

Venomous Animals of Texas

A venomous animal is one that produces a poison to attack its victims or defend itself. Some animals are more poisonous than others. People who have an encounter with these animals, have varied reactions to their venom. This article is an overview of the more commonly reported animals in Texas that inflict bites or stings. Hopefully this will help you identify critters you encounter including flying insects, crawling critters, spiders, snakes, and marine life. Some of the information used is provided by Dr. John Jackman, and is used with his permission.

Mistaken as Venomous

Texas has many insects, arachnids and arthropods that are mistakenly thought to be venomous. The list includes windspiders, and windscorpions, "daddy long-legs", crane flies that look like giant mosquitoes, scorpionflies, dragonflies, and many more.

Nuisance Biters and Sprayers

Various insects, spiders and arthropods can produce painful bites that vary in intensity depending on the victim's sensitivity. The effects are felt, but are usually not long lasting or life threatening. They can, however, be quite painful or irritating for a short while. These include giant water bugs, wolf spiders, tarantulas, and jumping spiders.

Ground beetles and bombardier beetles spray caustic substances that can burn or irritate the skin. Whip scorpions can spray a vinegar-like substance from the tail. Millipedes produce chemicals that can irritate the skin if they are handled.

Flying Insects

Bees

Bees typically establish new hives in the spring and fall. This is when they are most active. Honey bees are the only bees with a barbed stinger that can sting you only once. Bee stings are intense and immediate. If possible, remove the stinger and the attached poison sac by scraping it from the skin with a dull edge or fingernail. Do not pinch the stinger to remove it. Consult the Poison Center if symptoms include breathing difficulty, hives, cramping, tightness in the chest, or other allergic type reactions. If onset of symptoms is immediate and severe, call 911.

Honey Bees are about $\frac{1}{2}$ inch long. Their color varies from light brown to black mixed with yellow. Africanized honey bee is a strain of this species and difficult to distinguish from the managed honey bees.



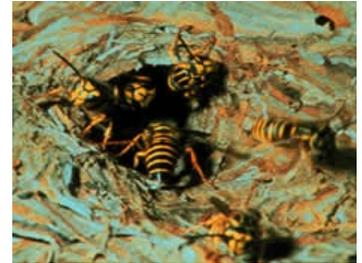
Bumble Bees are large, husky bees and about $\frac{3}{4}$ inch long. Their bodies are fuzzy with black and yellow or black and orange hairs. They usually nest in the ground or abandoned areas.



Other bees you might encounter are Carpenter bees, leaf-cutting bees, and sweat bees.

Wasps

Wasps stingers are not barbed, which allows for multiple stings. The pain is sharp and intense and may cause local swelling. Treat local reactions the same as other stings. Reactions should subside in a few hours. Consult the Poison Center if breathing difficulty occurs at any point, or call 911.



Yellow jackets, sometimes called "hornets" are about $\frac{1}{2}$ inch long. They are typically black with yellow markings on the head, thorax and abdomen. The body is smooth and wings are clear. They may be aggressive when looking for food, especially in the fall.

Paper Wasps include the common "red" wasp, with a reddish-brown body color that may have yellow markings. They are $\frac{3}{4}$ to one inch long. They usually nest under eaves or other sheltered areas, with less than 200 cells dangling on a single filament.



Mud Daubers come in several species that are $\frac{3}{4}$ to one inch long. Their body may be dull black, iridescent blue-black or black and yellow. They build mud tubes on the sides of buildings or other objects in sheltered areas. They can sting, but most attacks are bluffs.



Cicada Killers are large wasps measuring 1.5 inches long. The head and thorax are dark red, and the abdomen is black with yellow spots or bands. The wings are honey or rust-colored. They built nests in sandy soil or embankments that are about 6 inches deep. Females sting cicadas to paralyze them and carry them to their nests. Even though the female can sting they are rarely aggressive. Males are aggressive, but cannot sting.



