



CONSERVATION ENHANCEMENT ACTIVITY

E381A

CONSERVATION STEWARDSHIP PROGRAM

Silvopasture to improve wildlife habitat

Conservation Practice 381: Silvopasture Establishment

APPLICABLE LAND USE: Pasture; Forest; Associated Agricultural Land

RESOURCE CONCERN: Plants; Animals

ENHANCEMENT LIFE SPAN: 15 years

Enhancement Description

Establishing a combination of trees or shrubs and compatible forages on the same acreage, providing forage, shade, and/or shelter for livestock that include a purpose of enhancing wildlife cover and shelter.

Criteria

- Tree species and forage species must be adapted to the site and compatible with the planned management of the site.
- No plants on the federal or state noxious weeds list shall be planted.
- Where trees will be added to existing pasture, site preparation should be based on existing vegetation and soil conditions. Trees will be planted at an appropriate density to allow acceptable forage production and wood products.
- If pesticides are used, label recommendations must be followed.
- Only viable, high quality and adapted planting stock or seed will be used.
- Plant nutrients and/or soil amendments for establishment purposes will be applied according to a current soil test. Legume seed will be pre-inoculated or inoculated with the proper viable strain of Rhizobia immediately before planting.

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- Establish forage species and understory shrubs that will provide forage, browse, seed, cover, or nesting habitat for the wildlife species of concern. For additional guidance refer to NRCS Conservation Practice Standards Upland Wildlife Habitat Management (Code 645).
- Favor herbaceous seed mixes that include a diverse mix of native forbs and/or legumes to benefit wildlife including pollinators. Select species that vary in attributes such as timing of flowering, and production of leaves and fruit.
- Plantings will be protected from grazing until an adequate stand is established and meets the species specific, local standard for beginning grazing.



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Documentation Implementation Requirements

Participant will:

- Prior to implementation, select a tree or shrub species for establishment.

Tree or Shrub species	
Trees per acre	
Percent canopy cover	

- Prior to implementation, develop a grazing plan to keep grazing periods sufficiently short to allow for plants to recover before re-grazing occurs.
- During implementation, keep the following documentation:
 - Records and photographs of planting preparation and any materials purchased or materials on hand used for the implementation of the enhancement.
 - Documentation of seed (Pure Live Seed) and any fertilizer or soil amendments used for the implementation of the enhancement.
- After implementation, make documentation and photographs of livestock turn in/turn out grazing records for each field available for review by NRCS to verify implementation of the enhancement.
- After implementation, make the forage planting/or tree planting and grazing records available for review by NRCS to verify implementation of the enhancement.
- The State approved NRCS Wildlife Habitat Evaluation Guide (WHEG) as completed and certified by an NRCS or partner wildlife biologist. Wildlife species of concern for the silvopastoral area will be specified on the WHEG. Total WHEG score after installation will equal 0.60 or greater.

NRCS will:

- Prior to implementation, complete the State approved NRCS Wildlife Habitat Evaluation Guide (WHEG) as completed and certified by an NRCS or partner wildlife biologist when applicable. Specific pollinator species targeted will be notated on the WHEG, and total



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score after implementation will equal 0.60 or greater.

WHEG score after implementation = _____

- Prior to implementation, verify a grazing plan was developed to keep grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.
- Prior to implementation and as needed, NRCS will provide technical assistance:
 - Planning site preparation and establishment specifications meeting NRCS Conservation Practice Standard Forage and Biomass Planting (Code 512) or Tree/Shrub Site Preparation (Code 490) and Tree/Shrub Establishment (Code 612).
 - Prepare specifications for applying this enhancement for each site using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
 - Develop a grazing plan to keep grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.
- During implementation, evaluate any planned changes to verify they meets the enhancement criteria.
- After implementation, verify the planned perennial planting was established 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



**IOWA SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY**

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Additional Criteria for Iowa

- Tall Fescue, Kentucky Bluegrass, Bird’s-foot Trefoil, and Reed Canarygrass cannot be in a new seeding mix and cannot constitute more than 20% of the existing herbaceous stand when planting trees into existing pasture.
- Most tree and shrub species suitable for site conditions are considered wildlife friendly for this enhancement, with the following exceptions:
 - Nanking cherry, Honeysuckle, autumn olive, Russian olive, Saltcedar, Privet, common buckthorn, common lilac, winged/burning bush Euonymus, Oriental/ Asiatic bittersweet, white mulberry, Norway maple, amur maple, callery/ ornamental pear, and sawtooth oak.
- Trees and shrubs will be protected from grazing animals until all species planted are twice the height of the reach of the livestock.
- By applying Silvopasture for wildlife habitat within Iowa’s grazed landscapes according to the Iowa Wildlife Action Plan, the following species will benefit but are not limited to:
 - For Trees: Eastern Screech Owl, Whip-poor-will, Red-headed Woodpecker, Eastern Wood-pewee, Wood Thrush, Golden-winged Warbler, Northern Long-eared bat.
 - For Shrubs: Northern Bobwhite, American Woodcock, Yellow-billed Cuckoo, Black-billed Cuckoo, Eastern Kingbird, Bell’s Vireo, Brown Thrasher, Common Yellowthroat, Field Sparrow, Spotted Skunk.



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- When applying Silvopasture for wildlife habitat within Iowa’s grazed landscapes, **the following species should not be planted** because they are invasive:
 - Nanking cherry, Honeysuckle, autumn olive, Russian olive, Saltcedar, Privet, common buckthorn, common lilac, winged/burning bush Euonymus, Oriental/Asiatic bittersweet, white mulberry, Norway maple, amur maple, callery/ornamental pear, and sawtooth oak.
- When applying Silvopasture for wildlife habitat within Iowa’s grazed landscapes, **the following species should not be planted** due to disease/insect problems:
 - Colorado blue spruce, Scotch pine, Austrian pine, Ash species
- If applicant is managing for a species of concern not contained in the above list, reference the [Iowa Wildlife Action Plan](#) and contact an IDNR Biologist.
- A Forest Management Plan developed by an Iowa Department of Natural Resources (IDNR) or TSP must be approved by NRCS prior to installation.
- Use [Iowa Wildlife Working Lands Habitat Evaluation for the WHEG](#). Use Grassland Habitat – Permanent pastureland or Woodland Wildlife, whichever the planner determines to best relate to the site.