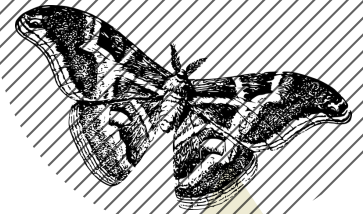


Moth Night!



Raccoon Creek Partnership Explorers Activity #10

Supplies:

- White Sheet
- Blacklight/flashlight
- Rocks
- Plastic Containers
- Moth ID book

Note: You can find moth ID book here:

<https://ohiodnr.gov/static/documents/wildlife/backyard-wildlife/Moths%20of%20Ohio%20Field%20Guide%20pub5467.pdf>

Time: 1 hour

Vocabulary:

Moth: Various nocturnal lepidoptera insects with antennae that are often feathery, with stouter bodies, duller coloring, and smaller wings compared to butterflies.

Nocturnal: active at night

Phototaxis: ability of an organism to move in response to light. Organisms will move toward (positive phototaxis) or away (negative phototaxis) from a light source.

Lepidoptera: Order of insects that contains butterflies and moths. Latin root translates to scale wing.





Background:

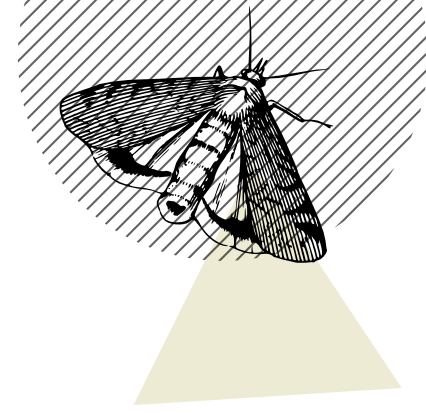
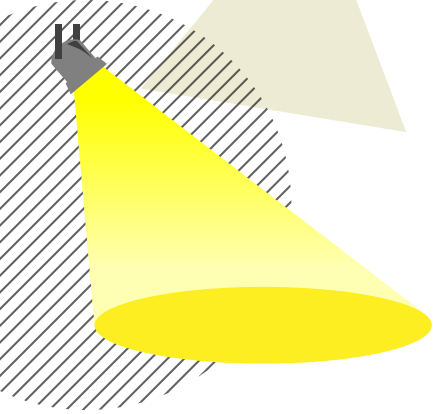
Have you ever had your tv or phone screen on at night and noticed that insects would keep getting on your screen? Sometimes this can be a bit annoying but it is very common for some insects. Moths are nocturnal, which means they are active at night, and tend to spend their time near light sources. Moths use phototaxis, which means they move in response to a light source. Many insect scientists use light as a method to study moths because it is an easy way to discover what different species of moths live in a specific area during different parts of a year. Many people believe light is a method moths use as a navigation system and that moths use the moon. There are many easy ways to look at moths in your own backyard by using light to draw them to a specific spot.

Moths vs Butterflies:

Moths and butterflies are part of the same order of insects called the Lepidoptera order. There are some key differences between the two and some people might confuse them. Let's talk about some of the ways moths and butterflies are similar and different. Both of them have antennae but moths can be more feathery. They have stouter bodies compared to butterflies. Many moths are duller in color compared to butterflies. There are some moths that are brightly colored though. Moths are hairier looking and have much smaller wings compared to butterflies. During the day you are more likely to find butterflies and at night you are more likely to see moths because they are nocturnal.

Let's get started:

1. Find a location you want to use to collect moths. Make sure the area is dry that is dark.
2. Place a sheet down and use rocks on all the corners to keep it from blowing away.
3. Place a UV light or flashlight in a clear plastic container and place the container on the center of the sheet. Make sure the sheet is well lit.
4. Leave the area alone for 15 minutes.
5. Check on the area and see what types of moths are found and take photos.
6. Repeat this every 15 minutes for an hour and continue taking photos.
7. Use a moth ID book to discover what you found!



Reflect:

How many different moths did you see?

Why are moths attracted to light?

What is a way to attract more moths?

Did you find anything other than moths?

Apply:

How are moths and butterflies different?

Would doing this activity during a different part of the year give you different results?

Which do you think would attract more moths, UV light or flashlight? Test it out!

Wrap-up:

Moths can be found almost everywhere in the world! This is an activity that is easy to repeat and does not require much set-up or supplies. It is a great way to discover what is hiding in your own backyard! You will be surprised by how many species of moths are out there and how unique they are!

Thanks everyone for exploring with us! We would love to see photos of any of the moths you collected or photos of the sheet covered in bugs! You can send them to us at raccooncreekpartnership@gmail.com. Keep on exploring!

