



POISONOUS ANIMALS & PLANTS OF FORT GORDON

SNAKES

Snakes, members of the reptile family, are found on every continent except Antarctica.

Approximately 38 species of snake are known to exist in the

east central region of Georgia. Although all snakes will bite, only five poisonous species of snake are known to exist on Fort Gordon, rattlesnakes, cottonmouths, copperheads, and coral snakes.



Figure 1. Timber Rattlesnake
Photo by Bruce Cockroft

Rattlesnakes - Two species of rattlesnakes have been identified on Fort Gordon, the Timber or Canebrake rattlesnake and the Carolina Pygmy rattlesnake. All rattlesnakes are classified as pit vipers, identified by the following characteristics:

- Wedge-shaped head with jaws larger than the neck
- Thick, strong body, typically fatter than non-poisonous snakes of similar length
- "Cat-like" elliptical pupils, adapted to nocturnal activity

Identification of rattlesnakes should not be based on color or presence of rattles.

Body color and markings vary with age, size, and season.

They also may lose and regrow rattles. All pit vipers on Fort Gordon, including



Figure 2. Pygmy Rattlesnake
Photo by Bruce Cockroft

rattlesnakes, have a hemotoxin, attacking the tissue and blood cells. **Caution** - in spite of the pygmy rattlesnake's small size, 15 - 30" in length, it is as dangerous as the larger timber/canebrake rattlesnake, 35-75" in length. Rattlesnakes are common on Fort Gordon and may be encountered anywhere on the installation.

Cottonmouth/Water Moccasin - Similar to rattlesnakes, cottonmouths are classified as pit vipers and exhibit the same body features, including broad head, fat body, and elliptical pupils. These animals are found primarily in and near wetland areas, including ponds, streams, rivers, and swamps.

Whereas rattlesnakes tend to avoid confrontation and usually strike when feeling threatened, cottonmouths are unpredictable and may exhibit



aggressive behavior, particularly during the breeding season. Cottonmouths may strike either in water or on land. Cottonmouths, as well as all other poisonous snakes, should always be treated with caution and avoided. **Do not disturb or attempt to handle these or any other poisonous snakes!!**

Figure 3. Cottonmouth
Photo by Bruce Cockroft

Copperheads - Another pit viper known to exist on Fort Gordon, copperheads occur predominantly in dry, upland habitat. They are similar to the cottonmouth and have been nicknamed the "uplands moccasin". This species, however, may occasionally be found in flooded areas and on the edge of wetlands. As with



Figure 4. Copperhead
Photo by Bruce Cockroft

other pit vipers, these animals exhibit a broad head, fat body, and elliptical pupils. Copperheads typically have an hourglass pattern on their back. Unlike rattlesnakes whose color and markings may change with age and size, young copperheads

resemble adults with the exception of a slightly sulfur-colored tail. Additionally, young cottonmouths also resemble adult copperheads.

Typically diurnal during the spring and fall, these animals may be found basking in the sun during these seasons. Copperheads, however, become nocturnal during the hot summer months, retreating around debris piles and stones during the day. Although copperhead bites are painful, they rarely pose a serious threat to human life. No human deaths have ever been attributed to this species.

Coral Snake - Unlike the other poisonous snakes on Fort Gordon, the coral snake is not classified as a pit viper. This species exhibits a narrow head and body, unlike the pit vipers.

Coral snakes are identified by their color patterns. Much like the non-poisonous milk and scarlet king snakes, coral snakes have red, yellow, and black bands across its body. The order of the color bands is the key to identification. If yellow bands are followed by red bands, the species is a coral snake and highly dangerous. If yellow bands are followed by black bands, it is non-poisonous. Remember the saying - "Red on Yellow, Kill a Fellow; Red on Black, Venom Lack". Unlike the pit vipers, coral snakes possess a neurotoxin, attacking the central nervous system, particularly respiration. Typically occurring around debris piles



Figure 5. Coral Snake
Photo by Lynn Stone

and rocks, coral snakes may be found anywhere on Fort Gordon.

