TEXAS MASTER GARDENER
TEXAS A&M AGRILIFE EXTENSION
Bastrop County

What's Growing On?

BASTROP COUNTY MASTER GARDENER ASSOCIATION

January 2026

What's in your leaf litter?

By Wizzie Brown

You probably have heard of the phrase "leave the leaves", but do you know why we encourage people to let leaves stay on the ground? Leaf litter can create a wonderful insulating habitat for various arthropods, reptiles, amphibians, and mammals. If you rake your leaves and place them in bags on the curb for disposal, you're not only getting rid of the cozy insulation for many animals, but you may also be getting rid of many arthropods along with the leaves.

Many arthropods use leaf litter as an overwintering location. While some arthropods may be found in the leaf litter itself, others will be in the soil under leaf litter. In both cases, the leaf litter provides a protective layer, hiding spots, and shelter. Some arthropods that you can find in or on the soil under leaf litter may include things like bumble bee queens, isopods, springtails, millipedes, centipedes, and spiders.

In the leaf litter you may discover adult and nymphal stages of assassin bugs, damsel bugs, minute pirate bugs, and boxelder bugs. Other adults you may find are lady beetles clustering together for warmth, fireflies, or mourning cloak and question mark butterflies. Eggs of walkingsticks and hairstreak butterflies can be found in leaf litter (walkingsticks) or on fallen oak leaves (hairstreaks). Larvae of tiger moths (woollybear caterpillars), fireflies, and soldier beetles spend the winter in leaf litter. Some insects create a pupal case using leaves as an outer casing material (certain silk moths) while others have a pupal case that mimics leaves (swallowtail butterflies, fritillary butterflies) to blend in with leaf litter.

If you want to take things a step further and provide more shelter for insects during colder times of the year, consider leaving hollow and pithy stemmed plants until the following warm up and insect emergence in spring. The majority of native bee species are burrowers or tunnel nesters. Leaving leaf litter can help ground nesting burrower bees while leaving plant stems can help those that tun-

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nel.

If keeping a tidy yard is needed, then you can rake leaves into beds or move into a section of the yard that isn't seen from the street. Leaves give the added benefit of providing organic matter to the soil as they break down. If you want to help conserve the arthropods that are in leaf litter, avoid mulching it with a mower.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at ebrown@ag.tamu.edu.

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Downtown Bastrop Main Street Planters

By Joni Groom

The Main Street Downtown Planters have been very well received since their installation in 2022. Lesley Morrison and Joni Groom have maintained the eleven planters (and recently added the new Utility Building garden and planters at the Old FNB Drive Through) every week, working on Tuesday mornings at 9:30.

The planters have a built-in wicking system that separates the planter into two parts. The bottom half of the planter holds the water, and the upper half holds the planting medium and the plants. The containers work well for established, larger plants, however, new bedding plants do not have the deep roots required to reach the water source, so they need supplemental watering from the top.

In addition to watering, Lesley and Joni trim, shape, and

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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 Curtney Dyer for keeping the info timely for us. https://txmg.org/bastropcounty/

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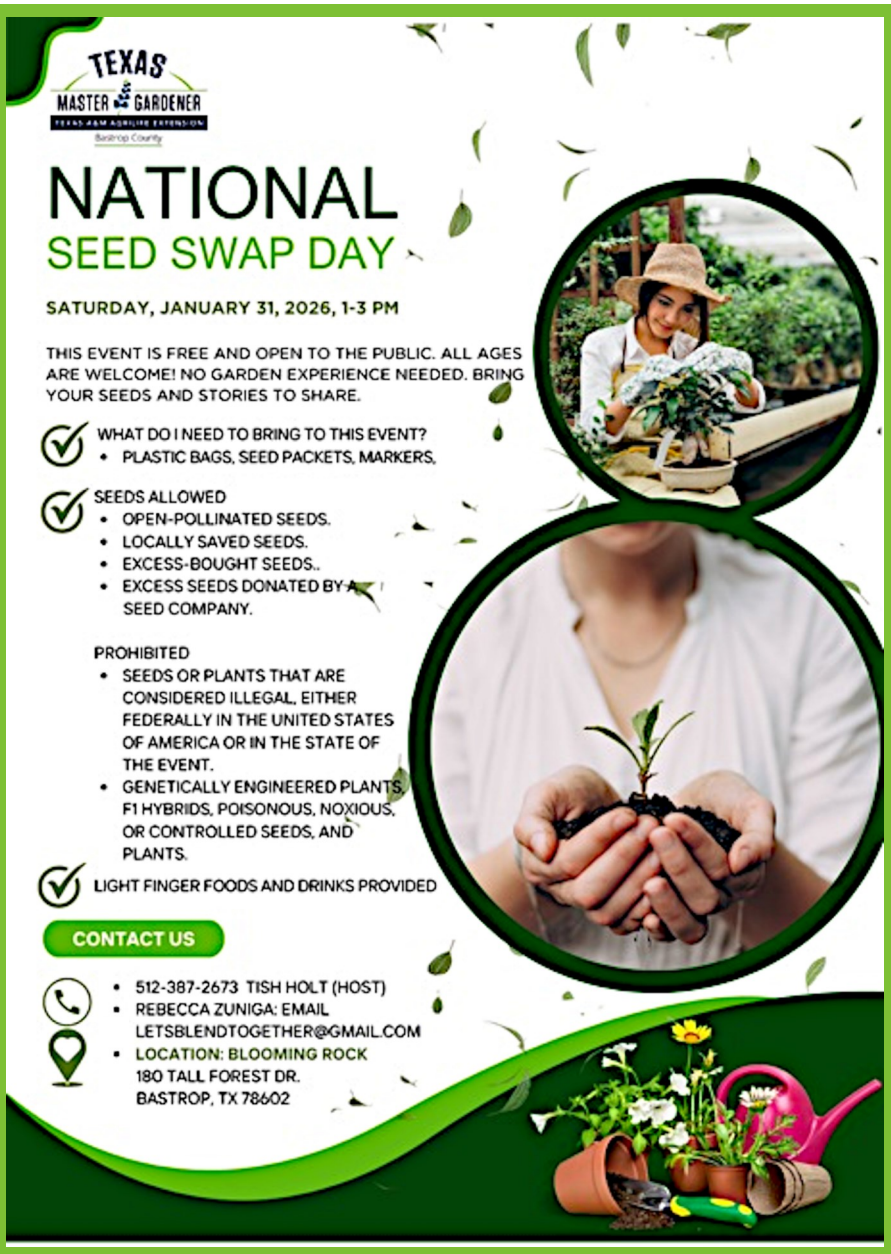
deadhead to keep the planters looking manicured. They make the rounds with a city issued wagon to carry water and other materials for maintaining the plants. In about two hours, they walk the three-block perimeter of Main Street and meet the loveliest folks while making their rounds.

There are special events to prepare for such as the Veteran's Day Car Show, Lost Pines Christmas and the Bastrop Mardi Gras! New plant installations for these events take time, and selection is part of the planning process. Welcome to those who want to join us! We meet up at the Vibe Tribe/Bastrop Opera House Parking Lot on Tuesdays at 9:30.



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.

Growth at Bob Bryant Park

The Pocket Prairie Takes Shape

By Kelly Wood

Exciting things are blooming—or at least, the ground is being prepared for them—at our demonstration garden at Bob Bryant City Park! If you have walked through the park lately, you may have noticed something new taking shape, a **750-square-foot Pocket Prairie**.

A Team Effort

Thank you to the Master Gardeners and interns who helped move stones and soil.

We also want to extend a 'thank you' to Bastrop Stone for delivering the materials needed to start this project. They recently delivered the beautiful limestone edgers that now define the prairie's borders, along with the nutrient-rich garden soil that will serve as the foundation for our native plants.

