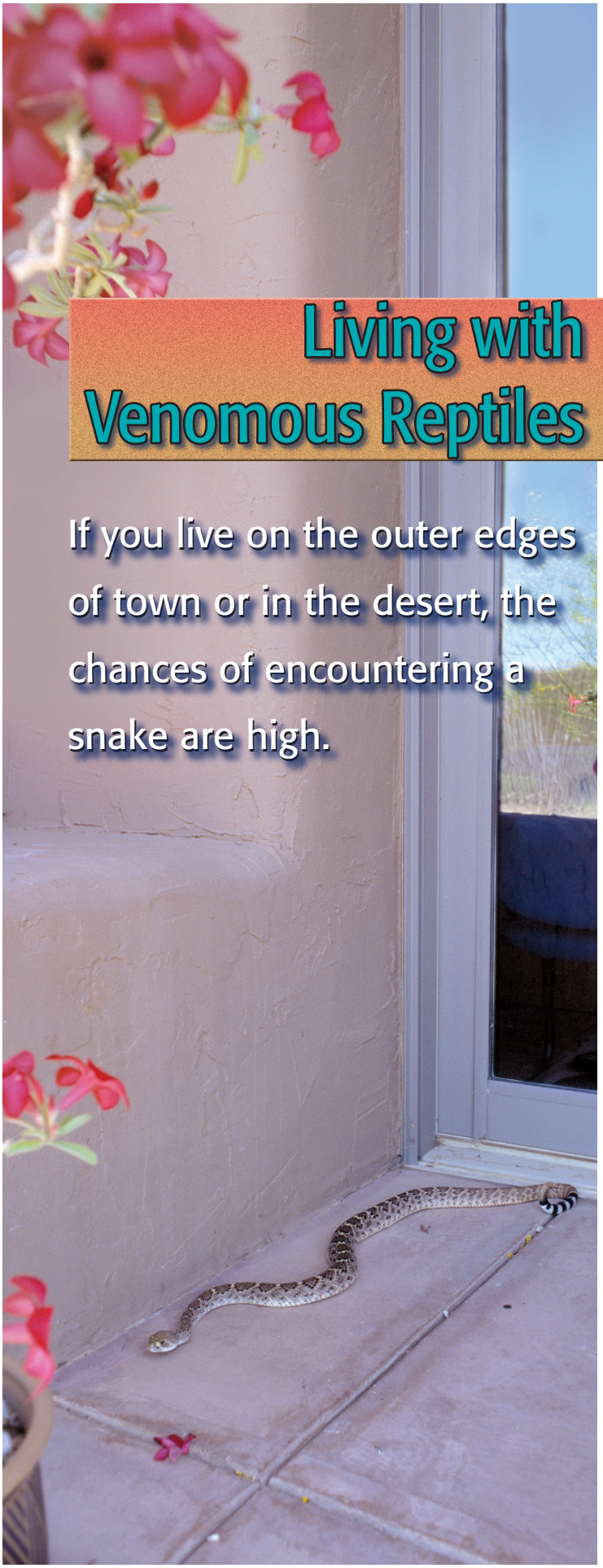
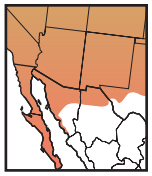




INFORMATION IN THIS HANDOUT APPLIES TO THE DESERT SOUTHWESTERN UNITED STATES AND DESERT REGIONS OF NORTHWEST MEXICO

Living with Venomous Reptiles

An encounter with a rattlesnake is a potentially dangerous situation; your knowledge about reptiles and how to avoid rattlesnakes could be invaluable.

If you live on the outer edges of town or in the desert, the chances of encountering a snake are high.

Most reptiles are harmless. Of the venomous reptiles of our region, only the rattlesnake is truly a safety concern around your home. The Gila Monster is a venomous lizard that rarely bites humans unless handled. The Sonoran Coralsnake is a small, shy snake usually less than 17 inches in length and not much bigger around than a pencil, - much smaller than the dangerous Coralsnakes of the southeastern US and tropical Mexico. Though venomous, the Sonoran Coralsnake has a very small head and mouth and is only prone to defending itself when handled. Most other snakes and lizards are also likely to bite in defense if handled but are considered non-venomous and therefore harmless to humans. **Wild animals should never be handled**; it puts the handler at risk and is extremely stressful to the animal.

