

CONSERVATION ENHANCEMENT ACTIVITY

E612D

CONSERVATION STEWARDSHIP PROGRAM

Adding food-producing trees/shrubs to an agroforestry system

CONSERVATION PRACTICE: 612 - Tree/Shrub Establishment

APPLICABLE LAND USE: Crop (Annual & Mixed), Crop (Perennial), Pasture, Range, Forest, Associated Ag Land, Farmstead

RESOURCE CONCERN: Animals, Plants

ENHANCEMENT LIFE SPAN: 15 years

Enhancement Description

Plant food producing trees/shrubs for wildlife or human consumption within an agroforestry system (windbreaks/shelterbelts, alley cropping, forest farming, silvopasture, and/or riparian forest buffer).

<u>Criteria</u>

- States will apply criteria from the NRCS National Conservation Practice Standard Tree/Shrub Establishment (Code 612), and any additional criteria as required by the NRCS State Office.
- Species selected will be able to produce food and/or culinary items to create an edible landscape. See States list for suitable woody plants.
- Apply at least one of the following activities to improve edible food production:
 - Add at least one edible, food producing row to existing linear plantings.
 - Add clusters of food-producing plants to existing plantings, so that food plants occupy at least 10% of the total area established in an agroforestry practice.
 - Add food-producing plants to occupy idle areas of the operation, such as field corners adjacent to existing plantings.
- Plant a variety of tree, shrub, and-or bramble species (3 or more, using native species whenever possible) with varying flowering times to favor pollinator species and to provide an extended time frame for available food.

E612D - Adding food-producing trees/shrubs to	July 2022	Page 1
an agroforestry system		



• Further considerations are visual appeal, proximity to farmsteads, proximity to areas of wildlife use or viewing, or other locations depending on landowner objectives.

CONSERVATION STEWARDSHIP PROGRAM

- Minimize herbicide use. Use spot weed treatments and avoid spraying when flowers are present.
- Selection of species should also be chosen according to the site's natural disturbance regime. Species should be selected based on traits, successional status, structure, and composition.
- Build forest resilience by favoring existing species that are better adapted to projected future climate conditions, and by enhancing relative compositional and structural diversity.
- Do not plant species on the Federal or State invasive species or noxious weed lists.
- Only viable, high-quality and site-adapted planting stock or seed will be used.
- A precondition for tree/shrub establishment is appropriately prepared sites. Refer to criteria in NRCS CPS Tree/Shrub Site Preparation (Code 490).
- Implementation and timing of planting will be appropriate for the site and ensure successful establishment.
- Plantings must be protected from unacceptable adverse impacts from insects, disease, wildlife, livestock, and/or fire. Apply supporting practices and treatments as necessary to protect establishing trees and shrubs.
- Each site will be evaluated to determine if mulching, supplemental water, or other treatments (e.g., tree protection devices, shade cards, weed mats) will be needed to assure adequate survival and growth.
- The enhancement will comply with all applicable federal, state, and local laws and regulations, and with States' Forestry Best Management Practices for Water Quality.



United States Department of Agriculture

Documentation and Implementation Requirements

Participant will:

- □ Prior to implementation:
 - provide an updated Forest Management Plan that documents intended objectives for adding food-producing trees/shrubs for wildlife or human consumption.
 - prepare the planned acres for trees and shrub establishment. Refer to NRCS Conservation Practice Standard Tree-Shrub Site Preparation (490).
 - select the required number and diversity of tree and shrub species (preference for native edible food plants) that will increase food and forage production for wildlife and humans.
 - select planting technique, arrangement and spacing design, and timing appropriate for the site conditions.

Species	Note selected species characterist	tic(s)

□ During implementation:

- install and maintain erosion control measures as needed for the site.
- protect the planting(s) from plant and animal pests and fire.
- notify NRCS in writing of any planned changes to verify changes meet NRCS enhancement criteria.

TASK	Species	Species	Species
Planting Date			
Planting Technique			
Arrangement/Spacing			

NRCS will:

□ Prior to implementation:

 provide and explain NRCS Conservation Practice Standard Tree/Shrub Establishment (Code 612) as it relates to implementing this enhancement.

E612D - Adding food-producing trees/shrubs to	July 2022	Page 3
an agroforestry system		

CONSERVATION STEWARDSHIP PROGRAM

USDA

United States Department of Agriculture

- verify the enhancement is planned for the appropriate land use.
- verify no plants on the Federal or state noxious weeds list are included.
- NRCS will provide Technical Assistance, as needed, in the following:
 - Selecting a combination of species to meet enhancement criteria.
 - Selecting planting techniques, arrangement and spacing design, and timing appropriate for the site and soil conditions.
 - Planning the use of additional erosion control for the site, as needed.
 - Preparing specifications for applying this enhancement for each site using approved state implementation requirements, national technical notes, appropriate state technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
 - During implementation, evaluate any planned changes to verify they meet the enhancement criteria and were established to specifications developed for the site.
 - After implementation, verify the plantings were protected from plant and animal pests and fire.
 - After implementation, verify all erosion control needed for the site is functioning and is maintained to specifications developed for the site.
- During implementation:
 - evaluate any planned changes to verify they meet the enhancement criteria and were established to specifications developed for the site.
- □ After implementation:
 - verify the plantings were protected from plant and animal pests and fire.
 - verify all erosion control needed for the site is functioning and is maintained to specifications developed for the site.

NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name	Contract Number
Total Amount Applied	Fiscal Year Completed

NRCS Technical Adequacy Signature	Date	
E612D - Adding food-producing trees/shrubs to	July 2022	Page 4
an agroforestry system		

CONSERVATION STEWARDSHIP PROGRAM

2024 CSP ENHANCEMENTS – GUIDANCE & PERFORMANCE CERTIFICATION

ENHANCEMENT NUMBER AND TITLE:

E612D - Adding food-producing trees and shrubs to existing plantings Conservation Practice 612: Tree/shrub Establishment

BRIEF DESCRITION OF ENHANCEMENT: Plant food-producing trees and shrubs for wildlife or human consumption within or near existing windbreaks, alley cropping, multistory cropping, silvopasture systems, and/or riparian buffers.

Applicable Forest Stand:

- Trees and shrubs will be planted on selected areas within any land use that contains an agroforestry installation.
- Examples include:
 - o Creates soft edge of shrubs or food producing trees.
 - Example 1; next to riparian forest buffer, outside edge of existing forest next to pasture, or along alley in silvopasture system.
 - Example 2; plant tree/shrubs within existing wildlife openings, within forest clearings, near old farm buildings, odd field corners, or other available space which is not currently being fully utilized. These areas must be within reasonable distance of windbreaks, alley cropping areas, multi story cropped areas, silvopastures and/or riparian buffers.

Minimum Specifications:

- A Tree Planting Practice Plan Will Be Required
 - o Required necessary site preparation (Practice 490) will be planned to insure survival
 - o Species mix appropriate to the site will be planned (consistent to landowner objectives)
- Policy will be followed as with any 612 planned practice
 - o Seedlings must meet specification and be planted properly
 - Planting survival of at least 75% (at least 75% of prescribed number meet specification and planted properly)
 - o Tree spacing to be determined by the conservation planner.

- For Shrub Plantings:
- Distance between shrub seedlings in the row will be 6 to 8 ft.
- Best if plum can be planted to create thicket (not in linear row) to create cover in addition to food
 - o 8 x 8 spacing (680 seedlings per acre)
 - o Each thicket should be .1 to .5 acre
- See Food Producing Species list for approved species and work with landowner to choose species that meet landowner's objectives. Recommend using five species from the list (Must be at least 3 species). The list is not intended to be all inclusive and is intended for guidance. Other varieties of listed species not on the list will meet the need and may be substituted if approved by NRCS State Staff Forester or State Staff Wildlife Biologist.
- Written planting plan required (see pg. 4 of the National Enhancement E612D)
- Practice is properly implemented when all site prep and seeding planting is completed according to plan and specification with planting score of at least 75%.
- NOTE: this practice requires a minimum of 10 percent of the base eligible agroforestry practice. For example, if the tract has 10 acres of riparian forest buffer or silvopasture, then 1 acre of food producing trees/shrubs must be planted.

Other:

- All applicable acres for the application must be identified and addressed in the planning process.
- Consider enhancement implemented for all acres in application if minimum specification are met for all applicable acres.

Alabama Supplemental Guidance for CSP Enhancement

E612D JOB SHEET

Stand Name or Number	Species (min. of 3)	Note specific species characteristics
	1)	
	2)	
	3)	
	4)	
	5)	
	Planting Date:	
	Planting Technique:	
	Arrangement/Spacing:	

(One table per stand should be developed and submitted as supporting documentation)

ATTACH COPIES OF REQUIRED DOCUMENTS AS NOTED BY THE ENHANCEMENT JOB SHEET. CHECK THE BOX OR OTHERWISE IDENTIFY THE SUPPORTING DOCUMENTATION.

- □ MAPS OF THE AREA or LOCATION(S) WHERE TREE PLANTING OCCURED
- □ LIST ACRES (BY STAND) WHERE TREE PLANTING OCCURED
- COMPLETED Alabama Job Sheet Nos. AL490B, AL612C and AL643 5 (found on the eFOTG guide)
- □ REPRESENTATIVE DIGITAL IMAGES/PHOTOS OF THE AREA AND INDICATE AREA ON MAP
- DATES OF COMPLETED ACTIVITY

The attached documents support the full implementation of this Conservation Stewardship Enhancement.

CSP Participant Name

Date

2024 CSP Enhancement 612D Food Producing Species List

- black raspberry Rubus occidentalis
- black walnut Juglans nigra
- butternut walnut Juglans cinereal (range is generally limited to north Alabama)
- pecan Carya illinoinensis
- native persimmon Diospyros spp
- pawpaw Asimina triloba
- southern crabapple *Malus spp*
- old southern apple varieties *Malus spp*
- old southern pear varieties *Pyrus spp* (caution: rootstock can be invasive if allowed to resprout after parent plant dies)
- old southern muscadine/scuppernong varieties Vitus spp
- old southern fig varieties *Ficus carica*
- Red Mulberry Morus rubra
- Wild Plum Prunus spp (Chickasaw or American are common)
- Old southern plum varieties *Prunus spp*
- Hazelnut Corylus americana (filbert)
- Hawthorn Crataegus spp