Dear friends,

Wonderful as always to see so many of you at our Chapter Meeting last month! Thanks as always go to our fabulous Programs committee and stellar audio-visual team. Much work goes into these programs. Thank you all!

Announcements

<u>Big Chapter Project:</u> 10/25/25 from 8:30-12:30PM at Dallas College Campus 3030 N Dallas Ave, Lancaster TX. Sign up at volunteersignup.org/WM7F7. Question? Email Brenda btcatlett@gmail.com

DragonFlyer: Check out the latest issue here

The Moth Kit is now available for outreach events or personal use! Questions? Ask Beth Andreson bethisvibrant@yahoo.com

A Special Contest: Name Those Naturalists!

We know that it's a pride of lions, a gaggle of geese, a colony of ants.

But what's the name for a group of committed naturalists in the field sharing information and ideas? Submit your entry (one per person) for a chance to win a \$25 Academy Sports and Outdoors gift card to springcreekforestpreservation@gmail.com by Wednesday, October 15.

NTMN's in the News!

Dorothy Buechel <u>here</u> And Gretchen Pollom <u>here</u>

Going to TMN State Conference but not yet on the NTMN Slack Channel?

Contact Karen Carpenter Carpenterkaren99@yahoo.com

Presentation: "Leaves are not Litter"

by Wizzie Brown, Senior Extension Program Specialist – Integrated Pest Management from Teas A&M Agrilife Extension Service Watch the video recording here

Background information:

- Insects/arthropods are ectothermic, thus most can't function below 40degrees F
 - Some insects become active on warm winter days (but not the ones in diapause)
- Basic categories of winter survival strategies: freeze avoidance and freeze tolerance
- Freeze avoidance: Migration is one strategy, such as is done by the Monarch Butterflies (they overwinter in Mexico; when they come North they start laying eggs once they hit our region in Texas and continue up to the S border of Canada). For the winter, they start to pass through our region in mid-late October. If it gets cold for them? While roosting in the trees, they can form dense clusters to generate collective heat
- Migrating insects tend to have shorter life spans
- Their migration map can be found at monarchwatch.org

^{**}Please let me know who I've missed in the news!

- We have multiple populations of monarchs in the US. Ours go up into the midwestern states. There is another population on the West and a separate population in Florida that is there year round.
- Another migratory insect? The common green darner, anax junius
 - o 1st generation emerges in the S states and they migrate northward.
 - o 2nd generation emerges in the N states and migrates south
 - o 3rd generation just stays in the south and is non-migratory
 - This is why you often see them for a short time in Spring (1st gen), but longer in Fall (where you are seeing both the 2nd and 3rd generations)
- Freeze avoidance-migration: example is to black cutworm moth
 - o They move northward in spring as it warms up
 - The ones in colder areas will die off in winter and are repopulated from the warm areas. So in the cold areas, you won't see them early in the spring – you see them once the ones from the South reach the northern areas
- Freeze avoidance smaller scale
 - o This is where leaf litter is important.
 - o Ants will dig down into soil below the frost line
 - Scorpions and mated wasp queens will seek shelter in cracks/crevices (or can move into structures)
 - Ladybird beetles and boxelders may move into structures
 - Leaf litter provides an extra layer of protection for ladybird beetles, fireflies, moth pupae, rove beetles, earwigs, and centipedes and millipedes
- Ant piles are like icebergs: what you see on the top is only a tiny portion of the entire hive
- Boxelder bugs: great example of bugs that will seek shelter in protected cracks and crevices but will also come out on warm winter days (which is when many people start to freak out because they come out in large numbers). They are dark so they show up on light colored surfaces. If they are outside they are OK. Inside? They can be stinky when crushed or under stress
- Ladybird beetles also commonly move into structures, including the multicolored Asian beetles
 - They are great at feeding on aphids and other softbodied insects
 - You see a lot of these in the winter inside
 - Whey they get indoors it can be a problem. They can bite you and they can exude a yellow/orange fluid which can stain
- Freeze tolerance: some insects can stop ice from forming within their cells.
 - o They may locate in dry place to overwinter to avoid ice formation
 - Some control where ice forms in their body to avoid damaging body tissue
 - Some can change their body chemistry and make their own antifreeze! Glycerol);
- Some stay active in winter: typically aquatic insects; in swift flowing water that doesn't freeze all the way at the bottom)
- Behavior changing: honeybees are a great example. As longer living insects (they can live up to 8 months), they store honey for food source, though if they don't have enough food they will kick out the males.
 - Worker bees form clusters to keep warm. They vibrate flight muscles to generate heat and maintain a safe temperature in the hive.

Leaf Litter is not LITTER!

