



United States Department of Agriculture

# CRP Practice CP29

Natural Resources Conservation Service - Indiana – July 2020 (ver. 1.0)

## Marginal Pastureland Wildlife Habitat Buffer Program Job Sheet



### PURPOSE

A Marginal Pastureland Wildlife Habitat Buffer is a band of **native** grasses and wildflowers/forbs used to limit sediment, nutrients, pesticides, and other contaminants from entering water bodies. In addition, Marginal Pastureland Wildlife Habitat Buffers can provide valuable winter cover, nest sites, nectar and pollen for pollinating insects, and food for wildlife.

Marginal Pastureland Wildlife Habitat Buffers are located on herbaceous (i.e. non-woody) areas immediately adjacent and parallel to perennial or seasonal streams, lakes, ponds, and /or sinkholes.

### WHERE PRACTICE APPLIES

On fields that meet eligibility requirements for the Conservation Reserve program (CRP) as determined by the Farm Service Agency (FSA)

### CRP POLICY

For CRP Marginal Pastureland Wildlife Habitat Buffers:

- The site must meet all marginal pastureland eligibility requirements. Cropland, forestland, and woodland are not eligible for marginal pastureland.
- The site must be **immediately adjacent and parallel to** perennial or seasonal streams, sinkholes and karst areas, or any permanent water body, such as a lake or pond, which provides at least a seasonal flow of surface water from the water body off the farm. Water bodies that do not provide a permanent water cover throughout the year in all years are not eligible.
- Marginal Pastureland Wildlife Habitat Buffers will be managed for (if already existing), or planted to, native warm season grasses, forbs and legumes.
  - a) If the existing vegetation for the site is non-native grasses, the site must be converted to native grasses.
  - b) Native grasses include the warm season grasses such as Big &/or Little Bluestem, Indiangrass, Switchgrass, Broomsedge, etc. as well as cool season grasses such as Canada &/or Virginia Wildrye, etc.
  - c) If the natural vegetation of the site is primarily trees, the area should be enrolled as CP22 Riparian Buffer.
- The minimum width of the Marginal Pastureland Wildlife Habitat Buffer depends upon the slope of the field, the soil type, and the pollutants contained in the runoff. The minimum width is 20 feet. The maximum average width is 120 feet
- Marginal Pastureland Wildlife Habitat Buffers must begin at the top of the stream bank, or edge of the water body. If the site already contains existing vegetation that is not eligible for CP29, these acres will be included in the calculation of maximum width and included in the CRP Plan, but will not be eligible for payments.

- Establishment of the Marginal Pastureland Wildlife Habitat Buffer should result in a substantial reduction of pollutants reaching the adjacent stream or water body.
- CRP Marginal Pastureland Wildlife Habitat Buffers will be installed according to the NRCS Riparian Herbaceous Buffer Standard (390) in the local eFOTG. Site-specific requirements are listed on the attached Specifications Sheet.

### **BUFFER PLANTING/ESTABLISHMENT**

If existing vegetation will sufficiently address the resource concern and will be native grasses and forbs, no planting will be required.

If planting is needed, establish the vegetation according to the attached plan/design sheet. Any changes to these specifications should be approved by NRCS.

All construction and seeding must be completed within 12 months of contract approval to remain in compliance. If circumstances beyond the landowner's control prohibit completion within the first 12 months, the local FSA County Committee may approve an extension to the next construction and planting season.

### **SELECTION OF RATES AND SPECIES**

The IN Natural Resources Conservation Service (NRCS) Seeding Tool will be used when developing seeding mixes for this practice. Plantings will be planned in the IN Wildlife Seeding Calculator. Any prepackaged mixes must be approved before seeding. Site-specific requirements are listed on the attached Specifications Sheet.

### **SITE PREPARATION**

Site preparation is the most critical step in the establishment of habitat. Even the most well-planned seed mix will fail if the site preparation is not thorough. A well-prepared planting bed will increase the likelihood of establishment and reduce maintenance and management in the future. Weed control efforts should begin as early as 12 months prior to planting and may require multiple applications over the course of one to two years. Pay attention to sites where noxious and potentially invasive species are likely to occur, or areas of sod, such as old fescue pastures. Many of these species are perennials that spread through seed and roots, and many have rhizomatous root systems that will persist and negatively impact the planting.

