

AGROFORESTRY AND FOREST FARMING IN CENTRAL APPALACHIA

Food & Agriculture Systems Working Group
Oct 4, 2017



Objectives

Leading Practitioners and Funders will share key initiatives and address these issues:

- What makes this sector/industry so important in Appalachia?
- What are current strategies being implemented in the region, and by who?
- What are the current and potential impacts in terms of economics, rural livelihood, conservation, human & ecosystem health, and cultural values?
- What are potential roles for regional-scale activities and FASWG support - peer learning, distribution, processing, branding, policy, market development, etc.?

Welcome and Introductions

- Name
- Organization
- Location

Food & Ag Systems Working Group - Background

- Partnership since 2013 between funders (Appalachian Funders Network) and practitioners (Central Appalachian Network - CAN) as peers who learn, plan, and work together
- Focus areas have included food system capacity-building, aggregation & distribution models, food access & food security strategies, federal Ag policy & the Farm Bill, & more
- Roles have included learning calls, strategy development, research and publications, and collaborative fundraising



Update on Current FASWG Efforts

- Productive August meeting for AFN Philanthropic Engagement Project
 - *Drafting an overview of regional strategic priorities*
- Case Studies project underway – documenting innovative food access models at the intersection of local food & public health
- Concluding USDA Rural Community Development Initiative project, a 2-year, \$250,000 grant to strengthen food system capacity in 4 sub-regions
 - *Has leveraged over \$3 Million in additional funds*

Introduction to Forest Farming and Agroforestry

Christine Laporte,
Sacharuna Foundation,
FASWG Funder Tri-Chair

Agroforestry

“an intensive land management system that optimizes the benefits from the biological interactions created when trees and/or shrubs are deliberately combined with crops and/or livestock. ..The intentional combinations of trees with crops and/or livestock which involve intensive management of the interactions between the components as an integrated agroecosystem.” 1

5 basic practices

- Windbreaks
- Alley cropping
- Silvopasture
- Riparian buffers
- Forest farming

Economic and Ecological Benefits of Integrated Agroecosystems

- Increased profitability potential, e.g. windbreaks protect crops & livestock from damaging winds
- Financial diversification and flexibility of the farming enterprise.
- Conservation and protection of natural resources, e.g.
 - *mitigating non-point source pollution, controlling soil erosion, creating wildlife habitat.*
- Carbon Sequestration in Soils and Biomass

Forest Farming

“the cultivation of *high-value specialty crops** under the protection of a forest canopy ..”²
Ideally, NTFP enterprise is Integrated into the Forest Stewardship - Management Plans.

***Non-timber forest products (NTFPs)** provide marketable, personal, cultural value.

- Culinary (e.g mushrooms, ramps, syrups, pawpaw, etc .)
- Medicinal (e.g. cohosh, ginseng, etc.),
- Decorative: craft and flora (e.g. galax, willows, pine boughs, etc.)
- Nursery stock (e.g. NTFPs, native reforestation spp.)
- Landscaping (e.g. native plants, pine straw)
- Additional categories emerge through cultural ingenuity

Benefits

- Higher agricultural productivity
- Land retention
- Income diversification
- High value products.
- Ecological stability, Ecosystem Services and Conservation for future generations

FF *does not* include wildcrafting (gathering naturally-occurring plants from native forests).

Presenters

- David Cooke, Executive Director, Grow Appalachia
- Emily Lachniet, Agroforestry Program Manager, Appalachian Sustainable Development
- Tom Redfern, Director of Sustainable Agriculture and Forestry, Rural Action
- Susan Leopold, Executive Director, United Plant Savers
- Nathan Hall, President, Reclaim Appalachia (Coalfield Development Corporation)
- John Munsell, PI, Virginia Tech, Appalachia Beginning Forest Farmers Coalition
- Mikki Sager, Vice President, Director, Resourceful Communities- Conservation Fund