It is important to remember that all snakes may bite and some are dangerous, even potentially fatal. When encountering any snake, leave it alone and back away! **It is illegal to kill any non-poisonous snake in the State of Georgia. Fort Gordon regulations prohibit the killing of any snake on the installation except in situations of imminent danger to health or life.** If bitten by a poisonous

snake, seek medical attention IMMEDIATELY. Contact the Fort Gordon Environmental and Natural Resources Management Office for more information regarding poisonous and non-poisonous snakes on the installation.

POISONOUS ARTHROPODS

Venomous Spiders - Two species of poisonous spider are known to exist on Fort Gordon, the **Southern Black Widow** and the **Brown Recluse**. These



Figure 6. Black Widow
Photo by Dr. James O. Howell

species are considered to be extremely poisonous and dangerous. Found primarily in wooded habitat, the black widow typically builds webs close to the ground, under stones and logs or among grasses and weeds. Black widows may, however, occur around dwellings near meter boxes, wood piles, and piles of rock or brick.

The brown recluse is found primarily around rotten tree stumps outdoors. It may be encountered around closets, old paper, shoes,



Figure 7. Brown Recluse
Photo by Dr. James O. Howell

and shed or barns as well. Typically shy, as its name implies, this species is reluctant to bite unless feeling threatened.

Black widow spiders are easily identified by the red, hourglass spot on the back of their black bodies. Brown recluse spiders are commonly identified by a dark violin-shaped spot on a dark brown-grayish body. The bases of its legs is colored orange-yellow.

The black widow possesses a neurotoxin which affects the body immediately. While the bite itself is painless, pain begins instantly and reaches a maximum in 1 - 3 hours. Severe reactions include sweating, nausea, muscular pain, and difficulty breathing. Although mortality from black widow bites is rare, it occurs in as high as 5 percent of victims. Brown recluse spiders possess a necrotoxin, which inhibits the body's healing

process. Bites typically result in deterioration of the tissue around the bite. Severity varies greatly among individuals. As with snakes, one should seek medical attention immediately if bitten by either of these spiders.

Scorpions -

Nocturnal, scorpions may be found under rocks, tree bark, and debris during the day. Scorpion species in Georgia are easily identified



Figure 8. Scorpion
Photo by Dr. James O. Howell

by an elongated tail, large pincher-like pedipalps and small body size. Unlike the shy brown recluse, scorpions are aggressive and will readily sting if provoked. Although this species is not considered to be life threatening, the painful sting can result in systemic reactions in some individuals. Stings may be avoided by not placing hands where they cannot be seen, wearing gloves if necessary, wearing shoes when walking at night, and avoiding leaning on trees. If you find a scorpion on you, do not attempt to slap or smash it. The stinger will likely puncture the skin. Simply brush the animal away.

Bees and Hornets -

Fort Gordon is home to many species of bees, hornets, and wasp. The most commonly encountered species include yellowjackets, bald-faced hornets, and red wasps. Yellowjackets normally build nests underground near rotten tree stumps and along stream banks and gullies. Yellowjacket stings are painful and may cause systemic reactions in some individuals. Minor reactions may include local pain, swelling and itching. Severe reactions may include swelling, shortness of breath, measles like rashes and even coma or death in extreme cases.



Figure 9. Hornet's Nest
Photo by Dr. Robert W. Matthews

The bald-faced hornet, actually a yellowjacket builds its nest 5-30 feet above the ground on the

branches of various trees. Hornets are very aggressive and normally sting multiple times. One nest may contain as many as 5,000 hornets. Reactions to stings are similar to those of other yellowjackets, except more painful.

Wasps typically build their umbrella shaped nests around the eaves of buildings, limbs of shrubs, and in other protected places. Although some species are aggressive most will not attack unless the nest is disturbed. Reactions are similar to those of yellowjackets and hornets. If a sting results in a severe reaction seek medical attention immediately.