RATTLESNAKES

There are fifteen species of rattlesnakes in our area. Those most often encountered are the Western Diamond-backed, Western, Mojave, Black-tailed, and Sidewinder. All of these snakes have rattles on their tails, and though many snakes vibrate their tails when nervous, only rattlesnakes can produce the characteristic buzzing noise so often heard in movies. In the warm deserts, rattlesnakes are most active from March through October. In the spring they are active during daylight hours. As days become increasingly hot around early May, rattlesnakes become more active at night and spend the day in a spot of shade or a cool shelter. In addition to these periods of activity, rattlesnakes can be seen “basking” (lying out in the sun) during any month of the year.

Rattlesnakes do not dig their own holes: they utilize preexisting shelters. Shelter sites might be abandoned burrows of other animals, brush or woodpiles, rock crevices, or any tight place where a snake can feel safe. Rattlesnakes may have several shelter sites within the range of their hunting grounds, and sometimes they will sleep in the open. All snakes are carnivorous (they eat animals). Rattlesnakes are effective predators eating rabbits, rodents, lizards, and birds. Snakes do not eat every day, and sometimes many months pass between meals.

Rattlesnakes are born alive, rather than hatching from eggs. At birth they are fully equipped with fangs and venom; miniature copies of their parents requiring no parental care. A baby rattlesnake is

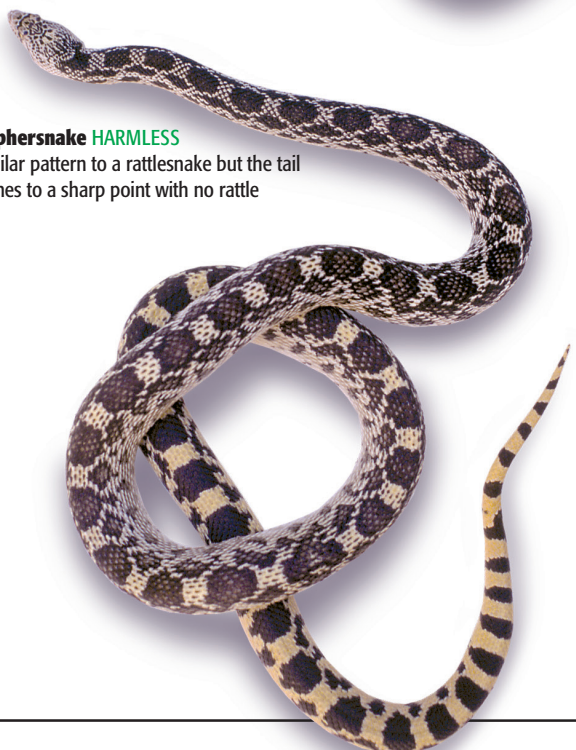
SNAKE GUIDE

Harmless snakes like Gophersnakes and Common Kingsnakes prey on rodents, competing for the same foods as rattlesnakes. It is a good idea to learn how to identify these snakes.

Common Kingsnake HARMLESS
Black with gold chain pattern or white with black bands, tail comes to a sharp point with no rattle

Western Diamond-backed Rattlesnake VENOMOUS
All rattlesnakes have a blunt tail and at least one segment of a rattle

Sonoran Coralsnake VENOMOUS
This small shy snake should not be considered dangerous unless handled



Gophersnake HARMLESS
Similar pattern to a rattlesnake but the tail comes to a sharp point with no rattle

not born with a rattle on its tail; instead it has one little knob called a prebutton. Within days, the newborn sheds its skin, and as it grows, it generates a new segment of its rattle with each shed. The single button on a newborn's tail does not produce a sound when rattled, but in about 3 weeks it will be fully capable of producing a warning rattle.

