

## WILPLIFE NOTES

## Black widow spider Latrodectus mactans

The glamour of the female black widow spider is partially due to her bold appearance: a glossy black abdomen that is brightly marked with a yelloworange or red hourglass shape on the underside.

Although the black widow is not aggressive to humans, the female's venom can have serious consequences for the very young or elderly. The male spider is smaller, variously spotted or striped, and harmless. Young spiders are orange, brown, and white; they become blacker with each molt.

The black widow spider eats her mate only if she is truly hungry. If she is not, the male departs peacefully after mating, or lingers about the web until a natural death overtakes him within a few days. The black widow does have, however, another unpleasant habit. If hungry again, she will also eat her young as they emerge from the egg sac she has made and protected so carefully.

Looking on the good side, this behavior helps keep down the black widow population, especially in times of low food supply. Black widows can live up to three years and produce a total of nine egg sacs, each containing 25 to 1,000 eggs.

The web of a black widow is rough, ungeometric, and rather

messy. The solitary black widow is active primarily at night, during which time she begins to seriously trap and consume a variety of prey. One black widow, observed in a laboratory, ate the following: 225 domestic flies, 12 sowbugs, and three grasshoppers. The spider can, however, go as long as three or four months with no food at all. An experimenter once mislaid a specimen in a jar for nine months. The emaciated spider was slowly nursed back to health.

Although black widows are evident in every state, they are more common in the southern and drier areas of the country. As most Southwesterners know, black widows can be found in any relatively unused, dim corner of the household. One might well be in your house right now. Fortunately, the odds are great that your paths will never cross.

Black widow bites are probably not as common as they once were. From 1900 to 1940, more than half of reported bites occurred while the victim was using an outhouse.

B l a c k widow venom is much more virulent per unit than that of a rattlesnake. Fortunately, the dose received is very small. Venom is injected from two large glands through fangs that are about one-fiftieth of an inch long. The results of the bite, while not usually deadly, are unpleasant. At first there may be only a slight pinprick of pain at the puncture. Within 50 to 60 minutes, severe pain can develop at the bite and spread through the body. Pain, cramping, and rigidity may appear in the shoulders, back, chest or abdomen. Blood pressure is elevated, and pupils dilate. A few reports specify that the victim "writhes in agony". Dizziness, nausea, difficulty in breathing, and vomiting occur. The stomach muscles in particular become rigid. Since these symptoms resemble an acute abdominal emergency, the black widow has been the cause of a number of gratuitous appendectomies. This may be why first-aid books urge people to identify the spider "and bring it

in, if you can."

Immediate first aid for a black widow bite involves getting the victim to a hospital or physican. Watch for shock and maintain basic life support. Something cold can be applied to the bite. Since the venom immediately attacks the nervous system, techniques such as those used for snakebite are useless and even harmful. Anti-venom medicine is available for those who are not allergic to horse serum, and in a healthy adult, pain from the bite usually disappears in two to four days. Complete recovery may require several weeks. Published 1992

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