# VERNAL POOLS



Big Puddles Full of Life!

### **WHAT IS A VERNAL POOL?**

- Fills with water in Fall or Springtime from rain and melting snow.
- Dries up in the Summer.
- · Amphibians come lay eggs in pools in Spring.
- "Vernal" means "Spring".







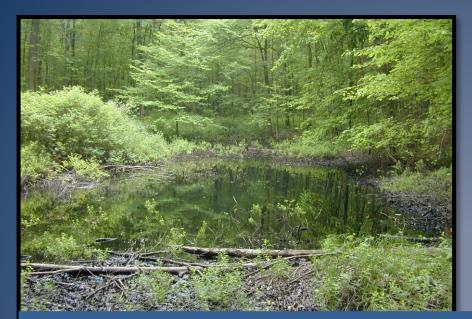
# NO FISH!







- Fish cannot live in the pools. They would die when the pool dries up.
- Frogs and salamanders can lay their eggs in the pools without fish eating them.





### Each Vernal Pool can look different!





### **IMPORTANT TO ANIMALS!**

- Vernal Pool Animals:
- Only lay their eggs in vernal pools and depend on them for survival:
  - Wood Frog
  - Spotted Salamander
  - Fairy Shrimp

#### Wetland Animals:

- Use pools for food and shelter but can live in other wetland ecosystems:
  - Spring Peeper
  - Tree Frog
  - American Toad
  - Green Frog
  - Pickerel Frog
  - Red Spotted Newt
  - Spotted Turtle
  - Box Turtle

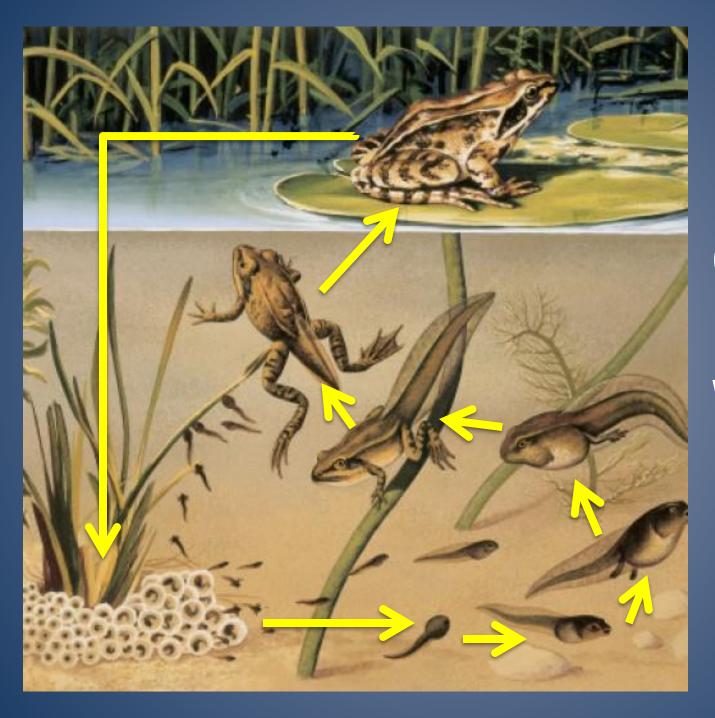
### **WOOD FROGS**

- Males make quaking sound like a duck!
- Tadpoles eat microscopic plants.
- Tadpoles are eaten by large beetles, snakes, and turtles.
- Adult frogs eat insects, spiders, worms, slugs & snails.







