



Forest Farming Footnotes



Bloodroot (*Sanguinaria canadensis*)

Spring 2017

IN THIS ISSUE

PlantShoe Botanical Detectives 2

Interested in participating in citizen science to help preserve forest herbs? This is a project for you!

North American Agroforestry Conference 3

Save the date! Blacksburg, Virginia is hosting the 15th annual agroforestry conference this June.

Forest Farming in Cameroon 4

Take a look at some innovative ideas practiced in Africa.

Upcoming Events 5-6

Great learning opportunities are coming up. Mark your calendars!

Regional News 7-9

Dear Forest Farming Community Members,

This time last year, The Appalachian Beginning Forest Farmer Coalition was in the throes of sorting out its inaugural training and services. Wow, what a difference a year of hard work and collaboration makes. And what an impact your engagement with coalition programs, initiatives, and communication is having. Because of you, the coalition transformed from a training program to a more meaningful 1000 member strong problem-solving network and diverse stakeholder team. This growth and evolution has been remarkable and reflects the great people that have come together around key forest farming issues and opportunities.

The coalition website is evolving and expanding with new video and print resources added regularly. We now host a coalition Facebook group in addition to our Facebook page so that all members can communicate with each other, exchange ideas, and develop community resources outside of face-to-face events. Be sure to join **HERE** if you haven't already! Training events for this year have been scheduled and with a diverse selection of topics guaranteed to pique any forest farmer's interest. New partners have joined the effort so we have been able offer more events in more locations. Be sure to keep an eye on the coalition calendar and attend!

We are so pleased to see this movement grow and look forward to our second year of work and service! Our collective identity symbolizes a movement and we are honored to be a part of the work and passion of this group on behalf of the woodlands we treasure.

John Munsell

Holly Chittum

Priya Jaishanker





PlantShoe
Botanical Detectives



VirginiaTech
Invent the Future



Looking for a fun citizen science project to be a part of? Want to get the kids outside? If so, this is for you. PlantShoe is a project recently launched by Virginia Tech, eXtension, and the Center for Geospatial Information Technology. It encourages folks to become engaged in citizen science through data collection of forest botanicals including ramps (*Allium tricoccum*), goldenseal (*Hydrastis canadensis*), bloodroot (*Sanguinaria canadensis*), and black cohosh (*Actaea racemosa*). While much is known about timber, relatively little is known about understory forest plants. This program was designed to change that by enlisting the help of botanical detectives across Appalachia.

How does it work? PlantShoes create a user profile and can read more about the program at plantshoe.org. They can then collect data in the field using an app, easily downloaded from Google Play for Android devices (and soon to be available for iOS users). Once installed, detectives take to the woods to search for plants. If found, the PlantShoe walks through the data collection process included in the app. Photos are taken, plots are measured, and GPS points, forest canopy, and surroundings are recorded. Once connected to wifi, the data can be uploaded to the user's profile page on plantshoe.org.



Bloodroot (*Sanguinaria canadensis*)



PlantShoe
Botanical Detectives

So how is this data used? After submissions are made through user profiles on plantshoe.org, the data can be synthesized to recreate a virtual picture of the forest habitats in which these plants live. This provides insight into the plants' range, climate, slope, canopy coverage, companion species, and much more. As the collected data broadens our understanding of these botanicals, it also allows for a greater push towards conservation efforts and propagation of plants for market sales.

Check out our video on How to be a PlantShoe. So grab your phone, bug spray, and water bottle and head for the woods! Your participation will go a long way toward improving our understanding of the vast diversity of our forests. It's an interactive way to engage with the great outdoors while contributing to the pool of knowledge that helps inform research and conservation initiatives. To download the app, click on the link below.



App coming soon for iOS

Forest Farming in Cameroon



Coffee Grower, Forba John Tabi



Apiculture in Oku



Water Cleanser of Mambu

Forest farming is practiced around the world. While the principles of forest farming remain the same, (intentional, integrated, intensive, and interactive) the non-timber forest products yielded vary with climate. A trip to Cameroon revealed products such as shade grown coffee beneath a canopy of banana, avocado, and kola nut trees.

Forest-produced honey is a commonly produced commodity in Oku, Cameroon, as beekeeping has become an attractive means for diversifying income. In Oku's Kilum-Ijim forest, beekeepers construct hives out of materials gathered from the forest, meaning that the only cost is construction time and hives are easily replicated. As beekeeping becomes more common throughout the region of Oku, the forest has become the region's apiary; the tree's within yielding flowers that produce white honey, a regional specialty.

