

## Highlighting the very best conservation equipment

## **MOTH TRAPS**



There are around 2,500 species of moth in the UK. Though often dismissed as drab night-flying relatives of butterflies, moths display an incredible diversity of sizes, shapes and colours. To learn more about these elusive nocturnal creatures and to see them up close, it is often necessary to use a moth trap.

Moth traps use an artificial light source to attract moths during the night. A traditional moth trap is typically a bulb suspended over a box, into which moths will accumulate over the course of the night. It is then simply a case of checking the trap come morning when the moths can be closely studied and identified (with the help of a good guide).

It is worth noting that traditional moth trapping does not harm the moths in any way: the moths simply spiral down towards the light source and are safely deflected into the box using a system of vanes which help to channel and retain the catch.

In the UK, moth traps can be used from early March to November, with the peak season coming between April and mid-September. Traps should be set up from dusk and can either be run for several hours if you want to stay and monitor the catch or left overnight and returned to at first light.



To view our full range of moth traps, visit www.nhbs.com

For more information and advice on the theory and practical aspects of moth traps, please see the NHBS Guide to Moth Trapping. Below we will discuss the main types of moth trap and their distinguishing features.

Although all traps work in pretty much the same way, they do vary in the wattage and type of bulb used, how they are powered (e.g mains vs battery) and the size and shape of the base. In the following guide, we will look at how each of these factors can influence a prospective buyer's decision.

## **Mercury vapour bulbs**

Mercury vapour (MV) bulbs are the brightest and most effective bulbs and were used for decades in moth traps. MV bulbs are no longer in production, however, due to the EU's drive to phase out mercury-added products owing to mercury's toxic effects. We no longer sell MV bulbs here at NHBS; most of the traps in our range now use either actinic or blacklight bulbs.

#### **Actinic bulbs**

Actinic bulbs tend to produce light in blue wavelengths, have a good catch rate and are far less intrusive than MV options. There are 20w and 40w traps available: the higher wattage bulbs may attract more moths but keep in mind they will also use more electricity.

## **Blacklight bulbs**

Typically 20–25 watts, blacklight bulbs produce much less visible light when compared to the above options but emit more infrared and ultraviolet (UV) light (moths are particularly sensitive to UV and blue wavelengths). Blacklight blulbs are a good choice for attracting moths while reducing the risk of annoying your neighbours!





## **Collecting sheets**

As well as more traditional moth traps, it is also possible to use a Moth Collecting Sheet. When used in conjunction with a UV light, the sheet acts as a large reflective surface on to which insects are attracted so that they can be easily observed and collected. The large collecting surface created by this sheet means this method is ideally suited for group sessions. This method does require the sheet to be manned, and so can be less convenient than a traditional moth trap which can be left unattended.

#### **Robinson Moth Trap**

Generally considered to be the best design for quantity and species of moth attracted, the manufacture of these traps has dwindled somewhat due to their powerful MV bulbs being phased out. The design of the base means that attracted insects tend not to escape. These traps are bulky, however, and the 125w MV bulb can often be too bright to use in the average suburban garden. They also often need mains or generator power, and the MV bulbs tend to run hot so need to be protected from rain to avoid shattering.

This type of trap is often favoured for research purposes but might be overkill for all but the most dedicated lepidopterists!



## **Skinner traps**

A popular and convenient moth trap, Skinners can attract more than 500 moths on a good night. Skinners often use actinic electrics, which do not give off as much visible light as their MV counterparts. This, combined with the fact that most models can be flat-packed for storage, makes the Skinner an ideal choice for garden trapping. Compared to the Robinson Moth Trap, which we no longer sell, Skinner traps do not attract and retain as many moths, but the trade-off in terms of convenience makes the Skinner a good choice for a robust, mains-powered moth trap. Unlike some of the other traps in our range, it is also possible to access and get a good view of the catch while the trap is running.

#### **NHBS Moth Trap**

Our take on the popular Skinner design, approved and tested by Butterfly Conservation. It is constructed with lightweight recycled plastic panels and covered with a lightcoloured nylon material which helps to reflect light from the 20w blacklight bulb. The whole set-up weighs in at only 3kg and packs down into the included fabric carry bag.



## **Compact Double 20W Actinic Skinner Trap**

Another popular model, this time housing two 20w actinic bulbs that will lead to a greater attraction rate when compared to standard bulb traps. It also includes

a rain guard and generous 5m cable.

Compact Double 20W Actinic Skinner Trap



## **Heath traps**

The standard heath trap design features a vertically mounted bulb suspended between three plastic vanes that help to guide the moths downwards to the base of the trap. Heath traps are designed with portability in mind and so tend to shy away from wooden bases. Instead, you'll often find aluminium or plastic panels which help to keep the weight down. The heath trap runs on a 12v battery (mains versions are available), making the heath trap an ideal choice for trapping at remote sites. Due to their lower wattage bulbs, catches tend to be lower for heath designs when compared to Skinner traps, but the heath traps are some of the most affordable and transportable traps on the market. It's worth noting that although heath traps tend to be fairly affordable, you will also need to budget for a **rechargeable battery** and **charger**.

## **6W 12V Portable Heath Moth Trap**

A compact and lightweight trap that can be dismantled for easy transportation. It uses a single 6w actinic tube and an adapter which allows the trap to be connected to the mains power can be purchased separately. A version with an attached solar switch that turns the trap on at dusk and off at dawn is also available.



# Heath Moth Trap - Plastic Bucket

A slight variation on the typical square-based collapsible heath traps, this version has a circular plastic bucket-style base into which the vanes and 6w bulb are placed. Although not collapsible, this design is very portable and is a popular choice for remote sites.





Other types of trap

For moth trapping in very remote sites, see our Safari and Ranger Moth Traps.
These traps are manufactured from lightweight fabrics which can be easily packed down for travel. Both traps will require mains power for operation.



**Ranger Capio Moth Trap** 

## **ACCESSORIES**

#### **Batteries**

Any of the 12v options mentioned above will require battery power, and we have several options available in our range. A higher amp hour rating will mean a longer run time for your trap; for instance, a typical 20w 12v trap can be run for 10 hours on a single 22Ah lead acid battery.



Rechargeable 12V 22Ah Battery

## **RCD Circuit Breaker**

Quickly cuts the electric current in the event of an earth connection leakage or if a power cable becomes damaged. Ideal for use with moth traps and outdoor electrical equipment in general.



RCD Circuit Breaker

## **UV** glasses

Recommended for use with all UV bulbs to protect the eyes from UV damage if viewing moths while the trap is running.



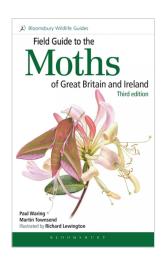
## **125ml Collecting Pots**

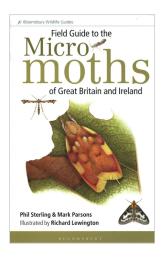
Ideal for holding moths to reduce handling time when ID'ing specimens.

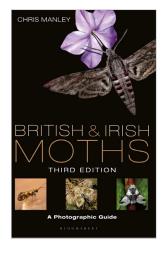


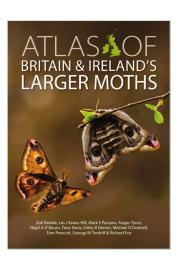
125ml Collecting Pot

## **FURTHER READING**









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Explore the complete range of moth traps on our website. If you have any questions about our range or would like some advice on the right product for you, then please contact us via email at customer.services@nhbs.com or phone on 01803 865913