GROW APPALACHIA

David Cooke
Executive Director



Grow Appalachia

David Cooke, Executive Director

<https://growappalachia.berea.edu/>

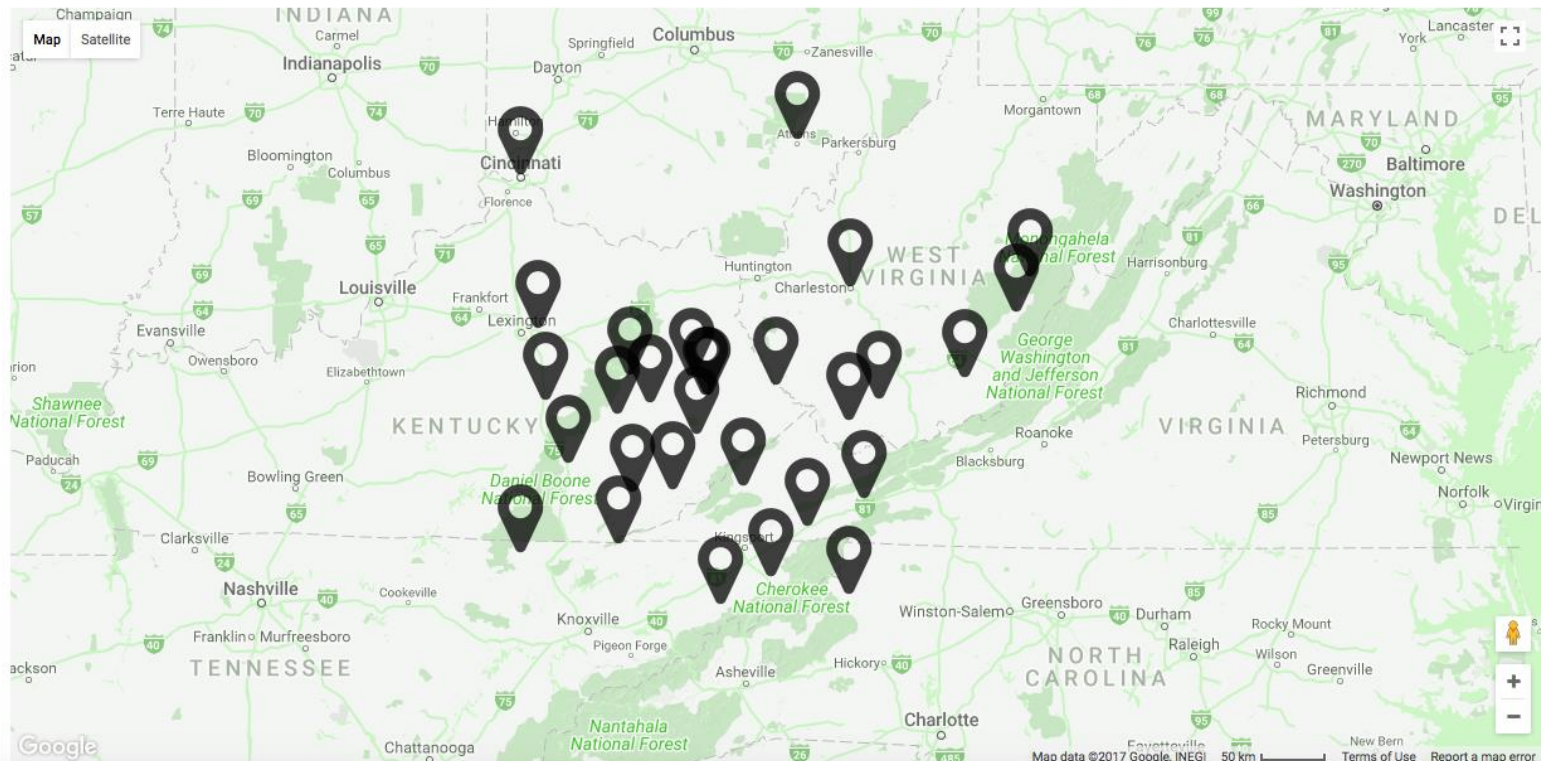
cooked@bereda.edu

CPO 2122

Berea, KY 40404

859 984 3941

“We carefully seek out partners who are interested in building a healthier generation of families in central Appalachia”

[ABOUT](#)[PARTNERS](#)[PROGRAMS](#)[SHOP](#)[BLOG](#)[CONTACT](#)[GIVE](#)

