

Daddy-longlegs, vibrating or cellar spiders

Family Pholcidae [Back <-----](#)

Introduction

These spiders have very long legs like the harvestman. Therefore, they are called Daddy-longlegs. The difference between the daddy-longlegs and the harvestman is that in harvestman the cephalothorax and the abdomen is almost fused together which looks like one structure whereas in daddy longleg spiders the cephalothorax and the abdomen are two distinct features connected by a visible narrow tube. Unlike these spiders, the harvestman does not make webs.

The members of the *Pholcidae* family live in houses and buildings. They make their untidy webs in the corner of a wall or a ceiling. They are also often found in the basement or the cellars, thus being referred to by another common name as the cellar spiders. When they are disturbed or when they are under a threat of attack, they start vibrating in their web violently to scare off and discourage their enemy. Therefore, they are also known by yet another common name of vibrating spiders. The male spider has large palps.

There are three genera of this family found in NW-Europe: *Pholcus phalangioides* (common), *Holocnemus pluchei* and *Psilochorus simoni* (rare).

It is said that the venom of this spider is one of the most poisonous. Since the fangs of these spiders are too small to penetrate the skin, it is not considered a dangerous spider. Many spiders use their venom to kill their prey but the poison of almost all of them is harmless to humans.



Male *Pholcus phalangioides*

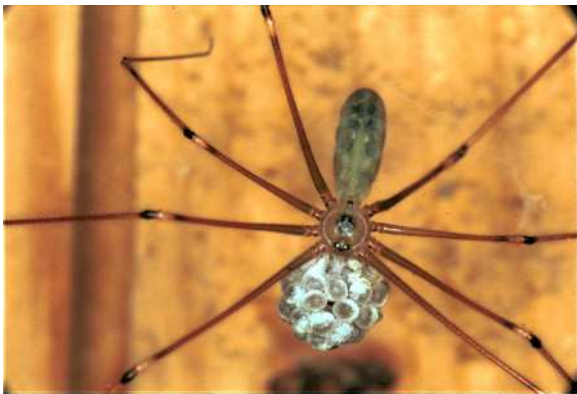
How does Daddy longlegs look like?

The daddy-longlegs have a quite simple structure. Therefore they are classified in between the six eyed and the eight eyed spiders. The internal structure of the female sexual organ is identical to that of the six eyed spiders. The mating ritual of these spiders is also similar to that of the six eyed spiders.

The spider can be easily recognized by a small mass of body and its extremely long legs. They have four pairs of legs. The first pair of legs is five and half times the length of its body. The legs do not have any prickles but have long stiff hairs. The knee segment is much darker than the rest of the legs. Their venomous fangs are very small, too small to penetrate the human skin and even while catching a prey they are not used. Two of the eight eyes are very small. At the place of the heart (at the top of the abdomen) there is a dark spot. The spider must, as all spiders do, renew its skin.

Hunting methods and prey

The daddy-longlegs have a special method of hunting. Their untidy web is used more as a place to stay than for catching prey. The spider hangs upside down in the web. If the web becomes too dirty, then it is abandoned and a new web is woven. Their poison jaws are far too small to hold a prey. They consume every insect like flies, ear worms, beetles and so on. The daddy long legs also put on their menu other spiders like the house spider, wolf spiders, jumping spiders and so on. In short, They can grab almost every insect in and around the house, even other daddy-longlegs! In this way these spiders regulate the population of insects and spiders in the house. The spider lives in the house the whole year. In winter, when there is hardly any insect left, the spider has to seek its prey among the next of kin.



Pholcus phalangioides with eggs.

