



- PRESENTER NOTES

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# Definitions

- **Herpetology:** The study of amphibians and reptiles
- **Herps:** Slang for amphibians and reptiles; from the Greek *herpein*, meaning “to creep”

- Herping = looking for amphibians and reptiles; typically for the “thrill of the find” or for research, not to kill
- Herper = one who looks for amphibians and reptiles
- Herpetologist = professional who studies amphibians and reptiles
- Herptiles / Herpetofauna = alternatives of herps
  
- Herpetology as a field is based more on historical groupings than on biologically meaningful ones; amphibians and reptiles are hugely different groups of vertebrates.

# AR Herp Species

Source	Amphibs	Reptiles	Total
Trauth 2004	52	65	117
AR Herp Atlas 2016	58	67	125

- General trend toward splitting, rather than lumping, taxa.
- Genetic analysis has revealed many “hidden” species that are not always congruent with traditional subspecies recognitions.

# Level III Ecoregions



- Ozark Highlands
- Boston Mountains
- Arkansas Valley
- Ouachita Mountains
- South Central Plains
- Mississippi Alluvial Plain
- Crowley's Ridge

- Additional major geographic/genetic barriers:
  - Arkansas River
  - Mississippi River
  - Elevations (i.e. “sky islands”), particularly in the Ouachita Mountains

# Amphibians

- Salamanders and frogs
- Moist, glandular skin; require moist habitats
- Biphasic life cycle pattern
  - Eggs simple and gelatinous; require water or very moist conditions
  - Aquatic larval stage
  - Terrestrial adult stage
  - (Many tweaks of the standard pattern)

- Amphibian from the Greek *amphibios*, meaning “double life”
- Worm-like and primitive caecilians not represented in Arkansas
- Examples of life cycle tweaks:
  - Lay eggs on land; larva develop fully inside eggs
  - Paedomorphism: adult reproductive development while retaining aquatic, juvenile characteristics

# Salamanders



- Salamander from the Greek *salamáandrā*, meaning “fire lizard”...perhaps originating from salamanders emerging out of rotten logs placed in a fire?
- 33 species in 7 families
- Cave Salamander (*Eurycea lucifuga*) crossing the road



- Mole Salamanders (Ambystomatidae)

- LEFT, TOP TO BOTTOM:

- 1) Ringed Salamander (*Ambystoma annulatum*)  
---- Ozarks; fall breeder
- 2) Spotted Salamander (*Ambystoma maculatum*)  
---- Statewide; spring breeder
- 3) Marbled Salamander (*Ambystoma opacum*)  
---- Statewide, except Ozarks; terrestrial breeder

- RIGHT, TOP TO BOTTOM:

- 4) Mole Salamander (*Ambystoma talpoideum*)  
---- Bottom lands of South Central Plains and Mississippi Alluvial Plain; some paedomorphic populations
- 5) Small-mouthed Salamander (*Ambystoma texanum*)  
---- Statewide, though rare in Ozarks
- 6) Eastern Tiger Salamander (*Ambystoma tigrinum*)  
---- Northern and southwestern Arkansas; winter breeder





- Amphiumas (Amphiumidae)

7) Three-toed Amphiuma (*Amphiuma tridactylum*)

---- Swamps of South Central Plains and Mississippi Alluvial Plain; fully aquatic; “Congo eel”



- Hellbenders (Cryptobranchidae)

8) Ozark Hellbender (*Cryptobranchus alleganiensis bishopi*)

---- Select cold water rivers in northeastern Arkansas; fully aquatic; federally endangered; “snot otter”



- Lungless Salamanders (Plethodontidae)
  - Dusky Salamanders (*Desmognathus*)

9) Ouachita Dusky Salamander (*Desmognathus brimleyorum*)

---- Streams of Ouachita Mountains and South Central Plains; highly aquatic

- NOT SHOWN

10) Spotted Dusky Salamander (*Desmognathus conanti*)

---- Streams of Crowley's Ridge; highly aquatic; likely extirpated



- Lungless Salamanders (Plethodontidae)
  - Brook Salamanders (Eurycea)

11) Dark-sided Salamander (*Eurycea longicauda melanopleura*)

---- Karst caves and cool ravines of Ozarks

12) Cave Salamander (*Eurycea lucifuga*)

---- Karst caves and cool ravines of Ozarks



- Lungless Salamanders (Plethodontidae)
  - Brook Salamanders (*Eurycea*)

13-14) Many-ribbed Salamander (*Eurycea multiplicata*) complex

---- Streams and very moist habitats in the Ouachita Mountains (south of the Arkansas River); highly aquatic; 2 distinct clades

15-17) Oklahoma Salamander (*Eurycea tynerensis*) complex

---- Streams and very moist habitats in the Ozarks (north of the Arkansas River); neotenic populations in extreme northwestern Arkansas; highly aquatic; 3 distinct clades



- Lungless Salamanders (Plethodontidae)
  - Brook Salamanders (*Eurycea*)

18) Dwarf Salamander (*Eurycea quadridigitata*) complex

---- Moist habitats of South Central Plains;  
Arkansas's smallest salamander; multiple distinct clades



- Lungless Salamanders (Plethodontidae)
  - Brook Salamanders (*Eurycea*)

19-21) Grotto Salamander (*Eurycea spelaea*) complex

---- Karst cave obligate of the Ozarks, 3 distinct lineages



- Lungless Salamanders (Plethodontidae)
  - Brook Salamanders (Eurycea)

22) Oucahita Streambed Salamander (*Eurycea subfluvicola*)

---- Known from a single stream system near Hot Springs; neotenic; fully aquatic





- Lungless Salamanders (Plethodontidae)
  - Four-toed Salamanders (Hemidactylium)

23) Four-toed Salamander (*Hemidactylium scutatum*)  
---- Ouachita Mountains; sphagnum moss mats/bogs preferred habitat; four toes on front AND hind feet; inset = ventral view



- Lungless Salamanders (Plethodontidae)
  - Woodland Salamanders (Plethodon)...”Slimy Salamander Complex”

- LEFT, TOP TO BOTTOM

24) Western Slimy Salamander (*Plethodon albagula*) complex  
 ---- Most widespread; gooey secretions for defense; distinct lineages

25) Caddo Mountain Salamander (*Plethodon caddoensis*)

---- Ouachita Mountains; Arkansas endemic; 4 distinct lineages

26) Fourche Mountain Salamander (*Plethodon fourchensis*)

---- Fourche Mountain and vicinity; Arkansas endemic; 4 distinct lineages

- RIGHT, TOP TO BOTTOM

27) Kiamichi Slimy Salamander (*Plethodon kiamichi*)

---- Round Mountain in eastern Polk County

28) Rich Mountain Salamander (*Plethodon ouachitae*)

---- Rich Mountain and vicinity; 7 distinct lineages



- Lungless Salamanders (Plethodontidae)
  - Woodland Salamanders (Plethodon)

29) Ozark Zigzag Salamander (*Plethodon angusticlavius*)

---- Ozarks

30) Southern Red-backed Salamander (*Plethodon serratus*)

---- Ouachita Mountains



- Mudpuppies and Waterdogs (Proteidae)

31) Red River Mudpuppy (*Necturus maculosus louisianensis*)

---- Waterways statewide; fully aquatic; inset = larva



- Newts (Salamandridae)

32) Central Newt (*Notophthalmus viridescens louisianensis*)

---- Statewide; aquatic larvae and adults; inset = terrestrial eft stage



- Sirens (Sirenidae)

33) Western Lesser Siren (*Siren intermedia nettingi*)  
---- South Central Plains and Mississippi Alluvial  
Plain; fully aquatic; inset = larva



- 25 species in 5 families
- Plains Spadefoot (*Spea bombifrons*) at breeding pool



- True Toads (Bufonidae)

1) Dwarf American Toad (*Anaxyrus americanus charlesmithi*)

---- Statewide; long, melodic trilling call

2) Fowler's Toad (*Anaxyrus fowleri*)

---- Statewide; hybridizes with Rocky Mountain Toad (*A. woodhousii woodhousii*); short trilling call





- Treefrogs (Hylidae)
  - Cricket Frogs (*Acris*)

### 3) Blanchard's Cricket Frog (*Acris blanchardi*)

---- Statewide; highly variable; cricket-like call; small photos = variations



- Treefrogs (Hylidae)

- Holarctic Treefrogs (*Hyla*)

- TOP, LEFT TO RIGHT

4) Cope's Gray Treefrog (*Hyla chrysoscelis*)

---- Statewide, except less common in Ozarks; arboreal; nearly indistinguishable from *H. versicolor*; faster trilling call

