

## Lesson 1 of SHARE monitoring program

Introduction to program and herpetofauna

Today we're going to talk about:

1. Background information on reptiles and amphibians—so you will know a little about them
2. A new research project at your school that all of you can help with

Amphibians and Reptiles

- a. Important – Any idea why?
  - i. Predator: They eat lots of other things
  - ii. Prey: They are food for lots of things

What are amphibians?

- Skin
  - Moist and can breathe through their skin
  - Must stay moist to breathe
- Good sense of smell
- What do amphibians eat?
  - Insects
  - Other amphibians
  - Anything else that will fit into their mouths
- Life cycle
  - Mating
  - Lay eggs
  - Eggs hatch
  - Larvae eat anything smaller than themselves & Grow
  - Absorb tail and grow legs (Metamorphosis)
  - Become an adult and disperse to new locations
  - Call to attract mates
- 3 Types that live in NC:
  - Frogs:
    - Tail-less as adults
    - Good jumpers
  - Toads
    - Warty skin: Have a large gland behind their eye that secretes poison
  - Salamanders
    - Some have lungs
    - Some don't have lungs and breathe entirely through their skin
    - They breed in 3 different places (lay their eggs there):
      - Terrestrial (land)
      - Stream
      - Wetland

- REPTILES
  - lizards, snakes, turtles, crocodilians
  - How do they reproduce: Give birth to live young or lay terrestrial eggs w/ leathery shells
  - Crocodilians
    - Only species in NC is the American Alligator
  - Turtles
    - backbone is incorporated into the shell
    - Eat plants and animals (insects and worms): Omnivorous
    - What turtles could you find in \_\_\_\_ environment?
      - Marine
        - All threatened or endangered
        - Leatherback turtle, Green, Hawksbill, Kemp Ridley, ect.
        - Crush from Finding Nemo
      - Freshwater ponds and wetlands
        - Snapping Turtle, Painted Turtle, Slider, Mud, Musk, Bog, Cooter, ect
      - Terrestrial
        - Box Turtles
  - Lizards and Snakes
    - Lizards
      - Extremely variable and diverse
        - Many islands have several species that don't exist anywhere else
    - Snakes
      - Snakes in our area can be poisonous, but most aren't
      - What makes snakes different from Lizards? Don't have legs
      - They shed their skin as part of their growth
      - Feeding
        - Eat MEAT aka only animals.
        - Swallow prey whole
          - Can eat animals much bigger than themselves
        - Some use poison
        - Some squeeze (constrict)

What makes a habitat?

- Shelter
- Food/water
- Weather
  - Air/wind
  - Rain/water
  - Sunlight
  - temperature

- Other animals
  - Predators: They eat lots of other things
  - Prey: They are food for lots of things

What kind of habitats are in your school's woods?

Forest:

Shelter: leaves, trees, logs, coverboards

Food:

For snakes: small snakes, worms, bugs, mice, moles, birds

For turtles: leaves, plants bugs, mice, moles, small amphibians

SHARE Program:

- cover boards and PVC pipes in the woods behind the school
- Why?
  - Do you remember what a habitat is?
    - Coverboards: provide shelter for small reptiles and amphibians
    - PVC pipes provide shelter for treefrogs
  - Because they provide shelter we can come back to the same places year after year to check the boards and see who is living underneath
  - Opportunity to do long term research
    - We can monitor the relative number of snakes, salamanders or frogs using the shelters and see how it differs by year and season
    - We can see some of the species of reptile and amphibian that live near you