

What's Growing On?

BASTROP COUNTY MASTER GARDENER ASSOCIATION

October 2020

Mexican Honey Wasps

By Wizzie Brown

The Mexican honey wasp, *Brachygastra mellifica*, is a neotropical wasp that can be found in North and South America. Within North America, it can be found in Arizona and Texas.

Honey wasps are small, about 1/4 – 1/3 of an inch. These social wasps have teardrop-shaped abdomens striped in yellow and black, rusty wings, and a dark head and thorax. Like other wasps, female honey wasps are capable of stinging and will do so to protect the colony or if they are provoked.



Mexican honey wasps create a small, about 18 inches in size, basketball to football shaped nest out of a paper-like material. These nests are typically located in trees or shrubs, often higher up where they won't be disturbed. Nests

(Continued on page 2)

Fun in the Sun Scavenger Hunt

By Debbie Mikel

Membership Director, Jayne Allen coordinated a COVID-19 friendly activity for BCMGA members. We were asked to find beautiful, creative, problem solving, edible or just plain fun and interesting things around our home and take a picture. Our criteria were to find items that corresponded to a letter of the alphabet. The pictures were viewed by a committee who reported having a difficult time selecting winners from the creative pictures.

Special thanks to our panel of judges: Carolyn Turman Master Gardener, Stephanie Martinez Intern, and Kathleen Newton Intern. Pictures were selected based on composition, creativity, and interest.

(Continued on page 2)

Inside this issue:

Mexican Honey Wasps (continued)	2
Scavenger Hunt (continued)	2-3
The Fruits of Your Labor	3-7

(Continued from page 1)

can be home to 3,000–18,000 wasps. Unlike honey bees, Mexican honey wasps can have multiple queens in each colony. Clusters of colonies can be common in some areas and nests last about 3 years before they are abandoned.

These wasps are pollinators and collect nectar and pollen to feed larvae in the colony. Adult wasps feed on fluids and, sometimes, exoskeletons of other insects, especially Asian citrus psyllids (*Diaphorina citri* Kuwayama) when they are available. These wasps create and store honey like honey bees to survive through the winter.

If you need to manage these wasps, then you should contact a professional that has proper protective equipment, such as a bee suit.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at www.urban-ipm.blogspot.com

For More Information

Pictures of wasps and nests: “Mexican Honey Wasp.” Compiled by Mike Quinn, Texas Entomology. Accessed October 24, 2020. <http://texasento.net/Brachygastra.htm>

“Asian Citrus Psyllid.” USDA Animal and Plant Health Inspection Service. Accessed October 24, 2020. <https://www.aphis.usda.gov/aphis/resources/pests-diseases/hungry-pests/the-threat/asian-citrus-psyllid/asian-citrus-psyllid>

TEXAS A&M
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(Continued from page 1)

1st Place – prize cedar stump stool



(Continued on page 3)

Volunteering

Master Gardeners volunteer in the community to teach others about horticulture. We follow the research-based recommendations of Texas A&M AgriLife Extension. Members who complete 50 hours of volunteer service in the year after training earn the designation “Texas Master Gardener.” We use our title only when engaged in Texas A&M AgriLife Extension activities.