Ticks- Considered to be a dangerous pest, ticks may be found throughout Fort Gordon. Common species found on the installation include the dog tick, deer tick, wood tick, and the lonestar tick.

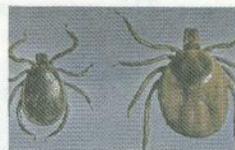


Figure 10. Deer Ticks
Photo by James M. Stewart

Ticks usually congregate along animal paths on grasses or shrubs and attach to host as they walk by. Tick bites may result in slight itching, swelling, lesions, or even paralysis and death.

On Fort Gordon two tick born diseases have been identified, Lyme disease and Rocky Mountain Spotted Fever. Lyme disease is characterized by a distinct skin "bull's-eye" shaped lesion, fever, headaches, stiff neck, arthralgias (arthritic pain). Rocky Mountain Spotted Fever is characterized by headaches, fever, and a rash that begins around the wrist and ankles, developing around the 2 days following the bite. Mortality in humans has been as high as 20 percent.

Remove an imbedded tick by grasping mouthparts with forceps and gently pulling. If symptoms of either disease appear seek medical attention immediately.

Fire Ants- Fire ants are commonly found throughout Fort Gordon. This species usually builds mounds in open areas such as roadways, pastures, stream edges, open woods and margins of cultivated fields.

Stings from fire ants almost always produce blisters or pustules. Reactions may vary but severe symptoms such as nausea, swelling, and intense pain may occur.



Figure 11. Fire Ant Mound Photo by Terry S. Price

This species is considered aggressive and reacts very rapidly when mounds are disturbed. Fire ants may occur any where on the installation and caution should be used anytime mounds are encountered.

COMMON POISONOUS PLANTS

Poison Ivy/Poison Oak- These plants commonly occur throughout Fort Gordon and flourish in open woodlands, pastures, parks as well as housing areas. Both Poison ivy and oak are woody perennials which can occur in both

shrub and vine form. The leaflets are 1-4 inches in length, dark green in summer and yellow to red in fall. Leaf shape is highly varied among plants, however, leaflets always form a trifoliate.



Figure 12. Poison Oak Photo by Pamela Harper

Remember - leaves of three let it be. All plant parts produce a volatile oil that causes severe inflammation, itching and blistering upon contact with skin. If inhaled during brush fire, the oil can result in internal systemic reactions. If you come in contact with either of these plants, wash thoroughly with soap or wipe with alcohol to remove the oil. Some individuals may be extremely allergic to the oil and require medical attention.

Although poison ivy and oak are the most common poisonous plants on Fort Gordon, they are not the only poisonous plants occurring here. Many poisonous and toxic plants exist in Georgia and reactions to all plants may vary among individuals.

RECOMMENDED TREATMENT FOR BITES, STINGS AND REACTIONS

Poisonous snakes Seek medical attention immediately. Do not attempt to remove venom.

Black Widow spider Seek medical attention immediately. Do not attempt to remove venom.

Brown Recluse spider Seek medical attention immediately. Do not attempt to remove venom.

Wasps, Hornets, Yellowjackets Remove stinger if present, Clean with soap and antiseptic, Apply ice, Stay alert for severe reactions, seek medical attention if needed.

Scorpions Ice area around sting to soothe pain, Keep victim warm and calm, Stay alert to systemic reactions, seek medical attention if needed.

Ticks Remove with forceps, Wash with soap and water, Stay alert for severe reactions.

Poison ivy/oak Wash effected area with soap and water or alcohol immediately. Apply over the counter treatments if necessary.

RESOURCES

Florida's Venomous Snakes, Florida Game & Fresh Water Fish Commission
Venomous Arthropods Affecting Forestry Workers in Georgia, 1985. Georgia Forestry Commission
Guide to Poisonous and Toxic Plants. 1995. US Army CHPPM