



## 2020 – Year in Review

Despite this unusual year and the adjustments to some of our planned activities necessitated by the pandemic, we were able to conduct most of the research we had planned and continue to engage with our audience, often in new ways. The success of this year was in large part thanks to our wonderful team, which included two six-month interns, Ellen Scheid (Botany) and Stephanie Ripsom (Entomology), and a new full-time staff member, technician Nellie Ostow. We emphasized outdoor components of the future Field Station by creating a butterfly house and by devoting substantial time to the native plant garden. We then (cautiously) opened these areas for guided public tours. Much of our other outreach was redirected to virtual offerings, such as sharing frequent “Farmscape Wonder Wanders” on Facebook and our blog, as well as a variety of virtual presentations, workshops, open houses, and participatory research opportunities. In the background, we continued to write our field guide and submitted a grant proposal for an acoustic ecology project.

### Butterfly House

Probably the most visible new initiative this year was the creation of a small (16 x 24 foot) butterfly house in front of the Creekhous. The simple hoop house structure was erected with the help of the Hawthorne Valley farmers and farm apprentices, covered with shade cloth, and then planted with a variety of mostly native plants to provide nectar sources and caterpillar food for the butterflies and their offspring. Each week from the beginning of July through the end of September, we caught a new cohort of butterflies around Hawthorne Valley Farm, kept them in the butterfly house for a couple of days so that visitors could experience them, and then released them back into the wild. We guided 45 one-hour tours for a total of almost 200 visitors through the butterfly house and surrounding native plant gardens



*The butterfly house in mid summer. Click on the links to a couple of blog postings to see more images illustrating its [creation](#) and its [butterfly visitors](#).*

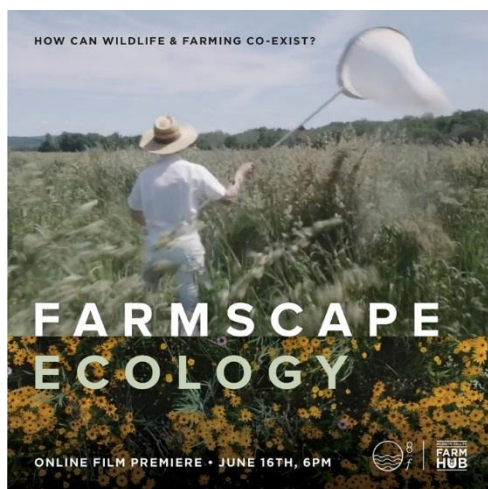
during that period, and hosted three classes from Hawthorne Valley School. Our interns Ellen Scheid and Stephanie Ripsom set up a Monarch kindergarten, and raised a series of caterpillars in late summer; these were one of the main attractions at the Butterfly House.

## Other Outreach

Before the pandemic, we completed a three-session workshop on Winter Botany, which was attended by an enthusiastic group of 15 participants ranging in age from 12 to 60+ years. We also had two well-attended in-person Open Houses with presentations on “Animal Tracks & Signs” by Pat Liddle and “Parasitoid Wasps” by Kenny Fowler.

In response to the world shutting down around us in March, we initiated the “Farmscape Wonder Wanders,” with our team members taking turns to prepare regular postings (on Facebook and the [Progress of the Seasons Journal](#)) of real-time, place-based happenings in nature as an invitation to our readers to do their own outdoor explorations.

At the same time, we offered participatory research opportunities in the Stone Wall Mapping Project, including many one-on-one zoom training sessions. The CLC-sponsored Butterfly Course, initially planned as a series of field outings, also was reimaged via zoom, and we initiated the Atlas to Butterflies of Columbia County iNaturalist project.



The documentary “[Farmscape Ecology](#)” by Jon Bowermaster and Oceans 8, which features the agroecology research conducted by our team and other members of the Applied Farmscape Ecology Research Cooperative at the Hudson Valley Farm Hub, [premiered virtually on June 16](#).

The film was also one shown during this year’s Farm Film Festival at the Crandall Theatre.

*Poster announcing the online film premiere.*

Later in the summer, following Covid-19 protocols, we guided a public, in-person ecology walk at PS21 in Chatham and gave a tour of the native meadow trials at the Farm Hub. Throughout the year, we also offered seven in-person and two virtual farm ecology walks for the Spanish-speaking farmworkers at the Farm Hub.

We participated in Hawthorne Valley’s virtual Fall Festival by tapping the many talents of our staff to offer a [Beetle Bank Coloring Page](#) (designed by Nellie and Ellen) and our own [Butterfly Documentary](#) (a coproduction by Stephanie, Nellie, Kenny, and Ellen).

We also had a small, but very active group of local volunteers helping with gardening tasks and seed collecting on a weekly basis.

