

WONDER WANDER JOURNAL

A COMPANION TO OUR
FORTHCOMING FIELD
GUIDE TO THE HABITATS
OF COLUMBIA COUNTY, NY

ARTWORK BY NELLIE OSTOW

Welcome to this Wonder Wander Journal—we hope it will be an inspiring companion for your winter explorations.

What's inside: This journal contains four “Wonder Wanders” featuring a unique habitat each month:

- December – Hemlock Forest
- January – Old Field
- February – Oak-Maple Forest
- March – Swamp Forest

Each Wonder Wander includes a description of the habitat and an illustrated set of wonders that you might find in it during that month.

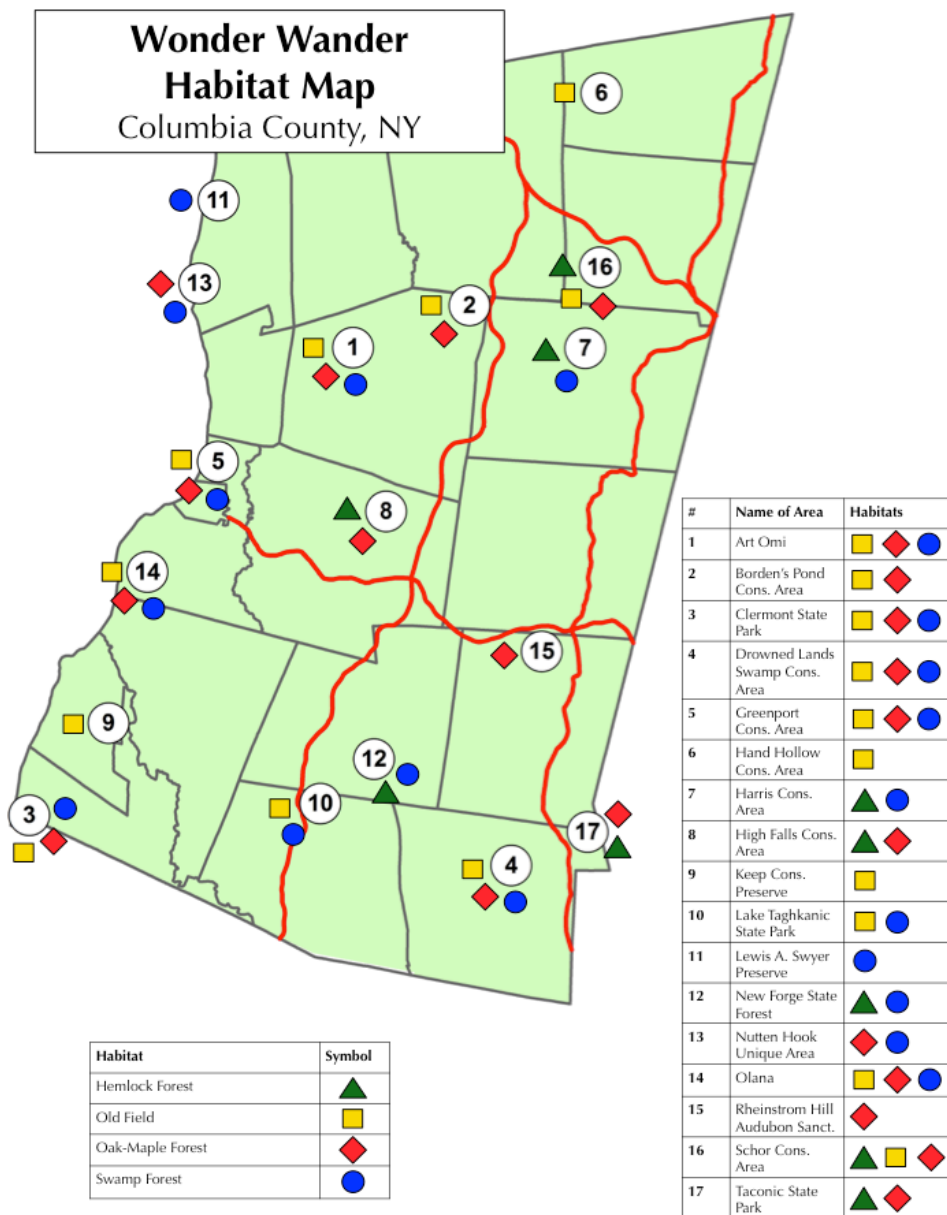
The fold-out map on the opposite page provides publicly accessible locations where you can find these habitats. Extra space, prompts, and a collecting envelope also invite your own observations, creativity, and respectful interaction.