Site preparation can use a combination of methods, including herbicide treatment, prescribed burning, mowing, and tillage. Each of these methods must be used with the appropriate timing and combination to maximize effectiveness. Disking should be used with caution, as soil disturbance can release additional weed seeds and increase the potential for erosion, creating larger problems. Mowing alone is not likely to be sufficient and should be combined with chemical, prescribed fire or additional mechanical treatments. Non-chemical methods and organic methods are possible but are labor intensive and will likely take longer to get the site ready for planting and are best suited for smaller sites. See Indiana Job Sheet 315 Herbaceous Weed Control- Site Preparation, for more information.

If prescribed burning is used for site preparation, it must meet the IN NRCS FOTG Standard (338) *Prescribed Burning*.

### **COMPANION/NURSE CROPS**

A companion/nurse crop will be used when erosion control and weed suppression are needed. Companion/nurse crops include Winter Wheat (after the Hessian Fly-free dates in Table 2), Oats, Barley, Cereal Rye or Annual Ryegrass; native Wildryes (i.e. – *Elymus sp.* such as Canada, Riverbank, and Virginia Wildrye) and other species are also effective.

Companion crops will be clipped after jointing, but before seed head pollination unless otherwise directed (control of Wildrye species is not necessary so that they persist as part of the seedings). A second and subsequent clipping is necessary if re-growth provides competition. Clipping height should be above developing seedlings. Where excessive growth has accumulated, the vegetation will be chopped rather than swathed.

### **PLANTING**

All seeding must be completed within 12 months of the effective date of the contract to remain in compliance. If circumstances beyond the landowner's control prohibit completion within the first 12 months, the local FSA County Committee may approve an extension to the next planting season.

### Seeding Dates

Selected species will be planted within the dates in the specification sheet that will be provided for the site.

### Seed preparation

Inoculate legume seed with the proper rhizobia bacteria for the species no more than 60 days prior to seeding or as specified on the seed / inoculant tag. Inoculant left in the sun, even for a short period of time can significantly reduce the viability and effectiveness. Pre-inoculated seed will have a coating that changes the pure live seed per pound and thus the bulk seeding rate per acre.

Be aware that blending seed of varying size, shape and weight can make calibration of equipment and seeding uniformity difficult.

Some seeding mixtures contain seed that is extremely small and thus have very low seeding rates. This may make it difficult to set seeding equipment to uniformly seed these low rates. To add enough volume to the mix for proper metering, a **carrier** or coated seed may be desirable. The carrier should be no larger than the largest seed species and have similar shape, density and texture to the majority of seeds in the mix. The carrier can be an inert material (i.e. cracked corn) that does not have abrasive properties that may cause damage to the equipment or the seed. Inexpensive seed (unimproved varieties) that will have no significant negative impact on the purpose of the seeding may also be used.

### Planting Methods

**No-Till seeding:** Use a no-till drill with seven (7) inch or less row spacing. Ensure the drill is designed to handle the type of seed being planted (especially important for native grasses). Set the no-till drill to provide good seed-to-soil contact and a planting depth preferred for the desired species (see table below). Soils that are too wet or too dry can also cause improper seed placement.

**Conventional Seeding:** Prepare a fine firm seedbed to a depth of three (3) to four (4) inches. Use a drill with seven (7) inch or less row spacing, or a culti-packer seeder designed for the seed to be planted. Seed should be drilled uniformly at a proper seeding depth for the desired species.

**Broadcast Seeding:** Seed may be broadcast if completed in a uniform manner. Pre-mix the seed with 200 pounds per acre of pelletized lime if using an airflow applicator. 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 one-third ( $\frac{1}{3}$ ) of the seed on the soil surface. Wind speed should be 15 miles per hour or less when broadcasting.

