tetraneris scaposa</i>	March – Nov.	US, Mexico
I	Scientific Name	Bloom Time	Native to
Indian Mallow	<i>Abutilon fruitiosa</i>	June – Dec.	US Native
Indigo Spires Salvia	<i>Salvia longespicata x farinacea</i>	May – Nov.	Hybrid
J	Scientific Name	Bloom Time	Native to
*Jack in the Bush	<i>Chromolaena odorata</i>	Aug – Nov.	Southern US, Central America
K	Scientific Name	Bloom Time	Native to
Kidneywood	<i>Eysenhardtia texana</i>	May – Nov.	Texas, Mexico
L	Scientific Name	Bloom Time	Native to
Late flowering Boneset	<i>Eupatorium serotinum</i>	Aug. – Nov.	US Native
Lindheimer Senna	<i>Cassia lindheimeriana</i>	June – Oct.	Arizona, New Mexico, Texas
M	Scientific Name	Bloom Time	Native to
Marigold	<i>Tagets Spp.</i>	April – Dec.	US, Mexico, South America
Marsh Fleabane	<i>Pluchea odorata var. odorata</i>	June – Nov.	US Native
*Maximillian Sunflower	<i>Helianthus maximiliani</i>	Aug. – Nov.	US Native
Mealy Blue Sage	<i>Salvia farinacea</i>	March – Nov.	US Native
Mexican Bush Sage	<i>Salvia Leucantha</i>	Aug. – Nov.	Central America, Mexico
Mexican Hat	<i>Ratibida columnaris</i>	May – Nov.	US, Mexico

*Mexican Flame Vine	<i>Senecio confuses</i>	May – Dec.	Mexico
Mexican Marigold Mint	<i>Tagetes lucida</i>	Aug. – Nov.	Mexico, Central America
Mexican Oregano	<i>Lippia graveolens</i>	June – Nov.	Mexico
Mexican Orchid Tree	<i>Bauhinia mexicana</i>	June – Nov.	Mexico
*Mexican sunflower	<i>Tithonia rotundifolia</i>	June – Nov.	Mexico, Central America
Mexican Shrimp Plant	<i>Justicia brandegeana</i>	June- Nov.	Mexico
Mountain Sage	<i>Salvia regla</i>	July – Nov.	West Texas, Mexico
P	Scientific Name	Bloom Time	Native to
Paloverde	<i>Parkinsonia aculeata</i>	April – Oct.	Arizona, Texas, Mexico
Partridge Pea	<i>Chamaecrista fasciculata</i>	June – Oct.	US Native
Pentas	<i>Pentas lanceolata</i>	April - frost	Africa
Periwinkle	<i>Vinca Spp.</i>	May – Nov.	Europe, Asia, Africa
Pigeonberry	<i>Rivina humilis</i>	March – Nov.	US, Central and South America
Plains Fleabane	<i>Erigeron modestus</i>	April – Nov.	US Native
Plumbago	<i>Plumbago auriculata</i>	June – Nov.	South Africa
*Prairie goldenrod	<i>Solidago nemoralis</i>	July – Nov.	US Native
*Prairie Verbena	<i>Glandularia bipinnatifida</i>	March – Oct.	US, Mexico
Pride of Barbados	<i>Caesalpinia pulcherima</i>	June – Nov.	Central/South America
Purple Cone flower	<i>Echinacea purpurea</i>	May - Oct	US, Canada
Pyramid bush	<i>Melochia tomentosa</i>	May – Nov.	US, Central / South America
R	Scientific Name	Bloom Time	Native to
Rock Rose	<i>Pavonia lasiopetala</i>	April – Nov.	Mexico, US Native
Rock Penstemon	<i>Penstemon baccharifolius</i>	July – Oct.	Texas, Mexico
Roemer's Mimosa	<i>Mimosa roemeriana</i>	April – Nov.	Oklahoma, Texas
Rose Mock Vervain	<i>Glandularia canadensis</i>	Feb. – Nov.	US Native
*Roosevelt Weed	<i>Baccharis neglecta</i>	Sept – Oct.	Arizona, New Mexico, Texas
Roughstem rosinweed	<i>Silphium radula</i>	June – Nov.	US Native
Russian Sage	<i>Perovskia atriplicifolia</i>	May – Nov.	Asia
S	Scientific Name	Bloom Time	Native to
Sedum	<i>Sedum Spp.</i>	Aug – Nov.	US, Asia, China
Shrub Daisy	<i>Euryops pectinatus</i>	June – Nov.	Africa
Shrubby Blue Sage	<i>Salvia ballotiflora</i>	May – Nov.	Texas
Simpson's rosinweed	<i>Silphium simpsonii</i>	July – Nov.	Florida
*Skeleton Leaf Goldeneye	<i>Viguiera stenoloba</i>	June – Nov.	US Native
Sky Blue Aster	<i>Symphyotrichum oolentangiense</i>	Sept. – Nov.	US Native
Stokes Aster	<i>Stokesia laevis</i>	May – Nov.	US Native
Summer Phlox	<i>Phlox paniculata</i>	June - Oct	US, Canada
Sweet Almond Verbena	<i>Aloysia vigata</i>	May – Dec.	South America
T	Scientific Name	Bloom Time	Native to
*Tall Goldenrod	<i>Solidago altissima</i>	Sept. – Nov.	US Native
Tall verbena	<i>Verbena bonariensis</i>	April – Nov.	South America
Texas Green eyes	<i>Berlandiera betonicifolia</i>	April – Dec.	US Native
*Texas Lantana	<i>Lantana urticoides</i>	April - Nov.	Mexico, Texas
Texas Vervain	<i>Verbena halei</i>	May – Nov.	US Native
Trailing Lantana	<i>Lantana montevidensis</i>	Feb. – Dec.	South America

