

POCKET Nature Journal

Vernal Pools

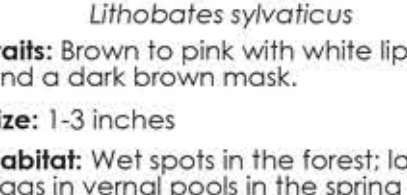


Illustrations and some content in this week's journal are courtesy of Kristine Hoffmann for the University of Maine's Wildlife, Fisheries and Conservation Biology Division

What is a Vernal Pool?

Vernal pools are shallow wetlands with still water that dry up each year or every few years.

Fish cannot persist in these temporary wetlands, but some amphibians and fairy shrimp can only reproduce or live in these small pools.



Let's learn more about 2 animals who begin life in vernal pools:

Wood Frogs, Fairy Shrimp & Spotted Salamanders

Wood Frog

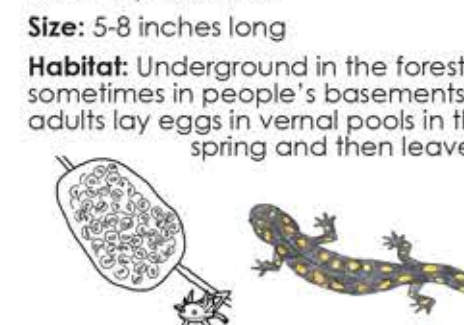
Lithobates sylvaticus

Traits: Brown to pink with white lips and a dark brown mask.

Size: 1-3 inches

Habitat: Wet spots in the forest; lay eggs in vernal pools in the spring

Song: Chuckle or duck-like quack



Wood Frog egg masses are the size of softballs. The developing tadpoles are black in a clear jelly. Hundreds of tadpoles hatch from each mass. They grow legs and lose their tail as they metamorph into young frogs.

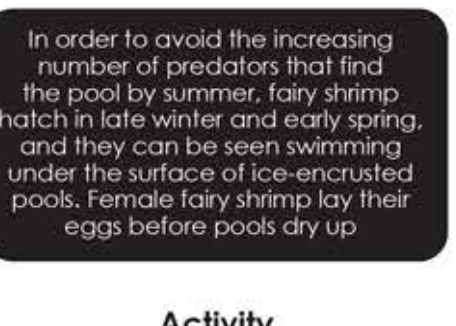
Spotted Salamander

Ambystoma maculatum

Traits: Yellow spots on a black background; sometimes they have tiny blue dots

Size: 5-8 inches long

Habitat: Underground in the forest; sometimes in people's basements; adults lay eggs in vernal pools in the spring and then leave.



In order to avoid the increasing number of predators that find the pool by summer, fairy shrimp hatch in late winter and early spring, and they can be seen swimming under the surface of ice-encrusted pools. Female fairy shrimp lay their eggs before pools dry up

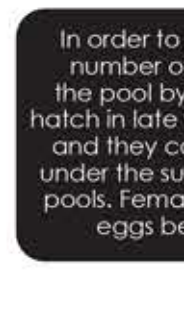
Fairy Shrimp

Order: Anostraca (Fairy Shrimp)

Traits: Pink to orange; swim on their back by paddling their legs; females carry eggs on their back.

Size: One half-inch to 2 inches

Habitat: Vernal pools



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Activity

Evening Sound Walk

Materials:

1. Flashlight or headlamp
2. Phone or camera (for pictures or sound recordings- optional)

Instructions:

- As it gets closer to dark hand out a headlamp or flashlight to everyone and head outside.
- Tell everyone to keep their ears and eyes open. You might see tiny spring peeper frogs but most likely you will hear them. Wood Frogs can sound like quacking ducks. Spotted Salamanders are silent but a very interesting sight to see.
- If you handle any creatures, make sure your hands are clean and wet. Wash your hands well with soap once you're back home

What sounds did you hear?

Did you see any frogs or salamanders?

What other animals did you hear?

Nature Quote:

Dr. Robin Wall Kimmerer,

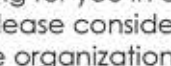
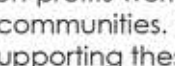
Ph.D Botany, Professor at SUNY College of Environmental and Forest Biology

"To a salamander beneath a log, the first heavy raindrops must sound like the knuckles of spring knocking hard on the door overhead. After six months of torpor, stiff limbs slowly flex, tails wiggle out of their winter immobility, and within minutes, snouts nose upward and legs push away cold earth as the salamanders crawl up into the night. The rain washes away traces of clinging soil and polishes their smooth black skin. The land is waking up, rising to the call of the rain."

The activities in this journal can be done on almost any quiet patch of earth in our area.



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