Notes from a Rogue entomologist Spiders: Phobias, hoaxes and hobos

BY RICHARD J. HILTON

Why are so many people terrified of spiders and snakes? The obvious explanation is that a phobia directed towards animals that have fangs and poison venom would increase one's chances of survival in the wild. Natural selection would therefore favor a healthy fear of spiders.

But in North America there are very few species of spiders that are poisonous to humans. The bite from a brown recluse spider can cause a serious injury, but they are native to the central and southern Midwest and have not become established here in the Pacific Northwest. We are all familiar with the black widow, whose neurotoxic venom can cause very painful reactions, but fatalities are *extremely* rare. A relative of the black widow, and superficially similar, is the false black widow spider (Steatoda grossa). It is originally from Europe, but can be found locally. The false widow, or cupboard spider, is more brownish and has no red spot on the underbelly. The false widow's

toxin can cause a reaction in humans, but not nearly as severe as its relative's.

Spiders, along with snakes, do seem to have a special place in our collective unconscious, and that makes good fodder for various hoaxes. For example, a few years back a neighbor forwarded my wife an email warning of poisonous spiders getting into toilets—I believe airplane lavatories were specifically mentioned—and biting people as they used the facilities. The message urged everyone to inspect toilets very closely before using. Bathroom humor never seems to get old, but this Internet hoax did achieve some notoriety for the rapidity with which it spread.

Urban legends concerning spiders also abound. A common one is that daddy longlegs have the most poisonous venom, but their fangs are too weak to inject it through the skin. Actually, daddy longlegs, also known as harvestmen or phalangids, are not even spiders, do not have either venom or fangs, and are utterly harmless.

Female cupboard or false black widow spider, Steatoda grossa. http://nathistoc.bio.uci.edu/spiders/Steatoda%20female1.jpg



The longlegged spiders that you sometimes find hanging in the corner of your living room or bedroom, in the family Pholcidae, are sometimes called daddy longlegs, but there is no evidence that their venom is particularly toxic (although y o u c a n

occasionally see them bouncing or vibrating in their web as a defensive tactic).

The case of the hobo spider is an interesting one. This spider is another European immigrant and has taken up residence in the Pacific Northwest. It is in the same family as the funnel web spiders, the ones that make the webs that you often see on the ground when the dew is hanging on them. The hobo spider, Tegenaria agrestis, was at one time called the "aggressive house spider," although the agrestis in the scientific name is Latin for field, where it usually resides, and the spider's behavior

is not unduly aggressive. It has

been claimed that the bite of the hobo spider produces a reaction similar to that of a brown recluse, whose necrotizing toxin can cause severe wounds that do not heal readily. However, the evidence for this claim is minimal, consisting primarily of one study where rabbits were injected with hobo spider venom, and the results from that study have never been repeated. Darwin Vest, the researcher who did the original work, was an independent and self-taught toxicologist. Adding to the mystery is the fact that he disappeared without a trace in 1999. He was last seen leaving a bar after a late night out with friends in his hometown of Idaho Falls. It is presumed that he fell into the Snake River that runs through the town.

So how is it that the hobo spider is being blamed for causing serious wounds if that is not actually the case? I think the answer lies in the human need to find an explanation for pretty much everything, and if you are looking at a wound that is



Female hobo spider, Tegenaria agrestis. http://www.burkemuseum.org/spidermyth/images/ agrestis.gif drawing by Margaret Davidson.

not healing, then a spider might serve as a good scapegoat.

Case in point: My wife stabbed her finger on a wire from an old screen and soon her finger was swelling and getting red, so there was some sort of infection at work. While she is usually a stoic, I did prevail upon her to go the ER where they asked multiple times if she had been bitten by a spider. When she answered "no," the response was "Are you *sure* you weren't bitten by a spider?"

Feel free to give spiders a wide berth, but remember that the facts belie the fear. In southern Oregon, with rare exceptions (I'm looking at you, black widow), spiders are simply not very dangerous.

Richard J. Hilton 541-772-5165 Senior Research Assistant/Entomologist Oregon State University Research and Extension Center richardhilton@oregonstate.edu

Join the Applegate Grange!

BY PAUL TIPTON AND JANIS MOHR-TIPTON

The mission of the Applegate Valley Community Grange (Grange) is "to educate, serve, and support the community." We strive to achieve this goal by having our members invested in local school and community projects, making the building available free of charge for informative community events (fire status meetings, earthquake preparedness meetings, open political forums), and renting the space for weddings, birthdays, private parties, political gatherings, literary readings and other uses. A group of over 50 people **came together** more than two years ago to reopen the Grange, which had been closed due to the long-standing group's decline in energy to keep it going as they reached their later years.

meetings and basic activities necessary to keep the Grange open.

Feedback from our events (like the recent well-attended Harvest Faire and earthquake preparedness meeting) and other activities gives us the strong feeling that the local community wants and needs to have the Grange available for a wide variety of uses and that the kinds of things happening at the Grange are appreciated. It all comes down to this shameless plea: If you want this organization and facility in the Applegate Valley, we need your support. Financial support is greatly appreciated and necessary, but what we need most are more bodies and minds to help with the daily business of the Grange, like behind-the-scene committee members who help coordinate events and people who can take even a small part in all the work it takes to keep the organization running and the building functioning.

We exist to serve the community. And the benefits of connecting with more of the community and working together with common purpose may surprise you.

Are you willing to help us define our community in positive ways? We meet the second Sunday of the month for a potluck at 5 pm and the meeting at 6 pm. Come check us out. Or contact us to get the details about becoming a member by calling 541-846-7501 or emailing applegategrange@ gmail.com. Our mailing address is AVCG, PO Box 3367, Applegate, OR 97530. Paul Tipton, President Janis Mohr-Tipton, Secretary 541-846-7501 applegategrange@gmail.com



Recently we have experienced a similar decline in *active* members who are willing or able to participate in monthly

The Applegate Grange entry in Ruch School's scarecrow contest.





