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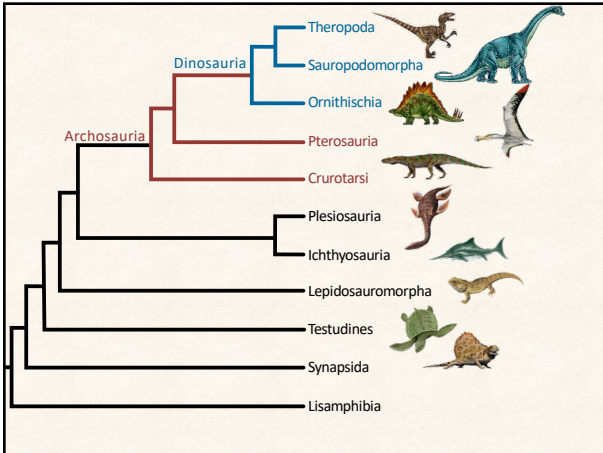
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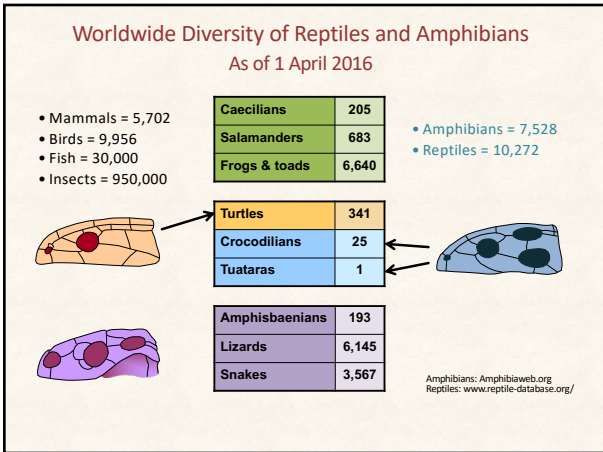
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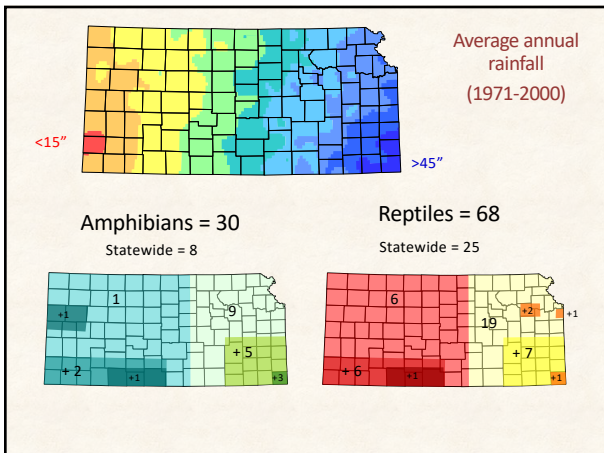
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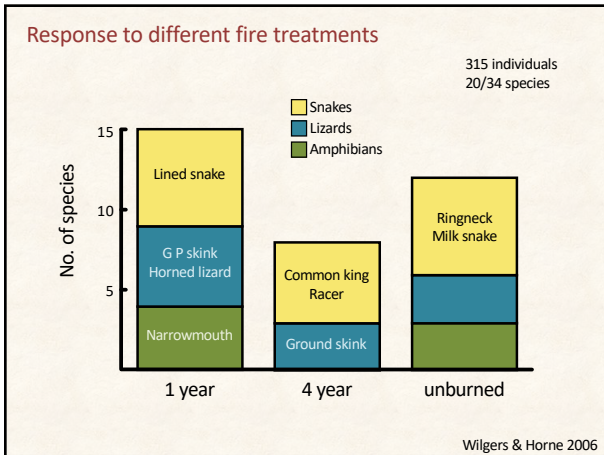
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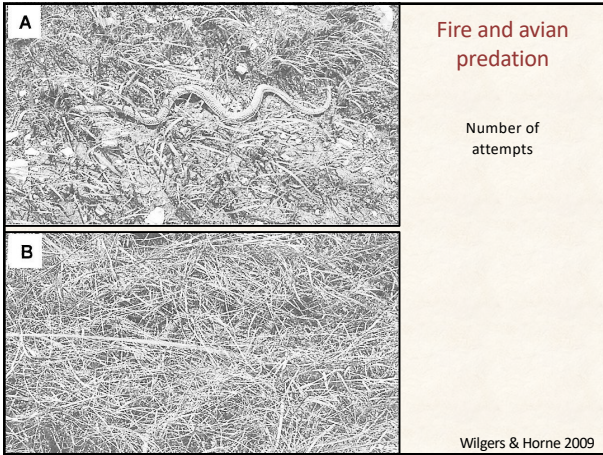
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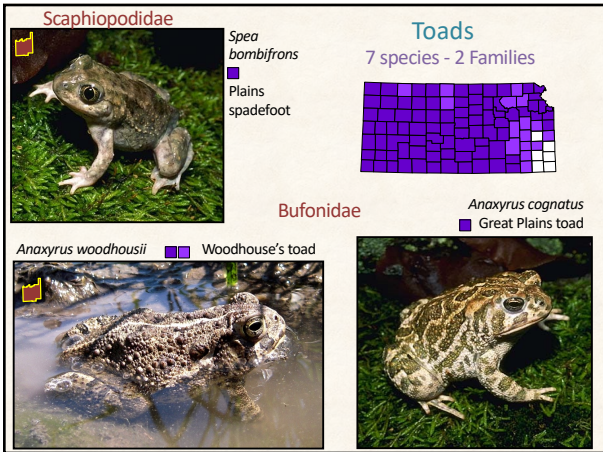
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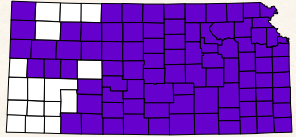

