CONSERVATION ENHANCEMENT ACTIVITY

E512132Z2

Native grasses or legumes in forage base to improve plant productivity and health

CONSERVATION PRACTICE 512 – Forage and Biomass Planting

APPLICABLE LAND USE: Pasture

RESOURCE CONCERN ADDRESSED: Degraded Plant Condition

ENHANCEMENT LIFE SPAN: 5 Years

Enhancement Description

Establishing adapted and/or compatible species, varieties, or cultivars of perennial, herbaceous species that can provide the structure and composition needed to enhance livestock and wildlife habitat, particularly when targeted forage supply and quality, cover, and shelter are not available in other pastures.

Criteria

- Select native, perennial, grass/forb/legume plant species and their cultivars based on climatic conditions, soil condition, landscape position and resistance to disease and insects, that meet the cover demand for movement by the wildlife species of concern.

- Recommendations for planting rates, methods, depths, and dates from land grant universities (LGU), plant materials program, extension agencies, or agency field trials will be followed.

- Seeding medium that does not restrict plant emergence will be provided, and planting will take place when soil moisture is adequate for germination and establishment.

- Federal, state, or local noxious species will not be planted.
• 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.

• Plants will be selected that help meet livestock forage demand during times that normal farm/ranch forage production is inadequate. When wildlife species are of concern, plant selection will be made and maintained based on the state’s approved NRCS habitat evaluation procedure.

• Forage species selected will meet the desired level of nutrition for the kind and class of the livestock to be fed. Forage species planted as mixtures will exhibit similar palatability to minimize selective grazing.
**Documentation and Implementation Requirements**

Participant will:

- Prior to implementation, select a perennial forage species or grassland mixture for establishment. If livestock are included in the system, 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.)

<table>
<thead>
<tr>
<th>Species</th>
<th>Species type (grass, legume, broadleaf)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Planting Date</th>
<th>Planting Technique</th>
<th>Seeding rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- If livestock are included in the system, prior to implementation a grazing plan must be developed to keep grazing periods sufficiently short to allow for forages 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.

- If livestock are included in the grazing system, documentation and photographs of turn in/turn out grazing records for each field. If livestock are included in the grazing system, during implementation in areas where animals congregate, establish persistent species than can tolerate close grazing and trampling.
After implementation, make the forage planting and grazing records available for review by NRCS to verify implementation of the enhancement.

NRCS will:

- As needed, provide technical assistance to meet the criteria of the enhancement.
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Forage and Biomass Planting (Code 512) as it relates to implementing this enhancement.
- If livestock are included in the system, prior to implementation a grazing plan must be developed to keep grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.
- As needed, prior to implementation, NRCS will provide technical assistance:
  - Planning site preparation and establishment specifications meeting NRCS Conservation Practice Standard Forage and Biomass Planting (512).
  - 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.
  - If livestock are included in the system, 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 meet the enhancement criteria.
- After implementation, verify the planned perennial grassland mixture 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

E512132Z2

Native grasses or legumes in forage base to improve plant productivity and health

Additional Criteria for Iowa

- In addition to the criteria specified in the National job sheet E512132Z2 the following additional criteria apply in Iowa:
  
  o Plant nutrients and soil amendments for stand establishment will be based on a current soil test and follow Iowa State University Extension Publications PM1688 (lime) and PM569 (N, P, & K).
  
  o Use Agronomy Tech Note 34 to develop a seeding plan that will be documented on IA-CPA-4 or the national enhancement documentation section.
  
  o Switchgrass cannot be seeded at more than 20% of the mixture and is not recommended.
  
  o Livestock Exclusion is required until plants are well established, usually not until the second year after seeding. Refer to PM569 section “Management During Establishment” for guidance.
  
  o The seed mix for animal congregation areas should include tolerant grasses such as Tall Fescue, Smooth Brome, or Kentucky Bluegrass and tolerant legumes such as White (Ladino) Clover or Red Clover. This will be different than the seed mix for the rest of the enhancement area.
  
  o If wildlife species are a concern, use Iowa Wildlife Working Lands Habitat Evaluation for the WHEG. For Pasture; use Grassland Habitat – Permanent Pastureland. The Composition of the Stand must improve from the benchmark condition.