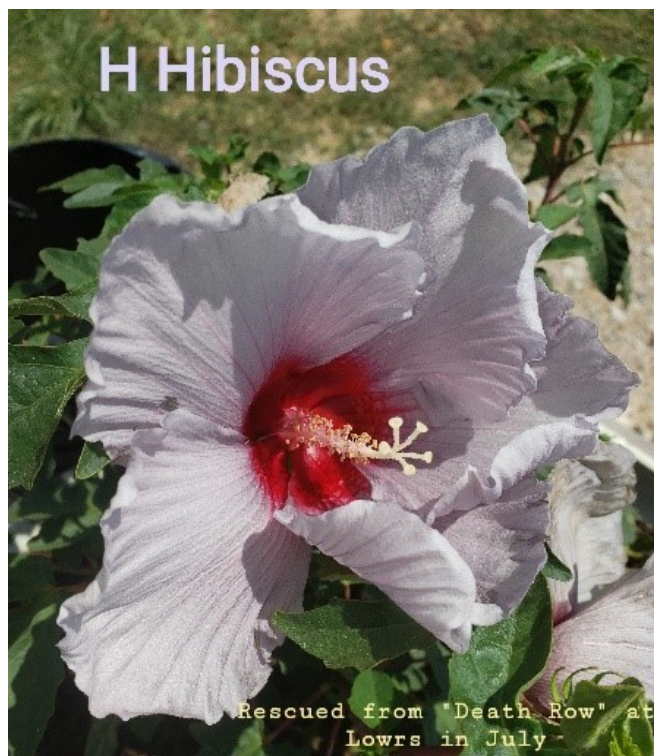


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A0802 - Leslie Enriquez - (Q) quite Place

2nd Place – prize hand carved walking stick

F0808 - Robin Schneider – (H) hibiscus



Honorable Mention – prize \$15.00 gift certificate from Graystone Garden

B0804 - Gail Smith – (G) gazebo

C0804 - Cheryl Stephens – (N) nest of baby birds

D0805 - Terri Bigsby – (Q) quartz

E0806 - Terri Lee – (N) nature

H0813 - Laura Johnson – (A) aggie bonnet

I0816 - Mark Stewart – (P) purple iris



The Fruits of Your Labor

By Howard Nemerov

It's getting late in October. Maybe you're still harvesting some late-season tomatoes or peppers, if you were able to carry them through our summer heat. There's another "harvest" available this time of year, as migrating and native pollinators fuel up on nectar.

This year, I went all-in with a fall crop of *Tithonia rotundifolia* (Mexican Sunflower), and it has rewarded me with a daily parade of native pollinators, with a few Monarchs that strayed from this year's annual migration that concentrated in the Hill Country.¹

As a result, I had the opportunity to "hunt" in my own yard, armed with my Nikon 7500 and Nikor 300mm Zoom lens.

Gardening requires having the right tools to do the best job as efficiently as possible. The same is true with photography. I was fortunate to receive guidance from expert photographers who led me to switch from saving photos in JPEG format to the much larger—and more detailed—RAW format. This required better editing software: "darktable" is a free, open-source package available on the internet.² After processing raw photographs, darktable outputs a high-quality JPEG, which I further enhance with GIMP—another free, open-source software package—to arrive at what you see here.³

(Continued on page 4)

(Continued from page 3)

Tithonia rotundifolia turned out to be an all-round pollinator magnet. Visitors ranged from bumblebees and other native bees, to honeybees, to butterflies like Skippers, Sulphurs, Monarchs, Swallowtails, and Fritillaries.

Whoa!!!

That moment a Skipper and a Sulphur realize: “There ain’t room enough on this here flower for the both of us.” (*Tithonia rotundifolia*) With so much action, I was lucky to get this much detail (picture to right).



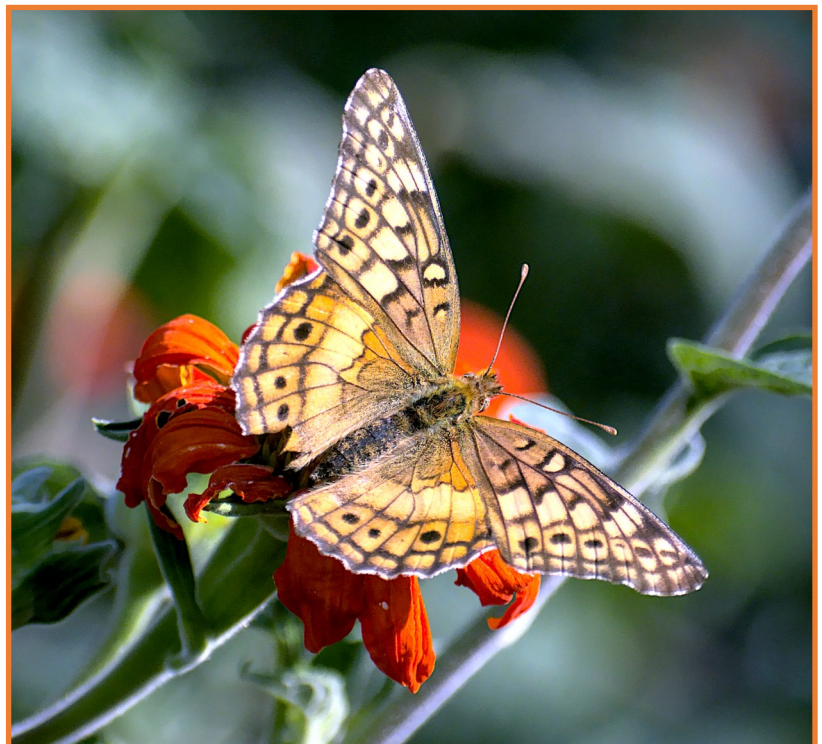
Uh, Where Am I?