- Leaf litter provides: insulation, shelter and habitat

- What can you find there? All stages of insects
 - Eggs:
 - Example: stick insects (NOTE: small stick insects are the males, not the young. The "young" are eggs at this time. This is a common question Wizzy gets from people)
 - Grasshoppers and crickets: leaf litter shelters the eggs
 - Butterflies: hairstreaks are a great example. Eggs are in the leaves
 - o Nymphs: Examples include boxelder bugs, damsel/assassin bugs, spiders
 - Larvae:
 - Fireflies: NOTE the leaf litter is really important for firefly larvae
 - Great spangled fritillary
 - Woolly bear caterpillars (tiger moths): these are those very large caterpillar which were common a few years ago. Common question: Are they safe to touch? Answer: Yes
 - Soldier beetles, ground beetles, etc
 - o Pupae
 - Eastern tiger swallowtail
 - Saturnid moths
 - Sphinx moths
 - Rove beetles
 - Pro tip: Large pupae may be located low on plants, so need to be careful not to remove too many plants in winter as well as keep the leaf litter
 - Adults
 - Butterflies: question mark, mourning cloak
 - Ladybugs
 - Boxelder bugs
 - Ground beetles
 - Rove beetles
 - Spiders
 - Important to remember that other animals are in the leaf litter. This is a very important ecosystem
- Added benefits of leaf litter
 - It is broken down by earthworms, fungi, bacteria so can use as mulch, but do not mulch/shred/compost if your goal is to conserve animals
 - Retains moisture around plants
 - Helps to maintain soil temperature
 - Insulates plant roots
 - Provides organic matter
 - o Helps improve soil composition
- Leave the leaves and then some!!!
 - Leave vegetation, including hollow/pithy-stem plants (so, don't cut them, just leave them). Or if you cut them, put them in a pile for the insects
 - Flower heads
 - Brush piles
 - Deadwood
 - Can create specific habitats such as big old logs that you can partially bury
 - Don't put it near your house because we have native termites

What to do about fire ants?

- She is currently doing a fire ant project in her community
 - Everyone treats at the same time
- They do a broadcast of fire ant bait (using a handheld spreader at the lowest setting so it is spread thinly
 - When? Two times per year. First in Late April to Early May, then again in early October.
- NOTE: fire ant bait can be taken in by ANY type of Ant. They will die.
 - But, they have found a more diverse set of ants after doing the fire ant bait program
 when they do it in spring and fall... this suppresses the fire ants and then they get
 more of other types of ants
- Does she treat individual mounds? They key is to do the broadcast treatment. Only if she gets mounds in summer does she treat individual mounds
 - o For mounds, you should treat AROUND the mounds, not on top of the mound because around the mound is where the ants have their foraging tunnels.
- Do they use boiling water treatment? Usually use a boiling water treatment after major rains
 - This is where you pour 2-3 gallons of boiling water directly into the mound after a rain
- Pro tip: Read your fire ant bait labels for instructions in case the bait needs to be watered in.

Other questions...

- Q: Can you just blow the leaves into your beds and off of your grass?
 - o A: Yes
- Q: In the spring, can you then mulch on top of the leaves?
 - o A: Yes
- O: want to want her webinar on monarchs?
 - A: Yes please! October 10 but need to email Wizzy to get on her email list. She does a monthly webinar. ebrown@ag.tamu.edu
- Q: If you have a mulching lawn mower (and don't bag clippings) is that good?
 - o A: Yes.
- Q: Someone's husband said if you leave leaf clippings you increase mosquitoes. Is this true?
 - A: Maybe. However, much more impactful on mosquito populations is standing water
- Q: What about people who say "its going to be a cold winter so we should have less insects"? Is this true?
 - o A: Not true
- Q: Do waxy leaves like live oaks make good insect habitat?
 - o A: They can, but they generally fall later in the season when they are less helpful
- Q: Someone said that they started noticing monarchs last week and saw one lay an egg on a milkweed. This isn't a usual time of year to do this, so what is going on?
 - A: If there is still milkweed available, they may break the migratory pattern and lay eggs now. But this isn't good. They should wait until they go further sourth. So, if you have tropical milkweed that is still out now, cut it down to the ground on labor day.
 - At this time of the year, you want to provide nectar with fall blooming plants so that monarchs can come through and get to Mexico.
 - You want the milkweed in the spring
- Q: Has this been a particularly good summer for wasps?

- A Maybe. Not sure.
- Q: "I've heard leaf blowers are bad for insects (i.e., use to blow leaves into garden beds)
 - o A: Only really a problem for butterflies. Fine for everything else
- Q: Do you have any handouts or signs to put out that say "leave the leaves"? This could be great for community education.
 - o A: No
- Q: What is the impact of Christmas lights on insects in winter?
 - o A: Probably not an issue in winter because most insects aren't out and about
- Q: In Dallas they are putting in LED lights which are bright and have a light color spectrum. Will these have an impact on insects?
 - A: Yes. They will draw insects.

Finally, If you want to learn about cockroaches, come see Wizzy at the state conference give a talk on cockroaches!!!

Final food for thought... Only the monarchs in the US migrate. No other monarchs in the world migrate. Why? We don't know...