

Snakes, Turtles, and Lizards – Oh My!



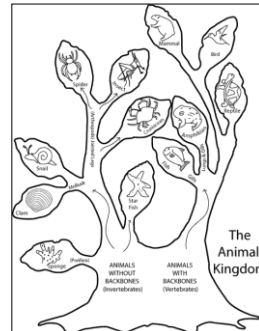
Marne Titchenell, Extension Program Specialist – Wildlife
School of Environment & Natural Resources

CFAES

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
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HEARD ABOUT HERPETILES?



Herpetile

- “crawling” animal
- **Herpetology**
 - The study of the ecology of reptiles and amphibians

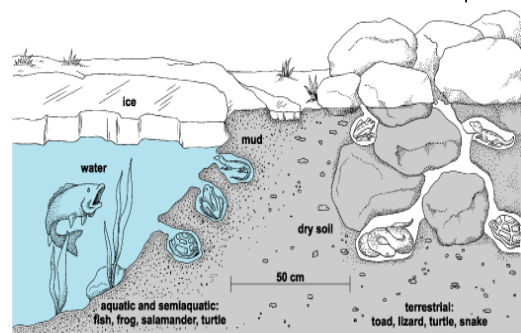
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WHY HERPS?

- **Secrecy** – with the exception of frogs, most herps lead very secret lives, many are masters of camouflage
- **Transportation restrictions** - generally small animals that crawl, hop, or swim with small territories
- **Ectothermic** – dependant on environment to regulate body temperature
- **Dormancy** – inactive for large portions of the year

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HOW HERPS COPE WITH THE COLD



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THE ACTIVE TIME OF YEAR:

- Reptiles and amphibians emerge with warming temperatures
 - March/April
- What are the main priorities upon waking??



- Wood frogs may emerge as early as February to being mating



- Male garter snakes emerging from hibernacula undergo fierce competition for females.

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OHIO'S REPTILES

46 species in Ohio:

- **Turtles**
 - 11 species
 - Most freshwater aquatic
- **Snakes and Lizards**
 - 31 species of snakes
 - Occupy variety of habitats
 - 5 species of lizards
 - All terrestrial and arboreal



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OHIO'S REPTILES



Characteristics:

- Clad in scales, dry skin
- Have claws
- Lay they eggs on land
- Young are miniatures of parents

ID Hint: Learn habitats of different snakes



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Joe Boggs

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HOW DO YOU FEEL ABOUT SNAKES?



