

## User guidance: Getting started

Moths play a vital role in ecosystems. They are a food source for birds, bats and small mammals, and important pollinators. Many species are attracted to light and monitoring moths can give an indication of the overall health of biodiversity.

### Where should I put the trap?

- Gardens are a great start, but woodlands and species-rich grasslands are also good habitats.
- In an open but sheltered place, ideally shaded from the morning sun.
- If you are running multiple traps, we recommend they are at least 100m apart.
- Make sure you have permission from the landowner.

### When should I put out the trap?

- Most moth activity is between March and October in the UK, peaking in July and August.
- Check the forecast: warm nights (minimum 10 °C) with cloud cover and little wind are best. Trapping on nights with a full moon should be avoided.
- Place the trap out when convenient, before twilight and return in the morning to record the moths.
- Avoid trapping in the same place on consecutive nights.

### Remember:

- Once you've recorded the moths, release them into long grass or dense vegetation.



## Safety guidance

This moth trap is a **research unit which is not UKCA or CE marked** and is not intended for commercial or regulated use. The trap has undergone a risk assessment and workshop inspection prior to release. Only those that have read the user guidance should operate the moth trap, and it should not be used by children without supervision.

- Electrical components should be kept dry and protected from adverse weather conditions.
- Check the electrical components regularly for signs of damage and wear.
- The Health and Safety Executive states that LEDs like these are safe for normal use, but we recommend not to stare directly at the lights.
- The moth trap should be powered by a 5V power bank from a reputable manufacturer (see overleaf).

Any safety concerns should be reported promptly to Abigail Lowe [abigail.lowe@ceh.ac.uk](mailto:abigail.lowe@ceh.ac.uk). All other comments or enquiries should be sent to [brightwellmothtraps@ceh.ac.uk](mailto:brightwellmothtraps@ceh.ac.uk)

Remember, it is your responsibility to stay safe and legal when recording moths with these traps. UKCEH is not responsible for damage or injury caused by misuse, modification, or failure to follow safety instructions.