The site is now mulched to suppress weeds and retain moisture throughout the winter. We are eagerly counting down the days until early spring, when we will begin the final phase: planting a curated selection of native grasses and wildflowers.

"Adding a Pocket Prairie to Bob Bryant serves as a living classroom for children and adults to learn about nature. It offers natural beauty and seasonal interest, creating a vibrant habitat for wildlife, and pollinators."

— Rudy Zuniga, Master Gardener and Bob Bryan Park Project Lead

What is a "Pocket Prairie"?

AI rendering of pocket prairie

A pocket prairie is a small-scale restoration of the native grassland ecosystem that once covered vast portions of Texas. Unlike a traditional manicured lawn, these "pockets" are designed to be urban sanctuaries for local wildlife. By planting a dense mix of native bunchgrasses and pollinator-friendly wildflowers, we create a resilient landscape that requires significantly less water and no synthetic fertilizers once established.

These mini-ecosystems serve as critical waystations for monarch butterflies, bees, and songbirds. You don't need hundreds of acres to make a massive impact on local biodiversity.

For the best results, follow the "**golden ratio**" of 60% native grasses and 40% wildflowers.

Did you know? We used approximately 700 square feet of cardboard, 3 yards of garden soil, 2 yards of compost, 8 yards of mulch, and 2000 pounds of stone for the border!

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Happy New Year to Our Bastrop County Master Gardener Volunteers

"A garden is not made in a year; neither is a gardener." — Unknown

As we step into a new year, this quote feels especially fitting. Growth—whether in our gardens or in ourselves—doesn't happen all at once. It happens season by season, through many small efforts that add up over time. Every class attended, volunteer hour given, question answered, and plant tended strengthens not only our knowledge, but our community as well.

I'd like to begin the year by saying a heartfelt thank-you to the true heart of our organization—our volunteers. Your time, energy, and willingness to share what you know are what make the Bastrop County Master Gardeners such a trusted and meaningful presence in our community.

Over the past year, you supported educational programs, created and maintained demonstration gardens, reached out to the community, and handled countless behind-the-scenes tasks that don't always get the spotlight—but truly matter. Whether you were teaching, planting, planning, mentoring, or simply stepping in where help was needed, your efforts made a real difference.

The New Year—much like a garden in winter—is a time full of planning and possibility. As we look ahead, there will be many opportunities to learn, serve, and grow together. From hands-on garden work and outreach to committee roles and special projects, every contribution counts, and every volunteer plays an important role in moving our mission forward.

I encourage you to stay involved in the ways that work best for you. Watch for sign-ups, attend meetings when you can, try something new, or reach out if you'd like help finding a place to plug in. Your participation keeps our programs strong and our organization thriving.

Thank you for your dedication, flexibility, and generosity of spirit. I'm grateful for the camaraderie, shared knowledge, and passion you bring to Bastrop County Master Gardeners, and I look forward to another year of working together—cultivating both gardens and community.

Warm wishes for a happy, healthy, and rewarding New Year.

From the President,
Dale Weiss

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Keep Pollinators Around All Winter

By Howard Nemerov

Calendula officinalis 'Orange Flash' isn't Texas native, but I grow it each winter because it's among the best nectar sources for local insects like Orange Sulfur (*Colias eurytheme*, left). My flowers are also aswarm with tiny insects like parasitic wasps and pirate bugs that love aphids, controlling spring infestations without pesticides.

Orange Crush

Falling for the Gulf Fritillary

By Kelly Wood

Last year, my backyard was a haven for pollinators of all kinds. However, as summer transitioned into fall, a vibrant explosion of orange wings took over. The Gulf Fritillary (*Agraulis vanilla*, left) was more than just a visitor; it was a late-season joy. With their bright orange wings and black markings, these butterflies are hard to miss. But the real magic happens when they land: the undersides of their wings are decorated with shimmering, metallic silver spots that catch the light like polished chrome.

