

FBMG Help Desk  
**Question of the Week**

---

Are these Walnut Caterpillars on my Pecan tree  
and what should I do?

*Yes those are Walnut Caterpillars...*



# EPMC Help Desk



# Walnut Caterpillars are Multigenerational

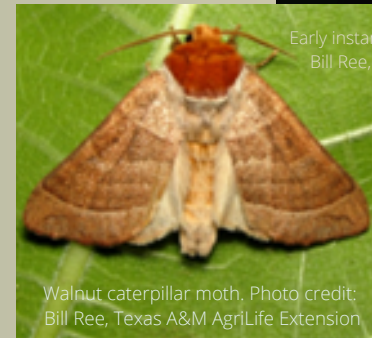
*Depending on the number of frost free days there are 2 to 3 generations a year.*

*Late spring to early summer sees the emergence of the first generation with the second generation or third overwintering as pupae in the ground and emerging as adult moth.*

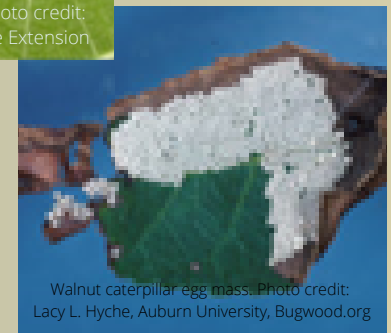
- The female lays single layer egg masses of approximately 600 eggs on the underside of leaves.*
- Usually in about 9 days the eggs hatch.*
- They go through 5 larval stages changing from a reddish brown to a black with grayish long hair and markings.*
- When they molt they will travel to the end of a branch or down the trunk of the tree. They will leave behind their molted skins before going back to feed.*
- At the final stage they will drop to the ground in search of the right place complete their life cycle.*



Early instar walnut caterpillar. Photo Credit: Bill Ree, Texas A&M AgriLife Extension.



Walnut caterpillar moth. Photo credit: Bill Ree, Texas A&M AgriLife Extension



Walnut caterpillar egg mass. Photo credit: Lacy L. Hyche, Auburn University, Bugwood.org

# *Walnut Caterpillars Come & go in Cycles*

*Eating the leaves off of trees for as long as trees and caterpillars have existed.*

There is usually an ebb and flow of cycles over a couple of years which cause little to no permanent damage. Once the leaves have been eaten by one generation the next passes it by, as mature leaves are the preferred. Pecans are the top choice in this area.

Leaves are necessary for the tree and the pecans to gain nutrients to grow. Once the tree sets fruit, the leaves become more necessary as they provide shade and nutrition for the fruit.



- *To aid the tree in putting on new foliage make sure it receives 2" of water a week beyond the dripline.*
- *Look for eggs and remove when you see them.*
- *By the time defoliation occurs the caterpillars are usually ready to move on.*
- *The best defense is to make sure that your trees are healthy and that your landscape is a vibrant area attracting birds, lizards and beneficial insects.*
- *The best time to treat is when they come down the trunk to molt. A strong stream of water from a hose will knock them to the ground, or this is a good time to spot treat.*

*Biological, mechanical and chemical methods of treatment are available.*

*If you see or have walnut caterpillars please email us at [fortbendmg@ag.tamu.edu](mailto:fortbendmg@ag.tamu.edu) and let us know.*

# Biological Control

## *Natural Predators and Natural Enemies*

*Birds, Frog and Lizards  
have a fondness for  
Walnut Caterpillars.  
As the canopy of the tree is  
defoliated the caterpillars  
are more readily found  
and eaten.*



*They are prey to other insects  
as well.*

# Mechanical Control

*Frequent Monitoring is key for early detection.*



Shining a powerful flashlight or spotlight up into the tree at night to check the underside of leaves will reveal eggs. They are easy to see in the dark and often have a reflective quality. Removing the eggs and destroying them will prevent hatching.

*Watch for movement.*

Walnut caterpillars move in mass to molt, frequently they move down the tree trunk, usually 6 to 15 feet off the ground, making it easier to access them.



*It is always safest to stay off of ladders*

# Chemical Control

## *Points to Consider Before Spraying*

- *Keep in mind that in most cases, the trees will generally recover without chemical control.*
- *Pesticides are poison and oftentimes have unintended consequences (drift can have a potential effects on other flora or fauna, including good bugs).*

### *Timing and Access*

- *Caterpillars go through several mutations during their life cycle,*
- *They will often come down the trunk or a lower branch and huddle to mutate into the next generation - you can spot spray this huddle*
- *Caterpillars prefer older foliage - if an area has been defoliated, they generally will not return to that area, even after the tree produces new growth*



*Pesticides specific for caterpillars are available locally*

*Always follow the label directions and dispose of empty containers or excess product properly*



**It is always safest to stay off of ladders**

*Do you have questions  
about your home  
landscape and plants?*

*Contact the Fort Bend  
Master Gardener Help Desk*

*Email:  
FortBendmg@ag.tamu.edu*

*Phone:  
281-341-7068*

*The Help Desk is manned  
Monday thru Friday,  
9am-Noon*

[extensionentomology.tamu.edu/insects/walnut-caterpillar/erfanv](https://extensionentomology.tamu.edu/insects/walnut-caterpillar/erfanv)

<https://citybugs.tamu.edu/files/2018/09/ENTO-041-Walnut-Caterpillar.pdf>

<https://extensionentomology.tamu.edu/insects/walnut-caterpillar/>

<https://pecankernel.tamu.edu/pecan-insect-pests/foilage-2/#:~:text=Walnut%20caterpillars%20feed%20together%20in%20large%20numbers%20on,found%20throughout%20Texas%20east%20of%20the%20Pecos%20River.>

<https://site.extension.uga.edu/pecan/2018/07/insect-update-walnut-caterpillar-and-fall-webworm/>

<https://site.extension.uga.edu/pecan/category/insect-management/>

<https://extension.okstate.edu/programs/digital-diagnostics/insects-and-arthropods/walnut-caterpillar/>

<https://hood.agrilife.org/publications/insect-control/the-walnut-caterpillar/>

<https://texasinsects.tamu.edu/walnut-caterpillar/>

<https://agrilifeextension.tamu.edu/library/landscaping/walnut-caterpillars/>

<https://agrilifetoday.tamu.edu/2016/10/10/walnut-caterpillars-hit-west-central-texas-pecan-trees/>

<https://content.ces.ncsu.edu/walnut-caterpillar>

<https://www.uky.edu/Ag/Entomology/treepestguide/walnut.html>

<https://www.canr.msu.edu/news/how-to-control-invasive-pests-while-protecting-pollinators-and-other-beneficial-insects>

<https://fortbend.agrilife.org/?s=walnut+caterpillar>