2017 Forest Farming Initiative in KY and WV coalfield communities



Forest and farms

Whole farm enterprise development



APPALACHIAN SUSTAINABLE DEVELOPMENT

Emily Lachniet
Agroforestry Program Manager

Appalachian Harvest Herb Hub

Income Opportunities from the Forest Understory

Our Vision

Appalachian Sustainable Development envisions a thriving and sustainable herbal economy in central Appalachia, where plant conservation is achieved through cultivation. The Appalachian Harvest Herb Hub will serve to help forest farmers sustainably grow, harvest, process and sell forest botanicals (i.e. ginseng, goldenseal, ramps) to premium-priced markets.

How We Can Help You

Trainings

Workshops on propagation, herb drying and more. Register online below for invites and expert advice.

Cost-Share

Limited cost-share funding available for planting stock and certification offering premium market access.

Processing

A processing center with a root washer and herb dryer available fall 2017 to forest farmers at the Herb Hub.

Marketing

Connecting forest farmers committed to conservation to higher value markets.

Get Involved

APPALACHIAN
sustainable
DEVELOPMENT



276.623.1121



elachniet@asdevelop.org



www.asdevelop.org



APPALACHIAN BEGINNING
FOREST FARMER COALITION

Registration:

www.appalachianforestfarmers.org/register-3/

Strengthening the Regional Market for Forest Farmed Botanicals

Issues and Opportunities



Appalachian Harvest Herb Hub



Premium pricing

through aggregation, certification, and processing in a GAP certified facility

Efficient processing

herb washer, dryer, moisture meter

Forest farming training

Site evaluation, harvesting, plant ID and propagation

APPALACHIAN

sustainable

DEVELOPMENT

Kathlyn Terry, Executive Director
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Emily Lachniet, Agroforestry Program Manager
elachniet@asdevelop.org

Katie Commender, Food Corridor Marketing and
Logistics Coordinator
kcommender@asdevelop.org

Office: 276-623-1121





Tom Redfern, Tanner Filyaw, &
Karam Sheban

Rural Action Sustainable Forestry
Program

Program Objectives

- Support production of NTFP's on private forestlands
- Support forest management and stewardship
- Support sustainable & value-added supply chains—Forest Grown Verification



Planting Stock Sales & Distribution

- Promoting and supporting wild-simulated ginseng & NTFP production
- 1,460 lbs. of ginseng seed
- 460 lbs. of goldenseal root
- Appx. 375 growers since 1998
- High economic development potential
 - Appx. \$4M - \$7M
- Appx. 25 new buyers annually

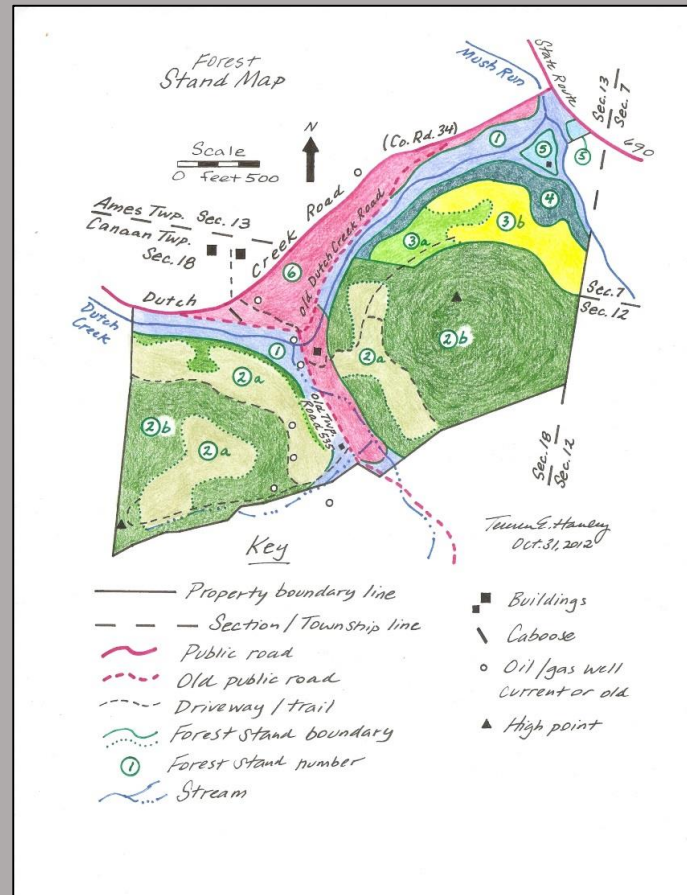


Stratified American ginseng seed ready for planting.