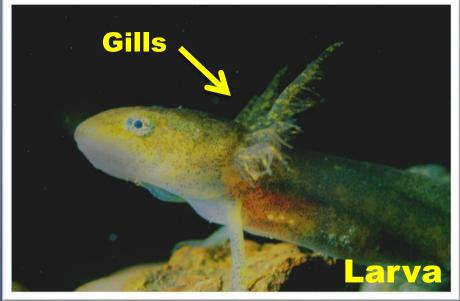


Life Cycle of Wood Frog

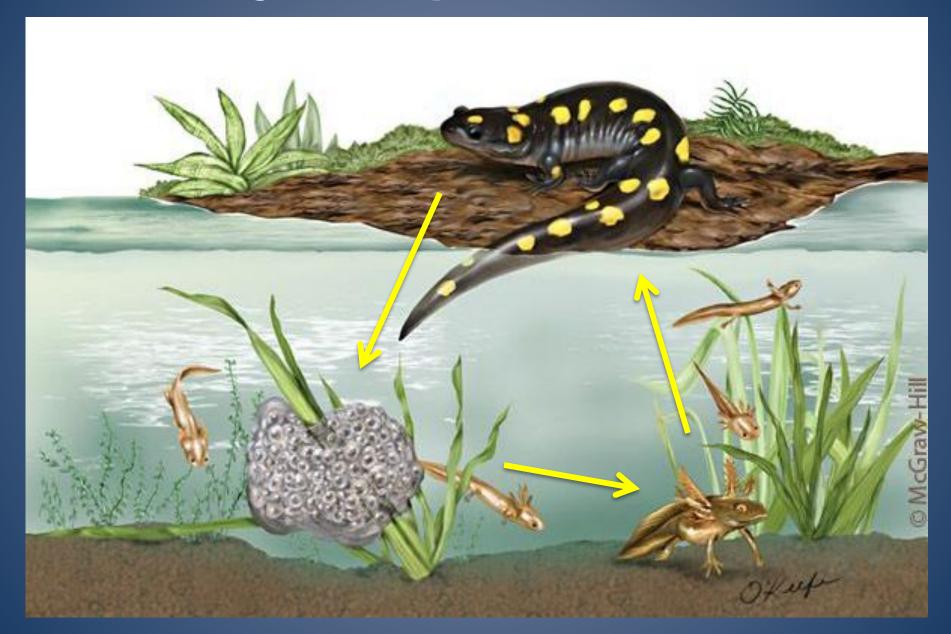
# SPOTTED SALAMANDERS

- A type of Mole
  Salamander- they spend
  most of their adult life
  underground in forests.
- Larva have feathery gills that they lose when become adults.
- Adults eat small insects, worms, centipedes, & spiders.

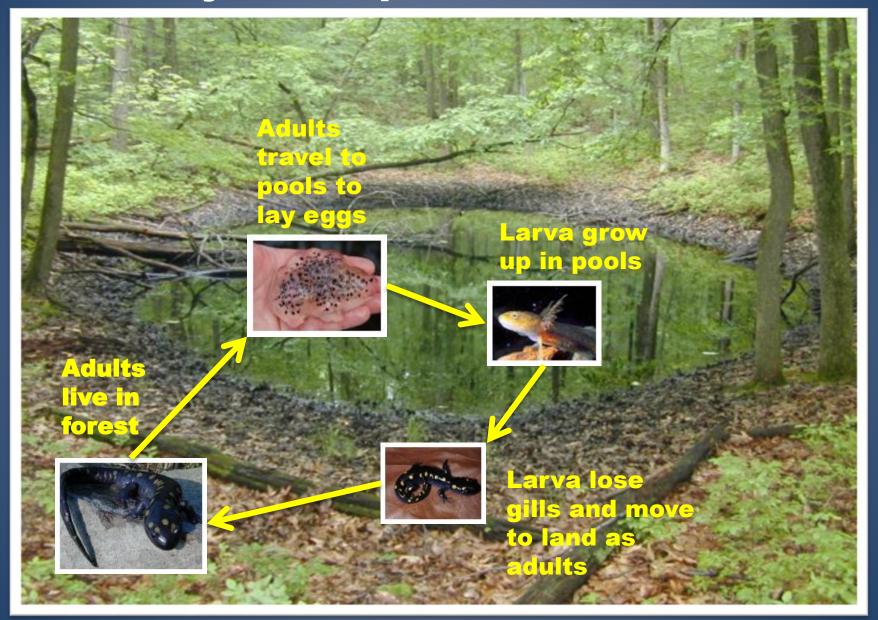




### **Life Cycle of Spotted Salamander**



### **Life Cycle of Spotted Salamander**



## FAIRY SHRIMP





- Only live in vernal pools!
- Swim upside down!
- Eggs can dry out completely, survive the winter, and hatch the next year when the pool fills up again.

### OTHER INVERTEBRATES

• Invertebrate: No backbone



Amphipod: decomposers, eat rotting leaves, look like tiny lobsters



Caddisfly larva



Backswimmer Beetle



Isopod: decomposers, eat rotting leaves & dead animals.



Diving Beetle & Larva



## **FOOD WEBS**

 Animals from surrounding ecosystems come to pools to feed or get water.











## **SURROUNDING FOREST**

- Why is it important?
  - Leaves fall into vernal pool and are broken down by bacteria and fungi
  - The bacteria and fungi are food for insects
  - Insects are food for amphibians
  - Forest provides habitat for adult amphibians





