



WINTER MOTHS

Members of the Lepidoptera order of insects

We tend to think of moths as pesky little things that munch through our favourite jumpers, but they are far more fascinating than that, and it is the larvae that eat the wool, not the adult moth. Despite the shocking decline in both the number and variety of insects, moths remain far more numerous than butterflies and are often very beautiful. There are many more species of moth than butterfly, with over 2,500 moth species in the UK, who often rely on specific plants and trees for their lifecycle. We tend to ignore moths as they are mainly nocturnal - active at night - so we see them less often, especially so in the winter months.

Moths are fantastically adapted to their nocturnal lifestyle:

- Many moths have 'ears', located on their thorax, made up of tiny membranes stretched over small cavities. These vibrate when near sound, sending a signal to the brain, and are ultra-sensitive to the high pitched sound made by bats, who are a major predator of moths.
- Moths have feathery antennae, and this larger surface area enables them to detect scents at a distance and also help them to navigate and balance when flying. Touch sensors at the base of each antennae pick up their flight movement, a bit like a gyroscope, helping the moth to keep a straight course.



- They are also able to smell and taste with their feet! Adult moths have a very modest appetite, but will feed on the nectar of ivy flowers, sedum, winter jasmine, etc. and drink from puddles and soft dung.
- Nocturnal moths rest during the day, well camouflaged with subtle colours that resemble leaves, bark and even lichen and fungi markings.
- Winter moths often have plump, furry or scaly bodies to keep them warm, and they also have very strong flight muscles in their thorax. They 'shiver' or vibrate these big muscles to bring their temperature up high enough to enable them to fly.

The Winter Moth, one of the many geometrid moths, flies only at night, and it is the male which does so. The female has tiny, useless wings and her only, brief role is to mate and lay eggs. She will sit on tree trunks after dark, and is one of the moth species whose caterpillars can infest and devastate orchards, so gardeners often have moth traps on their fruit trees.

I have a lovely old book I bought in a charity shop, by Richard South, called *The Moths of the British Isles*, first published in 1908. It has marvellous drawings and paintings of moths as you would expect, but what I most enjoy are all the names of the moths.

Here are a few I really like:

Sharp-angled Carpet, Dark Spinach, The Scarce Tissue, Chimney Sweeper, Cloaked Pug, Slender-striped Rufous, Drab Looper, Bloomers Rivulet, Dingy Footman and the Scorched Carpet. Fabulous names.

We are still uncertain about why moths are attracted to bright lights, but the best ideas so far are concerned with how moths navigate at night. As with other unsung species, we will learn more when we value them more.