

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 proper viable strain of rhizobia immediately before planting.

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- 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. Legume seed will be pre-inoculated or inoculated
 with the proper viable strain of Rhizobia immediately before planting.

Documentation and Implementation Requirements

Participant will:



Prior to implementation, select a perennial forb and/or legume mixture for establishment. <u>If 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	Species type (grass, legume, 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	

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Planting Technique	
Seeding rates	

- Prior to implementation when livestock are included in the system, 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

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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:

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United States Department of Agriculture

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

enhancement and met all criteria and requirements.	PROGRAM
Participant Name	
Participant Name Contract Number	
Total Amount Applied	Fiscal Year Completed
NRCS Technical Adequacy Signature	Date

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in forage base to improve the plant		
community		



IOWA SUPPLEMENT TO CONSERVATION

ENHANCEMENT ACTIVITY

E512L



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Additional Criteria for Iowa

- Plant nutrients and soil amendments for stand establishment will be based on a current soil test and follow lowa State University Extension Publication <u>PM869</u>, which references to use <u>PM1688</u> for soil test result categories and lime recommendations.
- Use Agronomy Tech Note 34 to develop a seeding plan that will be documented on IA-CPA-4 or the national enhancement documentation section.
- Livestock Exclusion is required until plants are well established. Refer to Prescribed
 Grazing Implementation Requirement Table 1 Grazing Management and exclude
 livestock until the seeded species reach the minimum vegetative growth to begin
 grazing.

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