Source: Google Images

NTFP Education & Farm Management Planning

- NTFP production and mgmt. workshops
 - 300-500 attendees/yr.
- Site visits & Consultation
 - ID existing forest assets
 - Assess NTFP production potential
 - Mgmt. recommendations
- Forest Management Plans
 - Help landowners acquire plans that include NTFP mgmt. strategies
 - Pilot project – 2000 acres under management



Sustainable and Verifiable Supply Chains

- Strengthen & expand existing models of Forest Grown Verification (FGV)
- Increase direct to market access for producers
 - Connecting value-added businesses with quality raw materials
- Verifies sustainable wild-simulated origin
- Wild-simulated & sustainable “brand” development



Forest Grown Verified ginseng products manufactured by Mountain Rose Herbs. Source: Mountain Rose Herbs.

UNITED PLANT SAVERS

Susan Leopold
Executive Director

United Plant Savers founded 1994

www.unitedplantsavers.org

Dedicated to Native Medicinal Plant Conservation



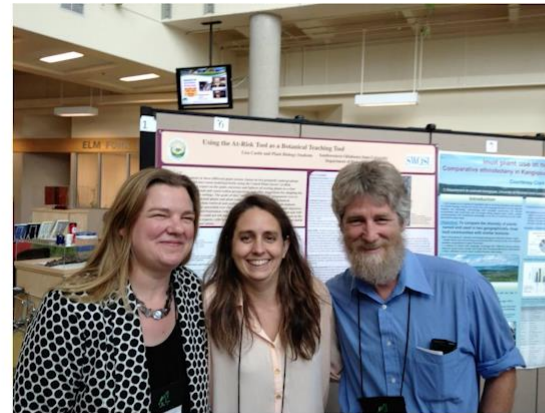
Rosemary Gladstar
Founder of
United Plant Savers





United Plant Savers "At Risk" List Statement of Purpose:

For the benefit of the plant communities, wild animals, harvesters, farmers, consumers, manufacturers, retailers and practitioners we offer this list of native medicinal plants which we feel are currently most sensitive to the impact of human activities. Our intent is to assure the increasing abundance of the medicinal plants which are presently in decline due to expanding popularity and shrinking habitat and range. UpS is not asking for a moratorium on the use of these plants. Rather, we are initiating programs designed to conserve and cultivate these important native medicinal plants.



- TOOL created by Dr. Kelly Kindscher from the University of Kansas
- Assisted by Dr. Lisa Castle of the University of Oklahoma

People are focused on what the plant can do for them..

But few are focused on protecting the plants in the wild...

Black cohosh number 6 on the list of top herbal supplement sales

43 million dollars in sales in 2015!



And in regards to Medicinal Plants....

Ginseng and Goldenseal the two plants listed in CITES have yet to be evaluated for IUCN RED listing.



Overharvesting in N. America



- The herb industry has grown tremendously!
- 12 consecutive years of growth
- \$6.92 billion spent in 2015 in herbal supplements
- Of the 65 top native N. American herbs only 4/5 are seriously cultivated
- Many herbs like Goldenseal, Black Cohosh, False Unicorn, Slippery elm have been overharvested and depleted from the wild populations

The problem wild harvesting faces with AT- RISK PLANTS on a commercial scale.....

- 1) The depletion of the resources
- 2) inconsistency of harvesting from various areas
- 3) How its dried and stored, and
- 4) The harvesting of the wrong plant material- not being able to properly identify plants..

