

# Venomous Snakes of Mississippi

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MISSISSIPPI  
Museum of  
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Science



# The Importance of Snakes

- Predator and prey
  - Important part of the ecosystem
- Natural pest control
  - Keep rodent populations in check
- Many threatened species
  - Habitat destruction, disease, human persecution





# Mississippi Biodiversity

- 55 snake species
  - Different habits and different services
- Gray Rat Snake
  - Rodent eater
- Common Garter Snake
  - A gardeners best friend
- Kingsnakes
  - Eat venomous snakes
- Important Conservation Species
  - Black Pine Snake
  - Rainbow Snake





# Common ID Techniques are not accurate

- Diamond shaped head
- Slit pupils
- Fatter bodies
- The best ID technique is to know your venomous species





# 6 Species of Venomous Snakes

- Copperhead
- Cottonmouth
- Eastern Diamondback Rattlesnake
- Timber Rattlesnake
- Pygmy Rattlesnake
- Coral Snake





# Crotalids vs Elapids

- Crotalids

- Pit Vipers
- Hinged tubular fangs
- Hemotoxic venom
  - Destroys red blood cells
    - produce hemorrhaging
    - Abnormal clotting
- CroFab or Anavip

- Elapids

- Coral snakes
- Short fangs
- Neurotoxic venom
  - Attacks nervous system
    - Nausea/vomiting
    - Slurred speech
    - Paralysis
    - Respiratory failure
- NACSA

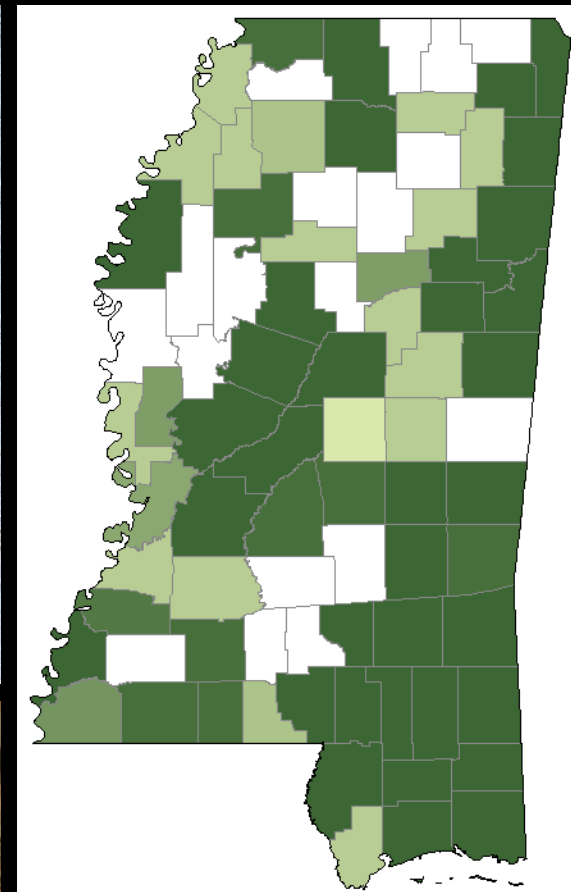
- Antivenom is expensive!



# Copperhead

*Agkistrodon contortrix*

- Found throughout the state
- Hersheys kisses from the side
- Hour glasses from the top
- Thin dark line behind eye
- Active at night during warmer months
  - Cold blooded
- Forests, wetlands, sometimes urban areas

