

How it all began....

The 'Green Thumbs' group of the 2017 Master Gardener (MG) Intern class, selected the North Richland Hills Common Grounds Community Garden project to create and plant a Monarch Butterfly Garden and attain Way Station Certification.



Texas Master Gardener™



Members of the MG Green Thumbs project group are:

John Cheney

Donna Lenick-Findley

Eden Hines

Dianne Jones

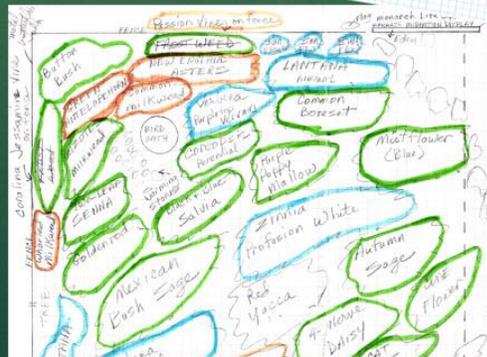
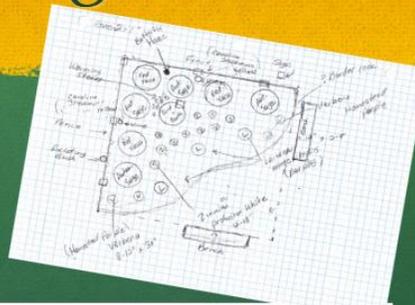
Janet Viola

Our team was so fortunate to have this opportunity at the North Richland Hills Common Grounds Community Garden.



Garden Design

The garden design was based on where the host and nectar plants should be planted according to their mature height and width characteristics. There were several versions of the design before we began planting, especially because we didn't know for sure which plants were available.



The host plants were given a back, central, garden location to help protect the Monarch Butterflies from predators. Taller plants were placed closer to the back and shorter plants towards the front and sides.

MG Intern Project Proposal

Date March 10, 2017

Project Name Monarch Butterfly Waystation - Common Grounds Community Garden, North Richland Hills (NRH)

Project Address 5301 Davis Blvd., NRH, TX Zip Code 76180

Estimated Date of Project Start: March 18, 2017

Estimated Project Completion Date: June 1, 2017

Purpose / Objective:

1. Design and build a Monarch Butterfly Waystation in the Common Grounds Community Gardens to help support the continued sustainability of Monarch migration. Will document build with before, during and after photos.
2. Provide an educational opportunity for the community and student groups by providing a Monarch butterfly habitat and showing the vital function it provides during butterfly migration. Will post garden pictures on MG Face Book page.
 - a. Display diagrams/pictures of the Monarch Life Cycle and Monarch migration patterns in a display case located adjacent to the garden.

Items of interest:

1. The Monarch Garden will be maintained by the TCMGA project participants through 2017. Common Grounds MG's will maintain thereafter.
2. Success of the Monarch Garden will be measured by community and student interest but more importantly, by the number of Monarch butterflies attracted to the garden. Common Grounds MG's will estimate the number of Monarchs in the garden and request teacher evaluations for feedback.
3. The Green Thumbs will make a presentation about the garden during the NRH Gardening Seminar scheduled for August 5th and/or Spring 2018.

Intern Participation:

Project participants: The Green Thumbs - John Cheney, Donna Lenick-Findley, Eden Hines, Dianne Jones, Janet Viola

Target Audience: The NRH Community, other visitors and student groups.

Benefits to the audience: a beautiful community garden, educational opportunity regarding the plight of the Monarch butterfly and encouragement for the community to build more Monarch butterfly gardens.

Once we had a good idea of what creating a Monarch garden entailed, we wrote the 'Intern Project Proposal,' for approval. The proposal helped us identify the purpose and goals of the garden.

The Tarrant County Texas A&M AgrLife Extension Agent and the North Richland Hills Common Ground Community Garden Lead needed to approve our plans for the garden before we could begin.

Plant Lists

We developed a complete plant list for all of our plant type considerations. The list includes Monarch favorites, plant characteristics and is color coded to indicate our plant preferences, based on our research.