## **Biodiversity Inventories and Land Use History Research in Columbia County and beyond**

Other than complicating the logistics of field work, the pandemic had little impact on our biodiversity inventories and land use history research, most of which we could do solo or with ample distancing. Our team members conducted field research for the Martin Van Buren National Historic Site (see [Wild Mammal Life](#), [Spring Insects](#), and [Summer Insects](#)), for Philmont Beautification around Summit Lake in Philmont, for the Columbia Land Conservancy at Overmountain Conservation Area, for Scenic Hudson at their new Quarry Waters site, for Save the Pine Bush at potential development sites near the Albany Pine Bush, and for several private clients.



*A Spring Peeper  
photographed by Dylan  
Cipkowski at the Martin  
Van Buren National Historic  
Site.*

## **Experimental Agroecology/“Habitat Farming”**

We continued, in slightly modified form due to Covid-19, our agroecology research at the Hudson Valley Farm Hub. This includes long-term monitoring of insects in various fields, as well as the detailed monitoring of vegetation composition, flower abundance and diversity, and insect communities in the nine half-acre test plots of the Native Meadow Trials. We also conducted a second season of experimental vegetable plantings to directly measure the impact of beneficial habitats on crop yield. The results continue to be less clear-cut than suggested by research elsewhere, and emphasize the importance of studying habitat management in our local landscape context.

Here at Hawthorne Valley Farm, we maintained and expanded several of the beneficial habitats established in past years. For the second consecutive year, we facilitated the farm’s participation in the Bobolink Project, a program that awards grants to farmers who are willing to adjust their cutting schedule of qualifying hayfields (and, as a consequence, to accept a loss in hay yield and/or quality) in order to allow Bobolinks and other grassland birds to raise their young. We also helped the farmers plant willows to stabilize a quickly eroding stream bank.



## Applied Farmscape Ecology Research Collaborative at the Hudson Valley Farm Hub

As part of our engagement with the Hudson Valley Farm Hub, we coordinate – together with our Farm Hub colleague Anne Bloomfield – the Applied Farmscape Ecology Research Collaborative. The research collaborative includes investigators not only from the Farmscape Ecology Program and the Farm Hub, but also Hudsonia Ltd., SUNY New Paltz, Bard College, the University of New England, SUNY Cobleskill, and Columbia University, as well as an independent farmer/ornithologist. While a couple of researchers had to postpone their projects because of the pandemic, several research teams were active, and this enabled students from SUNY New Paltz, SUNY Cobleskill, and Bard College to get field experience in agroecology.



*A set of three native meadow test plots as seen by a drone in July. The center plot is a fallow control that developed a very patchy vegetation and had many white Fleabane flowers in early summer. The left plot had been seeded into native grasses and a few wildflowers, of which Black-eyed Susan was blooming profusely in early summer, but not during the rest of the season. The right plot was seeded with a diverse wildflower mix that provided a variety of flowers throughout the season. Photo courtesy of Oceans 8/ Jon Bowermaster.*

## Other Ongoing Projects

Ecological and Cultural Field Guide to the Habitats of Columbia County, NY: We are making steady progress on the habitat chapters for our field guide. With these nearing completion, we will turn our focus in 2021 towards the other supportive material for the book and preparations for publication.

Native Plant Garden and Nursery: Ellen spent the two weeks of her quarantine at the beginning of her internship setting up the native plant nursery and raised around 1,000 plants of more than 20 native species from seeds collected last year. These were then transplanted into the Native Plant Garden, the beneficial habitats on the farm, and shared with our visitors for a small donation. Ellen and Nellie gave the Native Plant Garden around the Creekhouse a “facelift” and created new garden beds.

Sound Mapping and Dung Beetle Inventories: Stephanie continued these two projects from previous years. She expanded the sound mapping to include the mapping of both Bobolinks and calling insects across a nearby hayfield, and collected dung beetles across fields and dates at Hawthorne Valley Farm. The acoustic research also was pursued through the submission of

a SARE grant proposal for a multi-farm, two-year study. If we get approved, then we'll share more about it in next year's report.

3D Map of Columbia County: Our efforts to create a 3D Map as a surface onto which we can project stories were scaled back, literally. We are now, with the help of Markley Boyer, working to create a small, portable version of the larger map we are still planning for the Field Station. We are hoping that this will let us take the show on the road and also enable us to use it outside for as long as the pandemic demands. It will give us a hands-on introduction to a technology we are hoping to scale up.

Collaborative Network Studying Insect Abundance: As part of our research at Martin Van Buren National Historic Site, we participated in a continent-wide effort to monitor insect abundance spearheaded by Dr. Peter Dunn at the University of Wisconsin-Milwaukee. Our contribution involved capturing insects using a malaise trap during three pre-defined time intervals during late spring; we were one of over 30 research teams scattered throughout the United States and Canada coordinating to trap insects on the same schedule. The data generated from our efforts will be used to look for patterns in insect abundance across North America.