Other green initiatives were noted during the trip around Cameroon, including a collaboration that resulted in clean drinking water for the residents of Mambu, Bafut. Water ways are often polluted by farm animals, resulting in foul drinking water which leads to sickness. Joram Shu, head of the Agro Complex, and Farmer Tantoh worked to divert water channels through a filtration system of sand and gravel that was then covered with cement and allowed to collect in a holding tank. Filtered water is available everyday for community members and for irrigation. Future plans are in place to create a pump near the main road for elderly residents to have easier access to the clean water supply.

Registration is Open!

***The Future of Ginseng
and Forest Botanicals
Symposium:
Conservation,
Cultivation, Commerce***

*The Future of
Ginseng and Forest Botanicals*
SYMPOSIUM



July 12-14, 2017
MORGANTOWN, WV



Date: July 12-14

Location:

Waterfront Place Hotel,
2 Waterfront Pl,
Morgantown, WV 26501



VISIT WWW.UNITEDPLANTSAVERS.ORG FOR COMPLETE DETAILS

This 3-day symposium will provide a forum to bring together a diverse array of stakeholders involved in the industry, management, and regulation of forest botanicals in Appalachia, including federal and state agencies, tribal representatives, academics, landowners, collectors, and the herbal products industry.

Spearheaded by United Plant Savers and in collaboration with the U.S. Fish and Wildlife Service (USFWS), WV University and ABFFC, this symposium is a forum for presenting current research and documenting critical new information about the conservation, cultivation, and commerce of American ginseng (*Panax quinquefolius*) and other Appalachian forest botanicals. The symposium includes a special forest farming track on Friday and will include a special ABFFC member breakfast along with presentations and training sessions. Attendees have the option of registering for 1-day only (register for the "Friday ticket" for \$60). You can also register for the field trip to Larry Harding's Ginseng Farm for an added \$40 or for the entire event! There will be valuable information for landowners every day of the symposium. Proceedings of the event will be published online on the United Plant Savers website. Register at this [link](#).



Blacksburg, Virginia, a small town nestled in between the Blue Ridge and Alleghany Mountains, home to Virginia Tech University, will be hosting the 15th North American Agroforestry Conference from June 27 -29, 2017. Join us for three days of networking, discussion, site visits and more.

Opportunities include:

- Learning about the latest advances in agroforestry research, practice, outreach, and policy
- Seeing innovative on-the-ground systems with agroforestry farmers
- Sharing your agroforestry experience, skills, and knowledge
- Discussing how to capitalize on opportunities and overcome challenges in agroforestry
- Networking with agroforestry researchers, farmers, organizations, agency professionals, and key stakeholders

Eric Toensmeier, Author of "The Carbon Farming Solution" and Victor Harris, Editor-in-Chief of the Minority Landowner Magazine are keynote speakers for the conference.

Visit the **AFTA (Association for Temperate Agroforestry) website** for more information and for registration. While you're there considering joining AFTA!

Register Now!



Upcoming ABFFC Events

Forest Site Assessment and Planning: A multi-day workshop with Appalachian Sustainable Development

The Appalachian Beginning Forest Farmer Coalition has partnered with Appalachian Sustainable Development to bring you this event that focuses on site assessment and planning for growing forest botanicals. Join us from August 11 - 13 at the [University of Virginia's College at Wise](#). More information and registration coming soon at www.abffc.com

Planning, Managing, and Growing Your Forest Farming Business: A multi-day intensive, with Rural Action

Aiming to provide beginning forest farmers with the full spectrum of growing and selling their forest botanicals, this event focuses on business planning and marketing. Held at the scenic [Camp Oty'Okwa](#), we'll be meeting from September 8 - 10 to learn the critical steps of building your business. More information and registration coming soon at www.abffc.com

Forest Farming: A Multi-day workshop with Organic Growers School and Warren Wilson College

The ABFFC has partnered with the Organic Growers School and Warren Wilson College to bring you this event from September 29 - October 1. Join us at [Warren Wilson College](#) in Asheville, North Carolina to learn about the basics of forest farming. More information and registration coming soon at www.abffc.com

Post Harvest Handling, Processing, and Value-Added Production: An ABFFC multi-day workshop

Ready to take your forest farming operation to the next level? Join us from October 20 - 22 for 3 days of all about what happens after harvest. We'll cover the ins and outs of turning basic raw materials into usable, marketable products. Held at the [Montreat Conference Center](#), this event is one you won't want to miss! More information and registration coming soon at www.abffc.com



Last year's ABFFC events provided a great opportunity for members to learn and network.

