Be Nature Safe – Texas Critters, Environment, Safeguards

*Insects

--Red Ants, Bees & Wasps

Imported Red Fire Ants

Solenopsis wagneri

There are over 210 species of ants in Texas. Several are considered common lawn pests, but only one is considered a serious nuisance to humans-the Imported Red Fire Ant. Introduced in the 1930's, this ant has spread to infest 9 southeastern states including Texas. These ants deliver a painful sting that produces a red pustule that itches and burns. These stings are usually not serious except for the rare instance of serious allergy. Red Fire Ants build mounds that can reach 18 inches in height depending on the soil. Each mound may contain literally millions of ants that can move very quickly when the mound is disturbed. The good news is Red Fire Ants actually eat a lot of insects that are considered pest species. In urban areas fire ants feed on flea larvae, chinch bugs, cockroach eggs, chiggers, ticks and other pests.

How to Avoid

There is not much in the way of precaution to take until one becomes aware of the presence of Fire Ants and then moving away from them. Care should be taken with small children and newborn or confined pets, since their ability to escape attack are limited. Because Texas has a native fire ant species that is not a pest species, identification of the kind of fire ant present is important before treating an area with any chemical controls. Using the least toxic product is also strongly recommended.

What to Do

Fire Ant stings should be kept clean and intact to prevent secondary infections, topical analgesics can help the itching and burning that may persist for up to several days.

Bees and Wasps

Bees are furry insects that usually live together in colonies or hives. They are commonly seen during the summer, wherever there are flowers, gardens, fields, and forests. Bees are the world's most important plant pollinators. Wasps are often confused with bees. They are not usually furry and

many are predators. Wasps have unbarbed stingers that can be used again and again. Bees have barbed stingers which are left in the victim. After using it's stinger, a bee soon dies. Bees only use their stingers in self-defence, while wasps can use them repeatedly to obtain food.

How to Avoid

When eating outdoors, keep food covered, especially fruit and soft drinks. Should a bee or wasp fly near you, slowly raise your arms to protect your face and stand still or move slowly to escape.

What to Do

Try this home remedy: Mix one part bleach to nine parts water. Saturate a cloth with the solution and place it on the sting. If the stinger is still in, scape it out with a credit card or a piece of cardboard. Don't pull it out because it will release more venom. Some people have severe reactions including swelling, breathing difficulties, severe drop in blood pressure and shock. See a doctor immediately or call 911

*Arachnids

--Scorpions, Centipedes, Brown Recluse & Black Widow spiders

Scorpions

Centruroides vittatus

Scorpions have 4 pairs of legs, two pinchers and a segmented tail ending in a poison gland with a stinger. This scorpion is found throughout Texas and often under rocks or boards and other litter. This scorpion is commonly found in homes and feeds on insects, spiders, centipedes and other scorpions and is active mostly at night. Similar to a bee sting, the sting from a scorpion causes pain and local swelling but usually is not serious except for rare instances of allergy for which medical attention should be sought.

Centipedes


Scutigera coleoptera

Centipedes are long, multi-segmented arthropods that have one pair of legs for each segment. They have poison claws located directly under the jaws. Centipedes prefer moist or humid areas like basements and cellars. The House Centipede who lives primarily indoors eats small insects such as cockroaches, clothes moths, houseflies and other insects found in homes. Their bite is similar to a bee sting, but because allergic reactions can occur, it is advised to consult medical care in the event of more serious symptoms.

Spiders

There are almost 900 species of spiders in Texas. Only 2 groups of spiders in Texas are considered poisonous to humans. Spiders eat insects and other arthropods. A physician should treat bites from either of these two spiders as soon as possible.

Brown Recluse


Loxosceles reclusa

So named for it's shy nature, the Brown Recluse spider tends to hide during the day and is most active at night. It lives in and around buildings in warm, dry places, like closets, barns, etc. Often called 'the fiddleback' spider because of the design of a violin on it's back between the eyes and the abdomen, the spider's venom causes death and decay of the tissue surrounding the site of the bite.

How to Avoid

Be aware that these spiders like to hide in dark, undisturbed places and can be fairly common in houses. Shake out shoes first before putting them on. Wear gloves while dusting or reaching into places where visibility is not good, especially if you notice a lot of cobwebs.

