United States Department of Agriculture
Natural Resources Conservation Service

Conservation Reserve Program
MCM Job Sheet

Ohio – May 2010 (ver 3.0)

CRP MID-CONTRACT MANAGEMENT: INTERSEEDING FORBS, LEGUMES OR GRASSES

For:			
Field(s):	Acres:	Farm #:	Tract #:
Planned By:			Date:

BACKGROUND

Grassland fields need to be managed so that grasses do not crowd out the forbs and legumes over time. If no disturbance occurs the composition of grassland communities will change over several years through normal plant succession. Typically, grasses begin to dominate stands to the point that beneficial forbs are reduced. Also, the amount of bare ground declines, litter accumulates and overall vegetation density increases. These changes may lead to a decline in habitat value for many desirable wildlife species

PURPOSE

The purpose of this *Interseeding Forbs, Legumes or Grasses* practice is to enhance the wildlife habitat value of the enrolled acres by encouraging a diverse mix of plant species. Interseeding is an effective management tool that can be utilized where vegetation diversity and plants species important to wildlife have declined.

An increase the amount and diversity of flowering plants in the CRP area will improve its value for a variety of pollinators. Some insects such as butterflies, native bees, beetles and flies are critical as pollinators of agricultural and horticultural crops. Interseeding promotes an increase in the number of plants that serve as important alternate food sources and nesting sites for these pollinators.

Legumes (a type of forb), such as partridge pea, wild senna, roundheaded and slender lespedeza, and leadplant are a rich and highly palatable source of protein and green browse. Legumes also tend to harbor a wide variety of insects that are an excellent source of protein for both game and non-game birds.

The growth characteristics and structure of forbs also provide for a good interspersion of bare ground beneath a shaded canopy.

Small mammals and birds are able to move freely at ground level to search for seeds and insects. Loafing and roosting cover for wildlife is another benefit. Many legumes start growing in early spring when most grasses are still dormant and continue to grow well into the late fall, providing additional food resources. The addition of native grasses provides more variety in terms of structure over the course of a growing season.

In addition to improving soil fertility through the ability to fix nitrogen, many legumes are also deep rooted and drought tolerant, which provide erosion control benefits.

The stand assessment will determine the objectives of the management activity. The assessment will identify the plant species missing from the stand which should be incorporated into the stand through interseeding.

APPLICABILITY

This practice may be used on CP1, CP2, CP4B, CP4D, CP9, CP10, CP15A, CP21, CP23, CP23A, CP25, CP27, CP28, CP29, CP30 and CP33.

SPECIFICATIONS

The following are specifications for inter-seeding forbs, legumes and grasses on CRP acreage. Note that this practice typically will be used in conjunction with other mid-contract management techniques such as *Light Disking, Prescribed Burning* or *Herbicide Application*.

A) GENERAL

- NRCS eFOTG Standard *Upland Wildlife Habitat Management* (645) will be utilized for this practice.
- Grassland fields must be established for a minimum of three years before initiating inter-seeding.
- Interseeding will be done between July16 and February 28. However, when interseeding is done after an allowed disturbance practice, seeding date may extended up to 14 days after the completion of the disturbance activity, but no later than May 15.
- Interseeding shall not be performed in the following areas:
  - Areas where interseeding will have minimal affect or potentially cause a negative impact on existing cover.
  - Areas planted to trees and/or shrubs.
  - Riparian forest buffers
  - Environmentally sensitive areas marked on the plan map.

B) SITE PREPARATION

- Site preparation will result in a seedbed that consists of 40-70% bare soil.
- Successful site preparation should begin the fall before seeding. Methods for controlling existing vegetation include the use of herbicides, tillage, or prescribed burning.
- If spraying herbicide, work with a consultant or Ohio State Extension Specialist to determine the best herbicide combination and apply it at the appropriate time in the fall. Follow the manufacturer's label rates and guidelines when applying herbicides. Use herbicides rather than tillage on erosive sites.
- If burning is used for site preparation, see NRCS FOTG Standard 338 - *Prescribed Burning* for additional guidance.
- The presence of annual weeds (such as foxtail, common ragweed, and perennial forbs) is not a concern, as these plants are important sources of food for wildlife, especially bobwhite quail. The purpose of seedbed preparation is to control the density of these annuals during the establishment year, not to eliminate this group of plants.
- Inter-seeding operations will be performed along field contours, or across the slope, when practical.

C) SEEDING DATES

Refer to Ohio EFOTG, Section IV, Appendix A for appropriate seeding dates for the selected species.

Inoculate legume seed before seeding with the proper Rhizobia bacteria specific for the species. Re-inoculate seed if it was pre-inoculated more than 60 days prior to seeding.

D) SPECIES SELECTION

Species selection is dependant on the wildlife species and habitat you desire, species needing increased in the stand as well as site conditions. Recommended species are listed in the attached table.

If seeding <u>grasses</u>, the following criteria must be met:

- Minimum 2 species of grass are to be seeded
- Seeding must provide 15-20 PLS per square foot

If seeding <u>forbs or legumes</u>, the following criteria must be met:

- Minimum 5 species of forbs are to be seeded
- Seeding must provide 12-16 PLS per square foot
- Species must represent at least two bloom periods or types

E) PLANTING METHODS

No-till Seeding: Ensure the drill is designed to handle the seed being planted (especially important for native grass seed). Many Quail Unlimited and Pheasants Forever chapters, as well as local Soil and Water Conservation Districts, have native grass drills available. Set the drill to provide an ideal planting depth of no more than ¼ inch for native grasses unless otherwise directed. Seeding native grasses deeper than ¼ inch will lead to potential failure. Soils that are too wet or too dry can also cause improper seed placement.