There are challenges **but** there are also benefits to forest farming

To consumers, industry and conservation

- 1) The quality of the product = consistency and purity
- 2) Consistent sourcing = production planning
- 3) And the timing of the harvest= higher medicinal value
- 4) CONSERVATION/ LEAGACY



Challenges

forest farming can't economically compete with harvesting – we have to decide to do it because it the right thing when we talking about conservation....

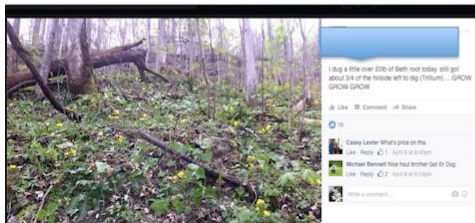
This is the middle ground between hands off and extinction....

It takes years to grow these plants. We have to think long term.

We need to protect the forest because the plants require high quality woodland habitat or and for many we don't know yet how to grow them, nor do we have the plant material for propagation.

Prices and posts from facebook
Taken spring 2016

Dug over 20 pds of beth root and
Still have ¾ of the hill yet to dig



Call for any explanation needed or further

BUSINESS HOURS

Mon - Thursday 11 Am through 7.00 Pm
Friday - Saturday - 11 Am - 5 Pm
Sunday closed

Beth Root - Fresh cut in half down the center .60 a lb
Beth Root - Dry cut down the middle \$4.00

Blood Root - Fresh no mold \$1.00 a lb
Blood Root - Dry no mold \$10.00 a lb

Black Cohosh - \$2.75 Dry only (clean, chopped, not molded, and free of foreign debris)

Black Cohosh - Fresh - We will be buying fresh later I will post when, but not rite now.

Blue Cohosh - .50 a lb fresh clean & free of debris
Blue Cohosh Dry - \$2.00 a lb

Black Indian Hemp - Dry Only - Whole plant root herb and all dry only \$5.00 a lb (Good news guys during that last season we where able to prove a buyer for this with out doubt. So harvest and dry away I will need the whole plant this time and brought in by Late July to Middle August.

Cranesbill - .60 a lb Fresh
Cranesbill - \$3.00 a lb dry

Elm Bark - .85 or \$1.00 a lb YOUR CHOICE - let me explain

Herbalists,
Botanists,
Researchers,
Foresters,
Growers,
Apothecaries,
Landowners
and
Herbal Allies
should attend.

Learn the latest
conservation
research,
forest farming
botanicals, herbal
entrepreneurship,
and the practice
of conscientious
commerce.

The Future of Ginseng and Forest Botanicals SYMPOSIUM



July 12-14, 2017 • Morgantown, WV

CONSERVATION | CULTIVATION | COMMERCE

WE CANNOT HAVE COMMERCE WITH OUT CONSERVATION!

COMPANIES CAN REFORMULATE _ PLANTS CANNOT!



Information on our tool

<http://www.unitedplantsavers.org/species-at-risk-assessment-tool>

You tube lecture at the center for agroforestry

https://www.youtube.com/watch?time_continue=105&v=L5rvWgykOMs



Reclaim Appalachia

An Enterprise within the Coalfield Development Umbrella

Nathan Hall, President

nhall@coalfield-development.org

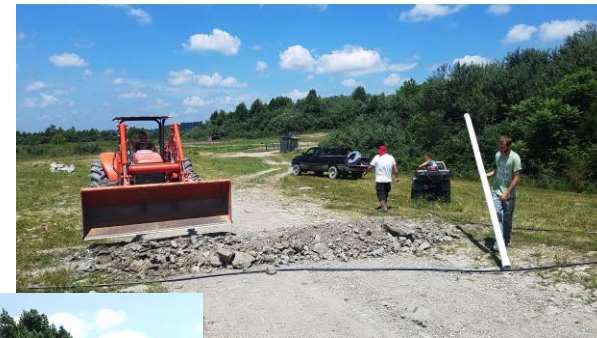
Cell: 606-471-2470

Reclaim Appalachia

- Local news piece on Reclaim Appalachia's pilot site:
https://www.youtube.com/watch?time_continue=2&v=xFb-6t3quT0