What to Do

Seek medical attention

Black Widow

Latrodectus mactans

Black Widow spiders are found all across the United States. It prefers protected cavities outdoors, often in portable toilets, abandoned sheds, cellars and other undisturbed places. It is the only shiny black spider (males and juveniles may show more color) and has a red hourglass pattern on the underside of it's abdomen. The Black Widow gets its name because of the reputation of some of the species females to devour the males after mating, but this is not true of all species. Only the female is dangerous to humans. The bite feels like a pin prick or may not be felt. There may be slight local swelling and two faint red spots surrounded by local redness at the bite. Pain may become intense within one to three hours and may continue up to 48 hours. Pain usually localizes in the abdomen and back. There may be pain in the muscles and soles of the feet, and eyelids may become swollen. Other symptoms include nausea, profuse perspiration, tremors, labored breathing and speech, and vomiting. During this time, a feeble pulse, cold clammy skin, unconsciousness, convulsions and even death may result if the victim does not receive medical attention immediately. Additional complications may occur due to the infection of the bite. Bites are uncommon and serious long-term complications or death are rare.

What to Do

Seek medical attention. Those at most risk of serious reaction to Black Widow venom are small children and older or infirm persons.

*Fish

--Stingrays

Stingrays

Dasyatis americana

Stingrays are a bottom-dwelling, flat fish that live in salt water. Like sharks, stingrays are cartilaginous which means, they have cartilage instead of bones. They also have a sharp barb on the base of a long tail that is capable of injecting poison. Most stings are usually delivered to a leg or foot when someone steps on a stingray while walking in shallow water triggering the reflexive response of the stingray. Stingrays eat worms, fish, crustaceans and mollusks. The stab of a stingray barb is characterized by immediate intense pain in the area of the wound and some blood loss. Severe allergies are rare but do occur.

How to Avoid

Stingrays are not aggressive and will only attack if threatened. The best way to avoid being stung is to shuffle your feet when you walk in surf or shallow bays where they live. That way, you give the stingray plenty of time to get out of your way and you don't bring your foot down on top of one.

What to Do

Stingray poison is heat sensitive, which means, it is neutralized by very hot water. If you are stung, submerge the wound in water as hot as you can stand, and the pain will subside very quickly. Medical attention should be sought afterwards because the barbs can frequently break off in the wound and need to be removed. Secondary infections can occur and Tetanus shots may need to be administered.

*Snakes

--Pit Vipers, Copperheads, Cotton Mouth, Rattlesnakes, Coral Snakes

Texas is home to over 105 different species and subspecies of snakes. Only 15 of those are potentially dangerous to humans. Those are the snakes that we feature here.

Pit Vipers

Pit vipers are venomous snakes that have an opening on each side of the head between the eye and the nostril. In Texas, we have 3 groups of these snakes: Copperheads, Cottonmouths, and Rattlesnakes.

Copperheads

Agkistrodon contortrix

Copperheads have chestnut or reddish-brown crossbands on a lighter colored body. These snakes are found in rocky areas and wooded bottomlands and are rare in dry areas. In the spring they can be found along streams and rivers, as well as in weed-covered vacant lots. There are three subspecies of Copperheads in Texas; **Southern copperhead** (*A.c. contortrix*), 20-30 inches long and found in the eastern one-third of the state; **Broadbanded copperhead** (*A.c. laticinctus*), about two feet long, widely scattered in central and western Texas; and the **Trans-Pecos copperhead** (*A.c. pictigaster*), 20-30 inches in length and found near springs in the southern part of the Trans-Pecos.

Cottonmouths

Agkistrodon piscivorous

The Latin name piscivorous means 'fish eating,' indicating its dietary characteristics. Also known as 'water moccasins', only one recognized supspecies is found in Texas; **Western cottonmouth** (A.p. leucostoma). Cottonmouths can be dark brown, olive-brown, olive green or almost solid black. They are marked with wide,

dark bands, which are more distinct in some individuals than in others. Juvenile snakes are more brilliantly marked. The cottonmouth gets its name from the white tissue inside its mouth, which it displays when threatened. This heavy-bodied snake, which averages about 3-1/2 feet in length, is found over the eastern half of the state in swamps and sluggish waterways, coastal marshes, rivers, ponds and streams.