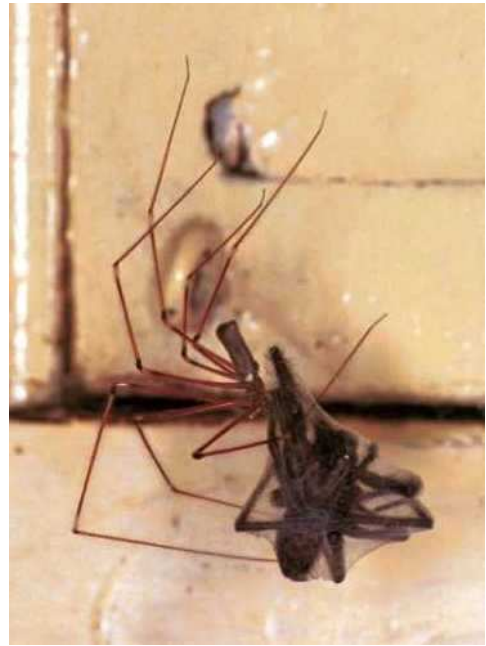


Pholcus phalangioides with prey.



How does this tiny spider catch its large prey? Normally the spider throws tough stiff web material over the victim and disables its mobility. After the prey is motionless, the spider engulfs its prey by spinning the web all around it. The spider makes a hole in the ball of the web and bites with its small jaws in the weaker parts of the prey. Then it spews digesting juices in the wound. Most of the time the prey is not consumed completely and larger preys are often left behind unfinished.

In seasons when the general insect population is at its lowest, the spider has to move through the house on hunting expeditions. On such occasions, long legs of the spider prove their advantage. The spider starts looking for other webs and presents itself as prey. It ticks on the web with one of its long leg and before the alarmed spider in the web could start any plans of an attack, the daddy-longleg with the element of surprise on its side takes hold of the situation and overcomes the alarmed spider. If there are no hard times or the famines, the daddy-longleg does not consume other daddy-longlegs, but when hungry and faced with hard choices, they kill their own kind.



Daddy-longleg with a house spider



Pholcus phalangioides male



Pholcus phalangioides male



Pholcus phalangioides with egg sac crawling on my bath room wall. *Pholcus phalangioides*

Copulation

The mating ritual is similar to the ritual of the six-eyed spiders (Haplogynae). The male spider can copulate when it is one year old. When ready to copulate, the male spider makes couple of silk threads, then places his genital area on the thread and starts rubbing along the thread which stimulate his sexual organs. This action produces secretion containing his sperms, which is drawn toward his poison fangs, which is sucked up by his palps. Now the male is ready for the mating and goes in search of a female. When he finds the female, he lets her know of his honorable intentions by vibrating his whole body on her web. As the female approaches, the male caresses her first pair of legs, which quickly wins her favor. He then inserts both of his palps in the female vulva. Often the copulation goes on for hours with varying attempts in which the male withdraws his palps, reloads it with sperms and inserts it back into the female vulva. If the mating goes undisturbed, then the male is not eaten up. He remains in her immediate vicinity until death overtakes.

While this is happening, its is not unusual to find another male spider waiting for his turn. The female lives for about 3 years. But the male lives only for a year, copulates and dies.

Breeding care

Contrary to most other spiders, daddy-longlegs breed the whole year. You might find spiders with eggs in your cellars in the middle of the winter. The spider originally came from the tropics and is only found inside houses. They are not accustomed to seasons.

The fertilized eggs are not spun in a cocoon but are held in a small net of silk. Because the spider is always on the move, it carries the silk net containing the eggs in between her jaws. Only 20 -30 eggs are fertilized. The eggs are hung in a web before the spiderlings could emerge from their eggs. The mother eats the spiderlings that have difficulty in getting out of their egg. Shortly after emerging from the egg, the young spider changes his skin. They are transparent and have short legs. Even after several changes of their skin, the spiderlings stay with their mother and she carries them in between her jaws. At the end when all the egg yolk is consumed and the small spiders have practiced catching tactics with their sisters and bothers, they eventually leave their mother and start for themselves.

Enemies

The daddy-longlegs does not have many enemies but as you can see on theright sometimes they get caught. Most daddy-longlegs probably die in a vacuum cleaner.



Tegenaria atrica (house spider) with a daddy-longleg



Holocnemus pluchei



Holocnemus pluchei



Holocnemus pluchei?

[More on: "PHOLCIDAЕ the longest legs in the web" web site from Bernard Huber](#)

Ed Nieuwenhuys, 9 november 2010

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