

E512L



# Diversifying forage base with interseeding forbs and legumes to increase pasture quality

**Conservation Practice 512 (L): Pasture and Hay Planting** 

APPLICABLE LAND USE: Pasture, Associated Ag Land

**RESOURCE CONCERN:** Animals

**ENHANCEMENT LIFE SPAN: 5 years** 

# **Enhancement Description**

Establishing adapted and/or compatible species, varieties, or cultivars of perennial, herbaceous species that increases the diversity to enhance livestock, forage supply and quality, not available in other pastures.

# <u>Criteria</u>

- Select perennial, forbs and legume plant species and their cultivars based on compatibility with established forage species, climatic conditions, soil condition, landscape position and resistance to disease and insects.
- Recommendations for planting rates, methods, depths, and dates from land grant universities (LGU), plant materials program, extension agencies, or agency field trialswill be followed.
- Utilize seed and planting materials that will meet State quality standards.
- Inter-seeding method will not restrict plant emergence or leave the site vulnerable to erosion.
- When planting legumes, use pre-inoculated seed, inoculum coated seed, or inoculate with the recommended viable strain of rhizobia immediately before planting.

E512L – Diversifying forage base with	April 2021	Page   1
interseeding forbs and legumes to increase		
pasture quality		



**United States Department of Agriculture** 

# E512L

# CONSERVATION STEWARDSHIP PROGRAM

- Select plants that will help meet livestock forage demand during times that normal forage production is not adequate.
- Use forage species that will meet the desired level of nutrition (quantity and quality) for the kind and class of livestock to be grazed or fed.
- Select species mixtures with similar palatability to avoid selective grazing.
- Select species with low or not toxic effects on grazing livestock. If two species for consideration provide similar forage quality, with one providing added benefit to wildlife and pollinator species, the wildlife beneficial species should be selected.
- In areas where animals congregate, consider establishing persistent species that can tolerate close grazing and trampling.
- Refer to NRCS Conservation Practice Standard (CPS) Nutrient Management (Code 590) for details for managing nutrients.
- Plant nutrients and/or soil amendments for establishment purposes will be applied according to a current soil test and LGU recommendations. Legume seed will be pre-inoculated or inoculated with the recommended viable strain of Rhizobia immediately before planting.

## **Documentation and Implementation Requirements**

interseeding forbs and legumes to increase

Participant will:

pasture quality



 Prior to implementation, select a perennial forb and/or legume mixture for establishment. <u>If</u> <u>livestock are included in the system</u>, forage species selected will meet the desired level of nutrition for the kind and class of the livestock to be fed. (NRCS will provide technical assistance, as needed.)

Species	Specie	es type (grass, le	gume, broadleaf)

• Prior to implementation, select planting technique, seeding rates and timing appropriate for the site and climatic conditions. (NRCS will provide technical assistance, as needed.)

 Planting Date

 E512L – Diversifying forage base with

 April 2021

Page | 2

**United States Department of Agriculture** 

E512L



Planting Technique	
Seeding rates	

- <u>Prior to implementation when livestock are included in the system</u>, modify the grazing plan that maintains grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.
- Prior to implementation, a current (within 3 years of the proposed planting date) soil sample analysis is required when soil amendments will be added.
- During implementation, exclude livestock until the overseeded species are well established and have reached the full start grazing heights or recommended cutting heights before the first grazing or cutting begins. Refer to Conservation Practice Standards (CPS) 511 Forage Harvest Management and (CPS) 528 Prescribed Grazing for more information.
- During implementation, keep the following documentation:
  - Records, seed tags and photographs of planting preparation and any materials purchasedor materials on hand used for the implementation of the enhancement.
  - Documentation of seed rate basis (Pure Live Seed) and any fertilizer or soil amendments and rates used for the implementation of the enhancement.
- <u>During implementation where livestock are included in the grazing system</u>, documentation and photographs of turn in/turn out grazing records for each field are required.
- As needed, provide technical assistance to meet the criteria of the enhancement.
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Pasture and Hay Planting (Code 512) and all supporting implementation requirements and specifications as it relates to implementing this enhancement.
- Prior to implementation where livestock are included in the system, modify the grazing

E512L – Diversifying forage base with	April 2021	Page   3
interseeding forbs and legumes to increase		
pasture quality		



**United States Department of Agriculture** 

E512L



plan to keep grazing periods sufficiently short to allow for forages to recover before regrazing occurs and maintain sufficient height to protect from soil erosion.

- As needed, prior to implementation, NRCS will provide technical assistance:
  - Planning site preparation and establishment specifications meeting NRCS Conservation Practice Standard Pasture and Hay Planting (512).
- During implementation, evaluate any planned changes to verify they meet the enhancement criteria.
- After implementation, verify the planned perennial forbs/ legumes or mixture was established to specifications developed for the site.

#### **NRCS Documentation Review:**

E512L – Diversifying forage base with	April 2021	Page   4
interseeding forbs and legumes to increase		
pasture quality		



E512L – Establishing native grass or legumes	April 2021	Page   5
in forage base to improve the plant		
community		

# ENHANCEMENT NUMBER AND TITLE: E512L: Diversifying forage base with interseeding forbs and legumes to increase pasture quality

# Conservation Practice: E512 – Pasture and Hay Planting

BRIEF DESCRIPTION OF ENHANCEMENT: This enhancement is to diversify forage base with inter-seeding forbs and legumes into existing pasture grass stands to increase pasture quality. This enhancement is not applicable where clover is already present in pastures.

## **Important considerations:**

- Plant legume such as white clover or chicory, a forb, into existing pasture. Existing grass should be mowed or grazed close prior to planting. Perennial white clover–like Ladino and Durana, is almost always considered a desirable forage species in grazing pastures.
- Use Alabama cooperative extensions recommendations for right plant materials, rates, methods, depths, dates, and planting guide for forage legumes (<u>Alabama Planting Guide for Forage Legumes Alabama Cooperative Extension System (aces.edu)</u>).
- Utilize the forage and biomass planting guide sheet No. AL512 for forage crops commonly grown for pasture or hay in Alabama and, the Geographical Areas for Species Adaptation and Seeding Dates. <u>512 AL GD Forage and Biomass Planting-AL512 Guide Sheet 2015 (usda.gov)</u>
- Control weed before and immediately after planting. Control broadleaf weeds before sowing clover or chicory. Annual broadleaf weeds–like henbit, certain buttercups, chickweed, and geranium–may be controlled with herbicide (<u>Cool-Season Weed Management</u> <u>Considerations Alabama Cooperative Extension System (aces.edu)</u>. Pests should be managed according to the Pest Management Conservation System (595) Standard.
- Apply plant nutrients and/or soil amendments based on current soil test. To take a proper soil sample and testing follow the protocol of the Soil, Forage, and Water Testing Laboratory at Auburn University: <u>Soil, Forage & Water Testing Lab | Alabama Agricultural Experiment Station (auburn.edu)</u>.

## PROVIDE REQUIRED DOCUMENTS AND IMPLEMENTATION REQUIREMENTS.

- □ Provide NRCS with the selected forbs and legumes, seeding rates and dates.
- □ Notify NRCS of any planned changes in species or mixtures or field operations.
- □ Provide maps of the area or location(s), digital images/photos of the area and indicate area on map, and dates of completed activity

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

CSP Participant Name

Date