

## **Mud Dauber Wasp**

**by Lloyd Eighme, Retired Entomologist**

Why are these big thread-waisted wasps frequently seen flying in the house? Are they doing some damage to the house? Can they sting? These questions are often asked when people see these wasps around their houses on a warm, sunny day.

Their common name, Mud Dauber, and their species name, Sceliphron caementarium tells us something about what they are doing. They gather mud with which to build a cement nest or brood chamber. They need a dry location for the mud nest because if it got wet it would fall apart. They may spend many hours searching for a suitable spot and that is when you see them flying in and around buildings. The attic is an ideal spot, not only dry, but warm in summer when they and their offspring are most active and also a protected spot, not likely to be disturbed. After the nest site is located they go in search of mud. Clay works best, but if they do not find clay they will use whatever is available. The success of their nesting project often depends upon finding the right building material. They gather soft mud with their jaws and front legs, forming it into a ball that can be carried in flight. If you are close enough, you may hear the wasp making a low humming sound as she gathers mud. When she arrives at the nesting site and begins to shape the mud with her mouthparts and feet, she makes a high-pitched singing sound. You may have heard that sound on a warm summer day coming from the attic or wall and wondered what it was.

It takes many trips to gather enough mud to form a tube about one inch long and 1/4 inch in diameter, plastered to a flat surface such as a rafter or wall. When the mud tube is nearly finished she goes in search of a food supply for the mud dauber larva that will live and grow in the tube. The Mud Daubers in our area provision the nest with small spiders. It may take several weeks for the young wasp grub to grow to full size ready to pupate for the winter. It needs a good supply of fresh food all during that growing time, so the female provisions the nest with enough spiders to ensure a sufficient supply and lays one egg attached to one of the spiders. Then she seals up that tube with mud and starts another one alongside.

Once a tube is sealed she never opens it, so there is no way to provide anymore food for that one. Dead spiders would dry up and spoil during the time required for growth of the larva, so the wasp does not kill them, she only paralyzes them with her sting. That way the larva has fresh spider meat every day for as long as it needs it.

The Mud Dauber wasp continues to make more mud tubes packed closely together until there are as many as 6 or 8 or until she runs out of mud and spiders or time and energy. After the wasp larvae in the mud nests finish eating and

growing, they transform into a pupa for the winter and emerge the next summer as adult Mud Daubers. The new adult wasps have never seen a mud nest being built and their mother is not there to give them building instructions or to tell them where to find spiders and how to paralyze them with their sting. That does not matter, they do it anyway and they have not been known to make use of the old nest in any way.

Are these Mud Dauber wasps harmful, beneficial or just interesting? That depends on how you relate to them. If you do not like mud nests on your nicely painted house, you could keep them washed off with the water hose. If you do not like spiders in and around your house you might appreciate the help of the wasps to get rid of them. I will let you decide what you want to do about these little 6-legged cement masons.



Sceliphron caementarium Mud Dauber