



# POLLINATOR HABITAT ESTABLISHMENT

## Supplement to CRP Practice Job Sheet CP1, CP2, CP3A, CP10

Ohio - Natural Resources Conservation Service

August 2010

### Description

The purpose of this practice is to enhance vegetative cover on eligible cropland with habitat for pollinators. By establishing this cover, butterflies, bees, other insects and some birds which are important for the pollination of many plant species will have a variety of food and nectar sources.

### Practice Requirements

Vegetation shall be established in accordance with the Conservation Cover standard (327) in the local Field Office Technical Guide (FOTG).

The required CRP practice cover shall be established, maintained and managed for a period of not less than 10 years. All provisions of the CRP-1 contract Appendix will be followed for the life of the contract.

Pollinator habitat must be established on at least 10% of the offered CRP acreage. Each habitat area must be at least 0.5 acres.

The species and rates shall be adapted to the soil and climatic conditions of the site and suitable for the practice purposes. In addition, species used will meet the requirements of the CRP practice.

The vegetation established will be a diverse mix of at least 9 pollinator-friendly shrubs (optional), legumes or wildflowers; it must provide at least three species in each of the bloom periods (early, middle, late). Forbs and wildflowers shall be planted at the rate of 20-25 PLS per square foot.

Pollinator habitat may be established in blocks or strips; square plantings are preferred. If planted in strips, each strip must be a minimum of 20 feet wide.

If sludge, manure or other agricultural by-products are to be applied to the CRP acreage, contact FSA. At a minimum, these actions will



require approval by the FSA County Committee and the development of a Waste Utilization plan by NRCS or TSP.

The cover shall be maintained for the life of the contract. Disturbance or alteration of the cover is allowed only if it is included in the conservation plan and authorized by the FSA County Committee.

The seeded area shall not be harvested or grazed by domestic livestock for the life of the contract.

The cover shall be seeded within 12 months after the CRP-1 contract effective date. If more time is needed to accomplish the seeding, an extension must be granted by the FSA County Committee.

In accordance with the Ohio FSA State Policy regarding quality of seed, all seed used on CRP contracts must be purchased from a registered Ohio Department of Agriculture (ODA) seed vendor and shall comply with all other provisions of this policy which is provided to the participant by the FSA County Office prior to contract approval.

The participant is responsible for certifying to FSA when cover has been established.

## Establishment

### Overview

Because some of the seeds are light, hairy or fluffy, the best results are obtained using a specialized drill. Broadcast seeding may also be an option for the small areas planted to the legumes or wildflowers found in the pollinator mix. The germination times may vary between the many species included in the mix.

### Site Preparation and Planting

Apply soil amendments as needed and described on the specifications sheet. Soil amendments, if needed, shall be applied prior to seedbed preparation or before planting if a no-till drill is used. Normally, the application of lime and/or fertilizer is not needed when establishing native legumes and forbs in cropland.

Because planting depth is critical for these plants, a firm, level seedbed is necessary. Also, because some species germinate later than most other plants typically found in fields, it is important to have a weed-free seedbed. In some cases, site preparation may be necessary the year before seeding. Seeds should be planted no deeper than ¼ inch. If planted properly, it is acceptable to see some seed on the surface after planting. If drilling, ensure that the drill is properly calibrated and set up.

Seed the species listed on the specifications sheet. Seed at rates and according to methods described on the specifications sheet.

**No-till Planting** The first step is to kill or suppress existing vegetation. If planting into an existing sod, treatment will need to begin the year before planting. Mow the existing sod and follow with a fall application of appropriate burndown herbicide to control grasses and broadleaved plants. New growth may occur in the spring prior to planting, so an additional burndown treatment may be necessary. If the previous crop was a row crop, use a nonselective burndown herbicide to control existing vegetation at the time of planting. Once competing vegetation is controlled, use a drill designed for no-till seeding these kinds of plants. Seed should be drilled uniformly at a depth no greater than ¼ inch.

**Tilled Seedbed** A firm seedbed is important when seeding native grasses. Initial tillage (plow, chisel, disc) should begin at least a month prior to seeding. About 2 weeks should be planned between initial tillage and final seedbed preparation to allow the weeds to germinate and

be killed by the final seedbed preparation. A nonselective herbicide can be used prior to seeding to control weeds, especially the perennial weeds. The final seedbed should be cultipacked until firm enough to leave footprints only 1/4 to 1/2 inch deep. Once the seedbed is prepared, seed the area by:

- Drill Seeding – Uniformly drill the seed ¼ inch deep

OR

- Broadcast Seeding – Use an “air-flow” fertilizer applicator or broadcast seeder capable of handling these seeds to uniformly seed the area. A carrier may be needed if using a fertilizer spreader. Cultipack again after broadcast seeding to achieve seed coverage and seed-to-soil contact.

### Seeding Dates

The best time to seed the forbs and legumes is April 1 until May 30. Dormant seedings may be done from November 1 until March 14.

### Maintenance during Establishment

Mow, clip or spray during the growing season to control weeds, insects or other undesirable species. Do not mow shorter than 8 inches. The goal the seeding year is to reduce the shade pressure that weeds can exert on the plant seedlings. The seeding should be mowed at least once before early August. There are herbicides labeled for some native forbs and legumes. These have proven to be very effective in helping the seeding get established. However, some caution must be used so that these materials do not harm desirable species included in the mix.