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*Pseudacris maculata*  
Boreal chorus frog

**Treefrogs**

Hylidae  
7 species

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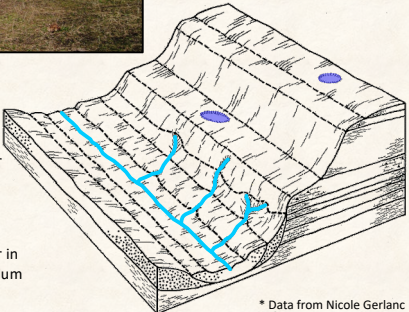
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- Over time:
  - pH increases in wallows
  - ammonium in streams



- Wallow tadpoles metamorphosed faster in water w/ high pH
- Stream tadpoles metamorphosed faster in water w/ high ammonium

\* Data from Nicole Gerlanc

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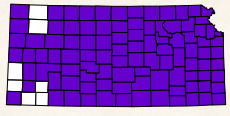
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*Acris blanchardi*  
Blanchard's cricket frog

12

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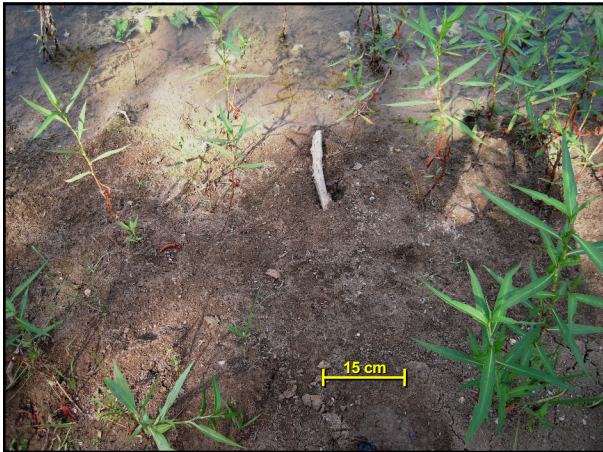
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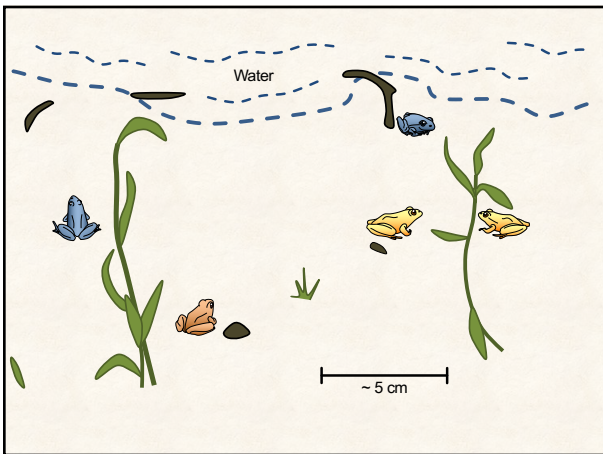
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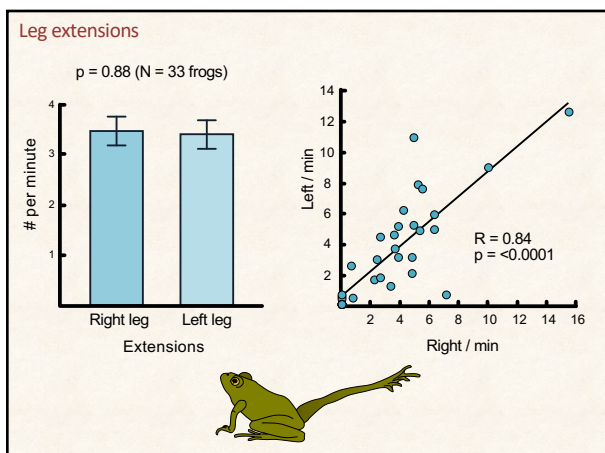
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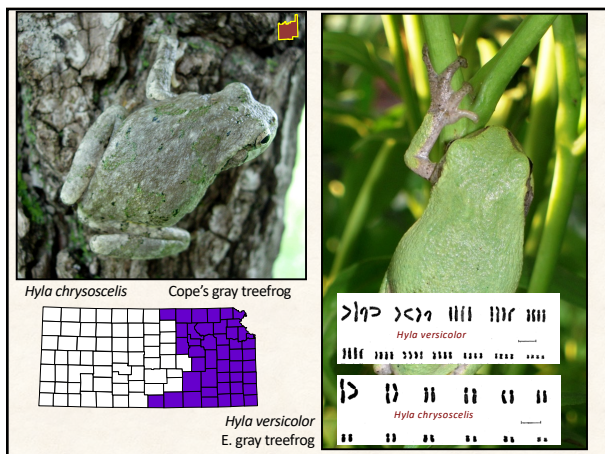
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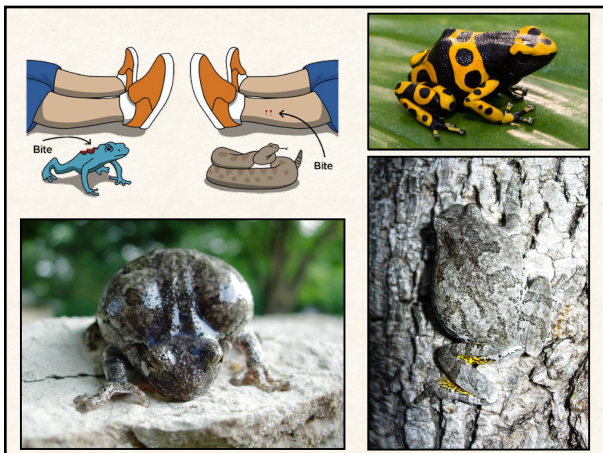
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**Aquatic frogs**  
**Ranidae**  
 5 species

■ *Lithobates sphenoccephalus*  
 S. leopard frog  
■ *Lithobates catesbeiana*  
 Bull frog  
■ *Lithobates blairi*  
 Plains leopard frog

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**Microhylid frogs**  
**Microhylidae**  
 2 species

■ *Gastrophryne olivacea*  
 Plains narrowmouth toad  
■ *Gastrophryne carolinensis*  
 E. narrowmouth toad

21

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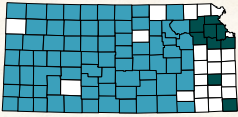

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**Mole salamanders**

*Ambystoma tigrinum*  
E. tiger salamander



**Ambystomatidae**  
3 species

*Ambystoma mavortium*  
W. tiger salamander

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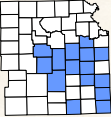
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22


**Mudpuppies**  
Proteidae  
1 species



*Necturus maculosus*  
Mudpuppy

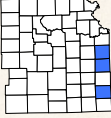



**Newts**



*Notophthalmus viridescens*  
E. newt

**Salamandridae**  
1 species


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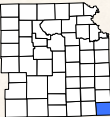


*Eurycea longicauda* Longtail salamander




*Eurycea lucifuga* Cave salamander


3 species



**Lungless salamanders**  
Plethodontidae



*Eurycea spelaea*  
Grotto salamander




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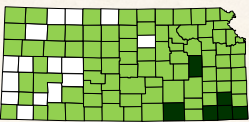
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24




**Snapping turtles**  
Chelydridae

*Chelydra serpentina*  
Snapping turtle

2 species

*Macrochelys temminckii*  
Alligator snapping turtle




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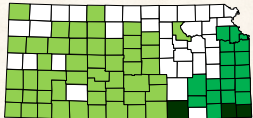
25

**Mud & musk turtles**  
Kinosternidae




*Kinosternon flavescens*  
Yellow mud turtle

2 species



*Sternotherus odoratus*  
Common musk turtle




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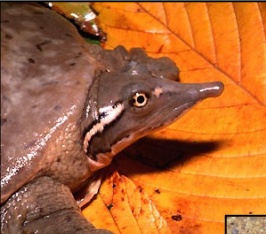
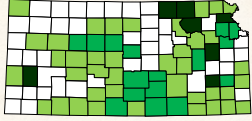
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26

**Softshells**





*Apalone mutica*  
Smooth softshell

Trionychidae

2 species

*Apalone spinifera*  
Spiny softshell




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27

**Basking turtles**  
 Emydidae  
 7 species

*Terrapene ornata* ■■  
 Ornate box turtle

*Chrysemys picta* ■ ■ N. painted turtle

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28

**Collared & Leopard lizards**  
 Crotaphytidae  
 1 species

*Crotaphytus collaris*  
 Collared lizard

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29

**Chigger parasitism**

<ul style="list-style-type: none"> <li>• Konza – mean chiggers:</li> <li>• Males = 705.8</li> <li>• Females = 504.4</li> </ul>	<ul style="list-style-type: none"> <li>• Tuttle – mean chiggers:</li> <li>• Males = 93.9</li> <li>• Females = 125.1</li> </ul>
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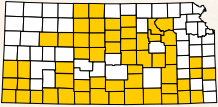

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30


**Sand & Spiny lizards**

Phrynosomatidae 3 species

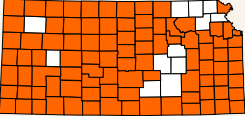
*Phrynosoma cornutum*  
Horned lizard

*Aspidoscelis sexlineata*  
Prairie racerunner



**Racerunners**

Teiidae 1 species




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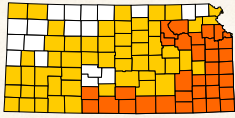

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31




*Plestiodon obsoletus*  
Great Plains skink

**Skinks**

Scincidae 6 species

*Scincella lateralis*  
Ground skink




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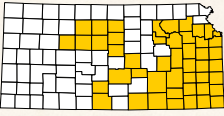
32