Newborn rattlesnakes are very small. They have no home territory and are low on the food chain (a lot of animals eat them). This makes for a very nervous little snake! In searching for something to eat and a place to live, newborn rattlesnakes turn up in the strangest places - swimming pools, potted plants, even in houses.

RATTLESNAKES AND YOUR HOME

Watch your step!

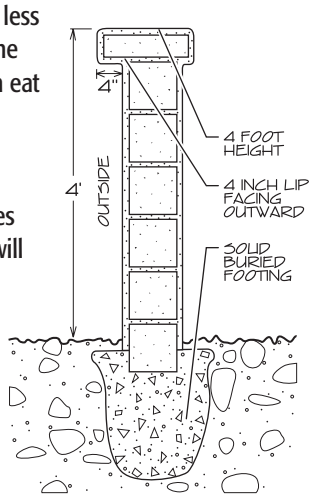
Rattlesnake colors and patterns allow them to blend with their surroundings so they often seem invisible. It is always best to look where you place your feet and hands. A flashlight should be carried at night, especially on warm nights when rattlesnakes are very active. Around your home, keep walkways clear of brush, as rattlesnakes on open ground are more visible. Keep walkways brightly lit.

Rodent Control

Rattlesnakes are attracted to their vital resources, including food, water, and a safe place to live. Rodents should be eliminated from around your home. They are both destructive to your property and a primary source of food for rattlesnakes. Realize that bird feeders in your yard attract rodents just as effectively as birds. Snakes searching for a meal are often drawn to the scent of rodents and birds around feeders. There are effective products available for controlling rodents, such as snap traps and live traps. Sticky traps and poisons are also available, but they might harm the wrong animals and are often inhumane.

Because snakes use burrows of other animals, fill all rodent holes in your yard to prevent snakes from taking up residence. Rodents not only provide tunnels for access but also leave their scent; this is quite an attraction for a hungry snake on the prowl! Wood piles or piles of junk are also very attractive to snakes. These should be cleaned up or moved away from the house. Take care when rummaging through them in case you already have a resident snake!

Harmless snakes like Gophersnakes and Common Kingsnakes prey on rodents, competing for the same foods as rattlesnakes. It is a good idea to learn how to identify these snakes. If left alone they might be encouraged to take up residence in your yard and make it less appealing to rattlesnakes. Some snakes, like the Common Kingsnake and the Coachwhip, even eat rattlesnakes.



Deterrents

Walls can be erected to discourage rattlesnakes from enclosed areas. A solid wall 4 feet high will keep out most snakes. The bottom of the wall should be sunk into the ground and have no tunnels underneath. Cover drainage holes with 1/4 inch hardware cloth. Gates should fit snugly against the ground since a one-inch opening is an open door to a snake. Keep in mind that there is no such thing as a 100%

snakeproof fence. An athletic snake may climb virtually any wall, and a very tiny snake can move through small crevices.

Several products that claim to be snake repellents are on the market. Though fashionably marketed and high priced, there is currently NO snake repellent known to be effective.

RATTLESNAKE ENCOUNTERS

Fortunately, when a rattlesnake is startled, usually its first defense is to warn you of its presence using its rattle. This encounter is always an exciting event. Though the inexperienced person may feel great fear, a little knowledge can turn one's emotions to feelings of respect and perhaps appreciation!

If you encounter a rattlesnake, keep in mind that once it senses you it will be just as nervous as you are. The snake has good reason to be afraid. By sheer size alone, you are much more of a threat to the snake than it is to you. Move slowly and deliberately when close to a rattlesnake and back away to a safe distance. Usually, the snake will either hold its ground or move away from you. The rattlesnake will not chase you. If the snake moves toward you, back away; it's probably just trying to get to a secure location just behind where you were standing. Keep tabs on the location of any rattlesnake and alert people in the area to be cautious. Small children and pets should be restrained until the snake moves on.