Rattlesnakes

There are two groups of rattlesnakes: the more primitive forms belong to the genus *Sistrurus*. Texas has two:

Western massasauga (*Sistrurus catenatus tergeminus*), light gray, with brown oval blotches along the middle of the back and smaller blotches along each side. They are two feet in length and found through the middle of the state in grasslands, marshy and swampy areas.
Desert massasauga (*S.c. edwardsii*), lighter in color than the western massasauga, smaller and more slender. Found in the Trans-Pecos, western Panhandle and the lower Rio Grande Valley.

The more advanced forms of rattlesnakes belong to the genus *Crotalus* and Texas is home to six:

Western diamondback (*Crotalus atrox*), Brown, diamond-shaped markings along the middle of the back and alternating black and white rings on the tail. Averages 3 1/2 to 4-1/2 feet in length, and can reach seven feet. This is the most common and widespread venomous snake in Texas, found in all but the easternmost part of the state.

Timber rattlesnake (*Crotalus horridus*) also known as Canebreak rattlesnake is a large, heavy-bodied snake averaging 4-1/2 feet. Brown or tan with wide, dark crossbands. Tail is entirely black. Found in the eastern third of the state in wooded areas in wet bottomlands.

Mottled Rock rattlesnake (*Crotalus lepidus*) is light bream or pink background with widely spaced, dark crossbands and mottled areas between the crossbands. Small and slender with an average length of about two feet. Found in the mountainous areas of West Texas.

Banded Rock rattlesnake (*C.l. klauberi*)Similar to the mottled rock rattlesnake, but darker greenish-gray in color. Found only in the extreme western tip of Texas.

Blacktail rattlesnake (*Crotalus molossus*) is gray to olive green with dark blotches along the back and a black tail. Averaging a length of 3-1/2 feet, it is found from Central Texas throughout most of West Texas in bushes and on rocky ledges.

Mojave rattlesnake (*Crotalus scutulatus*) is similar to the western diamondback in markings, but smaller and more slender and found only in extreme West Texas.

Prairie rattlesnake (*Crotalus viridis viridis*) is a slender rattler that is greenish or grayish, with rounded blotches down the middle of its back. Average length is about three feet and its found in the grassy plains of the western third of the state.

Coral Snakes

Micrurus fulvius tener

The brightly colored Texas coral snake is the state's only member of the Elapidae family, which includes the cobras of Asia and Africa. The coral snake is slender with a small indistinctive head and round pupils, and is usually is 2-1/2 feet or shorter. Its distinctive pattern is a broad black ring, a narrow yellow ring and a broad red ring, with the red rings always bordered by the yellow rings. Several harmless snakes are similarly marked, but

never with the red and yellow touching. 'Red on yellow, kill a fellow; red on black, venom lack,' is a handy way to distinguish the highly venomous coral snake from nonvenomous ringed species. Coral snakes are found in the southeastern half of Texas in woodlands, canyons and coastal plains.

How to Avoid

Learn to recognize the snake species that are likely to be in the area. Please do not kill a snake - even a venomous one - they serve a valuable function in the environment. The majority of bites result from people taking unnecessary or foolish risks with venomous snakes. Understanding what snakes look for in suitable habitat can help you know when to be wary. Understanding their behavior will help you know what to do if you encounter one. Snakes like tall grass.

- Keep the lawn around your home trimmed low.
- Remove any brush, wood, rock or debris piles from around the residence - they make great hiding places for snakes and their prey - rodents.
- Always wear shoes while outside and never put your hands where you cannot see them.
- Be careful when stepping over fallen logs and rock outcroppings.
- Take care along creek banks and underbrush.

Snakes do not prey on humans and they will not chase you, in fact they usually retreat or escape if given the opportunity. The danger comes when they are either surprised or cornered. Do not play around with a dead snake, they have been known to bite and envenomate. Get a good field guide and keep it handy especially in the field.