Photography is often a balance of light and shade. Trying to “punch up” this photo would have washed out texture and color, so I left this Monarch in the shade it was in while sipping on a *Tithonia rotundifolia* flower (picture to left). The black spot on each hindwing indicate this is a male, maybe a bachelor separated from the main migration far to the west. One too many Tequila Sunrises?



The “Other” Fritillary

Is it a Crescent? The forewings are too pointed. I asked AgriLife entomologists Wizzie Brown and Molly Keck, and they both replied, “Variegated Fritillary” (below).



(Continued on page 5)

(Continued from page 4)

Next year's garden will include *Passiflora lutea* in hopes of making a permanent home for Gulf Fritillary next year (2 pictures below).⁴ It's smaller and more manageable native Passion Flower variety than the more popular, but non-native, *Passiflora incarnata*. Maybe Variegated will find it amenable, too? More on this later.



Don't Forget Zinnias

Zinnias are another non-native nectar flower that perform well here. While not as popular with the entire pollinator population, larger butterflies were able to extract nectar from these flowers.

It's fascinating that the same Pipevine Swallowtail appears with blue or black hindwings within a few seconds, highlighting how butterfly wings are covered in tiny scales (2 pictures below).⁵ These scales produce colors we see. Sunlight reflecting on scales changes color just like a prism refracts light: Depending on your viewpoint, you see different colors. But yes, these are the same butterfly, both shots taken within a minute of each other.



(Continued on page 6)

(Continued from page 5)



Sometimes you just get lucky...

I set my Nikon to shutter priority—another coaching gem—dialed to 1/6400 second exposure, the quickest it goes. I “chased” this Pipevine Swallowtail around the Zinnia patch, not knowing this shot happened until downloaded from camera (picture to left).

Other Lessons

Native annual *Verbesina encelioides* (Cowpen Daisy) performed well all season. I started seed in late December to early January, and they flowered from late March into late October. “Hedges” went in in each tomato bed last spring (below).

However, beginning in October, no matter how much care they got, most began fading after pumping out hundreds of flowers all season. Only a few in shadier spots kept producing flowers, while others went to curbside pickup. It was

good to supplement with a late season crop of non-native annuals, or else a lot of hungry pollinators never would have put on this show.

Growing Fall Flowers

I started *Tithonia* seed on July 6, hoping to have a mature crop ready for the fall Monarch migration. They began flowering on September 18. Fall gardening here is always a balancing act. You want large, productive plants ready by October 1. If you plant too early, they suffer in late summer heat; too late, and you have underperforming plants killed by first frost. Despite lingering heat this year, I learned I can set out heat-tolerant flowers like these under 50% shade cloth and they settle in just fine with supplemental water.



Key Points to a Successful Pollinator Garden

- 1) A large clump of the same plant is more attractive for pollinators.⁶ With two or more fighting over the same flower, it’s good to provide lots of “options” so they can all find nectar. Larger clumps also allow for cross-pollination so that you can save seed from a successful variety.
- 2) I grew for nectar this fall, not seeds. Sexual reproduction requires a lot of energy: My spring seed crop plants remained smaller and produced fewer flowers. Daily deadheading results in more flowers (nectar stations).

