



Sally Salamander Quest

Hartford, Vermont

Moderate

Natural

Trail

1:00

Please bring boots, and a Field Guide

To get there: To get there: Take Exit 11 from I-91 and head towards White River Junction, turn from Route 5 onto Route 4 west. Follow Route 4 west for 2.1 miles, and then turn left onto Center of Town Rd. After traveling uphill 0.7 miles, turn left onto Kings Highway. Follow for 0.6 miles, and then turn right onto Reservoir Rd. Proceed 0.7 miles until the road ends at the Hurricane Town Forest parking area. Your Quest begins on Old Reservoir Rd, on the right side of the parking area.

Overview: Vernal pools are seasonal wetlands which fill annually from rain, runoff, and rising groundwater. Vernal pools do not have constant inlets or outlets of water; most pools are dry for at least a portion of the year. This dry-wet cycle prohibits fish from becoming permanent residents in the pool, creating a habitat for the successful reproduction of frogs and salamanders whose larvae would normally be preyed upon by fish. Hurricane Forest and Wildlife Refuge Park is under the caring umbrella of the Hartford Parks and Recreation Department, who encourage us all to get out and enjoy the great parks in Hartford. For more information: <http://www.hartford-vt.org/rec0.htm>. This Quest and the Natural Communities Quest Series as a whole were made possible by generous support from the Wellborn Ecology Fund of the New Hampshire Charitable Foundation / Upper Valley region.



Super Quest 2019: Gateway to Summer Fun

This quest is one of 25 featured in this year's Super Quest challenge to celebrate the 25th anniversary of Vital Communities. For the rest of your adventure: vitalcommunities.org/superquest

Now that you're here...

Check out the Hartford in the Civil War Quest that will take you through the Hartford Cemetery and gather clues to fill out a puzzle! Or, explore the Hurricane Forest Quest that highlights various trees impacted by the 1938 hurricane.

Clues:

Let's take a trip straight down the Old Reservoir Rd.
In search of a vernal pool
Full of salamanders and frogs—both peeper and wood.

You won't be long on your meander
Until on the right you will find
A pool of sorts, upon which to take a gander.

So: Is this the pool for which we drool?
Nope. Held up by this man-made dam,
To call this a vernal pool would be a scam!

Back on the trail and forward we go
Carry-on with this climb
Putting the reservoir behind.

As you go, don't turn to the left...nor to the right.
Don't be tempted by the next left either.
Another right to avoid is West Side Loop.
Your vernal pool mission carries you straight
To a junction, at which a sign will perform its function.
You've found the green sign, a marker for snowmobiles.

To the right then! And up over the rise.

Just beyond the young hemlocks
Look left, and you'll find a surprise.

Here is the pool which we seek,
Named vernal for the spring treasures
Hidden at its peak.

Start at the mossy stump (found in the open just off the path)
Look out at the pools glow
How is it different from the reservoir seen below?
This pool is a natural depression
Probably caused by a glacier's recession.
You can look for eternity but soon you will see
That no water flows IN from a mountain or OUT to the sea.
Frozen in the winter, thawed in the spring,
Gone in the summer
And returning for fall
The differences in the seasons
Provide this pool's definition and reason
Turn left from the stump and follow the edge of the pool
Count 42 steps as a general rule.
You'll arrive at a Hemlock attached to the shore
With a mossy "T" extending out from its base.

Look to the right and perhaps you will see
2 poles sticking out of the water
It was right here in March data collection did start.
Hartford Middle School students placed these with care
To discover the patterns of temperature, water and air,
pH, water depth and even live trapping
Help the students create some information tracking.

Continue around this edge,
But, be careful! You might need a leap and a bound
Keep going until you've past the tree that crashed to the ground.

Back to the water's edge
A question does rise:
How does this shallow basin fill to its brim
If there's no water flowing in?
(Which for a vernal pool is the general rule).

Spring and fall rains
And the addition of snow melting
Fill the basin to its brim
Without a stream flowing in.

Pull your thoughts out of the water
Continue to follow the shore.
Two peninsulas of land will soon appear,
One starts narrow and one starts thick
Choose the fat walkway and walk out on it.

Follow the stumps you'll find three in a row.
Circle the second with a look at your feet
And soon you'll find a small treat.

When done with the box place it back in its hole.
Please make sure that it is water tight
And hidden from sight.

