

What do you feel when you see spiders? Fear? Disgust? Fascination? Maybe no other group of animals evokes such powerful, polarizing emotions in people: whether you love them or hate them, you are likely to have a strong opinion. Spiders are an ancient group within the arachnid class and -- since their evolution -- have woven themselves into nearly every land ecosystem. Like an orbweaver's web, their connections with us and with the natural world are complex and numerous.

Silk Spinners and Web Weavers

Spider silk is an incredible material: ounce for ounce stronger than steel and able to absorb more impact energy than kevlar (the material used in bullet-proof vests).



Desert tarantulas (*Aphonopelma iodus*) weave tripwires around their burrows, alerting the spider when prey is close enough to strike.



Many spiders line their burrows with silk, but Penn Jillette trapdoor spiders (*Aptostichus pennjillettei*) go one step further, weaving rocks and dirt into a hinged lid.



Banded garden spiders (*Argiope trifasciata*) weave sticky webs to snare insects in flight before wrapping them in silk to save for later.



All spiders create silk egg sacs, which protect their developing young. Some even care for their young until they are old enough to establish their own territories.

Small-scale Predators

You may not consider spiders “predators” in the same way you think of animals like wolves and mountain lions, but they are the apex predators of Red Rock Canyon’s invertebrate food web.



Some jumping spiders (family Salticidae) can hit prey from over 30 body lengths away. Imagine if you could jump to hit a target from the top of a 20-story building!



Crab spiders (family Thomisidae) rely on stealth rather than agility to capture prey. They hide in flowers, using their incredible camouflage to attack unseen.

Spiders control insect populations, create new habitats by altering their environments, and are food for larger animals. They weave together the realm of small invertebrates with that of mammals, birds, and reptiles. They are significant figures in Indigenous cultures, including the Southern Paiute People who call Red Rock Canyon their homeland. Whatever your feelings on spiders, please protect them by watching your step and by observing them in their natural habitat undisturbed. Respect spiders’ place in this ecosystem and cultural landscape and give them the space they need to thrive.

Venom

All spiders are venomous, but most spiders' venom is no more potent than a bee sting. The only spider in Red Rock Canyon considered dangerous to people is the western black widow (*Latrodectus hesperus* - right), which causes muscle spasms, vomiting, and severe pain. Most healthy adults suffer no lasting effects, and no one has died of a black widow bite in the United States since 1983. However, a rare but dangerous allergic reaction to any spider bite is possible.



Spiders of Red Rock Canyon National Conservation Area

Agelenidae (funnel weavers)

-*Agelenopsis aperta* (desert grass spider)

Anyphaenidae (ghost spiders)

-*Anyphaena* spp.

Araneidae (orbweavers)

- Araneus gemmoides* (northern orbweaver)
- Argiope trifasciata* (cat-faced orbweaver)
- Larinioides cornutus* (banded garden spider)
- Metepeira* spp.
- Neoscona oaxacensis* (western spotted orbweaver)

Cheiracanthiidae (long-legged sac spiders)

-*Cheiracanthium inclusum* (agrarian sac spider)

Dictynidae (meshweavers)

- Mallos* spp. (Mexican social spiders)
- Nigma* spp.

Diguetidae (coneweb spiders)

-*Diguetia* spp. (desertshrub spiders)

Euctenizidae (wafer-lid trapdoors)

-*Aptostichus pennjillettei* (Penn Jillette trapdoor)

Filistatidae (crevice weavers)

-*Kukulcania arizonica* (Arizona black hole spider)

Gnaphosidae (stealthy ground spiders)

- Cesonia rothi*
- Drassodes* spp.
- Drassyllus* spp.
- Micaria* spp.
- Zelotes duplex*

Homalonychidae (dusty desert spiders)

-*Homalonychus* spp.

Linyphiidae (sheet-weavers)

-*Linyphius* spp.

Lycosidae (wolf spiders)

- Alopecosa kochi* (Koch's wolf spider)
- Camptocosa parallela*
- Geolycosa gosoga*
- Hogna antelucana*
- Oxyopes tridens*
- Pardosa* spp. (thin-legged wolf spiders)
- Pirata* spp. (pirate wolf spiders)
- Schizocosa* spp. (brush-legged wolf spiders)

Mimetidae (pirate spiders)

-*Mimetus* spp.

Miturgidae (prowling spiders)

-*Syspira* spp.

Oecobiidae (flatmesh weavers)

-*Oecobius* spp. (wall spiders)

Oxyopidae (lynx spiders)

- Oxyopes scalaris* (western lynx spider)
- Peucetia* spp. (green lynx spiders)

Philodromidae (running crab spiders)

- Apollophanes* spp.
- Philodromus* spp.
- Thanatus* spp.
- Tibellus oblongus* (oblong running spider)
- Titanebo* spp.

Pholcidae (cellar spiders)

-*Psilochorus* spp.

Pisauridae (nursery web spiders)

-*Tinus peregrinus*

Plectreuridae

-*Plectreuryx* spp.

Salticidae (jumping spiders)

- Chalcoscirtus diminutus*
- Colonus hesperus*
- Habronattus conjunctus*
- Habronattus hallani*
- Habronattus hirsutus* (hirsute paradise spider)
- Habronattus icenoglei*
- Habronattus pyrrithrix*
- Habronattus signatus*
- Habronattus tranquillus*
- Habronattus ustulatus*
- Metacyrba taeniola*
- Metaphidippus chera*
- Pelegrina* spp.
- Phidippus ardens* (desert red jumping spider)
- Phidippus audax* (bold jumping spider)
- Phidippus californicus* (California jumping spider)
- Phidippus johnsoni* (Johnson's jumping spider)
- Phidippus nikites*
- Platycryptus californicus* (California flat jumping spider)
- Plexippoides flavescens*
- Salticus palpalis*
- Sassacus papenhoei*
- Terralonus* spp.

Scytodidae (spitting spiders)

- Dictis striatipes* (striped spitting spider)
- Scytodes* spp.

Sicariidae (sixeyed spiders)

-*Loxosceles deserta* (desert recluse)

Sparassidae (hunter spiders)

-*Olios giganteus* (giant crab spider)

Tetragnathidae (long-jawed orbweavers)

-*Tetragnatha* spp. (stretch spiders)

Theraphosidae (tarantulas)

- Aphonopelma iodus* (desert tarantula)
- Aphonopelma prenticei*

Theridiidae (comb-footed spiders)

- Asagena medialis*
- Enoplognatha* spp.
- Euryopis* spp. (ant-eating spiders)
- Latrodectus hesperus* (western black widow)
- Parasteatoda tepidariorum*
- Steatoda triangulosa* (triangulate combweb spider)

Thomisidae (crab spiders)

- Mecaphesa* spp.
- Xysticus* spp. (ground crab spiders)

Uloboridae (hackled orbweavers)

-*Uloborus diversus*