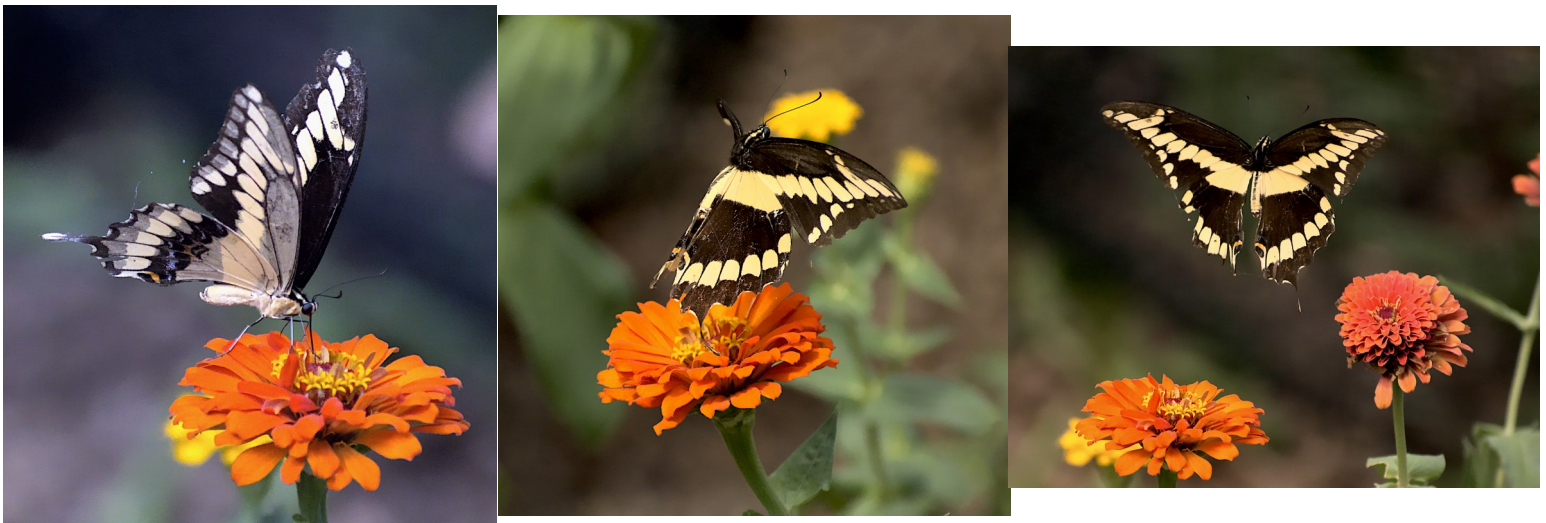
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(Continued from page 6)

- 3) I treated this as a crop for pollinators, providing more fertilizer and water than necessary for this variety. As a result, each plant supported dozens of active flowers, with the largest plants growing over 5' by 5' in size.

Endnotes

1. "Monarch Peak Migration Map." Journey North. Accessed October 24, 2020. <https://maps.journeynorth.org/map/?year=2020&map=monarch-peak-migration>
2. "about darktable." Accessed October 24, 2020. <https://www.darktable.org/about/>
3. "GIMP: GNU Image Manipulation Program." Accessed October 24, 2020. <https://www.gimp.org/>
4. "Passiflora lutea." Lady Bird Johnson Wildflower Center. Accessed October 24, 2020. https://www.wildflower.org/plants/result.php?id_plant=palu2
5. "An Introduction to Butterfly Watching." Texas Parks and Wildlife, revised June 2009, page 10. Accessed October 24, 2020. https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_0752.pdf
6. Terry Simon. "Pollinators 101." Urban Dirt, Harris County Master Gardener Newsletter, June 2017, page 5. Accessed October 24, 2020. https://hcmga.tamu.edu/files/2018/01/2017-06-urban-dirt-hcmga_public.pdf



Giant Swallowtail takes flight after nectaring on Zinnia.

New Website Features

Check out our website, which features project slideshows, a new photo gallery section, and an events calendar to check out upcoming activities. Find news articles and our newsletters. Thanks to Dave Posh for keeping the info timely for us <https://txmg.org/bastropcounty/>