The Life Cycle

To host these orange beauties in your garden, you must understand their unique requirements. While adult butterflies visit many flowers for nectar, they are specialists when it comes to starting a family.

The Host Plant: The female Gulf Fritillary will **ONLY** lay her eggs on passion vine (Passiflora). Her tiny, yellow-orange eggs are often tucked away on leaves or curling tendrils.

In Central Texas, the best option is ***Passiflora incarnata***, commonly known as the "maypop." This native vine produces large, frilly purple flowers and is incredibly cold-hardy. It typically dies back in winter and "pops" back up in late April. It is a vigorous climber—perfect for a long fence and hungry caterpillars.

Soon after the eggs are laid, spiny orange-and-black caterpillars emerge. While they look intimidating, they are harmless to humans. However, they are absolute eating machines.

Embracing the "Chewed" Look

Many gardeners panic when they see their vines being devoured. Don’t worry! Seeing chewed leaves is a badge of honor for a butterfly gardener. Passion vine is a vigorous grower; it is designed to be eaten and will bounce back quickly. You aren't losing a plant; you are gaining a new generation of pollinators.

When it is time to transform, the caterpillar forms a chrysalis that looks exactly like a dried, brown leaf. It is a natural disguise that protects them during their most vulnerable stage.

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While it may be tempting to reach for a spray bottle when you see aphids or other "pests" on your passion vine, pesticide use is the greatest threat to your orange visitors. Because the passion vine is a host plant, it is part of a tiny, functioning ecosystem. If you see unwanted insects, try a sharp blast of water from the hose or simply wait. Usually, the predatory insects—like ladybugs and lacewings—will arrive to handle the cleanup for you. I have even found a couple of jumping spiders looking for a meal.

Master Gardener Pro-Tip

To maximize your butterfly sightings, pair your passion vine with fall-blooming nectar plants. While the vine feeds the babies, plants like Texas Lantana, Greg's Blue Mistflower and Cowpen Daisy provide the high-energy nectar the adults need for their late-season displays.

A New Year's Resolution for Your Garden

As you plan your yard for the upcoming growing season, I challenge you to make room for a native passion vine. Whether you have a sprawling fence or just a large pot on a sunny patio, you can provide an essential lifeline for this local species. By planting a passion vine, you aren't just gardening—you're providing a vital pit stop for the Gulf Fritillary.

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Texas Native Milkweed Provides for Butterflies and Wasps

By Howard Nemerov

Asclepias texana—common name Texas Milkweed—is an underutilized, underappreciated species native to the Edwards Plateau and certain areas of Southwest Texas.[1] Being native only to Texas, it shouldn't be surprising this species is heat and drought tolerant.[2] This discussion focuses on its role as a nectar source for native pollinators.

Ecosystem services

This term describes how the environment benefits the public, but it's more complex than that. While "provisioning services" like harvesting trees for lumber is one ecosystem service, so are factors which improve our environment in more subtle ways. For example, a forest cleans our air and generates oxygen. Another example: one major category is "supporting services" that provide "fundamental ecosystem processes and support wildlife habitats and biological diversity."[3] For gardeners, this includes physical, mental, and emotional health benefits derived from growing food and enjoying a peaceful morning walk to watch pollinators danceing among the flowers we grew. It also means gardeners play an important role in supporting wildlife and biological diversity, counterbalancing the effects of development.

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Why grow this milkweed species?

I've previously written about Tropical Milkweed (*Asclepias curassavica*) being a major retail substitute for native milkweeds, and the health risks this species poses to Monarch butterflies.[4] But discussing negatives does little without providing a positive alternative to Tropical Milkweed, one that's easy for commercial growers to produce on a large scale, easy for gardeners to grow, and attracts pollinators. This is where the *Asclepias texana* comes in.