*Ophisaurus attenuatus*  
Slender glass lizard

**Glass lizards**

Anguidae



1 species




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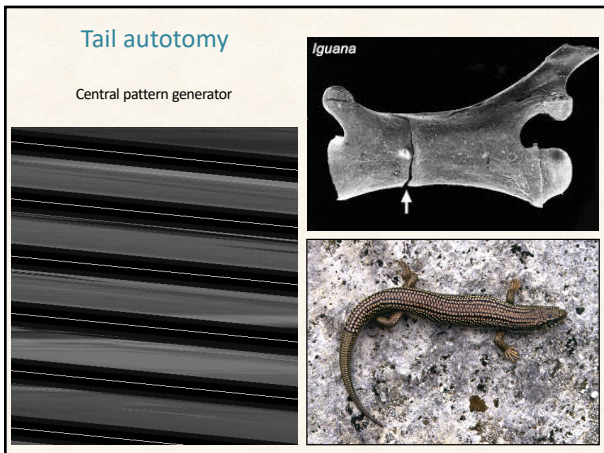
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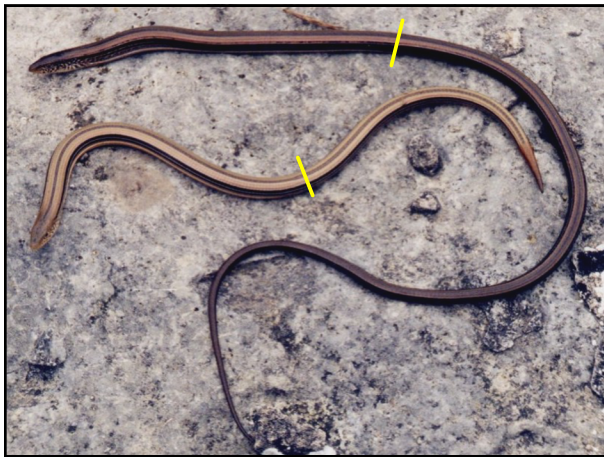
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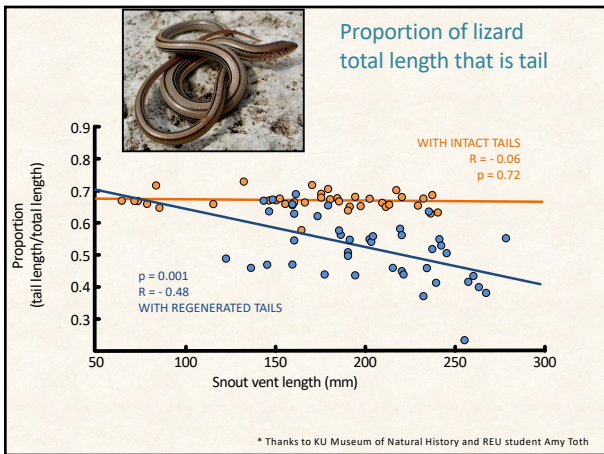
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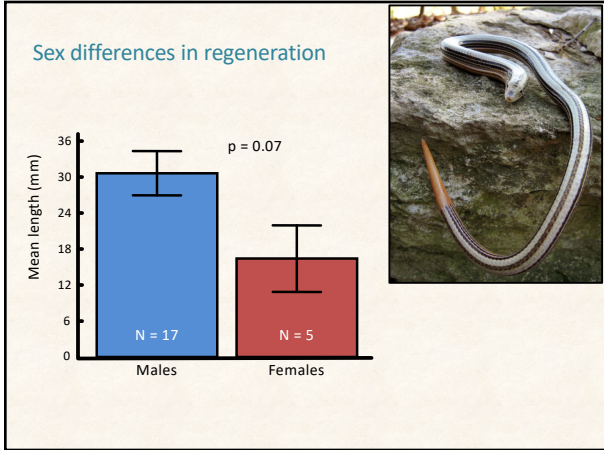
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38