Plant	GManning	Scientific Name	Light	Water	Type	Blooms	Spec Feature	Height / Width
Autumn Joy Sedum		Sedum 'Autumn Joy'	Sun, Part Shade	Medium	Perennial	Summer Fall	Bees, Butterflies, Hummingbirds	
1 Autumn Sage		Salvia greggii- Multiple colors	Full Sun	Low	Perennial	Summer Fall	Bees, Butterflies, Hummingbirds	2-3 ft
2 Autumn Sage		Furman's Red'	Sun to part shade			Summer & Autumn		
Black and Blue Salvia		Salvia Guarantica	Sun, Part Shade	Drought Tolerant	Perennial	Spring Summer	Hummingbirds, Butterflies	
Blackeye Susan		Rutbeckia Fulvida 'Goldsturm'	Sun, Part Shade	Drought Tolerant	Self Seeding /	Summer Fall	Birds, Butterflies	
Blackfoot Daisy		Melampodium leucanthum	Sun, Part Sun	Drought Tolerant	Perennial	Spring Summer Fall	Native, Butterflies	
Blue Mist Flower (Hardy Ageratum)		Eupatorium coelestinum	Sun, Part Shade	Medium	Perennial	Summer Fall	Birds Butterflies	
4 Brazilian Rock Rose		Pavonia astata	Sun		Perennial	Summer	Butterflies	4' tall
5 Bronze Fennel			Full Sun					48" tall 12" apart
Buddleia Purple Knight		Buddleia davidii nanhoensis	Sun	Low	Perennial	Summer Fall	Butterflies	
6 Butterfly Weed		Asclepias Tuberosa	Full Sun	Drought Tolerant	Perennial	Summer Fall	Butterflies, Hummingbirds	
Butter Bush		Cephalanthus occidentalis		wetland	Perennial	Spring		6-12 feet
7 Catmint 'Walker's Low'		Nepeta racemosa	Sun	Drought Tolerant	Perennial	Summer	Bees, Butterflies	1 - 2 ft tall well-drained soil
Chocolate Daisy		Berlandiera lyrata	Sun	Drought Tolerant	Perennial	Spring Summer	Bees, Butterflies, Birds	
Common Boneset		Eupatorium perfoliatum	Full or partial sun	Wet to moist	Perennial	Summer Fall		2-4 ft
Common Milkweed			Sun	Medium	Annual			1cm - 2.6 mm tall; 25 mm wide
8 Coneflower 'PowWow White'		Echinacea purpurea		Tolerates hot, dry		Late Summer to Autumn		22" tall 12 - 16" spacing
9 Cone Flower 'Primadonna Deep Rose'		Echinacea purpurea	Sun	moist to dry	Perennial	mid summer bloom	sunflower family	36" high; 18" spacing
10 Carolina Jessamine			Sun	Drought Tolerant	Perennial	Winter to Spring	Vine	up to 20 ft long (mv)

Plant preferences included Texas Native, drought tolerant, full sun, non-invasive and some expert recommendations. The final list for consideration included 68 plant varieties.

Host / Nectar Plant List

Our 2nd plant list categorizes the plants by host, nectar and bloom season to ensure that the Monarch butterflies had food, shelter and seasonal host plants for breeding. This list also documented our compliance with the Way Station certification requirements.

#	Host Plants	Scientific Name	Blooms
1	Butterfly Weed	Asclepias Tuberosa	Summer Fall
2	Common Milkweed	Asclepias Tuberosa	Summer Fall
3	New England Asters	Aster novae-aengliae	Autumn
4	Pipe Vine		Spring
5	Tropical Milkweed	Asclepias viridis	S, S, F
6	Green Antelopehorn	Senna roemeriana S. lindheimeri	S, S, F
7	Twoleaf Senna	Asclepias oenotheroides	late Summer until frost
8	Zizotes Milkweed	Asclepias verticillata	Spring to early Summer
9	Whorled Milkweed	Asclepias verticillata	Spring to early Summer
Nectar Plants			
1	Englemann's daisy	Engelmannia peristenia	Summer to early Autumn
2	Pincushion flower	Scabiosa columbaria	Summer to early Autumn
3	Purple Poppy Flower (wine cup)	Callirhoe involucrata	Summer to early Autumn
4	Annual Phlox	Phlox drummondii	Summer to early Autumn
5	False indigo bush	Amorpha fruticosa	Summer to early Autumn
6	Lyreleaf sage	Salvia lyrata	Summer to early Autumn
7	Wild Blue Phlox	Phlox divaricata	Summer to early Autumn
Nectar Plants			
1	Blue Mist Flower	Conoclinium coelestinum	Summer to early Autumn
2	Catmint	Nepeta faassenii or sibirica	Summer to early Autumn
3	Lantana	Lantana urticoides	Summer to early Autumn
4	(Pale) Purple Coneflower	Echinacea purpurea or pallida	Summer to early Autumn
5	Milkweed	Asclepias spp.	Summer to early Autumn
6	Zinnia Profusion (single flower variety) orange, fire, apricot	Zinnia spp.	Summer to early Autumn
7	Turk's Cap (Wax Mallow)	Malvastrum arboreus	Summer to early Autumn
Nectar Plants			
1	Autumn Sage	Salvia greggii	Autumn
2	Blackamoon echinacea (Purple Coneflower)	Echinacea angustifolia	Autumn
3	Chrysanthemums	C. leucanthemum 'Sheffield peak' or 'Bobaro'	Autumn
4	Sedum	Sedum 'Autumn Joy' or 'Autumn Fire'	Autumn
5	Smooth Blue Aster	Symphoricarpon laeve	Autumn
6	Canada Goldenrod	Solidago altissima	Autumn
7	Dakota moch vervain (Prairie Verbena)	Verbena bipinnatifida	Autumn

It is necessary to include host plants from early Spring to first frost. Nectar plants should cover bloom times for all seasons also.

Garden Donations and Expenses

We also kept track of all the garden costs and plant donations.

