Most of the snakes we see in the northeastern quarter of Texas are harmless. A few species are venomous, meaning that they can bite and inject venom, resulting in medically serious symptoms. Even the venomous snakes would rather be left alone and often either retreat or sit still, hoping you will leave them alone. Nevertheless, people who spend time hiking, hunting, fishing, or being outside for other reasons should know how to identify venomous snakes and stay safe around them.

This guide has photos of the venomous snakes found in north Texas, with some information about their size, appearance, and habits. For more information, please get a copy of Andrew Price’s *Venomous Snakes of Texas: A Field Guide*. That guide also has good information about snake bite, venom, and first aid.

Before we get started, let’s cover a couple of things about safety around venomous snakes:

1. When you are in a place where there could be venomous snakes, always look where you are about to put your hands or feet. Snakes are often partly camouflaged among leaves or grasses, and they are often found at the edge of, or underneath, rocks, logs, boards, etc. Do not reach underneath such things without knowing what is there. Don’t walk barefoot in darkness or where you can’t see where you are stepping.

2. If you see a venomous snake (or any snake), stay calm. If you are several feet from the snake, move away; once you’re ten feet or so from the snake, you could watch it or take a photo without taking much risk, just keep track of the snake’s movements and move further if needed. Despite what you may have heard, snakes do not attack you or chase you – though they have been known to move toward someone if they think the best escape is in the direction where that person happens to be standing.

3. I would suggest that you do not try to kill the snake – not because I like snakes (though that is true), but because trying to kill the snake with something like a shovel brings you very close to the snake and the panicked snake will move unpredictably and likely try to bite when attacked. It may be safer to let it go.

(continued)
4. A recently killed snake continues to have some automatic reaction to touch and movement, and may be able to bite, so do not handle it. Additionally, snakes die fairly slowly from some mortal wounds, so the snake may still be alive and capable of biting for a time.

Our Four “Kinds” of Venomous Snakes

In North America, we have four “kinds” of snakes that are venomous to a medically significant degree:

- **Copperheads** ➔ **Cottonmouths** ➔ **Rattlesnakes** ➔ **Coralsnakes**

Any other North American snake is not dangerous to the average person

There are different species within the groups I listed above, and they don’t all look exactly alike—as you will see in the pages that follow. But as a basic way of thinking about the groups of snakes found in North America, it works.

**Pit-Vipers**

The copperheads, cottonmouths, and rattlesnakes are all members of a group of snakes called “pit-vipers.” These snakes have:

- Fangs that fold against the roof of the mouth when not in use
- Venoms that mostly (with some exceptions!) affect tissues, causing pain, swelling, bruising, and other medical problems
- Elliptical pupils (like a cat’s)
- A small heat-sensing pit in the face between the eye and the nostril
- Rather chunky bodies, and some have broad or arrow-shaped heads

**Copperheads**

*The Eastern Copperhead and Broad-banded Copperhead* - *venomous*

(The “Eastern” Copperhead used to be called the “Southern” Copperhead)

These are relatively small, shy snakes that blend in very well with leaves on the ground. Copperheads have a pattern of darker and lighter reddish-brown bands that are broad in the broad-banded copperhead, and hourglass-shaped in the eastern copperhead. Newborns have bright yellow tail tips that fade to greenish as they get older. These snakes average around two feet long or so. The small size and relatively mild venom of the copperhead mean that a bite is usually considered non-life threatening, but it is still a medical emergency and should never be treated lightly. Different people react differently and bites result in very serious medical consequences for some.
Cottonmouths (sometimes called “Water Moccasins”)

The Northern Cottonmouth (previously called the “Western” Cottonmouth) - venomous

These snakes are often found near or in water. They are larger and bulkier than copperheads and have a darker pattern, but they are closely related to copperheads. Cottonmouths have flat, chunky heads, elliptical pupils, and a heat-sensing pit in the same location as the copperhead. The cottonmouth pattern is dark brown or nearly black, with some indication of broad crossbands that are wider on the snake’s sides. Newborns have a lighter, reddish pattern that is similar to that of a copperhead. Most of the cottonmouths in Texas grow to around three feet in length, but may look bigger because of their chunky proportions.

Cottonmouths have a bad reputation for being aggressive or even chasing people. However, it turns out that they would rather hide or get away than strike. Sometimes they provide a warning by gaping their mouths open to show the light, whitish inside (thus the name “cottonmouth”). Like other pit-vipers, the venom is primarily tissue-destroying, with relatively high hemolytic properties (attacking blood cells) according to Andrew Price’s field guide.

Rattlesnakes

The Western Diamond-backed Rattlesnake - venomous

This is the largest and most dangerous snake in north Texas. The danger comes from the fact that these snakes can deliver a large dose of fairly potent venom, and they can defend themselves aggressively. Most western diamondbacks grow to about 3 to 5 feet, but the record is just under seven feet. These snakes have white-edged dark diamonds running down much of the back, two diagonal white stripes on the face, framing the eye, and a black-and-white banded tail ending in a rattle (unless it has been broken off). The scales on the top of the head are small. When nervous, the rattlesnake may twitch or briefly shake the tail, resulting in a few “chick-chick-chick” sounds. If more agitated, the tail is vibrated vigorously, producing a steady buzzing sound.
The Timber Rattlesnake (the southern variety used to be called the “Canebrake” Rattlesnake) - venomous

The variety of timber rattlesnake that is found in the south used to be called the “canebrake” rattlesnake. It is also sometimes called a “velvet-tail” by local folks, because of the velvety-black tail. Key identifying features include: rusty brown or reddish vague stripe down the back, black chevrons or blotches, scales on the top of the head are small, elliptical (cat-eyed) pupils, pattern darkens toward the tail, and a black tail with rattle segments at the end. Adults may be around four feet in length, with the maximum reported length a little over six feet.

