

Why You Should Garden for Moths?



If you're wondering "why should I garden for moths?" hopefully, you'll see by reading this article that moths will not only enhance pollination of your garden plants, but may also bring songbirds to nest nearby, bats to help with mosquito control, and delight to your family.

Moths are often considered pests, but native moths are vitally important to the ecosystem. They are also fascinating and often strikingly beautiful.

Moths and butterflies belong to the order Lepidoptera. Their larvae (caterpillars) hatch from eggs, eating and growing through several stages called instars.

Eventually the larvae pupate, enclosing themselves in a chrysalis (butterflies) or cocoon (moths). During this stage, they metamorphose into winged adults.

Silk fabric comes from fibers made by mulberry silkworm moth larvae to make their cocoons. Mulberry trees planted in China around 2600 BCE for silk production were the first moth garden.

More than 11,000 moth species inhabit North America, and most feed on host plants while they prepare for pupation. However, some moths lay eggs in paper wasp nests, where their larvae feed on the wasp grubs. Others utilize woody stems and other materials.

Although some adult moths don't eat—living only to reproduce—others are efficient pollinators, mostly active at night. They are also prey for nocturnal creatures like bats, tree frogs, and small owls. Larvae are fed to baby songbirds; their soft, nutritious bodies are easy for nestlings to digest. A study found that 6,000 to 9,000 caterpillars were necessary to raise one clutch of chickadees.

You can observe moths and other nocturnal insects by suspending a white sheet outside on a summer night and shining a bright light at it. Soon the sheet will be filled with fluttering visitors. But turn off the light after an hour or so and gently shake the sheet to send them on their way.

If you're lucky, you might see some moth stand-outs, like the jade-green luna moth, or the enormous crecopia moth with its dramatic snake-head markings. Many moth caterpillars are also remarkable, with bizarre protrusions or vibrant markings.

The moth garden, like a butterfly garden, needs host and nectar plants. Most moths prefer fragrant, pale or white flowers that stay open at night, such as evening primrose, sacred datura, summersweet clethra, and common milkweed. Bonus plants, providing nectar and also larvae-feeding foliage, include sunflowers, goldenrods, bonesets, violets, and wild geraniums.

Many native shrubs and trees are also crucial host plants, including blueberries, meadowsweet, sumac, New Jersey tea, buttonbush, ninebark, plums, black cherries, pussy willows, and maples. Oaks support more than 500 moth species.

Specialist moths rely on particular host plants. For example, the primrose moth lays its eggs in the flower buds of evening primrose (*Oenothera biennis*, a common wildflower), and its larvae eat the leaves.

Pupation occurs underground during winter. In spring, when the evening primrose flower buds form, the adult emerges. Even though this pink and yellow moth is nocturnal, you may see it in daytime, resting in a yellow evening primrose blossom.

Fallen leaves, an important resource for overwintering moths, should remain under trees, in garden beds, and at lawn edges. One recent study found that 45% of moth species perished in areas where autumn leaves had been removed. Retain stumps, brush piles, and decaying logs for shelter. Never use insecticides.

For the sake of moths, fireflies, and migrating birds, turn off outdoor lighting—which confuses and exhausts them—when it isn't needed. Use motion sensors, low voltage lighting, and red bulbs where possible. And never use bug zappers, which kill moths and other beneficial insects at much higher rates than biting insects.