*This sweat bee (Halictidae sp.) was photographed by Dylan Cipkowski at the Martin Van Buren National Historic Site.*

Phenology: We contributed to the finalization of a jointly authored paper that draws upon our work with the historical phenology data we uncovered (available through our [historical phenology browser](#)). The paper compares historical and modern phenology data to identify the impact of temperature change on the phenology of a number of different species in locations throughout New York State. It has been prepared for submission to scientific journals, and the submission process is underway. We have meanwhile continued to monitor our phenology trails at Hawthorne Valley and are in the early stages of establishing a phenology trail at the Martin Van Buren National Historic Site in Kinderhook.

Anti-racism Work: We have also dedicated time and thought this year to how we as a program can practice anti-racism. Nellie took the lead in co-coordinating an anti-racism working group at Hawthorne Valley. Anna has organized anti-racism training opportunities for Hawthorne Valley leadership and staff. Other members of the FEP team are participating in some of these, as well as other offerings to better understand the role of nature-focused organizations and activities in promoting accessibility, equity and diversity in the outdoors.

## **Staff and Interns**

Early this year, we hired a second technician, Nellie Ostow, who brings diverse talents and experiences in art, education, and gardening to the team, and is training to also support the



insect crew. Our two interns Ellen Scheid and Stephanie Ripsom have moved on to their next adventures. Ellen returned home to Indiana and Stephanie has accepted a position as Laboratory Assistant with the Pennsylvania Department of Agriculture in Harrisburg, PA. We are grateful for all of the creativity and commitment that they brought. We were happy to be able to provide these two recent graduates with internships that gave them a range of practical experiences from research, to land management, to environmental education, to video production.



*The Hawthorne Valley Farmscape Ecology Program team of the 2020 season (from left to right): Zion (dog); Kenny Fowler (technician); Ellen Scheid and Stephanie Ripsom (interns); Delia (dog); Anna Duhon, Claudia Knab-Vispo, and Conrad Vispo (co-coordinators); Nellie Ostow (technician); Dylan Cipkowski (biologist). Photo by Nina Barry.*

## **Looking Ahead**

During the remaining winter months, we will focus on getting the field guide ever closer to completion. We will continue the “Wonder Wander” postings at a reduced frequency through the winter and complement them with monthly self-guided tours through different habitats at Public Conservation Areas. After evaluating the first season’s experience with the Butterfly House and Native Plant Garden tours, we’ll plan next year’s programming at the Creekhouse/Field Station. As long as the pandemic does not allow for in-person Open Houses, we will offer a monthly virtual presentation on some aspect of our work. As soon as the conditions allow, we will resume our in-person public programs at Hawthorne Valley and throughout Columbia County. During the field season, we will be engaged in ecological monitoring, new agroecology experiments, perhaps further development of the sound mapping project, and a variety of new biological inventory/mapping projects.

## **Acknowledgements**

Our work this year was made possible by generous program support (some of it financial, some of it institutional and/or collegial) from Armonia LLC, Arthur & Eileen Newman Family Foundation, Bank of Green County, Bernheim Foundation, Columbia Land Conservancy, Community Greenways Collaborative, Fidelity Charitable Gift Fund, Francis J. Greenburger Foundation, Gerda and Ole Skaarup Fund, Harvard Forest, Hudson Valley Farm Hub, Hudsonia Ltd., Hygeia Foundation,

Furthermore Grants in Publishing (a program of the J.M. Kaplan Fund), Martin Van Buren National Historic Site, Omega Institute, Philmont Beautification Inc., RSF Social Finance Commonplace Fund, Sandy River Charitable Foundation, Xerces Society, and 170 private donors. We are deeply grateful for this support.

We thank Markley Boyer for his volunteered time spent developing the 3D Map of Columbia County, and David Newman and Stephanie Lazar for their sponsorship of this pilot project. We also thank Dale MacDonald for her continued enthusiasm for the Field Station and related financial support. Much appreciation goes also to the lovely group of volunteers who have helped with weeding and planting, collecting seeds, mapping stone walls, and fundraising.

Finally, a big thank you to FEP's interns and co-workers, as well as the staff both here at Hawthorne Valley and at the Hudson Valley Farm Hub who helped with many aspects of the research and outreach during this challenging year.

## **In Memoriam**

This year, we sadly lost two people who meant a lot to our Program.

Ben Derr, who spent the summer of 2013 as an intern with us and then went on to study at SUNY Cobleskill, died unexpectedly and much too young on January 16<sup>th</sup>. Ben was a very talented naturalist (the things he would see where everybody else just walked by!) and nature photographer, and a fun guy with whom "to go creeping" through forest, field, and wetlands.

Reny Valente was one of our Program's earliest supporters and over the years became a personal friend of the Vispo family. After a long and eventful life, he died of cancer at the age of 93 on March 16.

We miss them both!



*Timber Rattlesnake. An example of amazing wildlife photography by Ben Derr.*