Areas that fail to become established should be re-seeded during the next seeding period.

### Stand Evaluation

Native forbs and legumes often have slower germination than typical introduced cool-season grasses and legumes. It is appropriate to give the stand sufficient time to develop when evaluating stand success.

**The Initial Evaluation** should be made 6-8 weeks after planting. Check and record seedling density (plants per square foot) and distribution in several areas of the field. This is also a time to check weed pressures. If it appears that undesirable cool season grasses and legumes are overtaking the desired species, consider using an Imazapic herbicide over the top to kill or suppress the cool season grasses.

**The Second Evaluation** should be made in late summer of the seeding year to evaluate stand adequacy based on density of established plants. An average of at least 2-4 strong seedlings per square foot should be the minimum acceptable stand.

**The Final Evaluation** should be made during the early summer of the second year. If an average of 2 healthy plants are found per square foot, a successful stand and cover should be accomplished.

#### **Maintenance after Establishment**

Maintain the cover to provide adequate erosion control, comply with noxious weed laws and control undesirable plants species, insects or rodents that negatively affect the CRP cover or adjacent lands.

After the initial establishment is completed, maintain the planting according to your CRP conservation plan. Maintenance activities are only allowed between July 16 and February 28 (outside the primary nesting and brood-rearing season) unless the FSA County Committee has approved maintenance activity during the nesting season prior to the activity taking place.

Scout fields in May to early June to identify problems such as thistle, johnsongrass, other noxious weeds or trees. These may need treatment to control.

Spot treatment necessary to control noxious weeds or pests that will damage the CRP cover may be allowed during the primary nesting season (March 1 to July 15) if: it is limited to the affected area of the field; the method used shall be the least damaging to nesting wildlife and habitat; and it is approved beforehand by the FSA County Committee.

Periodic mowing, mowing for cosmetic purposes and annual mowing for generic weed control are prohibited. In order to maintain a grass cover, mowing may be necessary to control unwanted woody plant invasion. Typically, mowing every 2 to 3 years will control woody vegetation. Mowing for this purpose may not be done annually.

Mow no shorter than 8 inches. Do not mow after August 20 in order to allow regrowth for winter cover. Mowing shorter than 8 inches will also damage or kill the desired species and promote cool season grasses.

If prescribed burning is to be used, it must be conducted in accordance with an approved burn plan and all applicable state or local regulations.

#### **Mid-Contract Management**

Research has shown that typically 3-4 years after establishment of herbaceous stands, the site becomes dominated by thick growth of the grasses or undesirable broadleaf plants. In order to counteract this, all CRP practices must have mid-contract management activities scheduled that are site specific and will ensure plant diversity, wildlife habitat and protection of soil and water resources. Management activities that will ensure these benefits in conservation cover include prescribed burning (with an approved burn plan), light disking, spraying and interseeding of forbs. Mowing is generally an inadequate means of disturbance for the desired habitat, except as needed to facilitate prescribed burning or light disking. Light disking in the late summer or fall is especially effective for maintaining desirable habitat. All management activities must be performed according to CRP policy and NRCS standards and specifications, as found in the FOTG. An evaluation of the stand will be made during the 4<sup>th</sup> year of the contract. At that time a separate mid-contract specifications sheet will be developed. The currently planned mid-contract practices are shown on the specifications sheet.

## POLLINATOR HABITAT SPECIFICATIONS SHEET

<b>For:</b>	<b>Farm #:</b>
<b>Field(s):</b>	<b>Tract #:</b>
<b>Planned By:</b>	<b>Date:</b>

### WILDFLOWER/LEGUME SEEDING

<b>Acres to be seeded:</b>			
<b>Recommended Species and Seeding Rates</b>			
<b>Legumes</b>		<b>Wildflowers</b>	
Species	Rate PLS lb./ac	Species	Rate PLS lb./ac.
<b>Total Legumes (lbs./acres)</b>		<b>Total Wildflowers (lbs./acre)</b>	

#### SITE PREPARATION - BEFORE PLANTING IN YEAR:

Herbicide: Per OSU Extension, professional consultant and/or label recommendations.  
 Tillage:  
 Fertilizer/Lime:  
 Temporary Seeding:  
 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.*  
**POST-PLANTING MAINTENANCE FOR PEST CONTROL DURING ESTABLISHMENT**  
 Herbicide: Per OSU Extension, professional consultant and/or label recommendations.  
 Mowing  
 Prescribed Burning – Burn according to approved plan

**Note:** After the seeding is established, maintenance activities during the March 1 – July 15 period require prior approval of the FSA County Committee. Mowing may only be done between July 16 and August 20. Other maintenance activities must be conducted between July 16 and February 28 unless prior approval for work outside these dates has been given by FSA County Committee.

**MID-CONTRACT MANAGEMENT**

CRP policy requires that all participants perform management activities that maintain or enhance the quality of the cover for wildlife and plant diversity benefits. An evaluation of the stand will be made no earlier than the 4<sup>th</sup> year of the contract. At that time a separate mid-contract specifications sheet shall be developed. At this time the following mid-contract management activity is recommended.

Starting in year:

Disk/chisel

Herbicide

Repeated every \_\_\_\_\_ years

Prescribed burning

Interseeding

**SIGNATURES**

NRCS Representative

Date

FSA Representative

Date

I understand the plan and specifications and agree to perform this practice accordingly.

Participant

Date