5) Western Bird-voiced Treefrog (*Hyla avivoca avivoca*)

---- Swamps of South Central Plains and Arkansas Valley; arboreal; melodic, bird-like call

6) Green Treefrog (*Hyla cinerea*)

---- Statewide, except Ozarks; arboreal; duck-like call

- BOTTOM, LEFT TO RIGHT

7) Gray Treefrog (*Hyla versicolor*)

---- Ozarks and Arkansas Valley primarily; nearly indistinguishable from *H. chrysoscelis*; arboreal; slower trilling call

8) Squirrel Treefrog (*Hyla squirella*)

---- Couple of localities in Union County; arboreal; nasally, buzzing quack call



- Treefrogs (Hylidae)
  - Chorus Frogs (*Pseudacris*)

- LEFT, TOP TO BOTTOM

9) Spring Peeper (*Pseudacris crucifer*)

---- Statewide; arboreal; harbinger of spring with loud peeps

10) Cajun Chorus Frog (*Pseudacris fouquettei*)

---- Statewide; slower “thumbnail over a comb” like call

11) Boreal Chorus Frog (*Pseudacris maculata*)

---- Pea Ridge area in Benton County; near indistinguishable from *P. fouquettei*; faster “thumbnail over a comb” like call

- RIGHT, TOP TO BOTTOM

12) Strecker's Chorus Frog (*Pseudacris streckeri*)

---- Arkansas Valley primarily; larger than other *Pseudacris*; “tink” like call

13) Illinois Chorus Frog (*Pseudacris illinoensis*)

---- Extreme NE corner of state; proposed candidate for endangered species status; larger than other *Pseudacris*; “tink” like call



- Microhylid Frogs and Toads (Microhylidae)

14) Eastern Narrow-mouthed Toad (*Gastrophryne carolinensis*)

---- Statewide; fossorial ant eater; “baaaw of dying sheep” like call

15) Western Narrow-mouthed Toad (*Gastrophryne olivacea*)

---- Spotty records from western Arkansas; fossorial; “angry buzz” like call



- True Frogs (Ranidae)

- LEFT, TOP TO BOTTOM

16) Crawfish Frog (*Lithobates areolatus* ssp.)

---- Arkansas Valley and four corners; early spring breeder; “snorting hog” like call

17) Plains Leopard Frog (*Lithobates blairi*)

---- Mississippi County

- RIGHT, TOP TO BOTTOM

18) Pickerel Frog (*Lithobates palustris*)

---- Statewide; quiet “snoring” like call

19) Coastal Plains Leopard Frog (*Lithobates sphenoccephalus utricularius*)

---- Statewide; “chuckling/quacking” like call



- True Frogs (Ranidae)

- LEFT, TOP TO BOTTOM

20A) American Bullfrog (*Lithobates catesbeianus*)

20B) American Bullfrog (*Lithobates catesbeianus*) – Tadpole

---- Statewide; Arkansas's largest frog; bull-like call

- RIGHT, TOP TO BOTTOM

21) Green Frog (*Lithobates clamitans*)

---- Statewide; “loose banjo string” like call

22) Wood Frog (*Lithobates sylvaticus*)

---- Ozarks; late winter breeder; quiet “hoarse quacking” like call



- North American Spadefoots (Scaphiopodidae)

- LEFT, TOP TO BOTTOM

23) Eastern Spadefoot (*Scaphiopus holbrookii*)

---- Mississippi Alluvial Plain; highly fossorial; grunt-like call

24) Hurter's Spadefoot (*Scaphiopus hurterii*)

---- Arkansas Valley and South Central Plain primarily; highly fossorial; grunt-like call

- RIGHT

25) Plains Spadefoot (*Spea bombifrons*)

---- Limited records from Arkansas Valley; highly fossorial; snore-like call

# Reptiles

- Alligator, turtles, and squamates (lizards and snakes)
- Dry, scaly skin; may be active in dry habitats
- Direct development; no larval stage
  - Amniotic egg = “shelled pond”
  - Oviparous (egg-laying) or ovoviviparous (egg-retaining/live birth)

- Reptile from the Latin *reperere*, meaning “to creep”
- Some sources elevate alligators and turtles to their own respective taxonomic classes
- Lizards and snakes not easily divided by characteristics; some lizard families are more closely related to snakes than they are to other lizards
- Worm-like and primitive amphisbaenids not represented in Arkansas