Despite appearances, rattlesnakes do not crawl very fast. A rattlesnake traveling at top speed would have trouble reaching 3 mph. The strike speed, however, is impossible to match. The distance of the strike can be up to two-thirds the length of the snake. A distance equal to the length of the snake can be considered a safe distance; however, 6 feet is a better idea.

If you encounter a rattlesnake in your yard and do not wish it to be there, you have several options:

- Watch the snake. Most likely it's just passing through, and you will not see it again.
- Call your local fire department. Some departments remove rattlesnakes.
- Call a private enterprise. Some specialize in the removal of animals but do charge for their service. Look under "Pest Control Services" in your local Yellow Pages. Studies have shown snakes moved more than a mile from their home will often not survive. People not wishing harm to the snake should encourage removal services to just move the snake a short distance away from the house, or better yet, just over the fence. Snakes may quickly learn to avoid your yard after being harassed.

Only people with proper equipment and training should handle rattlesnakes. No rattlesnake, not even a dead one, should be picked up by hand. Reflex bites with envenomation can occur for several hours after death.

If you're careful, the likelihood of a venomous snakebite occurring is low. If you avoid killing rattlesnakes you not only benefit the snake and the environment but also yourself. If rattlesnakes are left alone, the danger of being bitten is significantly reduced. Remember: more than half of all rattlesnake bites are provoked by the person bitten.

What to do if a rattlesnake bite occurs:

- Remain calm and reassure the victim.
- Remove all jewelry, watches, etc. from affected area.
- Immobilize limb and keep at level below the heart.
- Decrease total body activity as is feasible.
- Move victim to medical facility without delay.

What NOT to do if a rattlesnake bite occurs:

- Do NOT apply ice to bite area.
- Do NOT use incision of any kind.
- Do NOT use a constriction band or tourniquet.
- Do NOT administer alcohol or drugs.
- Do NOT use electric shock treatment.

Pets are sometimes bitten by rattlesnakes. Cats, by behavior, tend to hide out after an injury. Despite this, many survive. Although many large dogs do well with no veterinary care, it is recommended that any pet be taken to an emergency veterinary clinic if bitten. Some dog trainers offer "snake avoidance" training. Effectiveness of this training depends on the skill of the trainer and the personality of the dog.

GILA MONSTERS

Because they are brightly colored, slow moving and rarely encountered, Gila Monsters can hardly be considered dangerous to humans. They are, however, capable of defending themselves with a surprisingly swift venomous bite.

Gila Monster VENOMOUS
This slow moving lizard should not be considered dangerous unless handled or molested

The Gila Monster primarily inhabits the deserts and foothills of the Southwest, ranging from southern Sonora, Mexico, north through the deserts of Arizona, barely entering New Mexico, California, Nevada, and Utah.

The Gila Monster is the largest lizard in the United States, weighing up to 2 pounds and reaching a total length of 20 inches, including the large tail which is used for fat storage. They feed on animals that cannot easily escape, like newborn rodents, and on the eggs of reptiles and ground-nesting birds.

Gila Monsters spend most of their time underground. They overwinter in burrows and emerge in the spring, their most active season, to search for food and mates. With the onset of hot weather in late May or early June, they return to underground burrows. During the rainy season of late July and August, they become active again but are less frequently seen.

GILA MONSTERS AND YOUR HOME

Many people enjoy seeing Gila Monsters visit their yards. If you are not one of these people, follow the advice under ***RATTLESNAKES AND YOUR HOME***. The same procedures of watching your step, rodent control, and deterrents will improve your chances of avoiding a Gila Monster encounter.

GILA MONSTER ENCOUNTERS

The Gila Monster is venomous and caution should be used when one is seen. They should never be picked up or molested in any way; it puts one at risk and is in violation of state wildlife regulations.

The Gila Monster is a unique animal, inspiring myths and legends since early Americans first arrived in the Sonoran Desert. An encounter with a Gila Monster can be an exciting and positive event, although few are fortunate enough to see one in the wild.