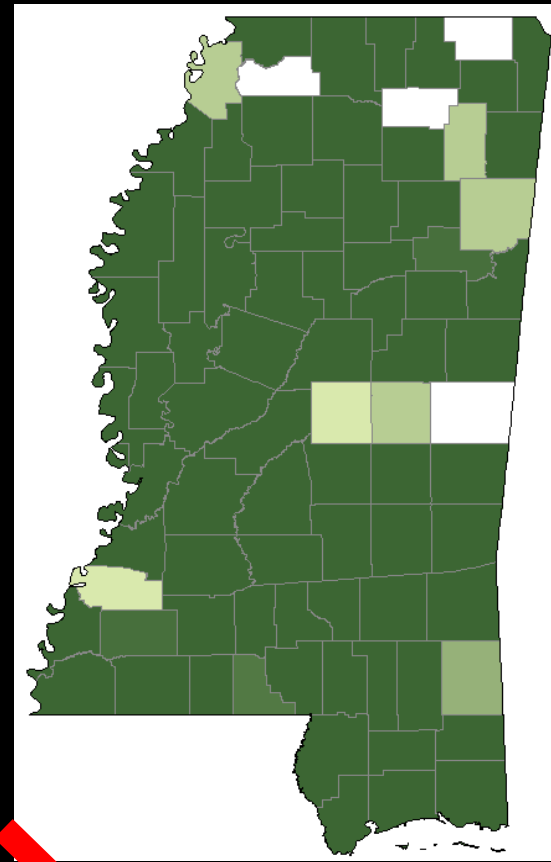
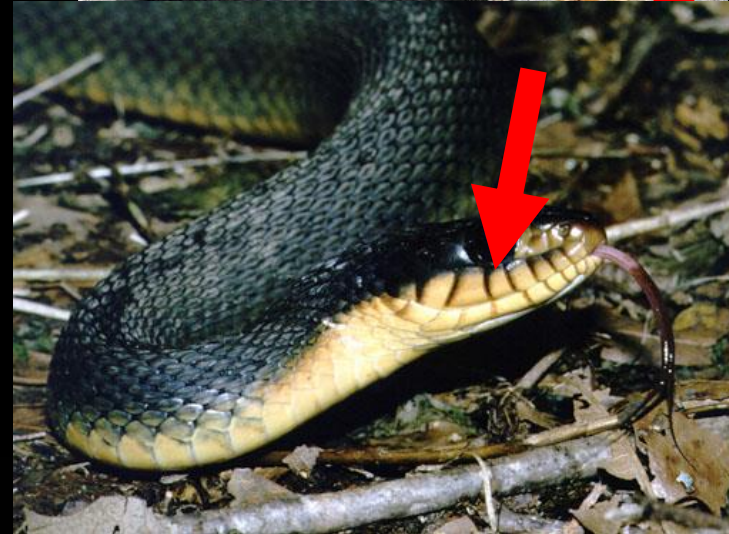




# Cottonmouth aka Water Moccasin

*Agkistrodon piscivorus*

- Found throughout the state
- Aquatic environments
- Flash white mouth
  - Most snakes have a white mouth
- Can have a pixelated pattern
- Some have no pattern
- Dark stripe across eye
  - Makes a mask
  - Looks almost sinister
- Very bold and curious