Scan the QR code to  
visit the Brightwell  
Moth Traps website

## User guidance: Assembling the moth trap

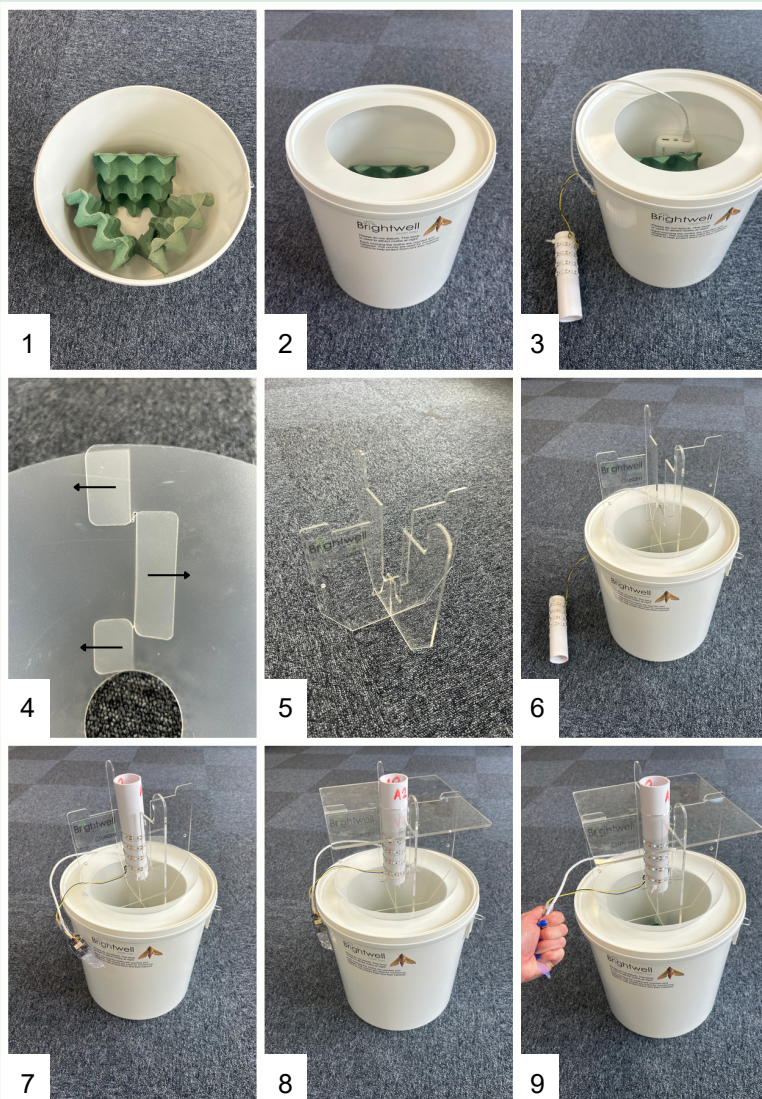
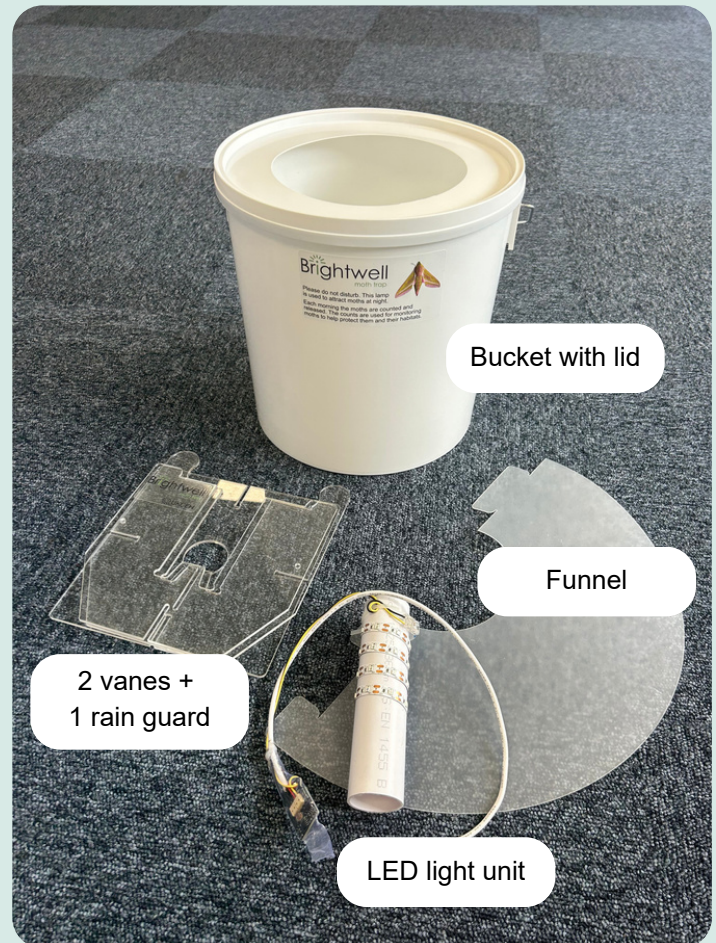
Each trap is made up of:

- Bucket with lid
- 2 vanes and 1 lid
- Funnel
- LED light unit



You will also need:

- 5V 20,000 mAh power bank<sup>1</sup> (~£25-35)
- 3-4 empty egg cartons/trays



Follow the steps below to assemble the trap, using the images to guide you.

1. Place 3-4 egg cartons inside the bucket for moths to rest on.
2. Rest the bucket lid on top. No need to fully secure it (this makes removal easier).
3. Connect the LED lights to a power bank and place the power bank inside the bucket against the side, or inside a waterproof container (e.g. a plastic sandwich bag).
4. Create the funnel by folding into a cone with the tabs inside.
5. Slot the two vanes together at a 90° angle.
6. Rest the funnel in the hole in the bucket lid, then place the vanes on top.
7. Place the LED light tube into the centre of the vanes, with the cables running downwards.
8. Put the rain guard on top and press down to click into place.
9. The light sensor should hang below the bucket lid. Cover it with your hand to confirm the lights are working.

The trap is ready to deploy!

<sup>1</sup> In our experience, reputable brands include but are not limited to: Ansmann, Anker, Belkin, Silicon Power