Velvet Ants are approximately $\frac{3}{4}$ inch long. The wingless female wasps look like "fuzzy ants", but they are not ants. The black and orange-red markings make them strikingly colorful. The males have wings and can actually "squeak" when cornered. Stings are extremely painful. This species is commonly called the cow killer because of the pain it causes.



Reference for more information on insects: <http://insects.tamu.edu>

Crawling Critters

Ants

Fire Ants consist of four species in Texas. The most aggressive are the Red Imported Fire Ants which are found mainly in the eastern two-thirds of Texas. They are less than $\frac{1}{4}$ inch long. The females are reddish brown and the males are darker. They respond rapidly and aggressively to any disturbance of the colony or to a food source. Ants both bite and sting. A single fire ant can and will sting repeatedly, even after the venom sac is empty. Initially the stings result in a localized intense burning sensation followed within 24-48 hours by the formation of a white pustule at the sting site. A minority of those stung who are hypersensitive to the venom require more intense treatment. Consult the Poison center if breathing difficulty develops.



Velvet Ants - See Wasps.

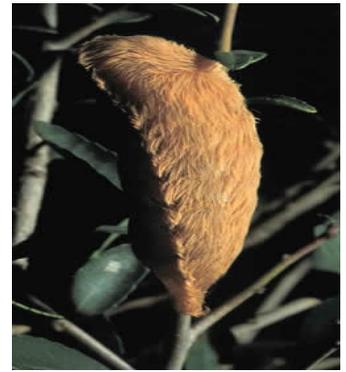
Blister Beetles

Blister beetles have a long, cylindrical body with a narrow neck. They are $\frac{3}{8}$ to 1 inch long. There are more than 50 species in Texas. The color is variable, commonly black, gray metallic blue and yellow. They may have lines or spots on their back. Blister beetles do not bite or sting, but produce a fluid which blisters the skin. They feed on alfalfa, soybeans and other legumes. They are dangerous if eaten and have been known to cause death when ingested by horses.



Puss Caterpillars

Puss caterpillars are sometimes called asp caterpillars. They are approximately 2 inches long and are covered with a thick mat of hair. They are usually tan or gray, but can vary from white to black. Adults are called flannel moths. They feed on oaks, elm and other woody plants. The hair conceals spines on the back that inject toxic chemicals when touched. These are extremely painful and can cause fever, inflammation and nausea.



Scorpions

There are about 18 species of scorpions in Texas, with most of them found in the Big Bend area. They have an average size of 2 inches. The color may vary from dark to light. Although Texas scorpions are not considered deadly, they can inflict a sharp, painful, sting which may produce a local reaction. Individual reactions may vary. The venom is a neurotoxin and anyone stung should be watched closely for adverse or allergic reactions. Consult the Poison Center if breathing difficulty develops.



Centipedes

Texas has several species of centipedes that are small and of little medical importance. The species of concern are the ones that average about 6-8 inches, but can be larger. They have one pair of legs per body segment. The body is brown to deep blue with yellowish to orange head and legs. Centipedes have a pair of pincers that produce an intense, scorpion-like pain. Most victims complain of burning pain. Each leg has a needle like structure on the tip that can inflict pain. Consult with the Poison Center if concerned.



Spiders

Spiders serve a very beneficial purpose in nature, often feeding on nuisance critters such as mosquitoes, gnats, flies, crickets, etc. All spiders have venom; that is how they kill their prey. If you are bitten by a spider, you may experience a red, swollen, itchy area on your skin. However, most bites are not medically significant, and require little attention with the exception of bites from widow spiders and recluse spiders. If you feel or see the spider biting you wash the area with soap and water. Call the Poison Center for further instructions. 1-800-222-1222.

Tarantulas

Tarantulas in Texas are large hairy spiders, brown to black in color, and adults are more than 3 inches long. They may be seen in the evenings when they are looking for food. Migrating males can be seen in early summer. If you find one crawling, get your camera and take a picture or just leave it alone. Tarantulas are not aggressive spiders and only bite when cornered or feel threatened. They do possess venom. There is no scientific evidence that any of their venoms are lethal, but bites from some species can be painful and cause unpleasant symptoms. Tarantulas can also brush hairs off their abdomen which can be irritating to the skin or eyes. If you are bitten and have trouble breathing, you may be allergic and should consult the poison center or call 911.