Reclaim Appalachia

- Pilot site in Mingo County, WV
- Rotational Livestock
- Workforce Development



Reclaim Appalachia

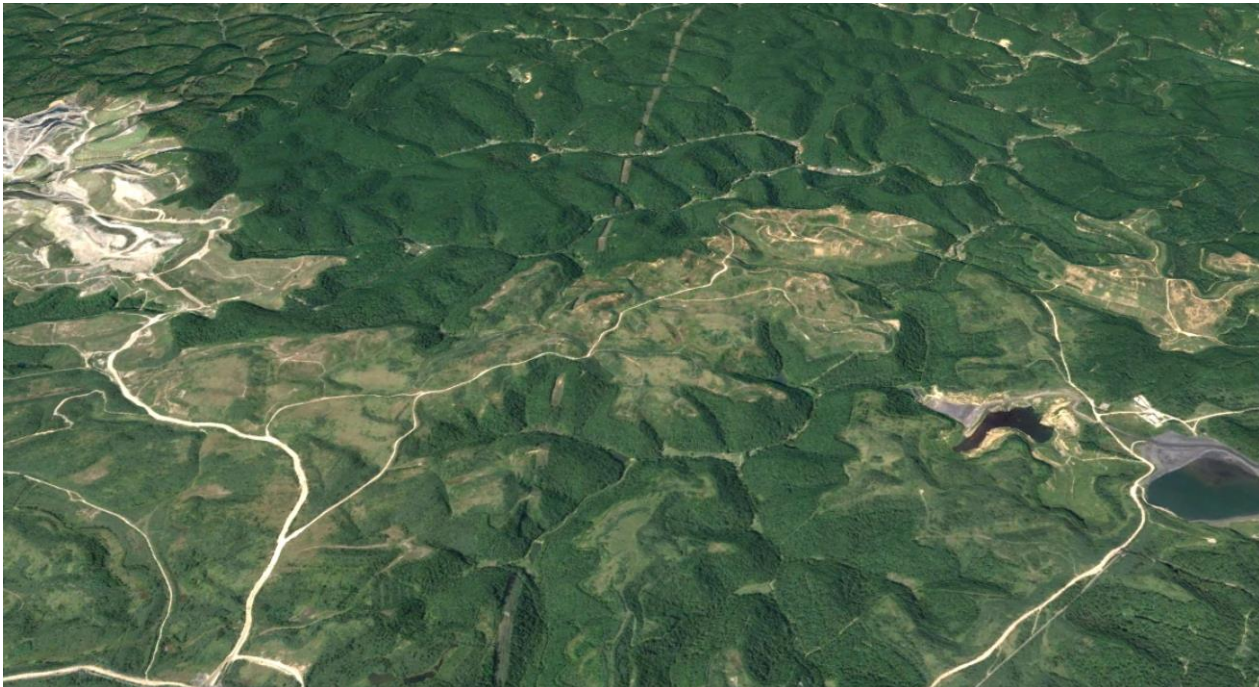
- Pilot site in Mingo County, WV
- Mixed Orchards
- Workforce Development



Reclaim Appalachia

➤ Future Direction

- Expansion to additional sites, landscape-scale integrated projects (agroforestry, reforestation, renewable energy, forest conservation)
- Partnerships with TNC, Green Forests Work, etc