Unlike many of our native milkweeds, *Asclepias texana* has a fibrous root system. One of the benefits of this type of root system is its ability to withstand damage during transplanting. In fact, a small amount of root pruning before transplanting can stimulate root production! Growing and transplanting species with taproots—common to many of our native milkweeds—can be challenging: if that taproot gets damaged during nursery production or transplanting, the plant may not recover. Considering the premium paid for native milkweeds, this quickly becomes expensive and can cause gardeners to return to Tropical Milkweed which is cheaper and easier to grow because it also has a fibrous root system.

Some backstory: I'm working with some growers and retailers to create a market presence for *Asclepias texana*, for the reasons mentioned above. My part is to grow this species as a seed crop. Of course, flowers need pollination to produce seed. Since I grew this crop in #2 pots to maintain quality control—it's a unique, specialized seed crop of a native species currently not commercially available—they received regular watering during the drought and maintained growth which benefited pollinators during this year's drought.

Butterfly nectar source

Over the summer of 2025, I watched a parade of butterflies nectaring on *Asclepias texana*. Earlier in June, I photographed two butterfly species on one plant: **Bordered Patch** (*Chlosyne lacinia*) and **Pearl Crescent** (*Phyciodes tharos*).

Later in September, as the drought became severe, my garden became a pollinator oasis. Hungry butterflies love these white flower clusters which, like beacons in the night, call pollinators home.

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Two Swallowtail species—**Pipevine** (*Battus philenor*, below left) and **Eastern Giant** (*Papilio cresphontes*, below right)—hung around long enough for me to retrieve the camera and set a fast shutter speed to capture species that rarely stop moving: Their wings continue beating even when nectaring.

Queens also visited (male *Danaus gilippus* below left), with females taking advantage of succulent milkweed leaves to lay eggs (below center). Smaller butterflies like **Gray Hairstreak** (*Strymon melinus*, below right) also availed themselves of the only nectar source around.

In October, this **Gulf Fritillary** (*Agraulis incarnata*, left) arrived after other butterfly species had moved on. Again, manually setting shutter speed to 1/1500 of a second enabled me to get a clear photo of this hyperactive species.

Large to small, butterflies love *Ascepias texana*, a milkweed species that's native only here in Texas (male Queen butterfly, right).

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Wasps may be the most important milkweed pollinator

[Note: Some people experience allergic reactions to wasp stings, which can be life-threatening. This article in no way suggests everybody should garden for wasps. If you're concerned about a health risk from wasps in your garden, please consult your medical doctor before altering gardening practices. Also, I'm not suggesting you should allow Paper Wasps to build nests in traffic areas. Please continue all common-sense safety guidelines.]

I've observed far more wasp activity on *Asclepis texana* than any other insect class. When it comes to milkweed pollination, this is an important reason why I welcome wasps into the garden. For those thinking I may be courting disaster, remember that most wasp species are solitary, meaning that females build nests only for *their* offspring. Unlike social wasps that feel the need to defend a communal nest, solitary wasps rarely sting humans.[5] In my garden, wasps exhibit "live and let live" behavior while I garden next to them as they forage.

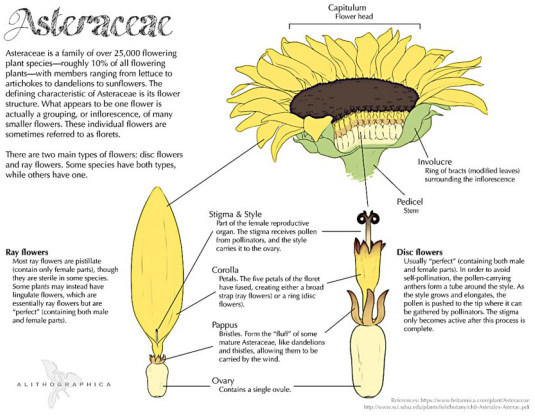
Wasps provide two vital ecosystem services. First, while adult wasps are primarily nectar drinkers, they harvest many different insect pests to feed their larvae. A mainstay for many wasp species is caterpillars, which includes pests like Fall Webworms that damage shade trees. Certain wasp species harvest other insect pests representing significant economic threats: examples include Emerald Ash Borer, Brown Marmorated Stink Bug which feeds on fruit trees and vegetables, and tomato hornworms. A healthy wasp population means you can reduce pesticide usage in your garden while still protecting your vegetables and landscape.