Conventional Drill Seeding (introduced forbs and legumes only): Conventional Drills are not suited to the light, fluffy native grass seeds, but will work well for forbs and legumes. Seedbeds should be worked to a minimum depth of three (3) inches and firmed before seeding. Native forbs and legumes should be

drilled uniformly and seeded no more than ¼ inch deep. Care should be taken not to bury the seed too deeply.

Broadcast Seeding: See Agronomy Technical Note OH-2 for specific recommendations for broadcast seeding of warm season grasses. Seed may be broadcast if completed in a uniform manner. Pre-mixing the seed with 200 lbs. per acre of pelletized

lime and utilizing an airflow applicator is also effective. Seedbeds should be worked to a minimum depth of three (3) inches and firmed before seeding. The seedbed should be culti-packed before and after seeding. It is acceptable to see up to ⅓ of the seed on the soil surface. Wind speed should be 15 m.p.h. or less when broadcasting.

CONSIDERATIONS

- Inter-seeding low, wet areas should be avoided because these areas often develop wetland plant communities, adding additional plant diversity to the site.
- Consider spot spraying or mowing areas where noxious weeds such as Canada thistle or johnsongrass exist. This will reduce the potential for unintentional establishment of these species.
- Participants should be wary of tile blowholes, groundhog holes, fallen tree limbs, and other hazards that may have developed since they were last in the field.
- Give the highest priority for treatment to areas that are dominated by a single plant species, especially a dense, monotypic stand of grasses such as fescue or smooth brome.

CERTIFICATION

The participant is responsible for certifying to FSA when the practice has been completed.

Recommended Species for Interseeding

Grasses

Species	Native/Introduced
Orchard Grass *(Dactylis glomerata)*	Introduced
Timothy *(Phleum pratense L.)*	Introduced
Big Blue Stem *(Andropogon gerardii)*	Native
Canada Wild Rye *(Elymus canadensis)*	Native
Virginia Wild Rye *(Elymus virginicus)*	Native
Switchgrass (Blackwell) *(Panicum virgatum)*	Native
Little Blue Stem *(Schizachyrium scoparium)*	Native
Indian Grass (Tomahawk) *(Sorghastrum nutans)*	Native

Forbs and Legumes

Species	Legume	Bloom Period
Alfalfa *(Medicago sativa)*	Yes	Early - Mid
Partidge Pea (*Chamaecrista fasciculata*)	Yes	Mid
Red Clover *(Trifolium pratense)*	Yes	Early
Alsike Clover *(Trifolium hybridum)*	Yes	Early
Crimson Clover *(Trifolium incarnatum)*	Yes	Early
Smooth Oxeye (False) Sunflower (*Heliopsis helianthoides*)	No	Late
Black-eyed Susan (*Rudbeckia hirta*)	No	Mid - Late
Purple Coneflower (*Echinacea purpurea*)	No	Mid - Late
Gray-Headed Coneflower (*Ratibida pinnata*)	No	Mid
New England Aster (*Aster novae-angliae*)	No	Late
Blue Vervain (*Verbena hastata*)	No	Mid
Sneezeweed (*Helenium autumnale*)	No	Late
Illinois Bundleflower *(Desmanthus illinoensis*)	No	Mid

Other species may be used based on site conditions. Refer to *SPECIES REQUIREMENTS FOR CRP GRASSLAND SEEDINGS* for other allowable species.

INTER-SEEDING SPECIFICATIONS SHEET

Landowner:				County:
Farm:	Tract:	Field(s):	Acres:	Date:

RECOMMENDED SPECIES AND SEEDING RATES						
All rates are in Pure Live Seed (PLS)						
Species	Rate Lb./acre	Total = (Rate X Acres)		Species	Rate Lb./acre	Total = (Rate X Acres)
NOTES:						

SITE PREPARATION - BEFORE PLANTING IN YEAR:
☐ Herbicide: Per OSU Extension, professional consultant and/or label recommendations.
☐ Tillage:
☐ Prescribed Burning:
☐ Other:
NOTES:

PLANTING YEAR:	
☐ Planting Method:	Date:
If unforeseen circumstances prohibit planting by this date, please contact the local NRCS office as soon as possible.	

ADDITIONAL INFORMATION

Mid-Contract Management cost-share payment for this practice is $25.00 per acre if seeding cool season grasses or legumes and $37.50 per acre is seeding native grasses or forbs.

Cost-share Payment Limitations for all MCM activities are:

- $50.00 per acre per year
- $100.00 per acre total for the life of the contract

The Farm Service Agency (FSA) is responsible for administering the Conservation Reserve Program (CRP). CRP policy requires that starting with Signup 26, participants must perform management activities that maintain or enhance the quality of conservation cover for wildlife benefits.

The FSA has requested the assistance of the Natural Resources Conservation Service (NRCS) and/or other partners to conduct an on-site assessment of the conservation cover. NRCS and/or the partners have evaluated the condition and density of the stand; the grass/forb species present; and have recommended this MCM practice to the FSA and the participant. FSA and NRCS representatives will meet with the participant and discuss the MCM options available and the appropriate incentive payments if applicable.

Signing this MCM Job Sheet is considered an addendum to the Conservation Plan of Operations (CPO). No modification of the CPO will be necessary.

SIGNATURES	
NRCS Representative Date	FSA Representative Date
I understand the plan and specifications and agree to perform this practice accordingly. Participant Date	

AD-862 Control Number: