

## Moths in Moonlit Meadows

This is the third and final installment of Duke Farms educator and artist, Meghan Martin's *Moths in Moonlit Meadows*. In this resource, we'll be going over mural progress pictures 15-26 by reviewing guided questions aligned to the environmental and natural sciences that formulate the basis of her design decisions. Throughout the project you will:

- Be introduced to 14 native species of moths while learning fun facts about their features
- Develop a keener sense of the biodiversity exhibited in healthy meadows
- Discover the important role moths play in our environment

We hope you enjoy the adventure while discovering the ecological significance of meadows and moths to our natural world.

Kate Reilly, Manager of Education, Duke Farms

## Mural Progress Number 15



This moth is often mistaken for a bird. This species' buzzing and humming comes from its rapid wing movements. Care to take a guess?

**Answer to Post 14:** The ghostly moth from the last progress pic was the aptly-named luna moth. Although this moth doesn't have a mouth or digestive system, it is a favorite snack for bats. Found only in North America, this species' larvae depends on walnut, hickory, sweet gum, and paper birch trees as food sources.

## Mural Progress Number 16



The moth pictured here may not be a welcome visitor to vineyards; as a springtime flyer, it is often confused for a butterfly. What's your guess?

**Answer to Post 15:** The moth in the last progress picture was the hummingbird clearwing. You can find these species on host plants like honeysuckle, snowberry, hawthorns, cherries, plums, and European cranberry bush. They have a rapid wingbeat of up to 70 beats per second, enabling it to fly up to 12 mph.

## Mural Progress Number 17



These moths are never able to feed; oak trees are often host to its caterpillars. Do you recognize it?

**Answer from Post 16:** The grapevine epimenis moth loves flowers. It consumes nectar from trees and shrubs in the cherry, hawthorn, and redbud families. The caterpillars eat the end buds on grapevines, so they are often considered vineyard pests.



## Mural Progress Number 18



You probably don't want to handle these caterpillars of this species; their hairs have fluids that can sting! Who is this tingly critter?

**Answer to Post 17:** The pink-striped oakworm moth was the star of the last closeup. The adult females of this species are larger than the males and covered in a bevy of fine, bright orange to yellow hair-like fibers. The wings are covered in almost transparent thin scales.

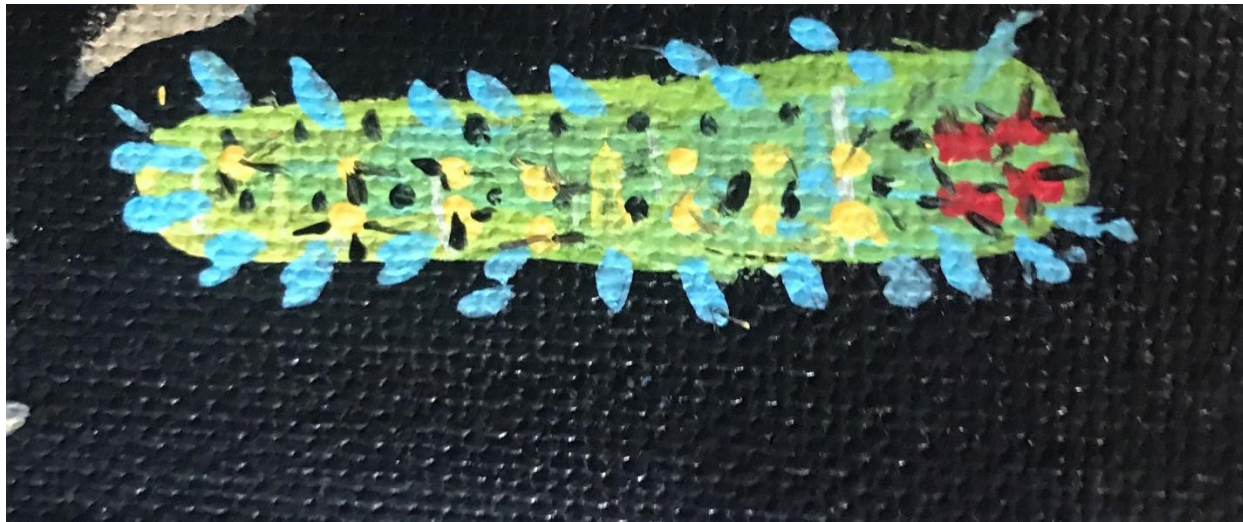
## Mural Progress Number 19



With their long proboscis, these moths are experts at getting nectar from long floral tubes. What's your guess?

**Answer to Post 18:** Found in oak forests, buck moth caterpillars can really sting! They get their name because they fly during the day throughout deer season. Their eggs are often laid in tight masses around oak twigs.

## Mural Progress Number 20



This one's a stunner, can you ID it? While the caterpillars for this species can be found chomping away on many types of trees and shrubs, the moth form doesn't eat at all and only lives for a few weeks.

**Answer to Post 19:** Hailing from the hawk moth family, the ash sphinx feeds on honeysuckle, evening primrose, dogbane, and phlox; all plants that stash their nectar deep in long floral tubes.



## Mural Progress Number 21



Do you recognize this moth? It has a quadripectinated antennae, which means it's male.  
If it has simple antennae, that indicates it's a female.

**Answer to Post 20:** The neon critter from post 20 was a cecropia caterpillar, which grows into a cecropia moth.



## Mural Progress Number 22



This might be your new favorite moth once you learn its diet: the larvae eat nothing but poison ivy! Can you ID it? **Answer to Post 21:** The regal looking moth from the last progress pic was the imperial moth.

## Mural Progress Number 23



Can you believe this mystery moth has a wingspan of up to 4 inches? Its cocoon hangs on its host plants throughout the winter.

**Answer to Post 22:** Who can we thank for eating poison ivy? The eyed paectes moth and its larvae, of course. Urushiol is the compound that puts the itch in ivy; similar to milkweed compounds in monarchs butterflies, these substances make insects unpalatable to birds.



## Mural Progress Number 24



Feel like you've already seen this one? This moth looks like promethea's twin; it's extremely difficult to tell them apart. What do you think it's called?

**Answer to Post 23:** The last featured moth was a promethea moth; also called a silk moth, they feed on a wide variety of host plants as caterpillars. Female moths lay rows of 4-10 eggs on the upper side of leaves.



## Mural Progress Number 25



This next moth and its host plant have a unique partnership; they're interdependent. If you can guess the host plant, you're already halfway there with its name!

**Answer to Post 24:** Who is twinning with the promethea? It's the tuliptree silkmoth. The larvae feed on tulip trees, but also on black cherry, and sassafras. They are short-lived at the adult stage.

## Mural Progress Number 26



Hard to believe, but these moths are often mistaken for beetles! Why? They tuck their wings close to their bodies when resting. So what moth is it?

**Answer to Post 25:** The second-to-last moth is the yucca moth! The female yucca moth has tentacles around its face, enabling it to hold and transfer pollen to other yucca plants. This moth spends all its life stages on or around the yucca plant. Clingy much?

**Answer to Post 26:** This one is a mouthful. The ailanthus webworm moth is often mistaken for a beetle while resting. These moths have spectacular orange wings spotted with white dots and ringed in black. They're unusually active during the daytime and are considered effective pollinators.





And we've made it to the end! Let's take a step back and look at the mural as a whole. Would you be able to identify these moths, caterpillars and plants out in the wild? Next time you're out near a meadow or in a garden, maybe the thought of this mural can jog your memory and remind you of our very important plants and pollinators. Thanks for sticking with us!