Second, wasps are large and active pollinators ideally suited to pollinating milkweeds.[6] The following discussion explains why wasps are vital to milkweed reproduction and therefore supportive of the Monarch migration.

Milkweed flower anatomy and wasps

Milkweed flower structure presents unique challenges to pollinators. As a result, smaller insects often consume nectar without providing pollination services that enable milkweeds to produce their next generation. Remember that flowers produce nectar to attract insects that will move pollen (male gametes) to stigma (receptacle containing female gametes): A flowering plant's primary goal is to reproduce the next generation by successfully creating viable seed.

Most flowering plants—like those in the Aster family—offer nectar along with pollen that attaches easily to most insects seeking nectar. That's why honey bees make such good pollinators: Their "hairy" legs pick up pollen while they dance over an aster flower drinking nectar, and easily transfer pollen to the next flower as they brush against exposed stigmas. On the right is an illustration of an Aster flower (e.g. Sunflower, Zinnia.) Notice how each flower contains both male and



Courtesy of San Diego State University

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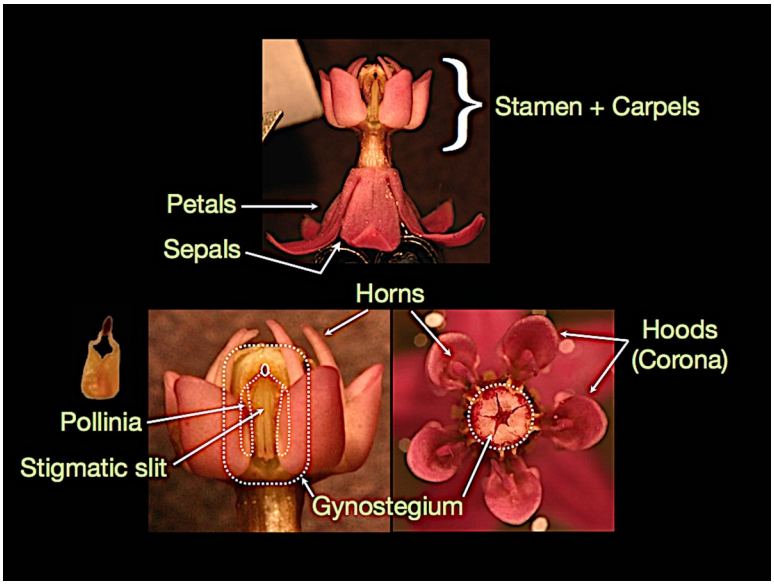
female anatomy that's exposed and easily accessed by pollinators, and that what we call a "flower" comprises numerous tiny flowers.



Milkweeds make this fertilization process more challenging: Specialist insects must access pollen hidden inside a central gynostegium (see illustration on left). To help visualize, consider the gynostegium to be like an Aster flower's central disc that contains both male and female structures, except milkweeds added a gateway that blocks the incidental pollination that works with Asters. Insects must be large and strong enough to slip an appendage inside the stigmatic slit and extract a pollen sac called a pollinia. Then the insect must repeat this process, slipping the pollinia-carrying appendage back through a stigmatic slit to bring pollen into contact with the stigma that also resides within the gynostegium.

This is why scientists often observe that not all insects visiting milkweed flowers are "large enough, strong enough, and clumsy enough to pollinate it effectively."[7] For a more detailed yet light-hearted discussion of milkweed pollination, please read "Milkweed Pollination: A Series of Fortunate Events" written by Chris Helzer, Director of Science for The Nature Conservancy in Nebraska.[8]

Wasps may be more successful milkweed pollinators than butterflies

Larger butterflies like Monarchs, Queens, and Swallowtails have the size and strength to pollinate milkweeds. Due to veracity and number of visits, wasps are more successful. It's a pleasure watching wasps as they clamber over a milkweed umbel, drinking nectar and repeatedly poking powerful legs into stigmatic slits.