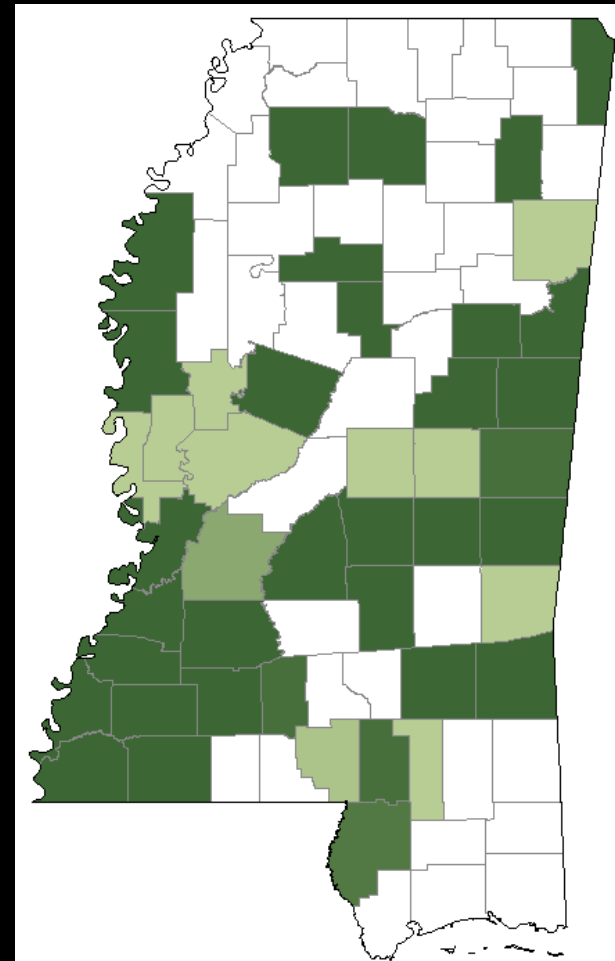
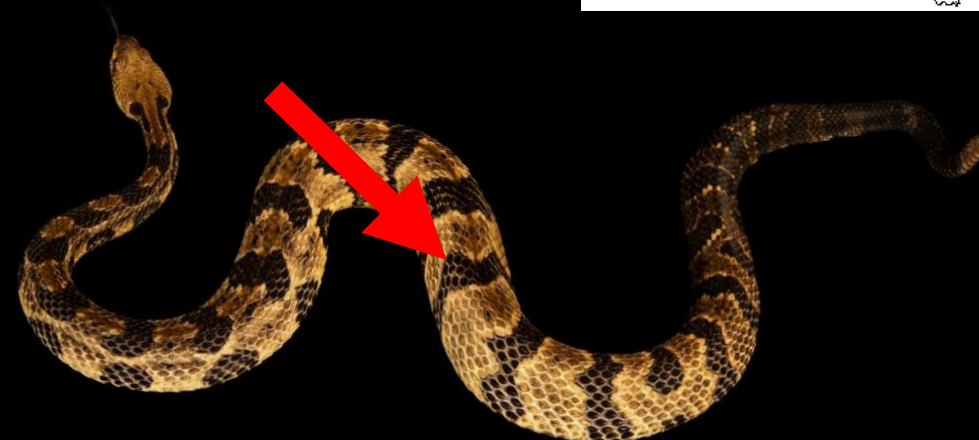
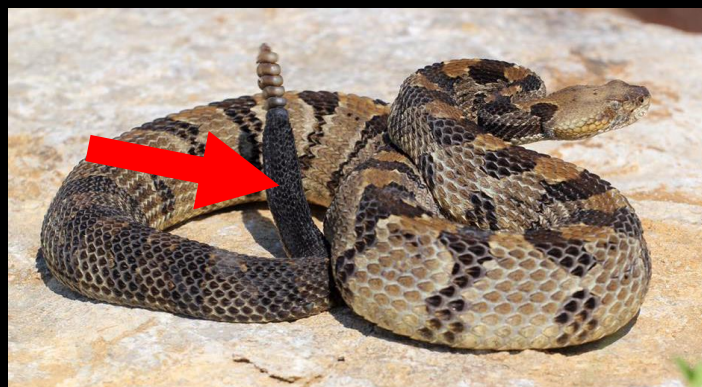