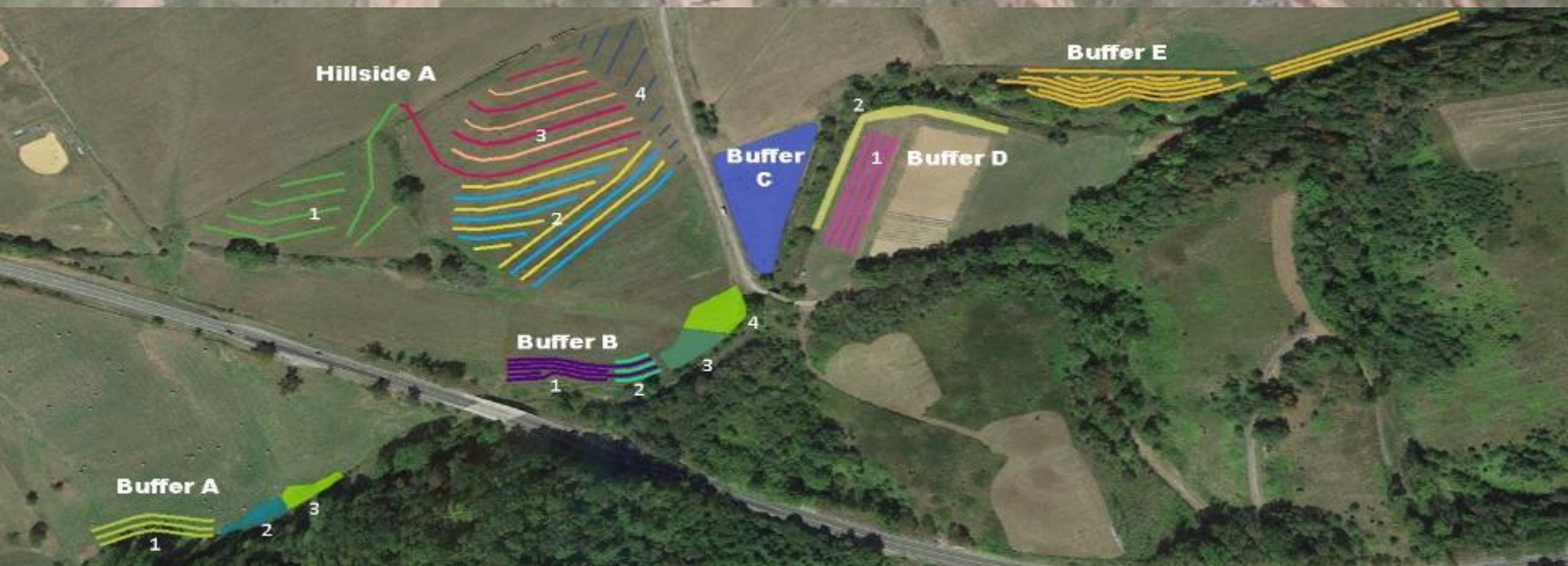
Nathan Hall, President
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APPALACHIA BEGINNING FOREST FARMERS COALITION

John Munsell
PI, Virginia Tech



Conservation Credit for Agroforestry Production



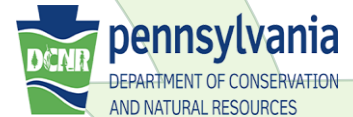




APPALACHIAN
sustainable
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NC STATE UNIVERSITY