How to use: Visit a location with the featured habitat each month and look for the wonders described—and any others you happen to find! Use the space provided to observe and interact.

Stay tuned for more: In collaboration with the Columbia Land Conservancy, we will also be installing a self-guided Wonder Wander each month at a public conservation area that includes the featured habitat.

The habitat descriptions and wonders in this journal are based on the forthcoming *Ecological and Cultural Field Guide to the Habitats of Columbia County, NY*, a richly described and illustrated book designed to inform and inspire your own explorations of the local landscape.

Map of Habitat Locations



Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Hemlock Forest – December

Locations on Map: ▲

- 7. Harris Cons. Area
- 8. High Falls Cons. Area
- 12. New Forge State Forest
- 16. Schor Cons. Area
- 17. Taconic State Park



Hemlock needles are flat, attached individually to branches in two rows, and have two narrow whitish stripes beneath.



This forest habitat is defined by its abundance of Hemlock trees and occurs throughout Columbia County, often in small stands of “ancient forest” remnants on steep, rocky terrain and near headwater streams. Hemlock Forest helps to maintain clear, cool, oxygen-rich water in adjacent streams, serves as breeding habitat for a number of rare birds, and provides winter shelter for a variety of animals. The future of the remaining Hemlock Forest stands is now threatened by an invasive insect, the Hemlock Woolly Adelgid.

Date: __/__/__ Time: ____ Location: _____
Weather: _____ Notes: _____

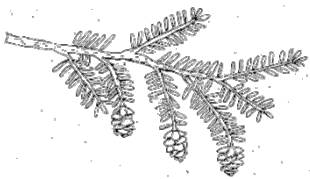
Wonder Search: Can you find one or more of these evergreen ferns?

Christmas
Fern



Marginal
Wood
Fern

Evergreen
Wood Fern



Notes, Drawings, Observations

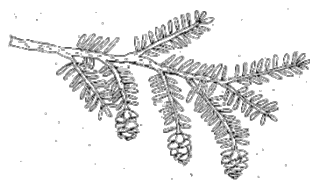
Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Can you find egg sacs of the invasive Hemlock Woolly Adelgid?



Look for egg sacs on the underside of twigs, near the base of the needle

Help scientists track the spread of this infestation by reporting your observation through nyimainvasives.org

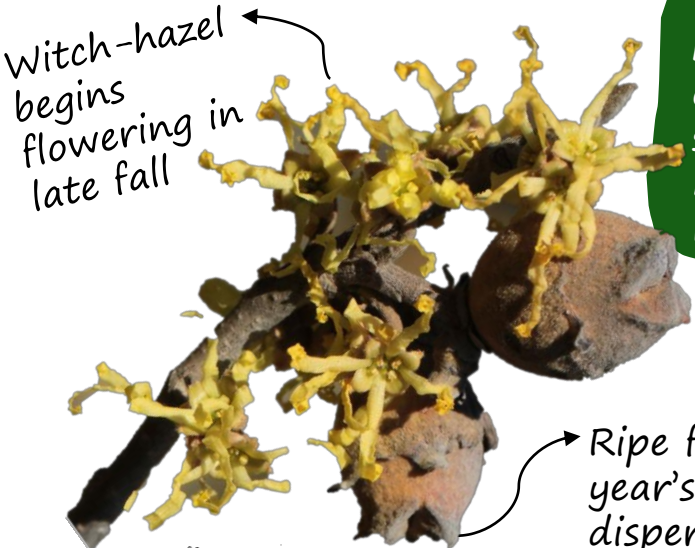


Notes, Drawings, Observations

Date: ____/____/____ Time: _____ Location: _____
Weather: _____ Notes: _____

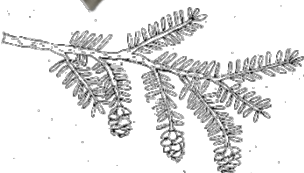
Wonder Search: Can you find the yellow flowers and ripe fruits of the native Witch-hazel shrub?