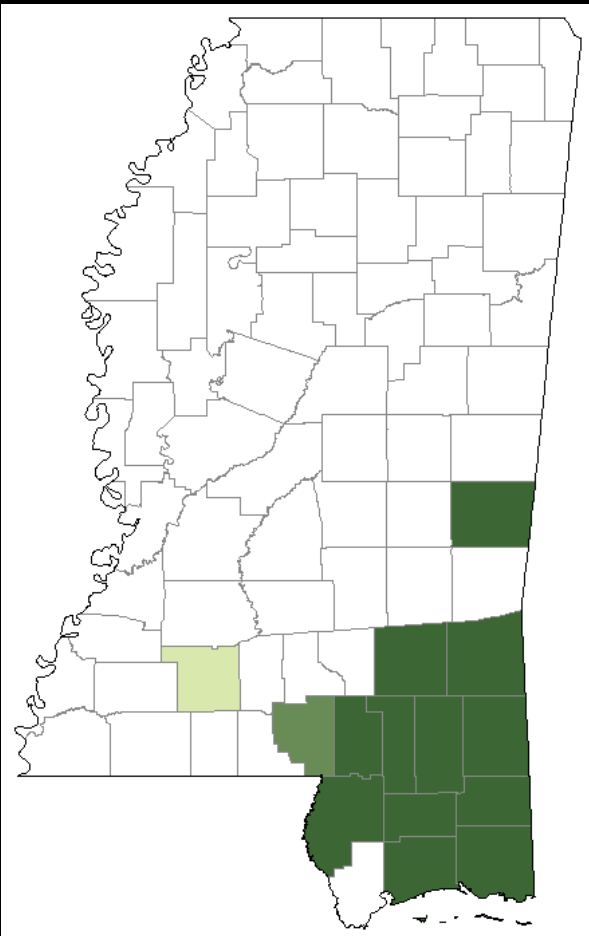


# Timber Rattlesnake aka Canebrake *Crotalus horridus*

- Found throughout the state
- Wooded areas and swamps
- Chevron or blotchy pattern
- Dark tail
- Active during the day in Spring and Fall
- Nocturnal during Summer





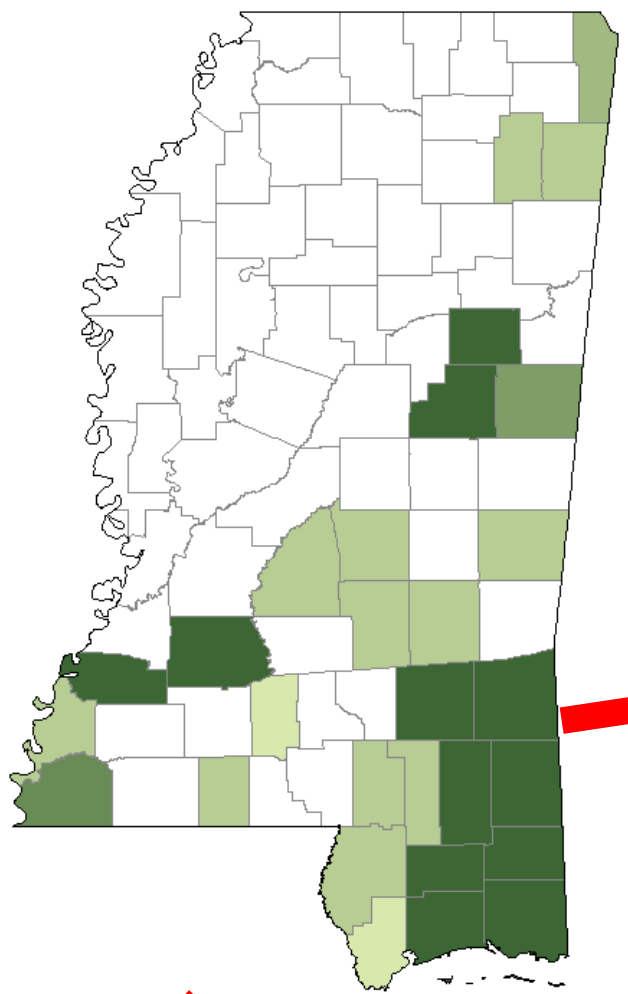


# Eastern Diamondback Rattlesnake *Crotalus adamanteus*

- Found in the southern portion of the state
- Pine savannas and sandhills
- Brown tan or gold
- Row of dark diamonds outlined by light scales
- Vulnerable species
- Typically active at dusk