Some of the costs included: the plants, compost, mulch, Way Station certification, bench repair, display case and garden plant labels.

No.	Item	Description	Cost
2	Brazilian Rock Rose		
1	'Pavonia astata'	FWBG Plant sale	\$12.60
2	2 Gaura 'Rose Jane'	FWBG Plant sale	\$12.60
2	Catmint Nepeta racemosa - 'Walker's Low'	FWBG Plant sale	\$12.60
3	2 Pincushion flower Scabiosa columbaria	FWBG Plant sale	\$12.60
4	'Butterfly Blue'	FWBG Plant sale	\$12.60
2	Coreopsis 'Uptick Gold and Bronze'	FWBG Plant sale	\$12.60
3	Red salvia greggii		
6	'Autumn Sage'	donation Jo Poppelreiter	\$0.00
7	Carolina Jessamine	donation Janet Viola	\$19.49
8	4 Wine cup	donation Jo Poppelreiter	\$0.00
9	Crossvine		
10	Goldenrod		
11	Green Antelopehorn	Donation NRH	\$0.00
12	Mistflower (blue)	Perennial (NRH CG)	
13	New England Asters	Perennial (NRH CG)	
14	Passionvine	Vine (NRH CG)	
15	Pentas		
16	Purple Poppy Mallow		
17	6 Tropical Milkweed	Donation NRH	\$0.00
18	Turks Cap	donation Chris Senerote	
19	Butterfly weed	donation Chris Senerote	
20	Purple cone flower	donation Chris Senerote	
21	Prairie phlox	donation Chris Senerote	
22	Lyreleaf sage	donation Jo Poppelreiter	
23	Milkweed	Donation Eden's neighbor	
24	Tickseed Coreopsis	Donation Stegall's Nursery	
25	Turks Cap	Donation Stegall's Nursery	
26	Lantana	Donation Stegall's Nursery	
	Jethro Tull' Coreopsis		
27	Coreopsis auriculata	Donation Stegall's Nursery	
28	Bronze Fennel	Donation Stegall's Nursery	

NRH donated Green Antelope Horn and Tropical Milkweed plants and quite a few Master Gardeners donated plants out of their own gardens. Weston Gardens Nursery and Stegall's Nursery provided plant donations. Also, we bought several of our plants at the Fort Worth Botanic Garden Spring Plant sale in April.

The 'Naked' Garden



This is the garden plot in February! It had a few weeds but overall, it was in good shape.

We learned that we shouldn't have the butterfly bath above the ground since it makes it easier for birds and other predators to get to the Monarch butterflies when they are drinking and bathing! (Do butterflies bathe?) We then placed the bath at ground level.

The First Garden Tasks



We started by placing the landscape stones around the edge of the garden. Janet's husband took the bench home to work on a complete renovation. Some fellow Common Ground gardeners came to help move the stones and trim the small tree. We were so thankful for their help! You know what we're talking about if you've moved landscape stones!

Then the Planting began

John, Dianne, Janet and Eden after planting the first plants in the garden.
Donna was taking the picture!



We placed the plants in the garden based on the plant category, height and width. Notice the 'Butterfly Bath' is on the ground in the center of the Milkweed plants. We even have a butterfly flag to welcome all guests to the garden!

Plant Labels



We took pictures of the plant labels when we bought plants to help keep track of all the plants we had, the plant species and also to have the spacing, light and watering requirements for each plant. This also made it easier to make the actual plant labels for the garden.

Compost and Pine Straw Mulch



We used a good quality manure-type compost to add more nutrients around the plants and pine straw mulch to help keep the weeds out and moisture in.

John created and hand painted the metal butterflies that are attached to the fence. Definitely a labor of love!



We placed warming stones alongside the bath so the butterflies have a place to rest in the protected area. Stones are also placed inside the bath for the butterflies to have easy access to drink the water. We planted vines by the fence posts to attract more butterflies! We also added some stepping stones to help make our way through the plants when gardening.

Way Station Certification



We applied for and received Monarch Way Station Certification in June - the Way Station sign is posted in the garden!

Just a matter of time!



Some beautiful boulders were donated to the garden by a fellow Master Gardener's cousin!

Butterfly Boulevard

The Common Ground Monarch Butterfly Way Station is located on the West end of Butterfly Blvd!



The Monarch Butterfly Way Station even has a street, well..... actually, a Common Ground pathway, named for it!

Pictures are nice but
visiting the garden is better!



Eden found the perfect poster to explain the Monarch Butterfly life cycle and migration pattern. Plants will be blooming from early Spring to first frost.

“Build it and they will come!”

Your beautiful
NRH community
Monarch Butterfly
Garden
on July 18, 2017.



We've lost some of the plants that did not successfully make the transfer from another garden but the majority of the plants are established and thriving! Now, it's a matter of weeding and watering and watching them grow! We are so very proud of our garden and the Way Station certification! We can't wait to see the Monarch Butterflies make it their home when transiting North Texas. Come visit the garden and be inspired to build your own!