- 1 species in 1 family
  - Alligators and Caimans (Alligatoridae)
- 1) American Alligator (*Alligator mississippiensis*)  
---- South Central Plains and Mississippi Alluvial Plain; swamp habitats preferred; Arkansas's largest reptile

# Turtles



- 16 species in 4 families
- Red-eared Slider (*Trachemys scripta elegans*) and Eastern River Cooters (*Pseudemys concinna concinna*) basking on log



- Snapping Turtles (Chelydridae)

- LEFT, TOP TO BOTTOM

1A) Snapping Turtle (*Chelydra serpentina*) – Adult

1B) Snapping Turtle (*Chelydra serpentina*) – Juvenile

---- Statewide; powerful

- RIGHT

2A) Alligator Snapping Turtle (*Macrochelys temminckii*) – Juvenile

2B) Alligator Snapping Turtle (*Macrochelys temminckii*)

---- Absent from Ozarks and Ouachita Mountains; powerful; Arkansas's largest turtle



- Box and Water Turtles (Emydidae)

- LEFT, TOP TO BOTTOM

3) Southern Painted Turtle (*Chrysemys dorsalis*)

---- Backwater/swamp habitats of South Central Plains and Mississippi Alluvial Plain; uncommon

4) Western Chicken Turtle (*Deirochelys reticularia miaria*)

---- Absent from Ozarks and Ouachita Mountains; uncommon

5) Eastern River Cooter (*Pseudemys concinna concinna*)

---- Statewide; larger species of basking turtle

- RIGHT, TOP TO BOTTOM

6) Northern Map Turtle (*Graptemys geographica*)

---- Ozarks, Arkansas Valley (and southern Arkansas River), and Ouachita Mountains; mollusk eater

7) Southern Map Turtle (*Graptemys ouachitensis*)

---- Statewide; highly keeled carapace

8) Mississippi Map Turtle (*Graptemys pseudogeographica kohnii*)

---- Statewide; highly keeled carapace



- Box and Water Turtles (Emydidae)
  - American Box Turtles (Terrapene)
    - LEFT, TOP TO BOTTOM
      - 9A) Three-toed Box Turtle (*Terrapene triunguis*) – Plain morph
      - 9B) Three-toed Box Turtle (*Terrapene triunguis*) – Patterned morph
      - Statewide; terrestrial
    - RIGHT, TOP TO BOTTOM
      - 9C) Three-toed Box Turtle (*Terrapene triunguis*) – Juvenile
      - 10) Ornate Box Turtle (*Terrapene ornata*)
      - Remnant prairie habitats in Arkansas; terrestrial



- Box and Water Turtles (Emydidae)
  - Sliders (Trachemys)

11) Red-eared Slider (*Trachemys scripta elegans*)  
---- Statewide; common basking turtle



- Mud and Musk Turtles (Kinosternidae)

- LEFT, TOP TO BOTTOM

12A) Mississippi Mud Turtle (*Kinosternon subrubrum hippocrepis*)

---- Statewide, except Ozarks; bottom-crawler

12B, 13B, 14B) Juveniles

- RIGHT, TOP TO BOTTOM

13A) Razor-backed Musk Turtle (*Sternotherus carinatus*)

---- Southern Arkansas; bottom-crawler

14A) Eastern Musk Turtle (*Sternotherus odoratus*)

---- Statewide; bottom-crawler; “stinkpot”



- Softshells (Trionychidae)

15) Midland Smooth Softshell (*Apalone mutica mutica*)

---- Larger waterways in Arkansas; sandbars used for laying eggs

16) Spiny Softshell (*Apalone spinifer* ssp.)

---- Statewide; small and large waterways utilized



# Lizards



- 12 species in 6 families
- Prairie Lizard (*Sceloporus consobrinus*) peeking over rock



- Glass Lizards and Alligator Lizards (Anguidae)

1) Western Slender Glass Lizard (*Ophisaurus attenuatus attenuatus*)

---- Statewide, except for Mississippi Alluvial Plain;  
legless



- Collared and Leopard Lizards (Crotaphytidae)

TOP

2A) Eastern Collared Lizard (*Crotaphytus collaris*) – Male

BOTTOM, LEFT TO RIGHT

2B) Eastern Collared Lizard (*Crotaphytus collaris*) – Female

2C) Eastern Collared Lizard (*Crotaphytus collaris*) – Juvenile

---- Rocky glades of Ozarks and Arkansas Valley; “mountain boomer”; Arkansas's largest lizard



