Hazardous Animals & Plants of Fort Riley
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- Venomous Snakes
- Non-Venomous Snakes
- Insects and Arachnids
- Plants
- Fungi
- Mammals
HOW CAN YOU TELL THEM APART?

1. HEAD SHAPE

VENOMOUS

NON-VENOMOUS
VENOMOUS

NON-VENOMOUS
How can you tell them apart?

1. Head shape
2. Eyes (pupil shape)
VENOMOUS

ELIPTICAL PUPIL
(CAT EYE)

ROUND PUPIL

NON-VENOMOUS
How can you tell them apart?

1. Head shape
2. Eyes (pupil shape)
3. Heat sensing pits
VENOMOUS

HEAT SENSING PIT

NON-VENOMOUS
Copperhead

• Most common venomous snake on Fort Riley.
• Venom on low end of toxicity scale
• Juveniles have bright yellow tail.

VENOMOUS

• Density estimates in North East KS = 3 to 4/acre
• Not Aggressive
Timber Rattlesnake

- Largest venomous snake in Kansas.
- Rusty red stripe often runs down the middle of the back.
- Mild disposition—often remains quiet in order to avoid being seen.
- Not common on Ft. Riley.
Massasauga Rattlesnake

• Smallest rattlesnake in Kansas

• Active from Apr.-Oct.

• Small rattle is hard to hear (Sounds like insect)

• Not common on Ft. Riley.
Snakes that **DO NOT OCCUR** in Kansas!

- **Cottonmouth** or **Water Moccasin**
- **Coral Snake**
Northern Water Snake

Common Non-Venomous Snakes

- Very Aggressive
- Found in almost any aquatic situation.
- Often mistaken as a Water Moccasin.
- Can have ±60/litter
Common Non-Venomous Snakes

Milk Snake

Black Rat Snake

Some non-venomous snakes will mimic venomous snakes:

- Color Pattern
- Behavior
Common Non-Venomous Snakes

Bull Snake

Great Plains Rat Snake

Some non-venomous snakes will mimic venomous snakes:

• Color Pattern
• Behavior
Common Non-Venomous Snakes

- Fairly Aggressive
- Can be blue-gray, greenish blue, or brown in color.

Eastern Racer
Common Non-Venomous Snakes

- Garter Snake
- Speckled Kingsnake
- Ring-necked Snake
Snake Teeth

VENOMOUS

NON-VENOMOUS

Location of venom gland
Venom duct entering fang
Snake Bite ID

- Usually a puncture wound (or wounds)
- Will begin to change color and swell fairly quickly.
- Wound will burn!
- Bite looks more like a scratch.
- Some victims could have reaction to saliva.
- Usually will bleed a lot!
Course of action greatly dependent on type of snake/venom and environmental conditions (quality and availability of medical treatment).

Could be beneficial if used within the first 3-5 minutes of envenomization.
Things to REMEMBER!

- **DO NOT** try to catch or kill snake.
- **DO NOT** allow the person to become over-exerted. If necessary, carry the person to safety.
- **DO NOT** apply a tourniquet.
- **DO NOT** apply cold compresses to a snake bite.
- **DO NOT** cut into a snake bite with a knife or razor.
- **DO NOT** try to suction the venom by mouth.
- **DO NOT** give the person stimulants or pain medications unless instructed to do so by a doctor.
- **DO NOT** give the person anything by mouth.
- **DO NOT** raise the site of the bite above the level of the person's heart.
If victim is bitten by a venomous snake: DO’s

1. Identify or get a description of snake.
2. Remove constricting objects (rings, etc.).
3. Keep victim calm (pulse down).
4. Restrict movement with a loose splint (below the heart).
5. Disinfect area with Betadine (or wash with soap & water).
6. If pump suction device is available, it may be useful within the first 5-10 min.
7. Some bleeding is OK!
If victim is bitten by a venomous snake: DO’s

8. Monitor the victims vital signs and treat for shock if necessary.

9. Record/monitor swelling.

10. A bandage, wrapped two-four inches above bite, may slow venom. It should be loose enough to slip a finger underneath it!

11. Have doctor consult Poison Control @ 1-610-688-4400
• ~90% of people bitten by venomous snakes were trying to catch or kill them.