On the left is a female **Two-horned Beetle Wasp** (*Cerceris bicornuta*). She feeds her offspring weevils which can damage grasses.[9] Here's the perfect example of providing nectar to a beneficial insect that lowers landscaping costs while pollinating native milkweeds.

Five-banded Thynnid Wasp (*Myzinum quinquecinctum*, right) feed white grubs to their offspring.[10] These grubs can damage lawns by eating grass roots; additional damage occurs when raccoons dig holes foraging for what they consider juicy treats.[11]

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Metric Paper Wasps (*Polistes metricus*, left) hunt caterpillars in trees—including fall armyworms—and shrubs; sometimes they feed leaf beetle larvae to their offspring.[12] As with other species in genus *Polistes*, it's a social species that builds and protects a communal nest.

Guinea Paper Wasp (*Polistes exclamans*, right) is another social species that hunts fall armyworms as well as caterpillars of other insect species.[13]

Like the first two wasp species mentioned here, **Great Golden Digger Wasp** (*Sphex ichneumoneus*, left) builds a solitary nest and provides her offspring katydids.[14] While many Katydid species aren't considered pests because "they chew only a small amount of foliage before moving to another plant," they can damage fruit.[15] You decide if holes in plant leaves and fruit is pestilential or not; I consider this wasp to be both beautiful and valuable.

Time to rethink wasps?

To grow reasonably-priced native milkweeds in your garden, there needs to be a thriving retail pipeline which relies upon access to enough seed to make it profitable, and those seeds and species must be easy to grow and sell. This is especially true since tropical milkweed has been providing growers easy, reliable income. As a potentially summer-long nectar source, *Asclepias texana* can provide all-around ecosystem services, and wasps are arguably the most effective way to maintain this milkweed species.

Endnotes

[1] "Texas Milkweed." iNaturalist. Accessed October 12, 2025. https://www.inaturalist.org/observations?quality_grade=research&subview=map&taxon_id=158762
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[4] Nemerov, Howard. "Tropical Milkweed's Impact on Monarch health and migration." *What's Growing On?* September 2024. https://txmg.org/bastropcounty/files/2024/09/09-Sep.pdf
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[10] Holm, Heather. *Wasps: Their Biology, Diversity, and Role as Beneficial Insects and Pollinators of Native Plants* (Pollination Press, 2021), page 239.
[11] “White Grub Control in Turfgrass.” Iowa State University Extension and Outreach. Accessed October 22, 2025. https://yardandgarden.extension.iastate.edu/encyclopedia/white-grub-control-turfgrass
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[14] Holm, Heather. *Wasps: Their Biology, Diversity, and Role as Beneficial Insects and Pollinators of Native Plants* (Pollination Press, 2021), page 177.
[15] “Katydids.” University of California, March 2025. Accessed October 22, 2025. https://ipm.ucanr.edu/home-and-landscape/katydids/

Asclepias texana may be popular with larger insects, but a macro lens shows that tiny insects also love this nectar source. I believe this is a small predatory wasp (left): These species lay eggs inside aphids to provide their larvae an instant food source after hatching. You’ll see “aphid mummies” which look brown and hard, compared to living aphids that are greenish to yellow depending on species. Free pest control!

Upon successful pollination, *Asclepias texana* produces long, green pods (right). Seed is ripe when the pod turns brown and begins to split. When you see the pod beginning to turn color, you need to inspect twice daily, or a breeze will blow away your seeds when the pod splits open.

Rather than adding stress to a busy gardening schedule, I use makeup brush protectors which slide over the end of the pod and hold seeds in after the pod splits, awaiting my convenience for harvest. — HN