Southern Regional
Extension Forestry



BLUE RIDGE WOODLAND GROWERS





BECOME A MEMBER or LOGIN



APPALACHIAN BEGINNING
FOREST FARMER COALITION

ABOUT CALENDAR RESOURCES ENGAGE

Appalachian Beginning Forest Farmer Coalition

Growing Opportunities Beneath the Canopy

BECOME A MEMBER

f ABFFC Facebook



Appalachian Beginning Forest
Farmer Coalition

4 days ago

Are you interested in learning the
many techniques for adding value to

UPCOMING EVENTS

SORT OPTIONS

29⁻¹
SEP OCT

FOREST FARMING - A

14
OCT

GINSENG

20⁻²²
OCT

FROM HARVEST TO

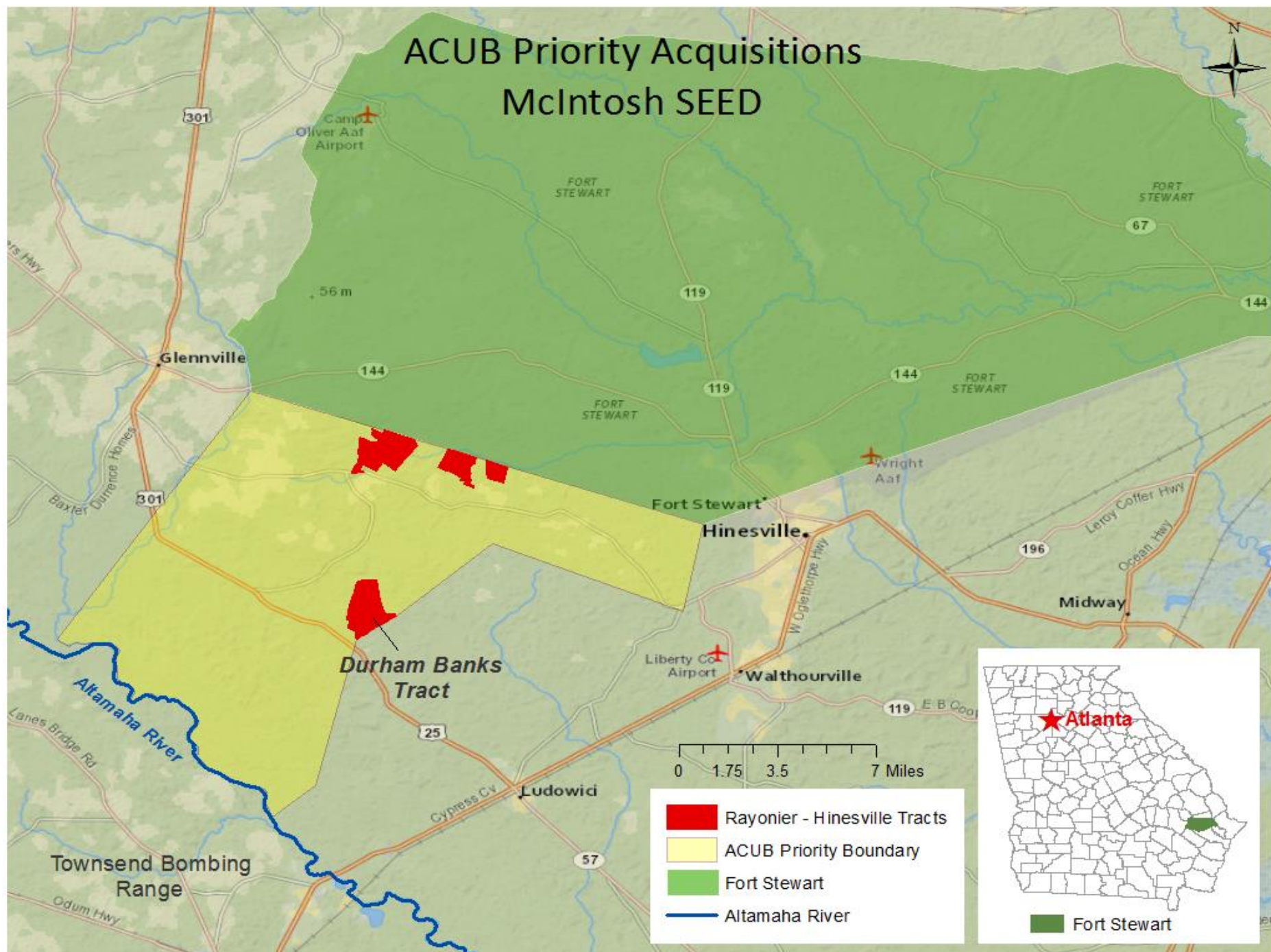
RESOURCEFUL COMMUNITIES

Mikki Sager, Director
Vice President, The Conservation Fund

McIntosh SEED Community Forest: The Model



ACUB Priority Acquisitions McIntosh SEED




An Important Story

- 1,148 acres protected working forest
- First community forest acquired by African American community group using conservation tools
- Acquired working forest valued at \$1.6 million for less than \$700,000
- Triple bottom line outcomes/ impacts



Rural Economic Development and Conservation

- 
- A photograph of various traditional woven baskets and a lamp. The baskets are made of different materials, including sweetgrass, and feature various patterns and colors. A lamp with a patterned shade is visible in the background. The items are arranged on a wooden surface, showcasing the craftsmanship of Gullah-Geechee basketmaking.
- Educating and engaging African American landowners in conservation programs and practices
 - Longleaf pine restoration
 - Eco-tourism and bird-watching programming
 - Small business development opportunities
 - Plans to propagate sweetgrass in wetland areas for Gullah-Geechee sweetgrass basketmaking

Rural Economic Development and Conservation



Q&A Discussion

- What makes this sector/industry so important in Appalachia?
- What are current strategies being implemented in the region, and by who?
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