Tropical Sage	<i>Salvia coccinea</i>	March – Dec.	US Native
Tube Tongue	<i>Justicia pilosella</i>	April – Oct.	Texas, New Mexico
Turk's Cap	<i>Malvaviscus arboreus</i>	May – Dec.	US, Mexico
V	Scientific Name	Bloom Time	Native to
Velvet leaf	<i>Wissadula halosericea</i>	April – Dec.	US Native
Verbena	<i>Verbena canadensis</i>	April – Nov.	US Native
*Viburnum Mistflower	<i>Eupatorium viburnoides</i>	Oct. – Dec.	Mexico
Vinca	<i>Vinca minor</i>	April – Nov.	Europe, Asia, Africa
W	Scientific Name	Bloom Time	Native to
Western Ironweed	<i>Vernonia baldwinii</i>	Aug. – Nov.	US Native
*White Mistflower	<i>Eupatorium havanensis</i>	Sept. – Nov.	Texas, Mexico, Cuba
Wingstem	<i>Verbesina alternifolia</i>	Aug. – Oct.	US Native
Wild Shrimp Plant	<i>Yeatesia platystegia</i>	June – Oct.	Texas
Woolly Bee Brush	<i>Aloysia macrostachya</i>	March – Dec.	US, Mexico
Woolly Ironweed	<i>Vermonia lindheimeri</i>	June – Nov.	Texas, Mexico
Wright's Skullcap	<i>Scutellaria wrightii</i>	April – Nov.	Oklahoma, Texas
Y	Scientific Name	Bloom Time	Native to
Yellow Cestrum	<i>Cestrum aurantiacum</i>	June – Nov.	Guatemala
Yellow Bells	<i>Tecoma stans</i>	April – Nov.	US, Central and South America
Z	Scientific Name	Bloom Time	Native to
Zexmenia	<i>Wedelia hispida</i>	May – Nov.	Texas, North Mexico
Zinnia	<i>Zinnia linearis</i>	April – Nov.	Southern US, Mexico to S. America

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/>