Harmless egg-laying snakes  
14 species

Colubridae

*Pituophis catenifer*  
Bull (Gopher) snake

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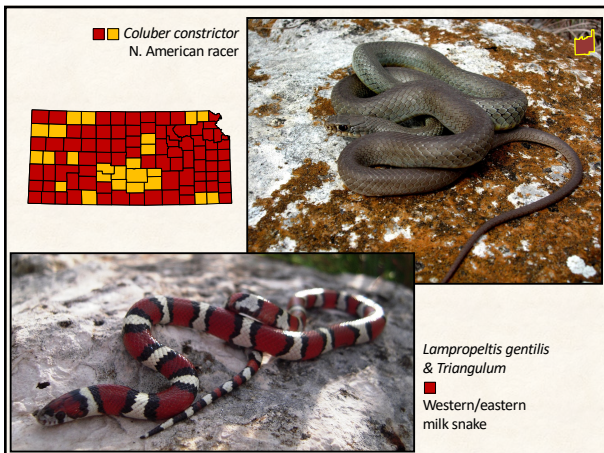
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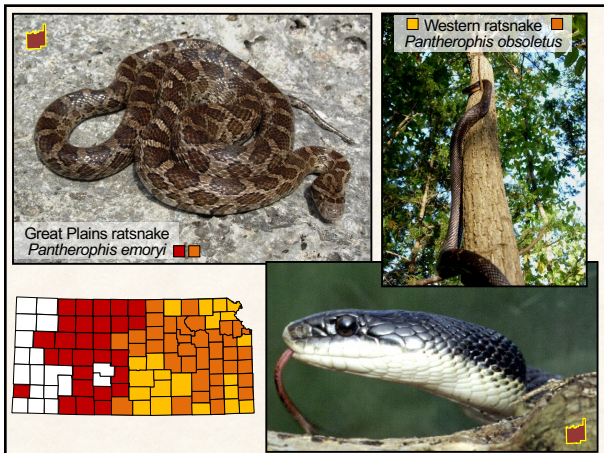
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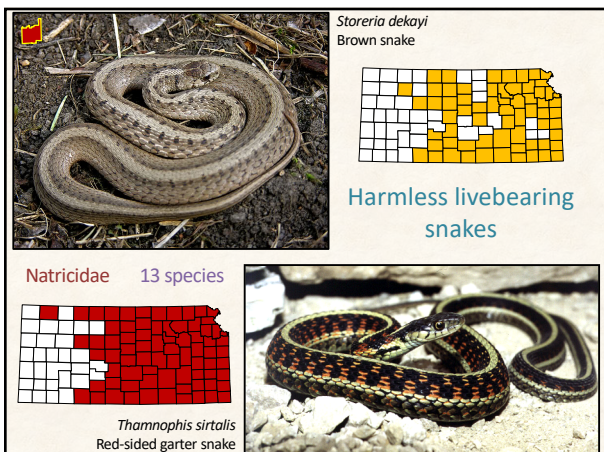
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**Rear fanged snakes**  
Dipsadidae 7 species

*Diadophis punctatus*  
Ringneck snake

*Carphophis vermis*  
Worm snake

43

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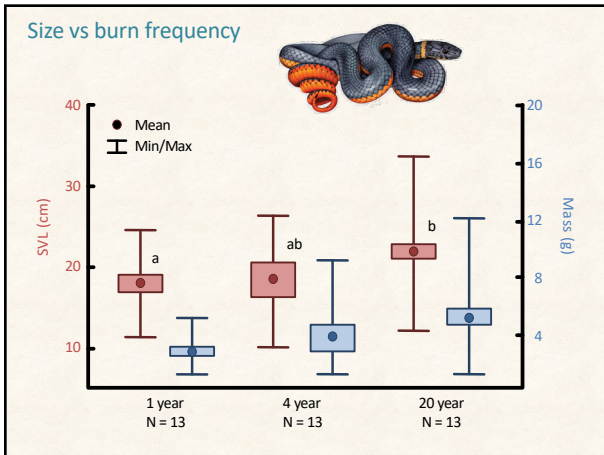
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*Heterodon nasicus*  
W. hognose snake