Wolf Spider

Wolf Spiders hunt at night. They are often large, generally brown and black, and may have stripes on both their abdomen and head. They are very common, especially in new housing developments where the soil has been disturbed. They frequently enter homes. They are relatively harmless but their bite can produce local pain and swelling.



Orbweaver Spiders

Orb-weaving spiders make the beautiful webs with concentric circles that are often very ornate. They come in many shapes, sizes, and colors. Orbweavers are generally harmless, but can be a nuisance if they build large webs in places you like to walk. If you've been bitten by a spider of any kind and feel concerned, contact your local Poison Center.

Yellow Garden Spiders, the largest and best-known of the orbweavers. They are marked with yellow, black, orange or silver. The female body can be more than 1 inch long, with much longer legs. The males are about half the size of females, and dark colored. This garden spider is also known for the zigzag design in their web and some folks call them the "writing spiders." They are very beneficial and eat harmful insects, such as grasshoppers. It is possible for them to bite you if you get into their web or try to handle them. They will often spin a web across a walkway or trail, spanning several feet. If you notice these spiders building webs close to your home and would like them to move, you don't need to harm the spiders. Simply tear down the webs. The spiders will relocate further away where they can continue to do their part in keeping down the insect population.



Spinybacked Orbweavers are sometimes called hardbacked orbweavers, just in case you want to learn more about this unique little spider. They are common in wooded areas and their abdomen colors may be white, yellow, orange or red. The unusual flattened, spiny body shape makes it look like a crab...but it is not a crab spider...they are different.



The Golden Silk Spiders weave very strong webs which look like gold thread in the sunshine. The female (3") is much bigger than the male (1/2"). They rarely bite people. Although many people call them Banana Spiders because of their yellow bodies, they are not banana spiders. In fact they are very different from the spiders found in banana bunches.



Jumping Spiders

Jumping spiders, are among the most interesting spider groups to watch. Jumping spiders come in many sizes and color patterns. Active hunters during the day, they have good eyesight, relying primarily on movement to locate prey. They stalk their prey before attacking in a fast leap. Jumping spiders put out a line of webbing when they jump and can sometimes be seen dangling from this silken dragline after a leap that fails. Many jumping spiders are bold, stocky and often brightly colored. They often have conspicuous bands of black and white on their bodies or legs. Others have velvety red abdomens. Like most spiders, jumping spiders are not considered hazardous to humans and are unlikely to bite unless cornered or handled. One of the most common and conspicuous of the jumping spiders is black with a distinct irregular white spot on the back of the abdomen. It can be found in gardens and around homes.



Recluse Spiders

There are 5 different species of recluse spiders. The brown recluse spider is commonly known as a "fiddleback" because of the violin-shaped marking on the back of the head portion. The shape and intensity of the fiddle design may vary. The body size is 1/4 to 3/4 inch with the leg span about the size of a half dollar. It lives in dark secluded places where there is little activity. Effects from a bite may be immediate or delayed and vary from a stinging sensation to intense pain. Within 24-36 hours fever, chills, weakness and pain may occur. Within 24 hours, the bite site can erupt into an ulcerating lesion. Due to potential medical problems, call the Poison Center for instructions



Widow Spiders

There are several species of widow spiders in Texas, but the most notorious is the southern black widow. It is the most recognized of the venomous spiders. They are shy and prefer to live in protected cavities outdoors. The female is about 1.5 inches long with a red marking on the underside of her spherical abdomen. The marking typically is red hourglass shaped, but not always. The color may vary from white, red, orange, pink, or other colors. Females bite when threatened or when protecting an egg sac. The bite is usually felt. The neurotoxin causes intense pain in 1 to 3 hours and may cause medical difficulties. Bites may be problematic, especially for infants and elderly. Call the Poison Center for instructions if bitten.