### Inter-seeding:

- 1. Legumes/Forbs (frost seeding):** No-till drill or broadcast as above into existing vegetation or residues. Broadcasting relies on freeze/thaw cycles, rain and/or snow to incorporate the seed. This method does not include a seedbed preparation. This is most commonly used during the dormant seeding period.
- 2. Cover Crops:** No-till drill or broadcast as above into existing vegetation or residues. Broadcasting relies on freeze/thaw cycles, rain and/or snow to incorporate the seed. Inter-seeding does not include a seedbed preparation. This method can be used to establish cover crop species or combination mixes into relatively light (e.g. soybean) and weed free crop residues, or to establish vegetation into standing crops.
- 3. Grasses:** No-till drill into existing covers only if prior-treated with herbicides or tillage, or if existing cover is diminishing (i.e. – older alfalfa plantings).

### Weed Control during Establishment

**Weed Control in introduced and native grass plantings:** Control competing vegetation as needed until established or a Final Status Review is issued. *Mowing multiple times during this establishment period is critical to the success of the native grass planting.* Mow when competing weeds are taller than the planted vegetation, and at a height above the planted vegetation. Use selective herbicides and/or spot spraying to protect the desired species,

or for problem perennial weeds. Refer to the Purdue/Ohio State *Weed Control Guide for Ohio and Indiana* for herbicide timing and treatment.

### **HAYING AND GRAZING**

Exclude all acres from haying and grazing year-round, unless authorized by the Farm Service Agency beforehand and all CRP policies and standards are met. Fences may need to be constructed and maintained to exclude livestock throughout the entire year. See the attached *CRP Implementation Requirements - Grazing & Haying* plan addendum for more details.

### **OPERATION AND MAINTENANCE**

Operation and maintenance is required and begins with the purchase of the seed. Purchase seed from reputable dealers that is tested and verified to not contain noxious or other species that may become a problem such as Palmer Amaranth. Do not plant seed from unknown sourcing or with weeds, as it could result in long-term management problems. Throughout the life of the contract, noxious weeds and other undesirable plants, insects, and pests will be controlled, including such maintenance as necessary to avoid detrimental effects to the surrounding land.

*After* the Final Status Review, maintain the planting according to your CRP conservation plan - See the attached *CRP Operation and Maintenance* for more details. Maintenance activities are allowed only on a spot basis and only if necessary to maintain stand health, maintain stand diversity, or control pests that will damage the CRP cover or adjacent lands. Burning must be in accordance with a prescribed burn plan. **MOWING and other maintenance activities are not authorized between April 1 to August 1** to protect ground-nesting wildlife (i.e. - the Primary Nesting and Brood-Rearing season). If maintenance activities are needed (allowed on a spot basis only) during these times, the FSA County Committee must approve the maintenance activity prior to the activity occurring. Native grasses will not be mowed lower than 12 inches. **Mowing for generic weed control or for cosmetic purposes is prohibited.**

The contract area cannot be used for field roads or other uses that will damage or destroy the cover.

### **MANAGEMENT ACTIVITIES**

Management Activities are required on this practice. If the CRP acres are less than 5 acres, the entire acreage can be managed in a single year; otherwise, the maximum amount that can be disturbed during any one year is ½ of the contract acreage. For maximum habitat value, disturb no more than 1/3 of the contract acreage in any given year.

Areas devoted to grass have the following options:

- Prescribed Burning
- Strip Disking
- Strip Spraying
- Inter-seeding forbs/legumes/pollinator habitat

Avoid Environmentally sensitive areas as marked on the plan map including:

1. Concentrated flow areas,
2. Critical areas,
3. Within the first 20 feet of a practice that borders a water resource to avoid water quality resource concerns, and
4. Other areas where gully erosion is likely.

Grassland areas must be established for a minimum of three (3) years before initiating Management Activities. Management Activities will not be performed from April 1 through August 1 to protect the primary nesting period for grassland bird species. It is also recommended, but is not required, to delay Management Activities until after August 15 to reduce the chance of harming fledgling birds and other young wildlife.

Strips will parallel brushy or woody escape cover when feasible.