Witch-hazel
begins
flowering in
late fall



Tip: Witch-hazel is one of the few shrubs in Hemlock Forests

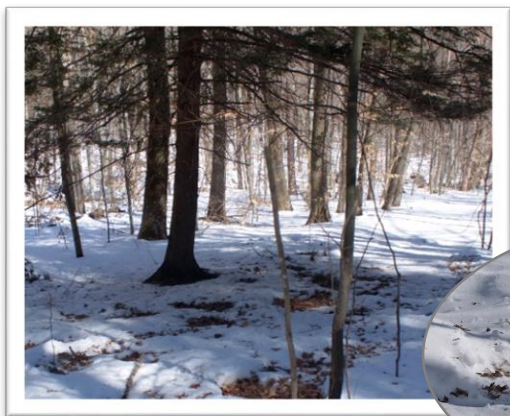
Ripe fruit from last year's flowers disperse seeds



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

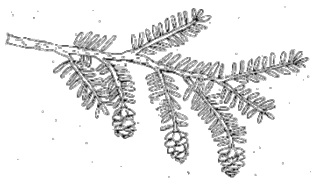
Wonder Search: Can you find evidence of White-tailed Deer bedding down under a Hemlock tree?



↖ You can also look for a "browse line" at deer height



Look for disturbed snow, revealing leaves and perhaps even the imprint of a deer.




Notes, Drawings, Observations

Date: ____/____/____ Time: _____ Location: _____
Weather: _____ Notes: _____

Writing Prompts: *What surprised or delighted you about the wonders you found in a Hemlock Forest? * How does it feel to be in a Hemlock Forest? * What memories or associations were evoked by your time in the forest?*

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Old Field - January

Locations on Map: 

1. Art Omi
2. Borden's Pond Cons.
Area
3. Clermont State Park
4. Drowned Lands
Swamp Cons. Area
5. Greenport Cons. Area
6. Hand Hollow
Cons. Area
9. Keep Cons.
Preserve
10. Lake Taghkanic
State Park
14. Olana
16. Schor Cons. Area



Old Fields in winter are tan-colored and the dead vegetation (typically species of goldenrod and upland aster) often remains standing upright, knee to hip high. Old Field habitat usually represents a transition between productive agricultural field and shrubland. It can occur temporarily during a field's return to forest after abandonment or can be consciously maintained as part of a landscaping plan. Because Old Fields usually don't get mowed until late in the season, they provide an important source of nectar and pollen in the summer, and—if left unmowed into the winter—seeds and shelter for many insects, birds, and small mammals.

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

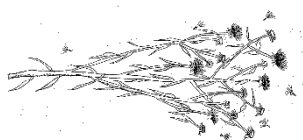
Wonder Search: Look for goldenrod ball galls on the stalks of goldenrods.

Goldenrod ball galls form as a reaction to the larva of the fly *Eurosta solidaginis* burrowing into the stalk. The larva overwinters in the gall, pupates, and emerges as an adult fly in early spring.



The hole in this gall was made by a bird extracting the larva. Downy Woodpeckers and Black-capped Chickadees both feast on the larva in these galls.

Be careful not to disturb the overwintering larva!



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Can you spot sparrows or goldfinches eating seeds?



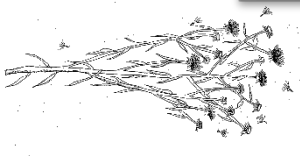
Goldfinch

American Tree Sparrow



Photos by Anne Bloomfield

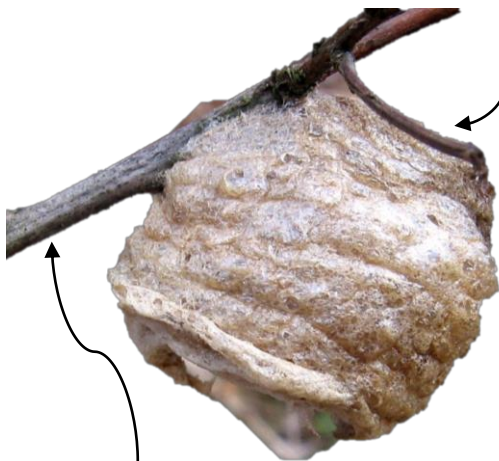
Tip: After a light snow is a great time to follow bird tracks and see what seeds they've been eating.



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Hunt for Praying Mantis egg sacs, but be careful to not disturb!