These snakes are generally not seen very often, and tend to be found in scattered areas in or around woodlands. This is the only protected venomous snake in Texas - it cannot be collected and should not be harrassed or killed. However, be assured that this protection is not enforced against anyone who kills one in the belief that they were in danger from it.

Timber rattlesnakes often do not rattle and may sit quietly, relying on camouflage to escape harm. When they do bite, it is a serious emergency as they can inject a large dose and the venom is potent. There is variability in the degree to which the venom affects the nervous system and/or destroys tissue.

The Western Pygmy Rattlesnake - venomous

These little snakes only reach about 18 inches in length, and the rattle is very small and not easily heard. They have large scales on the top of the head (as opposed to the small scales between the eyes and behind the snout for the larger rattlesnakes). The ground color may be grayish, brownish, or have a slight purple cast to it. A series of dark blotches run down the back, and a vague reddish stripe runs down the center of the back. These snakes are found in east Texas and in a small area of north Texas near the Red River. They occur in forested areas with deep sandy soil.

The fangs are short and the amount of venom injected is small, and there are no recorded fatalities from bites of this species. However, a bite should still be treated as a medical emergency, so don’t be careless around them!
There are records of these small rattlesnakes from Dallas westward, but it is more likely to be seen west of Tarrant County. Massasaugas grow to about two feet in length. Like the related pygmy rattlesnake, they have large scales on the top of the head. The rattle is small but more noticeable and more visible than would be the case with pygmy rattlesnakes. Down the back is a series of rounded or vaguely heart-shaped blotches, and there is no reddish stripe down the back. The massasauga is colored mostly in grays or brownish-gray.

This little snake used to be a common sight at sunset on the prairie west of Fort Worth, but it is much less common these days. Most of them either sit still and hope humans will walk past them, or else try to get away. If touched or threatened at close quarters, however, it strikes in little lunging jabs. Like the pygmy rattlesnake, it should be treated with respect, though there are no fatalities recorded in Texas.

**Elapids**

The only Texas snake in the “elapid” group of venomous snakes is the coral snake. Coral snakes and their relatives have:

- Fangs that are short and fixed in position
- Venoms that mostly affect breathing and heart function, with little tissue damage near the bite
- Round pupils, but the eyes are small and this is not easy to see
- Long, fairly slender bodies and small heads

**Coral Snakes**

These are secretive snakes that are not often seen, even though they may be fairly common in some places. Coral snakes have wide black and red bands separated by narrow yellow bands. The first yellow band is at the back of the head, and the head and initial part of the neck are black. The last few wide bands of the tail are black. Additionally, the red bands have some amount of black mottling in them, sometimes to the point that the red is not very apparent.

Coral snakes are very nonaggressive if left alone and so the best strategy when finding one is to let it go. People are at much greater risk if they try to move it or kill it than if they leave it alone. The fangs are in the front of the mouth so it is **not true** that coral snakes have to chew in order to envenomate a person. On the other hand, the short fangs and nonaggressive nature of this snake result in few human bites. Do not assume that this means coral snakes are not dangerous!

As noted above, coralsnake venom is primarily neurotoxic. There may be little pain or swelling immediately following a bite, but do not assume that this means no envenomation occurred. Get to a hospital as soon as possible!
It is worth adding a note about using round vs. elliptical pupils to identify venomous snakes – if you are close enough to a coralsnake to see the round pupil, you are way too close, unless you are trained and experienced in working with these snakes! The eye is small and dark, nearly matching the surrounding black scales.

A few words about venomous snake bite

As noted above, the field guide by Andrew Price discusses snake venoms as well as the symptoms and treatment of snake bite in enough detail for most readers, but I’ll make a couple of comments here.

1. Keep the website and number for the American Association of Poison Control Centers handy. The website is: http://www.aapcc.org and they also have a site for specific help regarding poisoning: www.PoisonHelp.org. Their toll-free number is 1-800-222-1222.

2. The AAPCC and BTG (maker of CroFab antivenom) have developed an app called “SnakeBite911” that can be downloaded to a smartphone. It provides a number of features, including snake information, hospital locator, and with your camera it prompts you to take photos of the snakebite site every 15 minutes on the way to the hospital to track the progress of symptoms.

3. Venomous snakes are capable of biting without injecting venom. Such “dry bites” may produce little or no symptoms because no venom was injected. While you could get lucky, don’t count on it – get to the hospital!

4. A bite from a pit-viper generally produces immediate pain which some describe as like a wasp sting, and swelling, bruising, and deeper pain (and other symptoms) soon follow. Bites from nonvenomous snakes feel like sharp scratches, without much pain and little or no bruising or swelling. However, differences in pain tolerance and state of mind may lead to different experiences, and remember that coralsnake bites produce limited pain. Unless you can positively identify the snake as harmless, it is best to seek treatment.

5. If bitten, immediately move away from the snake and remove rings and other jewelry from the bitten area (because of the swelling that will quickly follow). Most authorities – including the information on the SnakeBite911 app – recommend that you DON’T try to kill the snake or take it with you, and that you DO NOT take aspirin-containing or other pain medicine or drink alcohol, DO NOT cut the bite or use a tourniquet, DO NOT pack it in ice, and DO NOT use electric shock to try to neutralize the venom. Your “to-do” list is short: keep calm, remove the jewelry, get someone to drive you to a hospital, and if you have it, use the SnakeBite911 app.