What to Do

If bitten,

1. Assume envenomation has occurred, especially if initial symptoms are present. Initial symptoms of pit viper bites include fang puncture marks; in addition, they almost always include immediate burning pain at the bite site, immediate and usually progressive local swelling within five minutes, as well as local discoloration of the skin. Initial symptoms of coral snake bites include tremors, slurred speech, blurred or double vision, drowsiness or euphoria and a marked increase in salivation within four hours; however, life-threatening effects from coral snake envenomation may not be evident for 24 hours or longer.
2. Identify the species of venomous snake that inflicted the bite, if possible, taking care to avoid another person being bitten. Identification is not necessary, but may be helpful.
3. Keep the victim as calm as possible. This helps reduce the spread of venom and the onset of shock.

4. Keep yourself and any other members of the group calm as well. This will help reassure the victim and ensure that the appropriate first-aid measures are followed, as well as preventing anyone else from becoming injured.
5. Know and be alert for the symptoms of shock, and institute the proper treatment should it ensue. Difficulty in breathing and/or kidney failure are frequent symptoms of envenomation.
6. Wash the bite area with a disinfectant if available.
7. Remove jewelry such as rings and watches, as well as tight-fitting clothes, before the onset of swelling.
8. Reduce or prevent movement of a bitten extremity, using a splint if possible; this helps decrease the spread of venom. For the same reason, position the extremity below the level of the heart.
9. Get the victim to a medical facility as soon as possible and begin treatment there with intravenous antivenom, crystalloid solutions and antibiotics. Antivenom treatment is generally most effective within the first four hours of envenomation, and is ineffective after 8-10 hours.

What NOT to Do

1. **Do not** make incisions over the bite marks. This can result in significant damage to already traumatized tissue, and can damage intact structures such as nerves and blood vessels, enhance bleeding caused by anticoagulant components of venom and increase the rapid spread of venom throughout the body if the circulatory system is compromised. A suction device, such as the Sawyer Extractor™, may be used without making any incisions. This device may remove significant quantities of venom, although its efficacy has yet to be conclusively determined.
2. **Do not** use a tourniquet or other constricting ban except in extreme cases of envenomation, and then only if properly trained in the technique. Such devices are of no value if applied more than thirty minutes after the bite, and if improperly used they can restrict blood vital blood flow to the traumatized tissue and possibly result in the amputation of an extremity. Unbearable pain can also result, and the improper loosening of such devices can allow sudden systemic absorption of venom.
3. **Do not** use cryotherapy (including cold compresses, ice, dry ice, chemical ice packs, spray refrigerants, and freezing) for the same reasons that the tourniquets should be avoided, and also because it can increase the area necrosis.
4. **Do not** use electroshock therapy, a method popularized following publication of a letter from a missionary in South America reporting its effectiveness in treating bites from snakes of uncertain identity. Several controlled clinical trials and at least one on humans have failed to demonstrate any positive result; moreover, the potential negative results from the uncontrolled use of an electric charge are obvious.

5. **Do not** drink alcohol, as it dilates blood vessels and increases absorption from the circulatory system, and thus helps spread venom faster.
6. **Do not** use aspirin or related medications to relieve pain, because they increase bleeding. A pain reliever not containing aspirin, however, may be used.
7. **Do not** use the pressure/immobilization technique, which consists of firmly wrapping the entire limb with an elastic bandage and then splinting, especially for pitviper bites. The theory behind this treatment is to confine the venom to the area of the bite until reaching a medical facility, but studies have shown the technique to be ineffective or worse with venoms which produce local swelling and tissue damage.
8. **Do not** administer antivenom in the field unless properly trained in the procedure, unless evacuation to a medical facility will take many hours or days, or unless envenomation has been extreme. Intramuscular or subcutaneous application of antivenom has proven to be much less effective, and in some cases ineffective, than intravenous administration. Acute allergic reactions to antivenom can occur, and contemplated field administration of antivenom should include provision for a sufficient supply of epinephrine (adrenalin) to counteract any such potential effects.

***Hydroids**

--Portuguese Man-O-War, Jellyfish

Portuguese Man-O-War

Physalia physalis

Portuguese Man-of-War is actually a colony of organisms, each with its special function. The gas-filled bubble or float is blue to pale purple and transparent. The long, thread-like tentacles can reach up to 15 meters and are armed with thousands of stinging cells called nematocysts. Some tentacles are short and straight and

others are long and coiled. These Man-of-War float on currents and are washed up on Texas beaches during the spring to late summer. They are carnivorous, feeding on small fish and other small animals that get caught in the tentacles. Their primary predators are Sea turtles and Purple Storm Snails.

