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NORTHWEST WILDLIFE PRESERVATION SOCIETY

Black Widow spider

Latrodectus hesperus



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By Aurora Hicks Beach

Black widow spiders are well known and well feared across the world. The stereotypical black body with a red hourglass shape on the abdomen has inspired many things from superhero characters to horror novels. However, although the black widow is known for its deadly venom and is the most venomous spider in North America, it in fact only causes death in humans in very, very rare cases although the venom can cause a nasty reaction. Also, the black widows are far less likely to bite humans, as to try to run away. There are 5 species of black widow and the western black widow is native to British Columbia. Anyone who is bitten by a black widow should seek immediate medical care and try to remain calm.

Characteristics

Black widows are members of the 'comb-footed' or 'tangles web' spider genus. This genus does have comb like feet at the end of its spindly hind legs and also creates a web that is funnel shaped, crooked and tangled.

Juveniles look a bit different to the mature adults, they are orange, brown and white. Females have the famous red hourglass on their very rounded abdomen and one or two red spots over their spinnerets and down the middle of the back. Males are the same dark charcoal colour but are half of the size of the females with longer legs. The males' joints are orange-brown in the centre and back on the ends. They also have 4 red and white stripes on the side of the abdomen. The mature females are about 14-16mm long (0.5 inches) and males are half the size 7-8mm (0.3 inches)

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Life Cycle

During the mating season, in the summer, the male forgoes food and concentrates solely on searching for a female. Once he finds a female, he vibrates the strings of her web to know that she is a female and for her to know that he is present. The female may eat the male after mating, which is why the male life expectancy is often far shorter than the females.

A female typically lays 750 eggs and wraps silk around them creating an egg sac. Over the summer the female can lay between 4 to 9 eggs sacs. The female then guards the eggs until they hatch. The spiders hatch after 14 days and the young are cannibalistic and only 1-12 will live to be 30 days old. It takes about 6-9 months to reach maturity. Females may live up to a year and half but the males have far shorter lives maturing at 2-5 months and dying a couple of months after reaching maturity.

Habitat

The western black widow is found from south Saskatchewan, Alberta and British Columbia and down into Mexico. It is widespread in BC. It inhabits various habitats including temperate forests, temperate grasslands, tropical rainforests, chaparrals and deserts.

The black widow likes to be in warm, dry and dark places, close to the ground. They prefer abandoned squirrel tunnels, wood piles, and underneath rocks in sunny areas. The spiders remain active until the first frost and will hibernate until spring. When hibernating the spider drops its metabolic rate, tucks in its legs and remains huddle in a shelter during the cold months of the year.

Behaviour

The black widow spider uses its web for a multitude of things. The web is the home for the spider, as a defense against predators, a trap for prey and a device to communicate between males and females. Predators and prey alike get trapped in the web. When they do, the spider wraps more silk around them to subdue them and then injects its venom. The spider then drags the victim back to its home and eats it. When eating the prey, the spider pours digestive juices on its prey to break it down before consuming.

Research in BC has found that some populations of black widows are socially organized. Females band together to improve foraging success. However, females who have fertilized eggs will leave the group to disperse the eggs privately.

Threats

Not ranked for any conservation status. .

IUCN red list has not categorised it.

There are few animals who would dare to eat the black widow spider and those that do usually end up as prey.

What We Can Do To Help

- Leave fallen trees in wooded areas where they fall – a dead tree has more living organisms and wildlife in it than a live tree, and the ground needs the decaying material back to help nurture new trees.

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- Do not litter on land or in the water. Help clean up the environment.
- Dispose of toxic substances such as antifreeze, batteries, and paint responsibly. Municipalities usually provide special disposal facilities for these types of things, as putting them down drains can be extremely toxic.
- Reuse and recycle whenever possible.
- Buy organic food – this supports farmers who are trying to preserve the environment by not using chemical pesticides and herbicides.
- Plant native plant species in your garden.
- Volunteer to help organizations like the Northwest Wildlife Preservation Society.
- Take the time to learn about wildlife. Take a walk and observe the wildlife around where you live.

Other Interesting Facts

The black widow spider is very timid and would much rather run than be confronted, however, when it feels attacked it will bite. The last death from a black widow spider in BC was 10 years ago. Elderly and young people are at a higher risk of severe reactions. Reaction can include profuse perspiration, and nausea, if left un-treated, the bite can lead to tremors, convulsions and unconsciousness. In the unlikely case of death, the death is due to suffocation.

Contact your physician, hospital or poison center **immediately** if bitten and follow their instructions. Poison Centers across the country now have a new national emergency phone number - **1-800-222-1222**

Where & When to view the animal

We recommend not trying to find the black widow.

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