Upcoming Events

WNC Medicinal Herb Growers Club 2017

Managing Mixed Forest and Field Herb Operations

Date: Tuesday, March 28

Time: 1pm-4pm

Location: Cedar Springs Farm, Asheville, NC

The planning involved for managing both field and forest herbs is a key component for timely harvesting and successful sales. We'll visit a mixed-used farm and discuss the tools, equipment, labor demands, successive plantings, and investment involved in operating a diverse medicinal herb growing business. Participants will also collectively work through an assessment of five mixed field and forest crops and how to plan for financial demands and utilize enterprise budgets.

Proper Care of Tools used in Forest Farming

Date: Thursday, May 11th

Time: 1pm-4pm

Location: MHCREC, Mills River, NC

Craig Mauney will present a 2-hour workshop on "Proper Care of Tools Used in Forest Farming". Craig will demonstrate cleaning and care of hand tools used on the farm and in the garden. Sharpening tools as well as tool safety will be included in the lecture. Participants are welcome to bring a couple tools to sharpen on their own once the demonstrations have taken place. Please note that we will only be focusing on non-powered hand tools. Participation will be limited to 25, so please register early. Contact Meghan Baker with the Buncombe Cooperative Extension office to register: meghan_baker@ncsu.edu



Increasing the NTFP Footprint, One Seed at a Time

Rural Action is wrapping up a busy spring, and getting ready to launch into the summer season. We spent the late winter and early spring corralling volunteers, carting out rakes and other tools, and conducting restoration plantings of ramp seed across the Wayne National Forest in Southeast Ohio. Part of a project funded by the National Forest Foundation, over the course of 2016 Rural Action planted 20 new populations of ginseng, goldenseal, and ramps across national forestland with the help of over a dozen community volunteers. Also as part of the project we held five separate herb-based educational events for over 200 landowners, to promote a “Cultivation for Conservation” approach to forest herb management. Our March 11th event at the Wayne National Forest headquarters brought in nearly 70 people to hear presentations and get hands-on planting experience. We were awarded NFF funding for 2017 as well, which will fund more restoration plantings and landowner trainings, as well as hands-on forest herb education for students in Appalachian Ohio.



Tom Redfern, Rural Action Director of Sustainable Agriculture and Forestry, leads a ramp planting

On top of our forest herb education and restoration work, Rural Action wrapped up our annual ramp bulb sale in April, distributing 3,000 ramp bulbs to over 30 unique buyers. Along with our ginseng seed sale in the fall, which in 2016 saw 85 pounds of ginseng seed go to nearly 80 landowners, our planting stock distribution reached from Rhode Island to Georgia to Nevada, as well as providing planting material for local forest farmers in the Central Appalachian region. We intend to expand our planting stock program, to continue supplying farmers locally and across the broader region.



Medicinal plant workshop at the Wayne National Forest

Rural Action is gearing up for our second event with the Appalachian Beginning Forest Farmer Coalition, which will focus on non-timber forest product business planning and development. The event will take place on Friday, September 8th through Sunday, September 10th at Camp Oty’Okwa in Hocking County, a botanically and geologically unique site in the beautiful Hocking Hills. Attendees will learn how to budget, market, and scale their NTFP operations, with NTFP resource and industry professionals, as well as Rural Action’s Social Enterprise program, providing a range of strategies to make forest farming economically profitable and sustainable. Stay tuned for more event details!

Rural Action is a membership based non-profit organization, with a mission to foster social, economic, and environmental justice in Appalachian Ohio. For more information on any of these projects, or on Rural Action, visit www.ruralaction.org, www.facebook.com/ruralaction, or contact Karam Sheban at karam@ruralaction.org or 740-677-4047.