How to Avoid

Watch along the beach before going swimming or wading to see if you can find any Man-of War washed up which would indicate that they are in the area. They are sometimes difficult to see in the surf because of the their color and they look like foam from a wave. Besides, with those long tentacles, you may never see the float of the one that stings you. Avoid stepping on beached Man-of-War since the stinging cells remain toxic even when the rest of the organisms have died.

What to Do

Stings produce what seem to be burning rash streaks where the tentacles have made contact. It is important not to rub the area, although this is a natural instinct. You can use a driver's license or credit card to scrape off the tentacles, which are almost invisible. One of the most effective and inexpensive treatments for the pain of the sting is placing the affected area under hot (not scalding) water or applying warm compresses. Non-prescription hydrocortisone cream or antihistamine tablets may relieve the itching rash that may follow a sting. If severe allergic reactions are experienced, medical attention should be sought.

Jellyfish

Jellyfish - in spite of their name - are not fish. They are invertebrates - relatives of sea anemones and corals. True jellyfish belong to the Phylum: Cnidaria, - class Scyphozoa. Some other animals that are similar in general appearance, such as the Portugese man o' war, are often called jellyfish, but though they are related, scientists do not regard them as true jellyfish. Jellyfish stings are caused by the tentacles that hang from the mollusk.

How to Avoid

As with Portugese Man-of-Wars - watch along the beach for washed up 'jellies' before going swimming or wading. Don't touch dead jellyfish lying on the beach - the stinging cells are probably still active.

What to Do

If you get stung, splash the area with salt water. Then apply a paste of unseasoned meat tenderizer. Don't press the skin. The pain should go away within an hour. Regular vinegar or a solution of one part bleach to 10 parts water also work to alleviate pain.

***Plants**

--Poison Ivy, Poison Sumac, Poison Hemlock

Poison Ivy

Toxicodendron radicans

Poison Ivy can be a climbing or trailing vine, a shrub or even a small tree. The leaf edges can be smooth, toothed or deeply notched. New leaves are red in spring and dying leaves are yellow. Fall leaves are yellow, orange and red. The plant produces small, greenish-white clusters of flowers in spring and white, waxy, berry-like fruits in fall. It grows almost everywhere in Texas except for the western Panhandle and in almost any type of environment. Several variations of the old adage 'Leaves of three, beware of thee' proclaim the warning-typical 3-leaf (occasionally 5-leaf) clusters on a single stem identify it. The symptoms of Poison Ivy contact begin to appear between 12 and 36 hours after exposure. They include itchy, burning rash followed by small blisters and in severe cases, large blisters and swelling. All parts of the plant are toxic in all seasons. Burning leaves of Poison Ivy are particularly dangerous because the toxin is carried in the smoke and can cause serious respiratory damage if inhaled.

How to Avoid

The best defense against Poison Ivy is learning to identify the plant and wearing protective clothing. After contact, carefully removing and washing clothing is extremely important because the resin can remain on the garments indefinitely and infect whoever handles them again.

What to Do

If bare skin has been exposed to Poison Ivy, immediately wash the affected area with soap and large amounts of water. This can reduce or eliminate the possible affects. If you were not so lucky as to realize beforehand

that you were affected, treatment includes keeping the area clean and dry and the topical applications of hydrocortisone creams and lotions. Staying cool can help the itching. If you experience more than a mild outbreak, it is advised that you seek medical attention, since there are stronger products available by prescription.

Poison Sumac

Toxicodendron Vernix

Poison Sumac reacts very much like Poison Ivy, but it looks very different. It is also usually only found in very wet, wooded regions of Texas, typically in the east. It can be a tall shrub or small tree. The leaves are arranged in pairs of 3 to 6 with a single leaf at the terminal end of the stem. The fruits of the Poison Sumac are a whitish green hanging fruit. There are non-poisonous varieties of Sumac, which appear similar, yet their fruits are red and upright. The same procedures should be followed as for Poison Ivy exposure.

Poison Hemlock