Praying Mantises lay eggs each fall in a foamy pouch that soon hardens into a case that protects the eggs until they hatch in the spring.

The egg sac is often attached to a dry stalk a foot or two off the ground.



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Look for signs of Meadow Voles and other small mammals tunneling under the vegetation or snow.

Meadow Vole tunnels in an Old Field in winter →



Snow tunnels made by a small mammal →




Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Observation Prompts: Follow the tunnel and/or tracks of a small animal—what do you think it was doing? * Find a location to quietly observe any bird activity. What birds do you see and what are they doing? * Look into the seed heads of different plants and gather any seeds you might want to save in the envelope below. Observe what happens to these seeds when you plant them! (Tip: Leave potted seeds outside for the winter, to mimic natural conditions).

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Oak-Maple Forest - February

Locations on Map: 

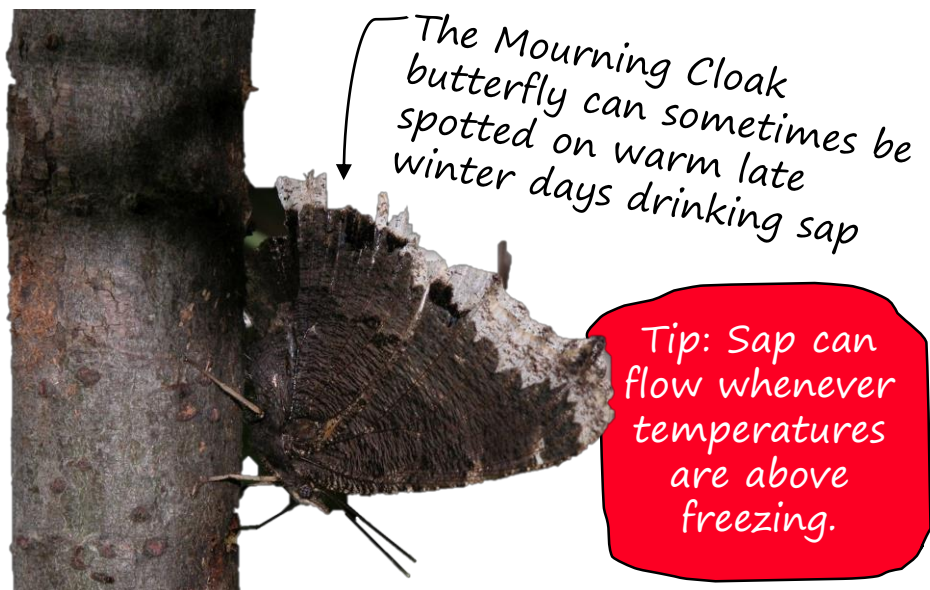
1. Art Omi
2. Borden's Pond Cons.
Area
3. Clermont State Park
4. Drowned Lands
Swamp Cons. Area
5. Greenport Cons. Area
8. High Falls Cons. Area
13. Nutten Hook Unique
Area
14. Olana
15. Rheinstrom Hill Audubon Sanct.
16. Schor Cons. Area
17. Taconic State Park



Oak-Maple Forest might well be the most extensive of our mature forest habitats, and it often strikes people as a "typical" deciduous forest with good-sized trees. The largest trees are usually oaks (most often Red Oak, although they are sometimes joined by White, Chestnut, and/or Black Oak). The crowns of the large oaks tend to emerge above the canopy, which is formed mostly by maple trees (Sugar and/or Red Maple). The understory is relatively open with few shrubs, vines, and ferns, and one feels invited to walk between the stately trees. In mast years, the oaks produce ample acorns. The extensive stands of Oak-Maple Forest provide habitat for many forest (and especially forest interior) organisms.

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Can you catch sight of squirrels or even a butterfly drinking sap from a tree wound or broken branch?