Now it is time for the final leg of this wander
Continue along shore with your thoughts to ponder.
Look in the water as you amble and move,
Just be careful not to fall in an unexpected groove.

Stop where you like, what on the bottom do you see?
Everywhere I look leaves have greeted me!

These leaves provide the energy to make this pool function
The base of the food chain, these leaves fuel quite a production.
Combined with bacteria and macro invertebrates
All the nutrients on which an amphibian feeds
Are provided right here for their young, growing needs.

This vernal pool is the key to the amphibian cycle of life:
Egg→larvae→juvenile→adult
At least one, sometimes all stages,
Depend on waters such as these
For their reproduction and protection, if you please.

If it's spring amphibian eggs might be beginning to show.
Described as globular, circular, and like jelly,
These eggs are clear or opaque through their bellies.

They are laid in the water, for most but not all,
Piled high and together on the bottom, you will see
Or clustered on the stems of grass they will be.

From here in the spring on the first rainy night
When temperatures creep above 40 degrees—
We could sit in the rain and watch a great sight
The migration of Jefferson's, Spotted and Newts.
Wood frogs and peepers, oh what a hoot!
All seeking this pool to mate and lay eggs.

These adults are returning to complete a circle
Born in the same pool to which they are now migrating
Be careful and watch, but don't keep them waiting.

There are salamanders who like it here in fall.
The Marbled and Dusky prefer their nests dry
Or maybe just damp, but never with water filled high.

A last clue that would confirm this pool be called vernal
Are the obligate species that will stay here eternal.
A look for the mole salamanders
Those which we call Jefferson, marbled, and spotted.
Or listen for songs of wood frogs and peepers at night
The beauty of which takes away any fright.

The presence of these species—considered obligate—
Combined with the seasonal fluctuations of water

Makes us not to forget
That this pool is indeed vernal
And deserves protection for its life eternal.

It's time to return to that mossy stump start.
Along the way take a moment to peak
Under logs you find at your feet.
You're looking for the red back salamander so sweet
The most abundant salamander you'll find in these parts
Its sight is still a great treat.

Just remember to turn logs with great care
And put the logs and salamanders carefully back
Not in a state of disrepair.

From the mossy stump take one last look at the water
Turn your head all the way around.
A pile of brush on the ground
Hides a treasure chest.

Vernal Pool Species Check List

What did YOU see?

Hartford MS students have seen:

- | | |
|--|---|
| <input type="checkbox"/> Green frog | <input type="checkbox"/> Damselfly nymph |
| <input type="checkbox"/> American toad | <input type="checkbox"/> Water scorpion |
| <input type="checkbox"/> Spotted salamander | <input type="checkbox"/> Caddisfly larvae |
| <input type="checkbox"/> Blue spotted salamander | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Red backed salamander | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Wood frog | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Spring peeper | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Red-spotted newt | <input type="checkbox"/> _____ |
| Red Eft (terrestrial life stage) | _____ |
| Aquatic adult | |
| <input type="checkbox"/> Mosquito larvae | |
| <input type="checkbox"/> Diving beetle | |
| <input type="checkbox"/> Daphnia (cladocera) | |
| <input type="checkbox"/> Ribbon snake | |
| <input type="checkbox"/> Backswimmer | |
| <input type="checkbox"/> Isopod | |
| <input type="checkbox"/> Dragonfly nymph | |

Did you know?

Spotted salamanders return to the same spot each year to mate, and may often use the same path. Source: chesapeakebay.net

If under attack, the Eastern Red-backed salamander can drop its tail, and grow a new one over time. Source: nationalzoo.si.edu

This Quest benefited from the participation of: Michael Quinn and his students at Hartford Middle School, Sally Clement, and Steven Glazer, Valley Quest Coordinator in 2004.

Please be a good steward of the land: leave it better than you found it and pack out any trash you find.



Valley Quest is a collection of 100+ treasure hunts that share and teach the natural gems and cultural heritage of the Upper Valley with children, families, adults, and visitors. It is a program of Vital Communities, a regional nonprofit working to engage citizens, organizations, and communities in creating solutions to our region's challenges. Learn more at vitalcommunities.org.

Have a suggestion, question, comment, or idea for us? We'd love to hear from you. Reach us at valleyquest@vitalcommunities.org or 802-291-9100.