*Heterodon platirhinos*  
E. hognose snake

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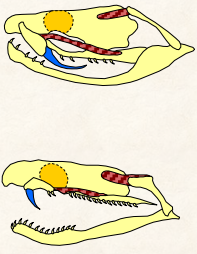
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Pit vipers 6 species Crotalidae

Elapidae

Not in Kansas

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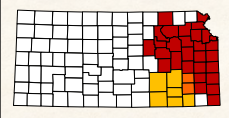
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46



Eastern & broad-banded copperhead

*Agkistrodon contortrix*  
and  
*A. latiscinctus*

- 22 - 36 inches
- Found in woodlands & brushy meadows near woodlands

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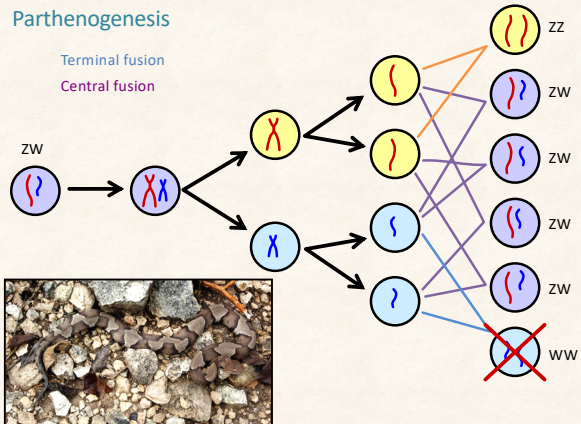

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Parthenogenesis

Terminal fusion  
Central fusion


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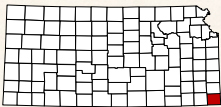
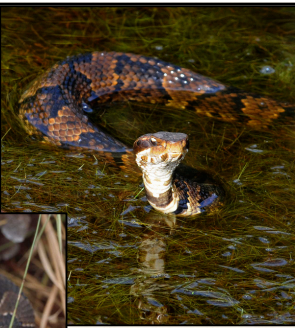
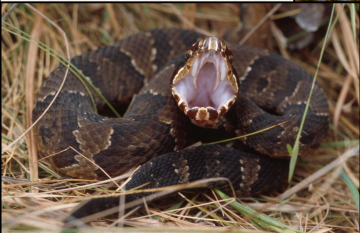
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Cottonmouth  
*Agkistrodon piscivorus*

- 30 - 48 inches
- Found in aquatic habitats

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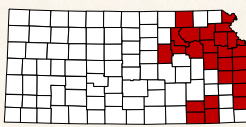


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Timber rattlesnake  
*Crotalus horridus*

- 36 - 60 inches
- Found in rocky outcrops on partially forested hillsides

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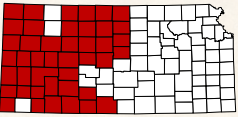


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Prairie rattlesnake  
*Crotalus viridis*

- 35 - 45 inches
- Found in rocky canyons & open prairie

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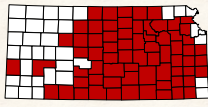
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Western Massasauga  
*Sistrurus tergeminus*

- 18-30 inches
- Found in arid, open sagebrush prairie; rocky, prairie hillsides; open wetlands




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52

### Acknowledgements

- Collins, J. T., S. L. Collins, T. W. Taggart. 2010. Amphibians, Reptiles and Turtles in Kansas. Eagle Mountain Publishing, Eagle Mountain, Utah.
- The Kansas Herp Atlas: <http://webcat.fhsu.edu/ksfauna/herps/>
- Photos – Suzanne Collins, Ryan Rehmeier, Eva Horne & various websites
- Many students helping to collect
- Some data shown from Dustin Wilgers, Amy Toth, and Daniel Peacock.






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