• ~40% of accidental venomous snake bites (not seen or stepped on) are dry bites.
Rattlesnake Facts

1. Rattlesnake get a new button after every shed.

2. They don’t always rattle their tail.

3. More people die from wasp and bee stings, playing in sports, and slipping in tub than snake bites.
BROWN RECLUSE SPIDER

- Very common on Fort Riley
- Shake out clothes & sheets
Serious tissue damage can occur with some bites!

- Rarely any pain when bitten.
- Bite site becomes reddened.
- Painful ulceration develops.
- Skin and muscle tissue dies, leaving a deep, infected wound that enlarges, fails to heal or heals quite slowly.
BLACK WIDOW SPIDER

• Only female Black Widow is venomous.
• Has been found on Ft. Riley (not common).
Beneficial Spiders

Garden Spider

Wolf Spider
West Nile Virus

Mosquitoes (Vectors)

Birds (virus reservoirs)
West Nile Virus

Only 20% people infected develop symptoms; 1 of 150 cases becomes serious.

Symptoms are similar to the flu.

Not all mosquito species are vectors.

Protect yourself with DEET!

Electron Microscope Image: West Nile Virus is about 2 millionths of an inch wide.
Ticks

3 Species of Ticks Occur on Ft. Riley

- American Dog Tick
- Black Legged Tick (or Deer Tick)
- Lone Star Tick
Deer Tick  

Dog Tick  

Lone Star Tick  

Diseases Transmitted By Ticks:

- **Lyme Disease** - usually a red-bulls eye around bite, flu like symptoms. (Deer Tick)

- **Rocky Mountain Spotted Fever** - rash on hands and feet, flu like symptoms. (Lone Star Tick)
Tick Removal

Grasp the back of tick and remove slowly.

DO NOT BURN tick prior to removal.
Chiggers

- Microscopic mite that bites.
- Apply DEET and permethrin.
- Try to stay out of tall grass / take B-1 vitamin.
- Some people apply fingernail polish, bleach, alcohol, but few seem to stop itch.

FACT: Chiggers DO NOT burrow into your skin.

By the time irritation has appeared around the bite, the chigger has probably already left the body.
Scorpion

- Stinger located at the end of their long, jointed tails.
- There are 56 species of scorpions in the U.S. and only 2 of those species are considered fatal. (Arizona)
- Kansas scorpions are not deadly, their stings much like that of a bee.
- Sting will subside quickly, followed by numbness.
- Can be found under logs, rocks, and in/around older buildings.
Wasp & Bee Stings

- Can be fatal if allergic!!
- Over 100 fatalities/year in U.S.
- Carefully remove honey bee stingers immediately
Symptoms for allergic reaction include: Dizziness, gastrointestinal distress, hives, swelling, vomiting, labored breathing.

MOST DEATHS OCCUR IN UNDER 30 MINUTES!
Poison Ivy

• Leaves of 3 let it be.
• Urushiol causes rash.
• Oil stays on clothing.
• Wash with cold water and soap!
Stinging Nettle

- Square stem with serrated leaf edges
- Glass-like hairs break off in skin
- Stings through clothing
- Short lasting
Edible Plants & Fungi:

Make sure the plants or fungi you are picking are edible.

Please use a vegetation or fungi identification book.
Mammals

Carry internal and external parasites (worms, ticks, fleas, etc) and diseases (rabies).

Will defend themselves and their young.

May look like dog or cat, but are wild animals.
Hantavirus

• Aerosol

• Can Be Fatal

• 14 Cases in Kansas

Droppings from:

• Deer Mouse
• Hispid Cotton Rat
• Wood Rat (Pack Rat)
Deer most dangerous in fall
Use brights
Usually more than one
Better to hit vs. wrecking out
SLOW DOWN!!!
Brown Bats can be found in homes and offices on Fort Riley. They have been found in attics, cellars, Unit/Activity Bldgs/Non-family Housing, and Quarters/Family Housing.
Brown Bats are known carriers of rabies.

Rabies shots consist of three shots of anti-serum and the rabies vaccine. The remaining 5 vaccines are given throughout the month.
Environmental Division
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