If you encounter a Gila Monster, remember that you are much larger than it is; therefore, you pose a threat that will likely put it into a defensive mode. Stay out of its path and give it room, and it will likely continue on its way. If you encounter one in the yard, move away, alert anyone in the vicinity, and restrain small children and pets. If a Gila Monster is left alone for a couple of hours, it will likely move on. If it does not leave after several hours or even after a day, you can contact your local Game and Fish Department office for advice. A commercial animal removal service should be called only as a last resort, as they may relocate the animal too far from its home, jeopardizing the animal's life.

The Gila Monster's bite is a defensive measure. The teeth and venom cause considerable pain. It hangs on to whatever is bitten, working venom into the bite wound slowly through grooved lower teeth. Few bites to humans have been reported, and nearly all are the result of individuals handling or harassing the animal.

Because of their natural curiosity, small children and pets could put themselves at risk of being bitten by a Gila Monster; however, the Arizona Poison Center and Tucson veterinarians report that very few children or pets have ever been bitten. Nevertheless, parents and other caregivers should always exercise caution whenever small children are playing near wilderness areas. Children should be taught about dangerous desert animals and how to avoid risky interactions with them.

What to do if a Gila Monster bite occurs

- Remain calm.
- Quickly remove the Gila Monster using an object to pry jaws open. Keep away from the animal after you have dislodged it.
- Transport bitten individual to medical facility immediately.
- Remove jewelry, watches, and restrictive clothing from affected limb.
- Immobilize limb below heart level.

What NOT to do if a Gila Monster bite occurs:

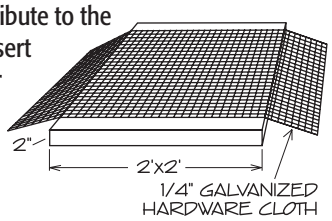
- Do NOT apply ice to the bite area.
- Do NOT make an incision of any kind.
- Do NOT use a constriction bandage or a tourniquet.
- Do NOT administer alcohol or drugs.
- Do NOT use electric shock treatment.

CONSERVATION AND PROTECTION OF RATTLESNAKES AND GILA MONSTERS

Several species of rattlesnake are protected by state laws in the southwestern US due to their limited range and numbers. It is illegal to collect or harm these protected rattlesnakes. The Gila Monster, protected throughout its range in both the United States and in Mexico, cannot be collected or harmed in any way.

Most reptiles are threatened by the activities of human beings. These include illegal collection as pets, destruction of natural habitat, road kills, drownings in swimming pools, and deliberate killing.

If you have a swimming pool, you can contribute to the conservation of Gila Monsters and other desert wildlife by using a floating escape device for animals unlucky enough to fall into the water. It can be as simple as a Styrofoam board floating in the pool with some hardware cloth draped across it.



The best protection against snakes is knowledge. Educate yourself, your family, and your friends about the desert and its amazing animals. Learning which snakes are harmless and which are venomous not only increases your safety but can also be enjoyable.

Suggested reading

Tucson Herpetological Society Web site: **http://tucsonherpsociety.org**

Arizona PARC Web site: **http://reptilesofaz.com**

A Field Guide to Western Reptiles and Amphibians. by Robert C. Stebbins. The Peterson Field Guide Series. 2003

Deserts. by James A. MacMahon. National Audubon Society Nature Guides. 1985

The Venomous Reptiles of Arizona. by Charles H. Lowe, Cecil R. Schwalbe, and Terry B. Johnson. Arizona Game and Fish Department. 1986

Poisonous Dwellers of the Desert. by Trevor Hare, Southwest Parks and Monument Assoc. Tucson, Arizona. 1995

Gila Monster - Facts and Folklore of America's Aztec Lizard. by David E. Brown and Neil B. Carmony, High Lonesome Books, Silver City, New Mexico. 1991

If you have specific questions about snakes or Gila Monsters, here are some phone numbers that may help you:
Tucson Herpetological Society (520) 760-0574
Arizona Poison Control (520) 626-6016
Arizona-Sonora Desert Museum (520) 883-3058
University of Arizona, Department of Ecology (520) 621-3187
Arizona Game and Fish Department (602) 942-3000

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