- Anoles (Polychrotidae)

3) Northern Green Anole (*Anolis carolinensis carolinensis*)

---- Southern half of Arkansas; “American chameleon”; inset = color change



- Spiny Lizards (Phrynosomatidae)

4) Texas Horned Lizard (*Phrynosoma cornutum*)

---- Spotty records from western Arkansas; ant eater; bleeds from eyes as defense; “horny toad”; possibly extirpated



5) Prairie Lizard (*Sceloporus consobrinus*)  
---- Statewide; inset = male breeding coloration



- Skinks (Scincidae)
  - Toothy Skinks (Plestiodon)

- LEFT, TOP TO BOTTOM

6) Southern Coal Skink (*Plestiodon anthracinus pluvialis*)

---- Statewide, except Mississippi Alluvial Plain

7) Common Five-lined Skink (*Plestiodon fasciatus*)

---- Statewide; most common of Plestiodons in Arkansas; inset = juvenile (“blue-tailed skink”)

- RIGHT, TOP TO BOTTOM

8) Broad-headed Skink (*Plestiodon laticeps*)

---- Statewide; Arkansas's largest skink

9) Great Plains Skink (*Plestiodon obsoletus*)

---- Limited localities in extreme western and northwestern Arkansas

10) Southern Prairie Skink (*Plestiodon septentrionalis obtusirostris*)

---- Spotty records from extreme western Arkansas



- Skinks (Scincidae)
  - Ground Skinks (*Scincella*)

11) Little Brown Skink (*Scincella lateralis*)  
---- Statewide; Arkansas's smallest lizard





- Whiptails and Racerunners (Teiidae)

12) Prairie Racerunner (*Aspidoscelis sexlineata viridis*)

---- Statewide; extremely fast and leery



- 38 species in 5 families
  - 6 venomous species; 32 nonvenomous species
- Eastern Copperhead (*Agkistrodon contortrix*) hiding under log



- Pitvipers (Crotalidae)
  - American Moccasins (Agkistrodon)

- LEFT, TOP TO BOTTOM

1A) Eastern Copperhead (*Agkistrodon contortrix*) – Adult

1B) Eastern Copperhead (*Agkistrodon contortrix*) – Juvenile

---- Statewide; venomous; “upland moccasin”

- RIGHT, TOP TO BOTTOM

2A) Northern Cottonmouth (*Agkistrodon piscivorus*) – Juvenile

2B) Northern Cottonmouth (*Agkistrodon piscivorus*) – Adult

---- Statewide; venomous; semi-aquatic; “lowland moccasin”, “water moccasin”, or “trapjaw”



- Pitvipers (Crotalidae)
  - Rattlesnakes (Crotalus)

3) Western Diamond-backed Rattlesnake (*Crotalus atrox*)

---- Southern Boston Mountains and Ouachita Mountains; venomous; Arkansas's largest snake; “coon-tail rattler”

4) Timber Rattlesnake (*Crotalus horridus*)

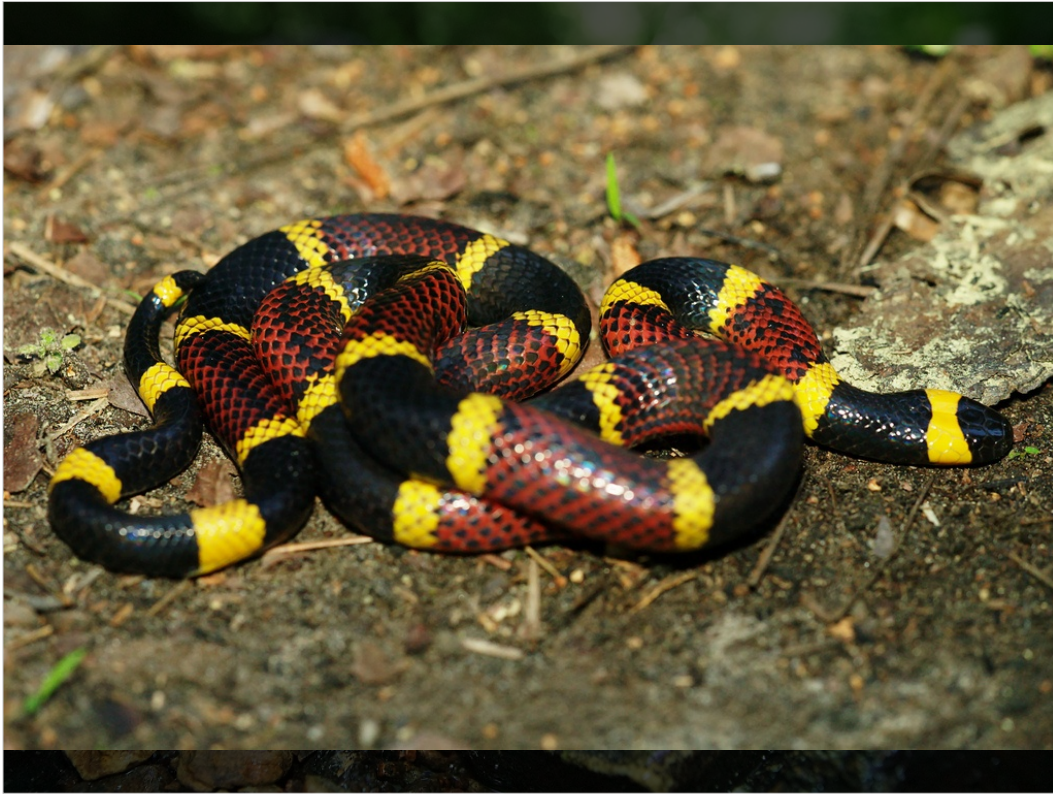
---- Statewide; venomous; “velvet-tail rattler”



- Pitvipers (Crotalidae)
  - Massasauga and Pygmy Rattlesnakes (Sistrurus)

5) Western Pygmy Rattlesnake (*Sistrurus miliarius streckeri*)

---- Statewide, except northeastern Arkansas; venomous; “ground rattler”



- Coralsnakes, Cobras, and Kraits (Elapidae)

6) Texas Coralsnake (*Micrurus tener tener*)

---- Sandy soil habitats of southwestern Arkansas;  
venomous (neurotoxic); snake eater; uncommon



- Harmless Egg-Laying Snakes (Colubridae)
  - Scarletsnakes (Cemophora)

7) Northern Scarletsnake (*Cemophora coccinea copei*)

---- Statewide, though uncommon (especially in Ozarks and Ouachita Mountains); Coralsnake mimic; specialized diet of reptilian eggs



- Harmless Egg-Laying Snakes (Colubridae)
  - North American Racers, Coachwhips, and Whipsnakes (Coluber)

- LEFT, TOP TO BOTTOM

8A) North American Racer (*Coluber constrictor ssp.*) – Adult

8B) North American Racer (*Coluber constrictor ssp.*) – Juvenile

---- Statewide; fast and active

- RIGHT, TOP TO BOTTOM

9A) Eastern Coachwhip (*Coluber flagellum flagellum*) – Juvenile

9B) Eastern Coachwhip (*Coluber flagellum flagellum*) – Adult

---- Statewide, except for Mississippi Alluvial Plain; fast and active





- Harmless Egg-Laying Snakes (Colubridae)
  - Kingsnakes (*Lampropeltis*)

- LEFT, TOP TO BOTTOM

10) Western Milksnake (*Lampropeltis gentilis*)

---- Southwestern half of state; Coralsnake mimic

11) Speckled Kingsnake (*Lampropeltis holbrooki*)

---- Statewide; oft a snake eater; “salt and pepper snake”

- RIGHT, TOP TO BOTTOM

12) Prairie Kingsnake (*Lampropeltis calligaster calligaster*)

---- Statewide, except for Mississippi Alluvial Plain

13) Eastern Milksnake (*Lampropeltis triangulum*)

---- Northeastern half of state; Coralsnake mimic



- Harmless Egg-Laying Snakes (Colubridae)
  - Greensnakes (Opheodrys)

14) Northern Rough Greensnake (*Opheodrys aestivus aestivus*)

---- Statewide; semi-arboreal; insectivore



- Harmless Egg-Laying Snakes (Colubridae)
  - North American Ratsnakes (*Pantherophis*)
  
- LEFT, TOP TO BOTTOM
  - 15A) Great Plains Ratsnake (*Pantherophis emoryi*)
  - 15B) Great Plains Ratsnake (*Pantherophis emoryi*) – Juvenile
  - Ozarks, Arkansas Valley, and Ouachita Mountains; powerful constrictor
  
- RIGHT, TOP TO BOTTOM
  - 16A) Western Ratsnake (*Pantherophis obsoletus*) – Adult
  - 16B) Western Ratsnake (*Pantherophis obsoletus*) – Juvenile
  - Statewide; powerful constrictor; “black/western ratsnake”, “chicken snake”, etc.



- Harmless Egg-Laying Snakes (Colubridae)
  - North American Groundsnakes (Sonora)

- LEFT, TOP TO BOTTOM

17A) Variable Groundsnake (*Sonora semiannulata semiannulata*) – Plain, collared morph

17B) Variable Groundsnake (*Sonora semiannulata semiannulata*) – Striped, collared morph

17C) Variable Groundsnake (*Sonora semiannulata semiannulata*) – Mixed morph

- RIGHT, TOP TO BOTTOM

17D) Variable Groundsnake (*Sonora semiannulata semiannulata*) – Muted barred morph

17E) Variable Groundsnake (*Sonora semiannulata semiannulata*) – Orange barred morph

---- Few records from rocky glades of Arkansas/Missouri and Arkansas/Oklahoma borders; highly variable; centipede eater



- Harmless Egg-Laying Snakes (Colubridae)
  - Black-headed, Crowned, and Flat-headed Snakes (*Tantilla*)

18) Flat-headed Snake (*Tantilla gracilis*)

---- Statewide, except Mississippi Alluvial Plain; rocky glade habitat preferred; highly fossorial; Arkansas's smallest snake



- Rear-Fanged Snakes (Dipsadidae)
  - North American Wormsnakes (*Carphophis*)

19) Midwestern Wormsnake (*Carphophis amoenus helenae*)

---- Crowley's Ridge; highly fossorial

20) Western Wormsnake (*Carphophis vermiformis*)

---- Statewide, except for Mississippi Alluvial Plain (and rare from South Central Plains); highly fossorial



- Rear-Fanged Snakes (Dipsadidae)
  - Ring-necked Snakes (Diadophis)

21) Ring-necked Snake (*Diadophis punctatus ssp.*)  
---- Statewide, except for Mississippi Alluvial Plain  
(though it **is** found on Crowley's Ridge); fossorial



- Rear-Fanged Snakes (Dipsadidae)
  - Mudsnakes and Rainbow Snakes (Farancia)

22) Western Mudsnake (*Farancia abacura reinwardtii*)

---- Swamps of South Central Plains and Mississippi Alluvial Plain; specialized diet of amphiuma and siren; “hoop snake” or “stinging snake”





- Rear-Fanged Snakes (Dipsadidae)

- North American Hog-nosed Snakes (Heterodon)

- LEFT, TOP TO BOTTOM

23A) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – Juvenile

23B) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – Patterned morph

23C) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – Plain morph

- RIGHT, TOP TO BOTTOM

23D) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – Defensive display

23E) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – Playing dead

23F) Eastern Hog-nosed Snake (*Heterodon platirhinos*) – “Differently toothed”

---- Statewide; highly variable; toad eater; exaggerated defensive tactics



- Harmless Live-Bearing Snakes (Natricidae)
  - Rough Earthsnakes (*Haldea*)
  - North American Earthsnakes (*Virginia*)

24) Rough Earthsnake (*Haldea striatula*)

---- Statewide, except Mississippi Alluvial Plain;  
fossorial

25) Western Smooth Earthsnake (*Virginia valeriae elegans*)

---- Statewide, except Mississippi Alluvial Plain;  
fossorial



- Harmless Live-Bearing Snakes (Natricidae)
  - Swampsnakes (Liodytes)
  - Crayfish Snakes (Regina)

- LEFT, TOP TO BOTTOM

26A) Gulf Swampsnake (*Liodytes rigida sinicola*)

---- South Central Plains; crayfish eater; aquatic; uncommon

27) Graham's Crayfish Snake (*Regina grahamii*)

---- Southern Arkansas and Mississippi Alluvial Plain with sparse records from northwestern Arkansas; aquatic; crayfish eater; uncommon

- RIGHT, TOP TO BOTTOM

26B) Gulf Swampsnake (*Liodytes rigida sinicola*) – Consuming crayfish

28) Queensnake (*Regina septemvittata*)

---- Boston Mountains (particularly the Mulberry River); aquatic; crayfish eater; uncommon



- Harmless Live-Bearing Snakes (Natricidae)
  - North American Watersnakes (Nerodia)

- LEFT, TOP TO BOTTOM

29) Mississippi Green Watersnake (*Nerodia cyclopion*)

---- South Central Plains and Mississippi Alluvial Plain; semi-aquatic; uncommon

30) Plain-bellied Watersnake (*Nerodia erythrogaster*)

---- Statewide; semi-aquatic; inset = juvenile

- RIGHT, TOP TO BOTTOM

31) Broad-banded Watersnake (*Nerodia fasciata confluens*)

---- South Central Plains and Mississippi Alluvial Plain; semi-aquatic

32) Northern Diamond-backed Watersnake (*Nerodia rhombifer rhombifer*)

---- Absent from central Ozarks and Ouachita Mountains; semi-aquatic

33) Midland Watersnake (*Nerodia sipedon pleuralis*)

---- Statewide, especially in faster waters; semi-aquatic



- Harmless Live-Bearing Snakes (Natricidae)
  - North American Brown Snakes (*Storeria*)

- LEFT, TOP TO BOTTOM

34A) Midland Brownsnake (*Storeria dekayi wrightorum*) – Variation

34B) Midland Brownsnake (*Storeria dekayi wrightorum*) – Variation

34C) Midland Brownsnake (*Storeria dekayi wrightorum*) – Variation

---- Statewide; fossorial

- RIGHT, TOP TO BOTTOM

35A) Red-bellied Snake (*Storeria occipitomaculata ssp.*) – Brown morph

35B) Red-bellied Snake (*Storeria occipitomaculata ssp.*) – Striped morph

35C) Red-bellied Snake (*Storeria occipitomaculata ssp.*) – Gray, “ring-necked” morph

---- Statewide; fossorial



- Harmless Live-Bearing Snakes (Natricidae)
  - North American Gartersnakes (*Thamnophis*)

36) Orange-striped Ribbonsnake (*Thamnophis proximus proximus*)

---- Statewide

37) Eastern Gartersnake (*Thamnophis sirtalis sirtalis*)

---- Statewide; “garden snake”



- Harmless Live-Bearing Snakes (Natricidae)
  - Lined Snake (Tropidoclonion)

38) Lined Snake (*Tropidoclonion lineatum*)  
---- Single record from northwestern Arkansas



- 3 exotic/introduced species

1) Seal Salamander (*Desmognathus monticola*)

---- Spavinaw Creek in Benton County; highly aquatic

2) Mediterranean Gecko (*Hemidactylus turcicus*)

---- Spotty records associated with human habitations, such as university campuses, state parks, and cities; nocturnal; adept climber

- NOT SHOWN

3) Cuban Brown Anole (*Anolis sagrei sagrei*)

---- Single record from Pike County



## Amphibians of Potential Occurrence

- Rocky Mountain Toad (*Anaxyrus woodhousii woodhousii*)
- Gulf Coast Toad (*Incilius nebulifer*)
- Spotted Chorus Frog (*Pseudacris clarkii*)
- Upland Chorus Frog (*Pseudacris feriarum*)



## Reptiles of Potential Occurrence

- Western Painted Turtle (*Chrysemys picta bellii*)
- Yellow Mud Turtle (*Kinosternon flavescens*)
- Texas Spotted Whiptail (*Aspidoscelis gularis gularis*)
- Broad-banded Copperhead (*Agkistrodon laticinctus*)
- Plains Hog-nosed Snake (*Heterodon nasicus*)
- Texas Nightsnake (*Hypsiglena jani texana*)
- Eastern Black Kingsnake (*Lampropeltis nigra*)
- Slowinski's Cornsnake (*Patherophis slowinskii*)
- Bullsnake (*Pituophis catenifer sayi*)

# Additional Resources

[HerpsOfArkansas.com](http://HerpsOfArkansas.com)

[ArkansasFrogsAndToads.org](http://ArkansasFrogsAndToads.org)

[Amphibians and Reptiles of Arkansas](#)  
by Stanley E. Trauth, et al.

[Arkansas Snake Guide \(AG&F\)](#)  
by Kelly J. Irwin



- QUIZ: 1) Find the herp. 2) Identify the species.
- ANSWER: 1) Coiled in leaf litter toward lower left corner. 2) Timber Rattlesnake (*Crotalus horridus*)



# Amphibians and Reptiles of Arkansas

- THE END