Snakes

In Texas, there are four types of venomous snakes, rattlesnakes, copperheads, water moccasins, and coral snakes. The first three are in a group we call vipers. Vipers have a characteristic large head described as arrowhead or triangle shaped. They have heat sensing pits on their head and elliptical eyes. They have retractable fangs in the upper part of their mouth that can pierce the skin and deliver venom when used for prey or defense. The venom of all three is very similar and the same anti-venom treatment is used when necessary for all three vipers. The fourth snake is a coral snake which is not a viper. Its head is basically the same as the rest of the body, it has round eyes, and 1/8 inch long fixed rear fangs. The venom is different from the others and therefore the anti-venom is different. If bitten by any of these snakes, call the Poison Center, 1-800-222-1222. Non venomous snakes will bite to protect themselves and may cause a bacterial infection. For any snake bite, wash the site if possible. For venomous snakes, it is not recommended that you try to cut and extract the venom, use a tourniquet, or place ice on the bite site. Remove constricting clothes and note the time of the bite. Call the Poison Center for further instructions.

Rattlesnakes

There are about ten different types of rattlesnakes in Texas. They range from the small pigmy rattler to the large timber rattler and include the massasauga, mojave, black tail, western diamond back, mottles rock, banded rock, and prairie. Rattlesnakes are pit vipers that have a triangular-shaped head which is broader than their neck. Their trademark is a rattle on the end of their tail, which frequently serves as a warning signal when they feel threatened. They have a wide range of color variation. They use heat sensitive areas in the pits on their heads. Venom is injected through fangs which puncture the victim's skin.



Copperheads

There are three different types of Copperheads found in Texas. The broadband copperhead and the southern copperhead cover a large area of the state. The trans-Pecos copperhead is only found around the Big Bend area. Copperheads are also pit vipers, and are recognized by their copper-colored head and body. The body is marked with bands of darker brown in an hourglass pattern. Like all vipers, copperheads can pose a danger to humans. It is the most common viper bite in many parts of Texas.



Cottonmouth Water Moccasin

The cottonmouth is the only North American venomous water snake. This dangerous semi-aquatic snake is aggressive and will stand its ground or even approach an intruder. It is characterized by a brown, olive or blackish dark body with lighter belly. The underbelly is frequently mottled with dark areas. The mouth is frequently in an ominous open position exposing the white inner surface from which it derives its name. It is a dangerous predator and can inflict a damaging bite. It is a very close relative of the copperhead and the young look the same.



Coral Snakes

This typically very small snake averages only 26 inches. The beauty of this snake represents a true danger since small children may want to pick it up. The coral snake found in Texas is the only black, red, and yellow cross-banded snake with the red and yellow bands touching. "Red against yellow kills a fellow, red against black, poison lack." The snake's small fangs do not penetrate well, so many bites do not inject venom, but the venom is dangerous. If bitten, call the Poison Center.



Treatment for Bites and Stings

For insect or spider bites:

- Remove stinger if possible
- Wash with soap and water
- If victim develops itching, or irritation, call The Poison Center for instructions.
- If patient develops breathing problems, wheezing or swelling around the lips or tongue, call 911.

For snake bites:

- Do not use ice or a tourniquet.
- Call the Poison Center for instructions [1-\(800\)-222-1222](tel:1-800-222-1222)
- Go to the nearest emergency room

Marine Life

Envenomation from marine animals is not uncommon if you spend a lot of time in the Gulf of Mexico waters. Some envenomations have been shown to cause human deaths, although the numbers are not large. Marine animal envenomations mostly cause severe pain. Marine envenomations are divided into three basic types: envenomations from the tiny "nematocysts" of jellyfish, envenomation by bites from sea snakes, octopus, and the cone shell's proboscis, and envenomation by penetrating spines. The first aid treatment is specific for each species, as is the medical treatment. Although there are other marine animals that may cause envenomations, the most common encounters are listed below.

