

Who Else is Interested in Agroforestry?

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Southwest Agroforestry Action Network - June 4-6, 2019 / Farmington, NM



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Today's Topics

- ▶ USDA Strategic Framework
- ▶ Climate Change Report
- ▶ USDA National Agroforestry Center
- ▶ Regional Working Groups

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USDA Strategic Framework

- ▶ Primary Focus is to direct and encourage USDA engagement in agroforestry
- ▶ Input from 8 USDA Agencies
 - ▶ USFS, NRCS, NIFA, FSA, ARS, AMS, NASS, RD
 - ▶ <https://www.usda.gov/sites/default/files/documents/usda-agroforestry-strategic-framework.pdf>
- ▶ Updated from the 2012 Framework



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3 Goals

- ▶ Strategic Goal 1—Reach Out
- ▶ Strategic Goal 2—Investigate
- ▶ Strategic Goal 3—Integrate

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Reach Out

- ▶ Ensure all landowners and communities have access to the latest tools and information that support agroforestry adoption.

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Reach Out

- ▶ Objective 1.1—Listen and Communicate
- ▶ Objective 1.2—Advance Professional Education
- ▶ Objective 1.3—Partner Expand Learning
- ▶



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Investigate

- ▶ Conduct applied and basic research to advance the science and technology that supports the use of agroforestry.



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Investigate

- ▶ Objective 2.1—Plan
- ▶ Objective 2.2—Discover
- ▶ Objective 2.3—Translate

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Integrate

- ▶ Facilitate the integration of agroforestry information, research, tools, and technologies to meet the goals and objectives of USDA agencies.



Integrate

- ▶ Objective 3.1—Institutionalize
- ▶ Objective 3.2—Assess Opportunities and Accomplishments
- ▶ Objective 3.3—Communicate Results

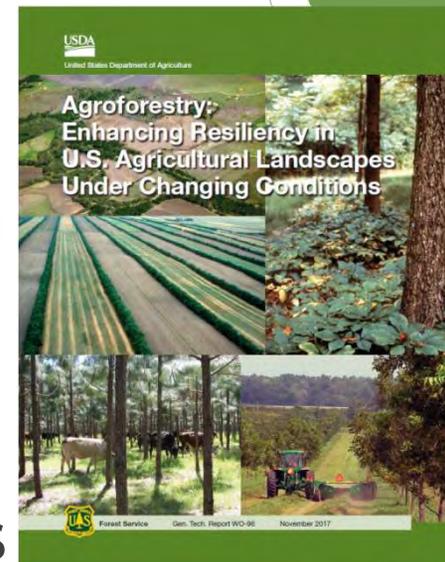


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Agroforestry: Enhancing Resiliency in US Agricultural Landscapes Under Changing Conditions

- ▶ science-based synthesis on the use of agroforestry for mitigation and adaptation
- ▶ framework for including agroforestry systems in agricultural strategies to improve productivity and food security and to build resilience in these landscapes
- ▶ https://www.fs.fed.us/research/publications/gtr/gtr_wo96.pdf

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Agroforestry Report

Key Themes

- ▶ Ecosystem Services and Food Security Benefits of Agroforestry
- ▶ Agroforestry as a Mechanism for Greenhouse Gas Mitigation
- ▶ Economic and Sociocultural Considerations
- ▶ U.S. Regional Summaries
- ▶ Perspectives From Canada and Mexico

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USDA National Agroforestry Center

- ▶ The mission of the NAC is to advance the health, diversity, and productivity of working lands, waters, and communities through agroforestry.
- ▶ With a national network of partners, NAC conducts and supports research, develops technologies and tools, and provides educational materials and training
- ▶ A partnership among USFS R&D, USFS S&PF, and NRCS

Value of Partnerships

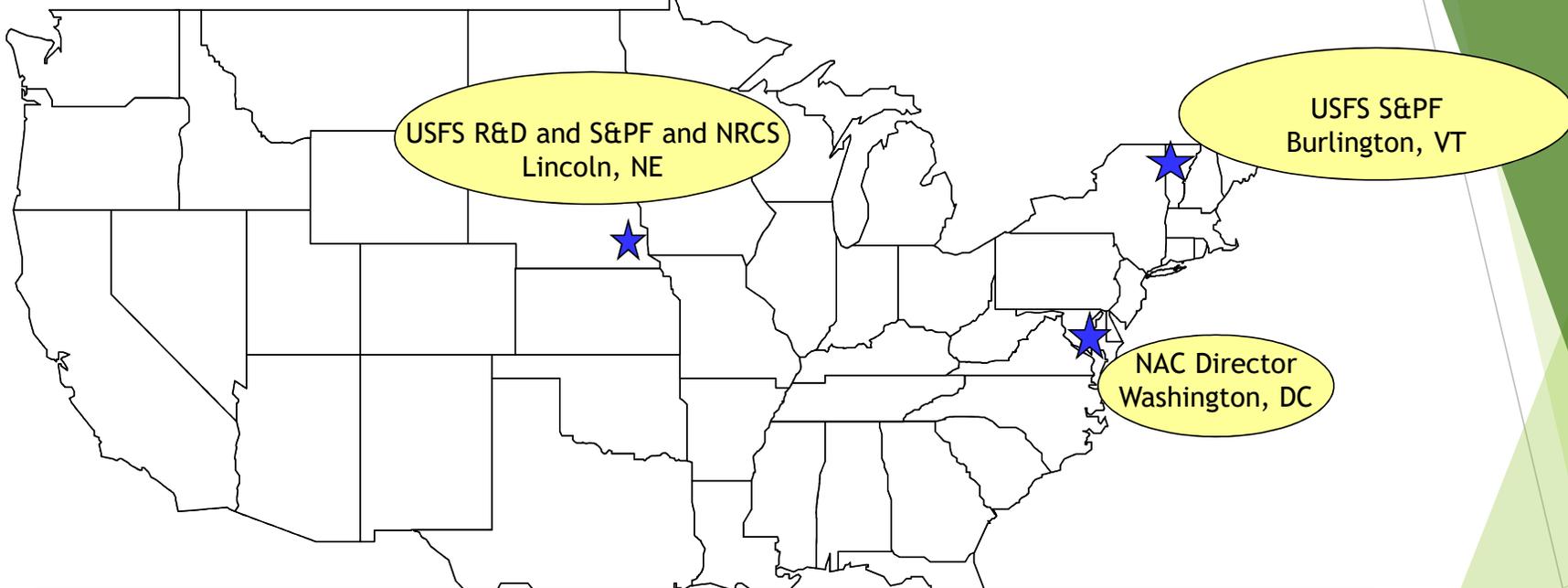


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USDA National Agroforestry Center



Center Director (USFS)	Admin: 2 Admin Professionals (1 vacant)
TT&A: 2 USFS Agroforesters	R&D: 3 FT Scientists (1 vacant)
1 Information Assistant	1 GIS Specialist
1 NRCS Agroforester (July 15)	1 Technician (vacant)



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NAC Focus Problem Areas

► Ecosystem Services



► Human Dimensions



► Outreach & Education



Research

- Scientific understanding of agroforestry
- Research syntheses
- Models & tools for effective design

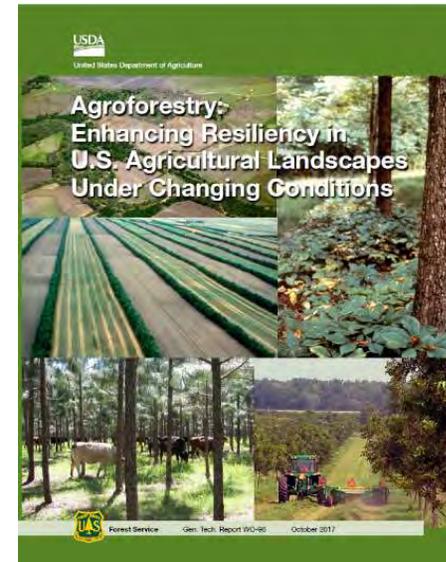
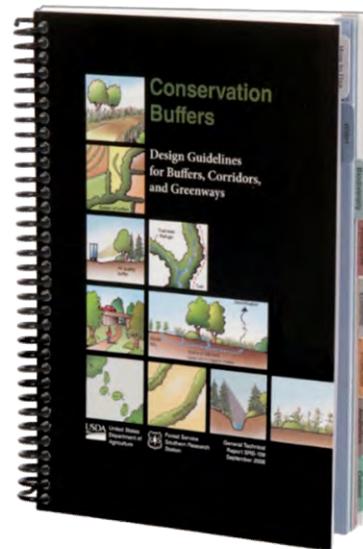
Conservation Buffer Plant Database
For the Northern Plains

Select Desired Buffer Function or Characteristics

<input type="radio"/> Sediment Trapping	<input type="radio"/> Groundwater Filtration	<input type="radio"/> Wind Protection
<input checked="" type="checkbox"/> Stem Density	<input checked="" type="checkbox"/> Rooting Mass	<input checked="" type="checkbox"/> Porosity
<input checked="" type="checkbox"/> Stem Resistance	<input checked="" type="checkbox"/> Rooting Depth	<input checked="" type="checkbox"/> Growing Season
<input checked="" type="checkbox"/> Growing Season	<input type="checkbox"/> Root Type	<input checked="" type="checkbox"/> Plant Type
<input checked="" type="checkbox"/> Plant Height	<input checked="" type="checkbox"/> Biomass Production	<input checked="" type="checkbox"/> Plant Height
		<input type="checkbox"/> Plant Form

Modify Site Characteristics Additional Functions

USDA National Agroforestry Center Run Query

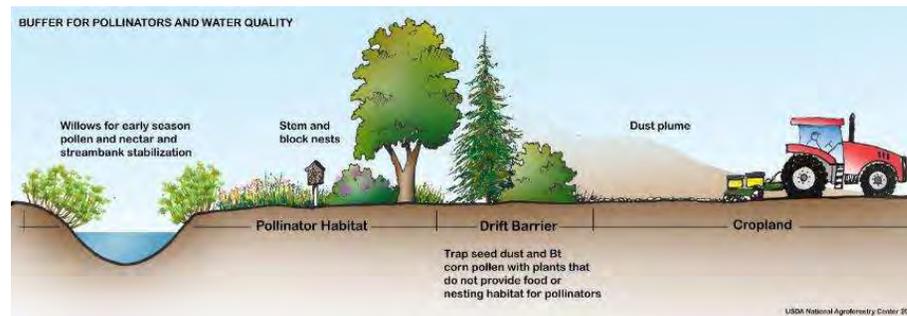


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Research

Topics:

- Habitat creation and protection
- Agroforestry inventory
- Climate change
- Crop and livestock enhancement
- Water quality





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Outreach and Education Products

Brochures

Technical Notes

Information Sheets

Newsletter

Agroforestry
Working Trees for Pollinators

Over 100 agricultural crop species in North America need a pollinator to be most productive. Agroforestry practices can be designed to support these pollinators.

In the past, orchards and other crops have been planted in rows. Now, agroforestry practices are being used to create a more diverse and resilient system. Agroforestry practices can be designed to support these pollinators.

USDA
AGROFORESTRY NOTES
Alley Cropping: An Agroforestry Practice

Published March 2017

Definition
Alley cropping is defined as the planting of rows of trees and/or shrubs to create alleys with or without agricultural or horticultural crops or products.

Introduction
Alley cropping is an agroforestry practice that places trees within agricultural or cropland systems. The system is sometimes called strip cropping, usually in cropland areas. It is especially useful to producers interested in growing multiple crops on the same acreage to improve whole farm yield. Growing a variety of crops in close proximity to each other can create a more resilient system to pests and diseases. Alley cropping systems change over time. As crops and shrubs grow, they influence the light, water and nutrient regimes in the field. These interactions will affect the crops that are grown there.

Info
Working Trees

Can windbreaks help with organic farming?

The hedgerow protects the subsequent crop from dust and reduces the risk of soil erosion.

Agroforestry buffers can be used to help organic farmers maintain the integrity of their products. If there is a risk of crop or animal contamination, agroforestry buffers can be used to help organic farmers maintain the integrity of their products. If there is a risk of crop or animal contamination, agroforestry buffers can be used to help organic farmers maintain the integrity of their products.

Inside Agroforestry
Windbreak Innovation

GIS and Remote Sensing for Kansas Public Outreach

Pacific Islands Multi-species Windbreaks

Sample Presentations

Tools

Displays

Agroforestry
Enriching our lives with trees that work

This presentation was developed by the USDA National Agroforestry Center.

ork - June

Webinar Library

Webinar Title	Presenter	Date	Duration
Alley Cropping: An Agroforestry Practice	USDA National Agroforestry Center	March 2017	15 min
Working Trees: Can windbreaks help with organic farming?	USDA National Agroforestry Center	March 2017	15 min





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Outreach and Education Activities

Demonstration Sites



Agroforestry Training



Online Training



Workshops



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Projects with Partners



NFWF & National CIG
Conservation Credit for Agroforestry Production (C-CAP)



A stylized illustration of a farm scene. In the foreground, there are silhouettes of a cow, a horse, and a pig. In the middle ground, there's a barn, a fence, and a windmill on a hill. The background features rolling green hills, trees, and a blue sky. The text 'USDA National Agroforestry Center' is overlaid on the left side in white, and '2018 Highlights' is in a red box below it. The website 'www.fs.usda/nac' is at the bottom right.

USDA National Agroforestry Center

2018 Highlights

www.fs.usda/nac

<https://www.fs.usda.gov/nac/documents/reports/2018-annual-report/>

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Regional Working Groups

- ▶ Locally Led
- ▶ Local Issues
- ▶ Local Solutions

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Why the Emphasis on Local



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Regional Working Groups

- ▶ Some have been initially supported by NAC
- ▶ Some have been initially supported through SARE Grants
- ▶ Some have been started to address very specific and local issues
- ▶ There is no single best way
- ▶ Maintaining Momentum



Regional Working Groups

▶ California Agroforestry Network:

<https://asi.ucdavis.edu/programs/ucsarep/research-initiatives/are/ecosystem/agroforestry>

▶ Pacific Northwest Agroforestry Working Group

<http://pnwagro.forestry.oregonstate.edu>

▶ Southwest Agroforestry Action Network

<https://aces.nmsu.edu/aes/agroforestry/southwest-agroforestry-w.html>

▶ Great Plains Windbreak Initiative

▶ 1890 Agroforestry Consortium

<https://nifa.usda.gov/1890-agroforestry-consortium>

▶ Appalachian Beginning Forest Farmer Coalition

<https://www.appalachianforestfarmers.org/>

▶ Northeast/Mid-Atlantic Agroforestry Working Group

<http://www.nemaagroforestry.org/>

▶ Northeast Silvopasturing Group

<http://silvopasture.ning.com/>

▶ Pennsylvania Agroforestry Brain Trust

▶ Tioga Agroforestry Network

<https://www.agfortioga.com/>

▶ Vermont Agroforestry Team

NAC is looking forward to
working with SWAAN

Thank You

