

CRP Practice CP2

United States Department of Agriculture

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

Native Grass Plantings Program Job Sheet



PURPOSE

Native grass plantings are used to reduce soil erosion, improve water quality, and create or enhance wildlife habitat.

Native grass communities are often associated with prairies, barrens, and savannas. Common native grasses that grow well in Indiana include warm-season grasses (WSG) such as Big Bluestem, Little Bluestem, and Indiangrass, as well as native cool season grasses such as Canada Wild Rye and Virginia Wild Rye. Native grass communities also included common wildflowers (forbs) such as Black-Eyed Susan, Purple Coneflower, Prairie Blazing Star, and others.

Native grass plantings of warm-season species provide excellent nesting and winter cover for wildlife. These tall,

stiff, upright grasses stand up well to snow and ice. Native grasses grow mostly in the heat of the summer, unlike the cool-season grasses (found in most lawns) which grow best in the spring and fall.

Native grasses persist long after establishment. However, like most long-lived plant species, they generally establish slowly. Therefore, it is very important to establish these grasses properly and to have patience when evaluating the results.

WHERE PRACTICE APPLIES

Apply this practice on fields that meet eligibility requirements for the Conservation Reserve Program (CRP) as determined by the Farm Service Agency (FSA).

CRP POLICY

General Signup: To award 50 points for the National Ranking Factor N1a, existing vegetation or seeding mixes will contain at least three (3) native grass species, plus at least two (2) forbs or legumes. To award 20 points for the National Ranking Factor, existing vegetation must contain at least one (1) native grass, with or without legumes; or seeding mixes will contain at least two (2) native grasses, plus at least one (1) forb or legume.

SELECTION OF RATES AND SPECIES

The IN Natural Resources Conservation Service (NRCS) Seeding Tool will be used when developing seeding mixes and to determine tree and shrub species for this practice. Native grass plantings in CP2 will use the IN General Seeding Calculator. Any prepackaged mixes <u>must</u> be approved before seeding. Site-specific requirements are listed on the attached Specifications Sheet.

SELECTION OF RATES AND SPECIES

The IN Natural Resources Conservation Service (NRCS) Seeding Tool will be used when developing seeding mixes and to determine tree and shrub species for this practice. Native grass plantings will be planned in the IN Wildlife Seeding Calculator, and cool season mixes will be planned in the IN General Seeding Calculator. Any prepackaged mixes <u>must</u> 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 <u>before</u> and <u>after</u> seeding. It is acceptable to see up to one-third (½) 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 <u>must</u> approve the maintenance activity <u>prior to</u> 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 <u>maximum</u> 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:

- a) Concentrated flow areas,
- b) Critical areas.
- c) Within the first 20 feet of a practice that borders a water resource to avoid water quality resource concerns, and
- d) 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 <u>not</u> 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.

Management Activities will be performed along field contours, or across the slope, when practical.

Strips will parallel brushy or woody escape cover when feasible