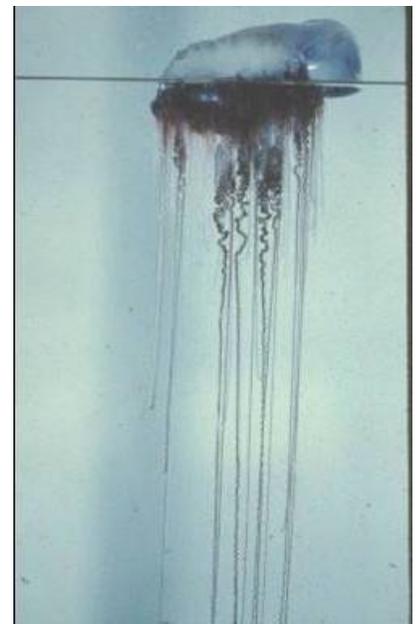
Jellyfish Stings

Portuguese Man-O-War

The Portuguese Man-O-War can be seen floating on top of the water or on the beach. It cannot move on its own and relies on the current and wind for its movement. The tentacles below its body have numerous stinging cells called nematocysts. A sting will cause pain and swelling. In severe cases, a severe backache, inability to move or breathing problems can occur. This can be fatal. Permanent purple lines may also be seen at the wound site. The same reaction happens if stung by a Jellyfish.

Treating a Jellyfish or Portuguese Man-O-War Sting

- Pour vinegar over the area.
- Remove tentacles using a towel or glove. DO NOT RUB
- Apply a paste of vinegar and unseasoned meat tenderizer carefully while wearing gloves
- Seek medical treatment if an allergic reaction develops



Marine Bites

Sharks

There are over 50 species of sharks that live in the gulf waters. Most prefer deepwater while others prefer the warmth of more shallow water. During the spring and summer months, the ocean currents or food will bring many sharks close to shore near sandy beaches. Sharks do not like to bother with people, but sharks will attack if they feel threatened or think you are a meal. Some things that provoke sharks include blood, shiny clothing or accessories, flapping arms and legs, swimming at dawn or dusk, or a misguided foot. Wade fishing can be dangerous in the gulf because the blood from bait attracts many animals, including sharks.

Treating a Bite

- Apply pressure to wound with a clean towel
- Clean with soap and water
- Go to the local emergency facility for additional treatment

Spiny Marine Life

Gaff Top Sail Catfish

The gaff top sail catfish is found in shallow water hunting for dead fish on the bottom. They can also be found on the beaches or docks where they are discarded by fishermen. Though these catfish don't usually attack, if someone were to step on or mishandle these catfish, the spines on its back are sharp enough to cause a deep cut, even if the fish is dead. The spines are shaped like a fishing hook and are not easily removed. The spines may also have bacterial slime over them increasing your chances of an infection. In fact, because the body's reaction to the slime can be very severe, the spines were once thought to be poisonous. Symptoms of infection include a gray to white wound changing to red in minutes, tingling and pain in the affected area, swelling, and a chilled feeling. You may also feel sick and vomit.



Sting Ray

There are many different types of sting rays. Many are found in the Gulf of Mexico. Most sting rays are gentle animals that rest along sandy or rocky bottoms or in crevices. When someone steps on the sting ray, it swats the person with its tail and the underlying stinger, or "barb", pierces the skin and releases its poison. The affected person will feel severe pain throughout the body and then feel weak and tired. Some people may have a drop in blood pressure, rapid heart beats, chills, feel sick or feel like they can't move.



Treating a Spine Wound

- Do not attempt to remove spines, many are brittle and will break or are shaped like a fish hook and will tear skin.
- Immerse in hot water for 45-60 minutes to reduce pain and swelling.
- Cleanse with soap and water **except** Sea Urchin wounds.
- Seek medical treatment if infection or allergic reaction develops

The Poison Center is available at all times to advise you on bites and stings.