Ophidiophobia – the fear of snakes

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COMMON GARDEN SNAKES



Eastern Gartersnake



Richard Gardner, Bugwood.org



Caleb Stemmmons, Nat. Ecol. Observatory Network, Bugwood.org

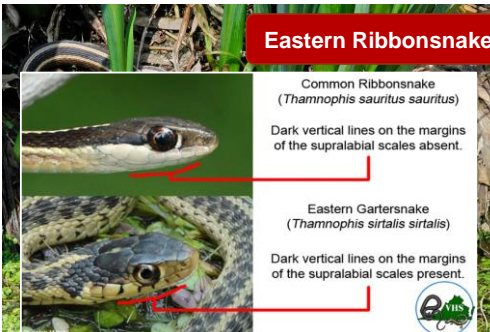


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GARTERSNAKE LOOK-ALIKE



Eastern Ribbonsnake



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COMMON GARDEN SNAKES

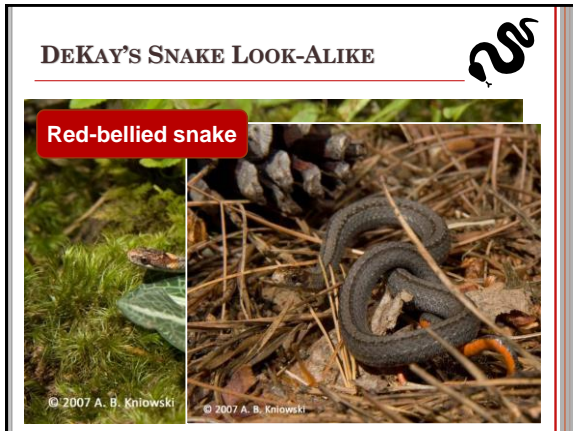


Brett Marshall, Sault College, Bugwood.org

DeKay's Brownsnake



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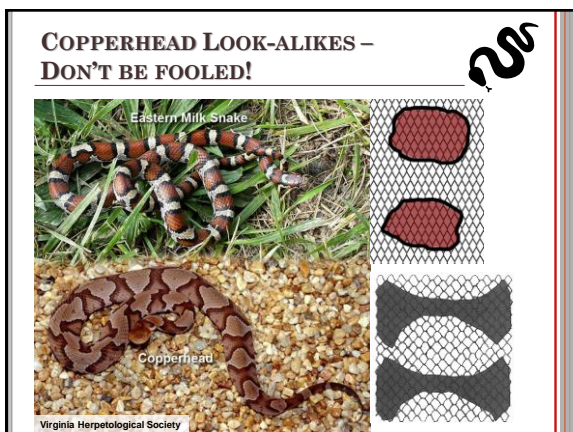
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VENOMOUS VS. POISONOUS

Venomous

Organisms that bite (or sting) to inject their toxins.

Poisonous

Organisms that unload toxins when you eat them.



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OHIO'S VENOMOUS SNAKES

Bill Peterman



Timber Rattlesnake*

Massasauga rattlesnake*



* = endangered in Ohio



Eastern Copperhead

John White

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CAMO COPPERHEAD



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MASSASAUGA MAMA



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MASSASAUGA MAMA



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UPCOMING FREE WEBINAR! REGISTER – GO.OSU.EDU/HERPS

CFAES OHIO STATE UNIVERSITY EXTENSION

Ohio Woodland Stewards Program

**Friday's
ESCAPE TO THE
FOREST**

Take a break to relax and visit the woods with us...

Woodlandstewards.osu.edu/resources

LIVE WEBINARS

October 2nd 10 am - 12 pm
Shorebird Identification
<https://go.osu.edu/shorebirds>

October 16th 10 am - 12 pm
Management: Deer and Habitat
<https://go.osu.edu/deer>

November 13th 10 am - 12 pm
Finding the Spots - A National and State Update on Spotted Lanternfly
<https://go.osu.edu/spotthelily>

November 20th 10 am - 12 pm
Timber Rattlesnake Ecology and Conservation in Ohio
<https://go.osu.edu/herps>

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VENOMOUS SNAKE ID



Venomous Snakes

- Triangular head
- Pupils elliptical
- Pits and nostrils



Allen Bridgman, SC Dept. NR, Bugwood.org

Non-venomous Snakes

- Oval head
- Pupils round
- No pits, just nostrils



Curtis Young

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BEWARE THE BLUFF!!



Video courtesy bradleystrand81
<https://www.youtube.com/watch?v=m1k5Nh4O9G8>

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EASTERN HOG-NOSED BLUFF



Video courtesy Nick Barys -
<https://www.youtube.com/watch?v=ICPVGstdNjU>

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BOTTOM LINE....



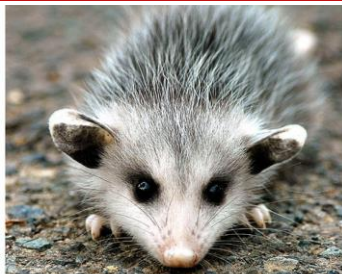
If you don't know what
species of snake it is,
don't bother it!

Eastern Black Kingsnake



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THE CREATURE THAT LOOKS INTO THE FACE OF VENOMOUS DEATH AND SAYS...NOT TODAY.



"Some scientists even believe the lowly opossum, which wields a venom-neutralizing peptide in its blood, may hold the key to developing a universal antivenom." ~ Jason Bittel, smithsonian.com

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TIME TO TALK...TURTLES!



