

College of Agriculture and Life Sciences

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# **VENOMOUS WILDLIFE**

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Living in rural areas offers many wonderful opportunities to see wildlife. These experiences are awe-inspiring and avenues for learning. But sometimes they can put you in close contact with animals that have the potential to be dangerous to humans. Although events where human life is threatened by wildlife are uncommon, it is important to be aware of risks and act responsibly when enjoying Arizona's rural areas. One potential source of injury is encounters with venomous animals. Because most incidents resulting in injury are set in motion by people, they are relatively easy to avoid.

## **Snakes and Gila Monsters**

Arizona is home to a diverse and spectacular array of reptiles. Some of the most exciting and beautiful reptiles, however, can be dangerous to humans because they are venomous. The first venomous group that probably comes to mind is rattlesnakes. Rattlesnakes are found throughout Arizona in numerous ecosystems. There are 13 species of rattlesnakes in Arizona. Of these, the western diamond-backed, Mojave, black-tailed, and sidewinder rattlesnakes are the species most often encountered in Arizona. They are most active from March through October and shelter in abandoned burrows of other animals, brush/woodpiles, and rock crevices. They generally eat small mammals (rodents), lizards, and birds. Rattlesnakes use camouflage as a defense mechanism and to help them catch prey. While camouflage makes it difficult for people to see and avoid them, their audible rattle provides an exceptional warning most of the time.

The boldly colored Gila monster is another venomous reptile found in the lower elevations of southern and western Arizona. Although rarely seen, they can deliver a painful bite if handled. Gila monsters move slowly and feed on animals that cannot easily escape, such as young rodents and the eggs of other reptiles and ground-nesting birds. They are most active in the spring and take refuge underground during hot weather. Fortunately, rattlesnakes and Gila monsters attempt



Gila monster.

to bite humans only as a defensive measure when they feel threatened and always prefer escape to defense. Because rattlesnakes and Gila monsters are frightened of humans, they do not "attack" or chase people as often rumored. Some simple ways to prevent injury from venomous snakes and Gila monsters include:

- Use a flashlight while outside on warm evenings so you can see ahead of you.
- Clear walkways of brush and keep them brightly lit.
- Control for rodents and other prey species around your home.
- Fill all rodent holes in your yard.
- Avoid feeding birds right next to your home and outbuildings. Bird feed will also attract rodents that in turn attract snakes.

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Black-tailed rattlesnake.

- Clean up wood piles and move them away from the house and pet areas (e.g., dog runs).
- Repair broken irrigation systems immediately upon detection; pooling water is a strong attractive force to wildlife, including venomous reptiles.

Learning to identify different snakes can also prevent uneasiness and help you enjoy wildlife observations. In fact, several non-venomous snake species (e.g. gophersnakes, kingsnakes, and black-headed snakes) can be useful around your home because they eat rodents, scorpions, and even rattlesnakes.

If you encounter a rattlesnake or Gila monster near your house:

- Move slowly and deliberately away. The animal will usually remain in place or retreat. If it moves toward you it is most likely only trying to get to a safe place behind you.
- Restrain pets and children until the animal has completely moved away.
- Watch the animal most likely it is only passing through and you will not see it again.
- If it does not move on, call your local fire department or private pest control services. Keep in mind, however, that because snakes are territorial, moving them too far outside their home range usually results in their death. Additionally, moving an animal off your property creates a void for another to move in. Therefore, removing them is only a short-term solution and it is better to learn to live with them and accept them as part of the local fauna.
- For no reason should you handle a rattlesnake or Gila monster. Even dead rattlesnakes can bite reflexively after death.
- If your pet has been bitten take it to a veterinarian immediately. Most pets survive a venomous bite.

If you have been bitten:

- Remain calm.
- Remove jewelry, watches and restrictive clothing from the affected area.
- Keep the bitten extremity below heart level.
- Decrease activity as much as possible and get to a medical facility without delay.
- DO NOT: apply ice to the affected area, use incision, tourniquet, or electric shock, or administer alcohol or drugs.

### Scorpions

Scorpions are actually very beneficial to ecosystems because they eat insects, spiders, centipedes and even other scorpions. In turn, they provide an important food source for large centipedes, tarantulas, snakes, some lizards, birds, bats, and other small mammals. Scorpions are a venomous arthropod related to spiders. Some species have the potential to be dangerous to humans, particularly to small children and infants. They are found in various habitats, not just deserts. They generally enter homes when their territory is disturbed during construction, tree removal, or floods. Most scorpion species are nocturnal, meaning they are active only at night, but a few species are active during the day, or diurnal.

Scorpion venom varies from species to species, but generally consists of different mixtures of neurotoxins. The most common species in Arizona are the bark, desert hairy and stripe-tailed scorpions. Of these, the only species with venom potent enough to be dangerous to humans is the bark scorpion.

To prevent scorpions from becoming a problem around your house, there are some simple things you can do:



Female bark scorpion.

- Remove all places where they could hide such as: trash, logs, boards, stones, bricks and other objects from around the home.
- Keep grass closely mowed near the home. Prune bushes and overhanging tree branches away from your home. Tree branches can provide a path to the roof for scorpions. Minimize low growing ground cover vegetation near your home and sheds.
- Store garbage containers in a frame that allows them to rest above ground level.
- Never bring firewood inside the home unless it is placed directly on the fire.
- Install weather-stripping around loose fitting doors and windows.
- Plug weep holes in brick veneer with steel wool, pieces of nylon scouring pad or small squares of screen wire.
- Caulk around roof eaves, pipes and any other cracks in the home.
- Keep window screens in good repair. Make sure they fit tightly in the window frame.

Reptile and scorpion sightings are wonderful and usually rare events. To ensure that your encounters are positive and enjoyable, take the precautions outlined in this factsheet to decrease your chances of injury from a venomous animal. For more information on reptile and scorpion biology, conflicts and prevention, see the resources listed below.

#### Living with Venomous Reptiles http://tucsonherpsociety.org/LWVR.pdf

#### Scorpions

#### http://ag.arizona.edu/pubs/insects/az1223.pdf

Venomous Animals of Arizona, 134 pp. Available for purchase (\$10) at http://cals.arizona.edu/pubs/

Arizona Partners in Amphibian and Reptile Conservation (AZ PARC)

#### http://www.azparc.org/

Arizona Poison & Drug Info Center—Tucson Emergency Phone: (800) 222-1222 http://www.pharmacy.arizona.edu/centers/apdic/apdic.shtml

Banner Poison Control Center—Phoenix Emergency Phone: (800) 222-1222 http://www.bannerpoisoncontrol.com/



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