

Tiger Moth Caterpillars

By Wizzie Brown

Tiger moth caterpillars have been a common sight lately in the Central Texas area. These insects are native to the United States and are sometimes called “woollybear caterpillars”. “Woollybear caterpillar” is a more general term that refers to various species of caterpillars that are densely covered in hairs, called setae, and tend to wander.



While these caterpillars can be highly variable for individual species, the common ones seen lately are woollybear (Isabella tiger moth), saltmarsh caterpillar (saltmarsh moth), and garden tiger moth caterpillar, also known as the great tiger moth caterpillar. Woollybear caterpillars are usually black on each end with brown in the middle. Saltmarsh caterpillars are variable and can be a creamy yellow to brown to black in color. Garden/great tiger moth caterpillars tend to be black on the top part of the body and brown on the bottom.

All three of these caterpillars feed on a wide variety of herbaceous and woody plants, but only sometimes considered to be pests when they feed on field crops.



Garden/great tiger moth caterpillar



Saltmarsh caterpillar

Tiger moths have a complete life cycle with four life stages: egg, larva, pupa, and adult. Eggs are laid in clusters on the leaves of host plants. Larvae go through several instars before they pupate in soil. Larvae tend to actively disperse and may be seen in groups moving over turf, roads, sidewalks, or other locations. Adults usually emerge in the spring to mate and begin

Inside this issue:

Tiger Moth Caterpillars (continued)	2
Bordered Patch Butterfly's Favorite Plants	2-4

(Continued on page 2)

(Continued from page 1)

the cycle again. Moths can be active year-round in South Texas, but for most parts of Texas larvae overwinter in their last instar in protected locations.

For more information or help with identification, contact Wizzie Brown, Texas AgriLife Extension Service Program Specialist at 512.854.9600.

This work is supported in part by the Crop Protection and Pest Management, Extension Implementation Program [award no. 2021- 70006-35347/project accession no. 1027036] from the United States Department of Agriculture (USDA) National Institute of Food and Agriculture.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M AgriLife Extension Service Extension or the Texas A&M AgriLife Research is implied.

Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin.



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/>

Bordered Patch Butterfly's Mutually Beneficial Relationship with Native Plants

By Howard Nemerov

[This is part of my ongoing Native Plants, Native Pollinators series, highlighting how native insects have coevolved with native plants to help each other survive and thrive.]



Native butterflies have co-evolved over millennia to recognize certain plants as nectar and food sources, while those plants adapted to being chewed on by certain species' larva. Britannica defines "coevolution" as: "the process of reciprocal evolutionary change that occurs between pairs of species or among groups of species as they interact with one another."¹ Mutualistic interactions are an important aspect of coevolution. "Mutualism" is an "association between organisms of two different species in which each benefits."²

This article discusses the mutualistic relationship between Bordered Patch butterflies and certain plant species in the Aster family (Asteraceae).³ Mutualism implies a beneficial relationship in a natural bal-

(Continued on page 3)

(Continued from page 2)

ance: butterflies don't want to threaten the species that support their lifecycle, and plants in the Asteraceae family need pollinators visiting their flowers in order to produce seed for the next generation.

Native Sunflower—All-Purpose Plant for Bordered Patch Butterfly

Native annual sunflower (*Helianthus annuus*) provides larval hosting, nectar, and shelter for Bordered Patch Butterflies.⁴ The first two pictures show larvae eating sunflower leaves. The second picture shows how larvae skeletonized a leaf, feeding between leaf veins to leave a pale outline of what the leaf used to look like. The third picture shows that when ready to pupate, larvae decided to “keep it local” and attached themselves to a sunflower stem.



Horseherb— Surprise Host for Bordered Patch Butterfly

I have a volunteer *Calyptocarpus vialis* (Horseherb) in a patio pot, indicating this specie's ability to self-sow. It established in our yard and makes a great ground cover and pollinator plant with its tiny, yellow flowers. But a larval host plant? Lady Bird Johnson Wildflower Center often lists butterfly species that host on a given plant, but doesn't mention Bordered Patch on this species' page.⁵ Other sources like Bug Guide don't mention this plant as a larval host, though they do list a number of plants in the Asteraceae family—where *Calyptocarpus vialis* resides—as hosts.



The only corroborating source I've found comes from Jerry Parson, Texas A&M Professor and Extension Horticulturist, retired.⁶

Now I have photographic proof (left). Who would have thought this somewhat modest, shade-tolerant ground cover would host these little babies?

Sunflower Goldeneye—Unsung Bordered Patch Larval Host

Sometimes the garden offers surprises when you slow down and take a deeper look. I was fortunate to have my camera available for this one. Again, references don't specifically say that perennial *Viguiera dentata* (Sunflower Goldeneye) hosts Bordered Patch caterpillars, so having photographic evidence is helpful. *Viguiera dentata* likes partial shade, unlike most Asteraceae species, allowing you to extend larval hosting into shadier areas of your garden.⁷ The picture on the right shows two Bordered Patch larvae with evidence of chewed *Viguiera dentata* leaves.



(Continued on page 4)

(Continued from page 3)

Cowpen Daisy—A Bordered Patch Favorite

Plants offer three important benefits for butterflies: larval food, adult food (nectar and pollen), and shelter from predators. *Verbesina encelioides* (Cowpen Daisy or Crownbeard) offers all three. The first picture shows young larvae skeletonizing a leaf. The second picture shows a newly eclosed (emerged from chrysalis) Bordered Patch resting on a leaf while remaining protected by leaves against predation. The third picture shows an adult Bordered Patch sipping nectar from a *Verbesina encelioides* flower; in return the butterfly helps pollinate flowers to produce viable seed for the next generation of this annual flower.



Conclusion

Growing native plants is a great way to attract local butterflies seeking to live their entire lifecycle in your yard. It's among the greatest rewards a gardener can receive: inspecting their yard on an early morning stroll and being welcomed by these little flying angels as they say "thank you" for providing all they need to make your garden home.

Endnotes

¹ Thompson, John N. and Rafferty, John P. "Coevolution." Encyclopedia Britannica, December 20, 2022. Accessed December 15, 2023. <https://www.britannica.com/science/coevolution>

² "Mutualism." Encyclopedia Britannica, October 18, 2023. Accessed December 15, 2023. <https://www.britannica.com/science/mutualism-biology>

³ "Species *Chlosyne lacinia* - Bordered Patch." Bug Guide, Iowa State University Department of Plant Pathology, Entomology, and Microbiology. Accessed December 13, 2023. <https://bugguide.net/node/view/28431>

⁴ "*Helianthus annuus*." Lady Bird Johnson Wildflower Center plant database. Accessed December 13, 2023. https://www.wildflower.org/plants/result.php?id_plant=HEAN3

⁵ "*Calyptocarpus vialis*." Lady Bird Johnson Wildflower Center plant database. Accessed December 13, 2023. https://www.wildflower.org/plants/result.php?id_plant=CAVI2

⁶ Parsons, Jerry. "Horseherb or Straggler Daisy." Plant Answers. Accessed December 13, 2023. <https://www.plantanswers.com/Articles/HorseherbOrStragglerDaisy.asp>

⁷ "*Viguiera dentata*." Lady Bird Johnson Wildflower Center plant database. Accessed December 13, 2023. https://www.wildflower.org/plants/result.php?id_plant=vide3



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.