ASD'S EMERGING HERB HUB

[Appalachian Sustainable Development](#) (ASD) is a non-profit organization based in Abingdon, VA. ASD works in northeast TN and southwest VA, covering a 15 county physical footprint. With a focus on creating jobs in farming and agriculture and addressing food insecurity, ASD collaborates with regional partners to bring necessary resources to the communities served. Their work tackles chronic challenges with education, empowerment, and encouragement, aiming to help partners create innovative solutions. Since its inception in 1995, ASD has worked with farmers and forest landowners to increase access to a wide range of markets. For more than 16 years, ASD has worked shoulder-to-shoulder with local farmers, helping them get to market. They provide GAP (Good Agricultural Practices) training, help them obtain organic certification, secure retail orders from large wholesale markets, and aggregate and distribute locally grown produce from Maryland to Georgia. ASD's experience, commitment, and understanding of how to 'identify and reach markets' in Appalachia has helped farmers sell millions of dollars of products to grocers and brokers.

Through its involvement in the [Appalachian Beginning Forest Farmers Coalition](#) (ABFFC), ASD has been able to greatly expand its outreach to the region, bringing a wealth of resources through trainings, technical assistance and online resources. There have been a number of benefits gained as a partner in the coalition. In 2016, ASD was able to offer a multi-day training in Johnson County, TN, an economically distressed area that will benefit from further land-based economic opportunity. Through the efforts of ABFFC partners, ASD learned about emerging market opportunities through the Forest Grown Verification label and has been able to engage herb companies that value products that have the label.

Being a part of the ABFFC has allowed ASD to leverage funding for further forest farming development. They were in a position to seek funding from the Appalachian Regional Commission's Power+ program as a part of broader \$1.5 million food corridor project with the Appalachian Harvest food hub. The funding will allow ASD to build an herb processing center at Appalachian Harvest, which will act as an "herb hub" that local forest farmers can access to dry their herbs in a GAP and organic certified facility. Designed by David Grimsley of the [Taproot Botanical Alliance](#), the herb hub will consist of several drying units for drying multiple batches simultaneously, along with a root washer. The equipment will be completed in September and ASD staff are working with growers and buyers to be ready for this fall's harvests and sales. ASD will continue to utilize the resources developed by the ABFFC and to build on partnerships within the coalition. As the Appalachian Harvest food hub footprint increases to include hubs in West Virginia, Kentucky and Ohio, ASD envisions that the herb hub concept will also expand and that the region's growers will be able to access markets that value and pay a premium for herbs that come from sustainably maintained populations.

Developing Standards for Sustainable Commercial Ramp Harvesting

Each spring, hundreds of thousands of pounds of edible greens known as ramps make their way from forest floors to farmer's markets, restaurants, and retail stores across North America. The increasing commercial popularity of ramps over the past 20 years has raised concerns about their sustainable management. But, what could the sustainable harvesting of ramps on a commercial scale look like? This is the question that a new agroforestry research partnership seeks to answer.



Michigan Ramps. Photo by Michelle Baumflek

Ramps are an iconic spring green in many parts of eastern North America. Also known as wild leeks or *Allium tricoccum*, they are a relative of the onion, beloved for their pungent taste and spring tonic properties. Although ramps are often closely associated with southern Appalachian culture, they can be found in rich hardwood forests from southern Georgia to Manitoba, Canada.

While several efforts have been made to intensively cultivate ramps, a majority are harvested from eastern woodlands. A large share of these are consolidated and sold by a few commercial distributors who may process up to 50,000 pounds of ramps in a season. Though the sale of ramps on a large scale raises questions about sustainability, it can also provide excellent opportunities for encouraging businesses to adopt sustainable harvesting practices for ramps and other forest edibles at a commercial level.

Last spring, Dr. Jim Chamberlain of the U.S. Forest Service, Southern Research Station and Dr. Michelle Baumflek of Virginia Tech began a collaboration with the newly-formed Institute for Sustainable Foraging (ISF) to better understand commercial harvesting practices. The goal of the ISF is to create a sustainable harvesting certification program for ramps and other forest edibles. To date, ISF standards are based on the best management practices of experienced ramp gatherers. The local ecological knowledge of these harvesters will be complemented by research and monitoring plots that Chamberlain and Baumflek have established near Traverse City, Michigan. Located in forests where ramps are commercially harvested, the researchers will revisit sites in the coming years to determine the effects of harvesting on ramp density, plant size, and overall population health. The intent of such work is to contribute scientific information to future harvest certification standards. *Written by Michelle Baumflek.*



Measuring ramp density in research plots near Traverse City, Michigan. From Left to Right: Brian Bourdages, Michelle Baumflek, Jim Chamberlain. Photo by Erin O'Malley.



**APPALACHIAN BEGINNING
FOREST FARMER COALITION**