The Mourning Cloak butterfly can sometimes be spotted on warm late winter days drinking sap

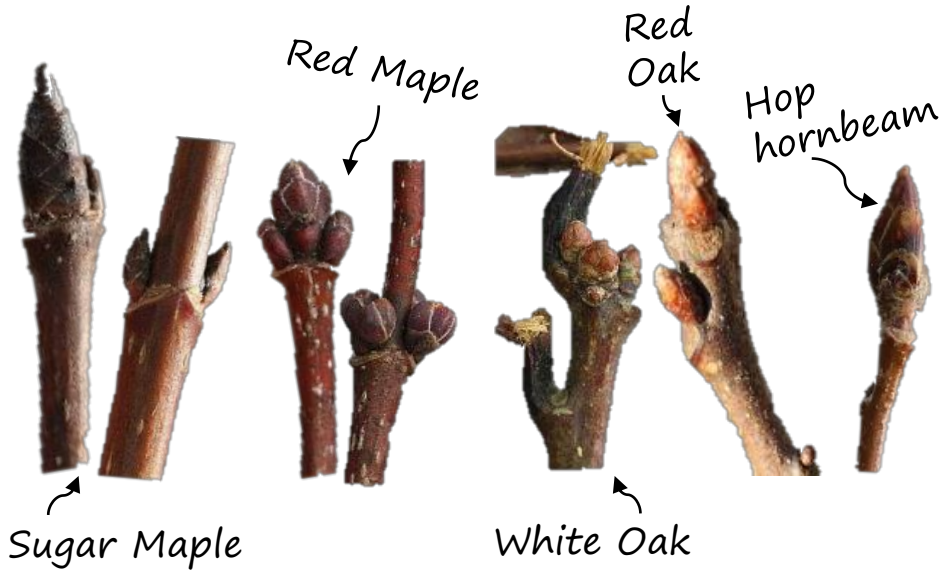
Tip: Sap can flow whenever temperatures are above freezing.



Notes, Drawings, Observations

Date: ____/____/____ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Can you find these tree buds in the forest?



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder

Search: Look
for a “roosting
tree.”

Large oak trees
with many limbs
are favored by
Wild Turkeys for
roosting. If you
find a likely
roosting tree, do
you see any signs
of Wild Turkey
tracks or
scratching?



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Can you find both Red and White Oak acorns? How about an acorn cache made by a small mammal?

Red Oak acorns often take 2 → years to mature and are very bitter due to accumulated tannins.



Acorn cache →



↑
White Oak acorns mature in 1 year and are sweeter.



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Drawing Prompts: Draw a White and Red Oak acorn and label the differences you notice. * Find and draw tree buds or leaves you don't know, and see if you can identify them based on your drawings * Try to illustrate the particular quality of late afternoon light in an Oak-Maple forest.

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Swamp Forest – March

Locations on Map: ●

1. Art Omi
3. Clermont State Park
4. Drowned Lands
Swamp Cons. Area
5. Greenport Cons. Area
7. Harris Cons. Area
10. Lake Taghkanic State
Park
11. Lewis A. Swyer Preserve
12. New Forge
State Forest
13. Nutton Hook
Unique Area
14. Olana



A Swamp Forest is a wetland habitat that can be readily recognized in early spring by the abundance of Red Maple flowers suffusing the leafless canopy with their soft red hue. Although most of our Swamp Forests are “ancient” forests, the trees are not very big. They may be widely spaced, perched on hummocks, and with deep pools of open water, dried mud, or exposed roots between them. Often the tree trunks are hugged by shrubs rooted in the same hummock. Around the elevated bases of the tree trunks and on sedge hummocks, mosses sometimes form dense carpets. Swamp Forest is one of our more natural habitats, and is home to a large number of native plants and animals, several of them rare.

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

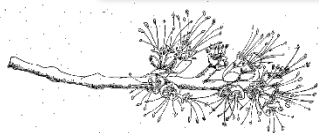
Wonder Search: Look into the canopy to find Red Maple flowers in bloom.



Female Red Maple flowers are seed-producing (pistillate)



Male Red Maple flowers are pollen-producing (staminate)



Notes, Drawings, Observations

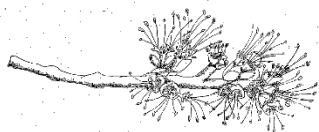
Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

*Wonder Search: Can you find flowering
Skunk Cabbage between the hummocks?*



Skunk Cabbage
flowers are
hidden inside the
reddish "hoods"
(spathes), which
generate heat and
serve as warm-up
stations for early
flying insects.

*Skunk Cabbage is an early food for
Black Bears emerging from hibernation.*



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Wonder Search: Pause and listen for the high-pitched “peeping” chorus of Spring Peepers and deep “quacking” cacophony of Wood Frogs as they mate.