- Remain relatively unchanged through the years
 - 200 million years old
- Painted turtle
- Red-eared sliders
- Snapping turtles
- Woodland box turtle
 - Forested areas
 - High-domed carapace and hinged plastron = boxed in for protection



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REPTILE EGG ID

- Many eggs look very similar to one another
- Soft-shelled, rubbery, white to cream in color
- Some are elongated, some round (snapping turtle)
- Usually buried in the ground or under logs or rocks
- Reptiles usually lay more eggs than birds



Chris Evans, U Illinois, Bugwood.org



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SNAPPING TURTLE NEST @ FFA CAMP MUSKINGUM



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OHIO'S LIZARDS



Broad-headed Skink



Eastern Fence Lizard



Five-lined Skink

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NON-NATIVE LIZARD

COMMON (EUROPEAN) WALL LIZARD

FAMILY: LACERTIDAE STATUS: INVASIVE ALIEN

LENGTH: 5.5" - 8.125"

DESCRIPTION: This exotic species was introduced into Cincinnati in 1951 and has become well established. Sometimes referred to locally as "European lizards," the common wall lizards were brought to eastern Cincinnati from northern Italy by a food retailer after a vacation near Milan and were released in a backyard. The lizards can now be found in several areas in Hamilton, Butler, and Chester Counties and have established themselves in neighboring Kentucky and Indiana, with population densities of 1,500 per acre in good habitat. It is unknown what effects the common wall lizard will have on native species, but their spread should be discouraged. It is illegal to release this or other animals into the wild in Ohio.

HABITAT: The lizards are primarily found along old rock walls, railroad tracks, refuse piles, or occasionally in rocky areas. Because they have persisted for many years and survived through record-setting winter winters, they are considered permanent residents.



• 1976 to present
 ■ Historic records prior to 1976

wildohio.gov

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BROAD-HEADED VS. FIVE-LINED SKINK ID

- Mature males have broad, reddish heads.
- Mature males lose their stripes with age.
- Females retain stripes (five-lined)
- Juveniles have blue tails.

Broad-headed Skink
(*Plestiodon laticeps*)Common Five-lined Skink
(*Plestiodon fasciatus*)

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NIGHT OF THE LIVING TAILS!!

- Tails break away at fault line
 - Wiggle for up to 30 mins
 - May flip 3 cm into air
- Some species regenerate new tail over 6-12 months
- This practice of self-amputation is called **autotomy**.



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SNAKE CONSERVATION

- Predators of pests
 - Invertebrates
 - Rodents
- Important to many ecosystems
- Contributions to human medicine
 - Snake venom proteins may help fight disease
- Facing threats



Allen Bridgman, SC Dept. NR, Bugwood.org

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HERPS AND HUMANS

Lizards

- Inside house, garages, basements
- Come in to escape weather and find food
- Catch with box or jar and release outside.

Turtles

- Nesting in yard, living in ponds
- Leave nest alone, fence off
- Trapping/hook and bait with fishing license

Snakes

- In basements, basking on porch steps, in the lofts of barns
- Seal cracks between house and foundation (most snakes can fit through crack 1/2" wide)
- Eliminate brush or log piles next to house or structure
- Erect angled fence, bury it 2-4" underground

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WHAT CAN YOU DO TO HELP?

- Protect/create vernal pools
- Create shallow edges around ponds
- Anchor logs to banks over open water for turtles to bask
- Add rocks, logs (cedar or oak) along shores to create basking sites
- Introduce native plants to edges of ponds as well as to the water

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WHAT SHOULD I PLANT?

Emergent Vegetation

- Cattails
 - No narrow-leaf cattail
 - Broad-leaf cattail
 - Can be very aggressive
- Sedges
 - Very diverse and not very aggressive
- Rushes
 - Bulrushes
- Irises
- Arrowhead
- Pickerel weed



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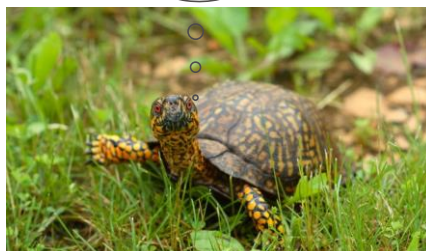
WHAT SHOULD I PLANT?

- Trees and Shrubs
 - Red osier dogwood
 - Cranberry viburnum
 - Buttonbush
 - Sumacs
 - Serviceberry
 - Winterberry (male and female)
- Good for every wildlife species
 - Stabilize edges, shade water surface – cool spots for wildlife, limits algae growth



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QUESTIONS??



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