

# A NATURALIST'S GUIDE TO MOTHING

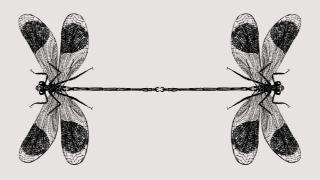


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Mothing is a most enjoyable method of attracting not just moths, but all sorts of fascinating nocturnal insects. You don't even need that much equipment (and what you do need, you can get for cheap). The setup consists of just a few things, which can be modified depending on the environment you find yourself mothing in (the middle of the woods, backyard, deck). Remember that there are *many* approaches to mothing technique and gear, but this is what I have done and I have had much success.

# **Equipment Required for a Mothing Setup:**

- 1. A sheet or other cloth material such as a pillowcase or a shirt. A sheet works best as it's easy to set up and has a large surface area. Mothing is easiest when this material is white, simply because it is easier to spot insects on it. Any color will do, but the lighter the better.
- 2. A portable USB battery, preferably with two USB slots. This is where the lights will be plugged in, and how your setup is powered. Getting more than one is recommended because they can run for a few hours, but often mothing takes longer than this.
- 3. One or two (preferably two) UV lights. Try to get some that have a USB plug so that you can use them with your portable battery. You can get one that plugs into another power source, but then you'll have to complicate your setup.
- 4. This is not required, but a camera (phone or dedicated digital works), a notepad or sketchbook and pencil, and (if you're not using a citizen science app like iNaturalist) a field guide to moths and nocturnal insects will all help you take better note of what's around you. You may even be able to contribute to science, especially if you post your pictures on iNaturalist for researchers to see. (Note: if you are collecting, collect ethically, and take your collecting equipment with you!)





ONE OF MY MOTHING
SETUPS, JUST AS DESCRIBED
IN THE GUIDE.

### (Depending on Situation) Optional Equipment:

- 1. A rope of some kind, one that's good for tying sturdy and long-lasting knots. You're going to need this if you hang it between two trees or on some other structure. I've had success with simply draping the sheet over a deck/porch rail, so you can really hang this anywhere there's a place to. However, sometimes the middle of the woods is the most fruitful place to moth, and you'll need a rope there most of the time.
- 2. Clips or clothespins. Some kind of chip clip is more versatile as it is stronger and opens wider than their wooden counterpart. This will be used to secure the sheet to the rope (or porch rail, or whatever). Clipping near the top is a good choice to make sure the sheet cannot blow away, but clipping on the bottom also ensures it won't flap in the wind (if it's windy that night).

### **Steps:**

- 1. Pick a night with good conditions. Nocturnal insects are around year-round, but the best times of year are in spring and summer. Dry, warm nights with little wind have been excellent in my experience.
- 2. Locate a prime mothing location. Somewhere without another light nearby will do the trick so that they are attracted to your light only. If you are tying a rope in your location, now is the time to do so. Make sure your knots will hold.
- 3. Put your sheet over where you have chosen to moth (rope, porch railing, wherever). Make sure that it drapes down evenly on both sides so you have the maximum surface area.
- 4. Secure your sheet with clips so that it does not blow around or away.

## **Steps (continued):**

- 5. Plug your lights into your portable battery. Turn them on and make sure they are working. You can set them up in a variety of ways, but I like to take a chair, set it facing the middle of the sheet, and position both lights facing in either direction to illuminate it. You could also clip the lights near the top to illuminate below. Experiment and see what works best for this situation.
- 6. Now you are ready to moth. Make sure you are somewhere nearby; and check the sheet every 10-15 minutes (constant vigilance is not required, as the insects stick around for a while I've known a number of individuals to hang around for hours so long as the UV lights keep running).
- 7. When you have finished, you should always collect all of your equipment. If you are doing this on your property, obviously you can leave the sheet up for other nights but taking all electronics inside is ideal in case of foul weather.

About an hour after sunset, a big wave of insects is noticeable. Later around 11, the wave picks up again. However, insect activity is present all night long (and sometimes the waves can be at other times). Some of the most common types of insects you may attract include ichneumon wasps, moths, lacewings, midges, true bugs (often stinkbugs), and a large diversity of beetle species. What you see will always depend on where in the world you are located, what time of year it is, and the weather conditions. Mothing is versatile and easy to set up anywhere (especially when your setup is as portable and efficient as this one), and can be a wonderful way to study the insect life around you. Good luck, and may your mothing be prosperous!

# A SELECTION OF CREATURES I HAVE FOUND WITH THIS METHOD:

