Agroforestry In Action



UNIVERSITY OF MISSOURI CENTER FOR AGROFORESTRY

USING NRCS ASSISTANCE FOR AGROFORESTRY & WOODY CROP ESTABLISHMENT

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The Natural Resources Conservation Service (NRCS) is an agency of the US Department of Agriculture (USDA) that is responsible for assisting landowners in addressing resource concerns on private lands to improve our soil, water, air, plants, animals (both domestic and wild), and improve energy efficiency. The vision of NRCS is to ensure productive lands in harmony with a healthy environment.

Agroforestry is a unique land management approach that intentionally blends agriculture forestry to enhance productivity, and profitability, and environmental stewardship. In 2010, the USDA-NRCS and USDA Forest Service, along with numerous other partners and stakeholders, developed the USDA Agroforestry Strategic Framework to increase awareness and support for agroforestry across the country. As a result, NRCS in Missouri offers dedicated funding pool а for Agroforestry and Woody Crop Establishment within the Environmental Quality Incentives Program (EQIP).

NRCS provides assistance to landowners in the form of Conservation Technical Assistance (CTA) and Financial Assistance. CTA is the help that NRCS and its partners provide to private landowners to address opportunities, concerns and problems related to the use of natural resources and to help landowners make sound natural resource



Elderberries

management decisions on private, tribal and other non-federal lands. CTA is voluntary and free. One of the most beneficial outcomes of participating with NRCS CTA is the development of a Conservation Plan specific to each landowner's property and goals.

landowner If the chooses CTA, the Conservation Plan serves as a springboard for those interested in participating in EQIP financial assistance. EQIP provides financial assistance to help implement conservation that address practices natural resource concerns. Some common natural resource concern categories that can be addressed with agroforestry and woody crop practices include: emissions, quality aquatic habitat, air degraded concentrated erosion, plant condition, field pesticide loss, field sediment, nutrient and pathogen loss, inefficient energy

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use, livestock production limitation, soil quality limitations, terrestrial habitat, weather resilience, and wind and water erosion. Financial assistance is awarded to the producer for implementing conservation practices in accordance with established conservation standards established for each practice.



Alley cropping

The core conservation practices associated with the EQIP Agroforestry and Woody Crop Establishment funding pool are:

- Alley cropping
- Multi-story cropping
- Riparian forest buffers
- Silvopasture
- Tree/shrub establishment
- Windbreak/shelterbelt establishment

These conservation practices may be utilized individually or in combination in different parts of the landscape depending on the landowner's goals.

Alley cropping is growing an annual or perennial crop simultaneously in the alley ways between rows of a long term tree crop. The agricultural crop generates annual income while the longer-term tree crop matures. Examples include, but are not limited to growing corn/soybeans between rows of walnut and growing hay between rows of pecans. The benefits of alley cropping include diversifying the farm enterprise, reducing erosion, improving water quality, enhancing wildlife habitat, and sequestering carbon dioxide.

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Multi-story cropping, also referred to as forest farming, is the intentional manipulation, integration and intensive management of woodlands under a managed forest canopy to produce non-timber products such as foods (e.g. chestnuts, mushrooms), medicinals (e.g. ginseng, goldenseal), and decoratives (e.g. redtwig dogwood, pine straw). The benefits of Multi-story cropping include improving the economic value of existing forests, diversifying income and improving forest health.

Riparian forest buffers are natural or planted woodlands adjacent to water bodies. They are designed with trees, shrubs and grasses to protect water resources from non-point source pollution. The benefits of riparian forest buffers are to improve water quality, protect aquatic habitat, enhance wildlife habitat, provide additional income when plantings include trees and shrubs with timber or woody crop production value, and sequester carbon dioxide.

Silvopasture combines timber, livestock and forage production on the same acreage. Trees provide longer term returns, while livestock generate annual income. The benefits of silvopasture include diversifying the farm enterprise, improving plant vigor, lowering animal stress, enhancing wildlife habitat, and sequestering carbon dioxide.

Tree/shrub establishment is utilized for block plantings or other planting options that do not fit specifically within one of the agroforestry practices mentioned above for woody crop establishment.

Find more NRCS resources on the UMCA YouTube Channel!

- <u>NRCS Agroforestry Assistance FAQs</u>
- <u>NRCS Agroforestry Assistance at Payne</u> <u>Family Farm</u>
- <u>Implementing Silvopasture Techniques</u> with NRCS Agroforestry Assistance
- <u>NRCS Agroforestry Assistance at</u> <u>Hart|Beet Farm</u>





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Examples of woody crop establishment include, but are not limited to, elderberry establishment, aronia berry establishment, nut tree establishment (e.g. pecan, chestnut), and fruit tree establishment (e.g. apple orchards, peach orchards). The benefits of tree/shrub establishment include reducing soil erosion, improving water quality, improving wildlife habitat and sequestering carbon dioxide.

Windbreak/shelterbelt establishment is the planting of single or multiple rows of trees and/or shrubs that redirect or modify the wind. The benefits of windbreak/shelterbelts include: lower energy costs, reduced erosion and pesticide drift, protected plants, sheltered livestock, managed snow drift, increased crop yield, odor and dust mitigation, additional income when plantings include trees and shrubs with timber or woody crop production value, increased wildlife habitat and carbon sequestration.

Landowners interested in agroforestry and/or woody crop establishment on their property have many resources at their disposal through the NRCS CTA and EQIP Financial Assistance opportunities. Agroforestry and woody crop establishment are consistent with NRCS goals and vision. For more information contact your <u>local USDA Service Center</u> to make an appointment to work with an NRCS-certified conservation planner. In addition, resources are available online to learn more about NRCS and EQIP.

Recommended Websites

USDA-NRCS www.nrcs.usda.gov/wps/portal/nrcs/site/ national/home/_

Environmental Quality Incentives Program (EQIP)

https://www.nrcs.usda.gov/wps/portal/nrcs/ main/national/programs/financial/eqip/

Conservation Stewardship Program (CSP) https://www.nrcs.usda.gov/wps/portal/nrcs/ main/national/programs/financial/csp/



Elderberry flowers





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