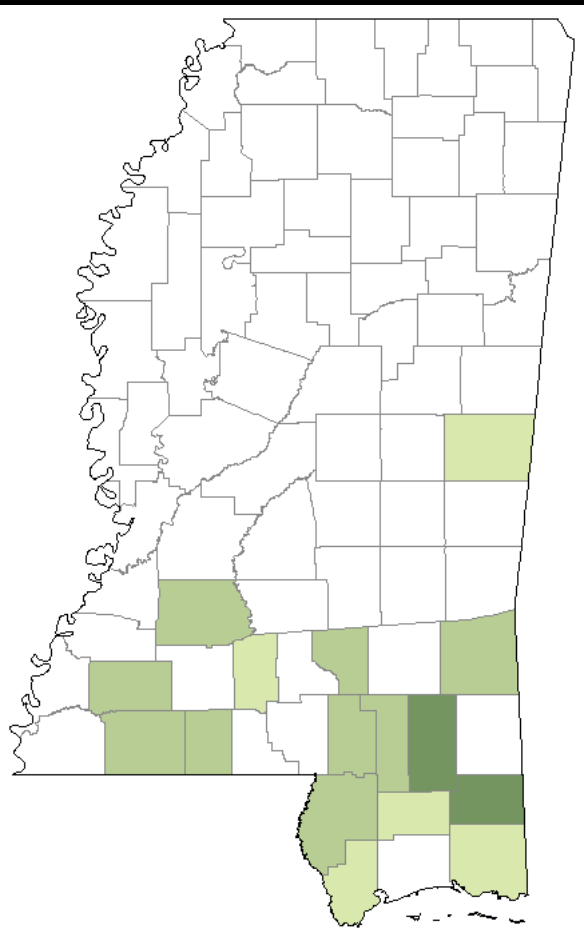


# Pygmy Rattlesnake

*Sistrurus miliaris*

- Patchy distribution
- Palmetto stands, sandhills, pine forests
- Smallest rattlesnake in MS
- 1-3 rows of dark spots down back
- Dark mask through eye
- Sometimes have a reddish line down middle
- Often mistaken with the Eastern Hognose
- Rattle can sound like an insect buzzing
- Rarely encountered
- Typically active at dusk and night





# Coral Snake

*Micrurus fulvius*

- Mostly in Southern MS
- Found among leaf litter and under logs
  - Mostly fossorial
- Black snout
- “Red touches yellow kills a fellow. Red touches black, friend of Jack”
- Elapid snake
- Very uncommon and docile





# If you encounter a venomous species

- Leave it be
  - Most envenomations are a result of disturbing the snake
- Snakes are inherently shy and don't want to bite
  - 25% of bites are dry bites
  - Venom is hard to make and mainly for prey
- If you have to move the snake
  - Only when ABSOLUTELY necessary
  - Use something long to move it away
    - i.e, shovel, rake

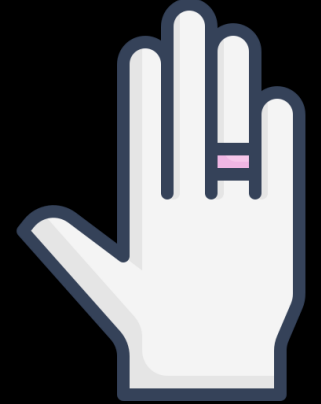




# If you are bitten: Do's and Do Not's

## DO

- Seek medical attention immediately
- Remain calm and still if possible
- Remove any jewelry, tight clothing, anything constricting
- Position yourself so the bite is at heart level or below if possible
- Clean with soap and water and cover with dry dressing

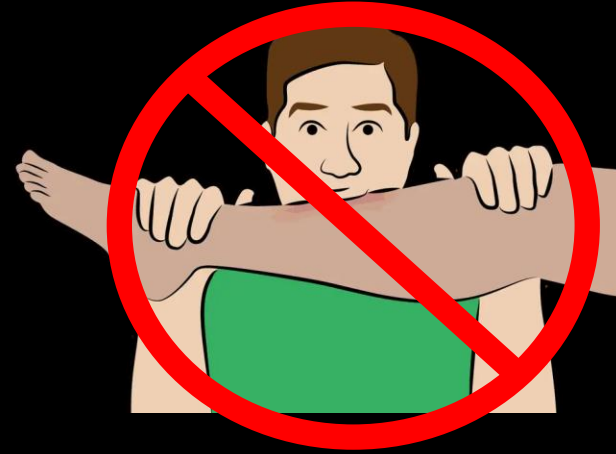




# If you are bitten: Do's and Do Not's

## DO NOT

- Use a tourniquet or apply ice
- Cut the wound or attempt to suck venom out
- Drink alcohol or caffeine
- Attempt to capture or kill the snake





Questions?