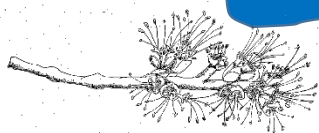
Spring Peeper



Wood Frog with
eggs mass



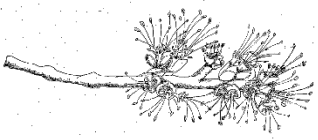
Tip: Approach quietly to avoid silencing the chorus.



Notes, Drawings, Observations

Date: ____/____/____ Time: _____ Location: _____
Weather: _____ Notes: _____

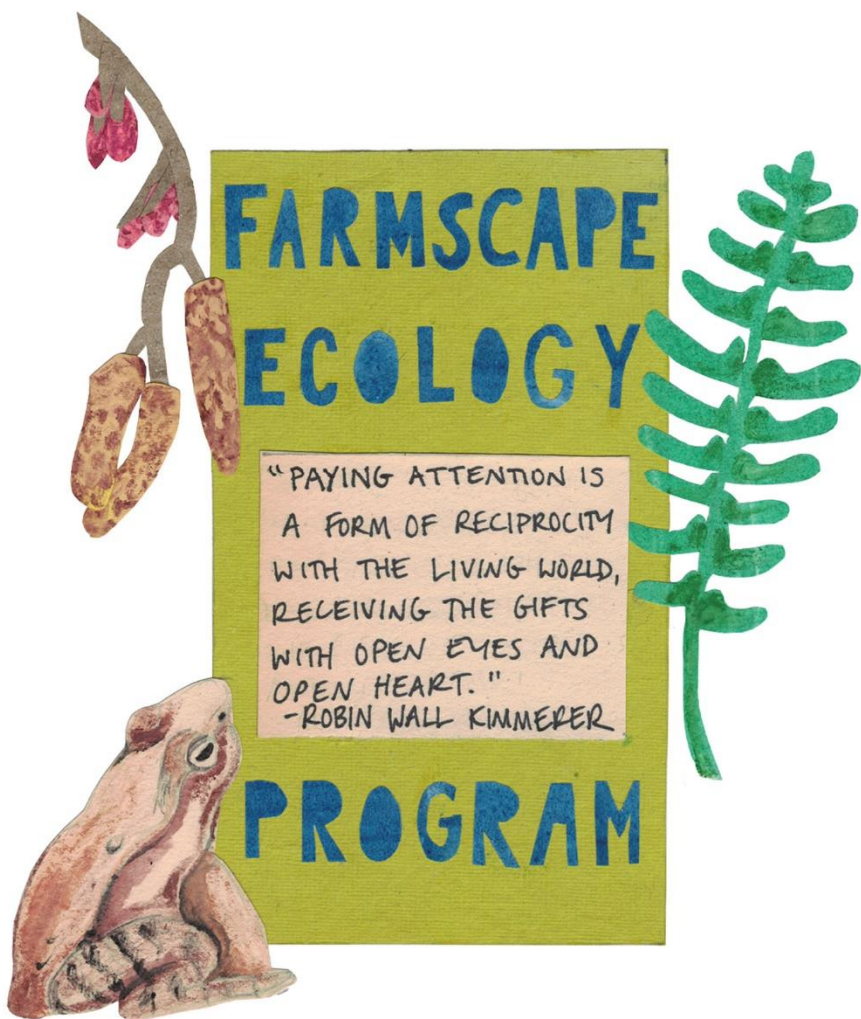
Wonder Search: Look for the dangling
alder flowers, also called catkins.



Notes, Drawings, Observations

Date: ___/___/___ Time: _____ Location: _____
Weather: _____ Notes: _____

Sensory Prompts: *Ground yourself and feel the earth under your feet. Is it hard/soft, even/uneven, stable/unstable? * Notice the quality of the light; the colors, shapes, textures, and any patterns that might present themselves. * Shift your attention to the sounds around you. Do you hear any natural elements (wind, water), animals, people, machines? * What smells are reaching you? Do any of the smells remind you of similar places you've been?*



This journal was created by the Hawthorne Valley Farmscape Ecology Program (hvfarmscape.org), a research and outreach initiative with the goal of fostering informed, active compassion for the ecological and cultural landscape of Columbia County, NY. Follow our Wonder Wanderers on Facebook or progressoftheseasons.wordpress.com