



# Rare and Declining Habitat (SAVANNA)

## Michigan CONSERVATION RESERVE PROGRAM

Natural Resources Conservation Service (NRCS)

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Photo courtesy of USDA NRCS

### WHAT IS A RARE AND DECLINING HABITAT (SAVANNA)?

The Rare and Declining Habitat (SAVANNA) practice is a native grass, wildflower, and tree planting that provides soil erosion protection as well as habitat for a variety of wildlife, especially upland game birds and songbirds.

Savannas were found throughout Michigan prior to European settlement. Michigan savannas were diverse areas of native grasses and wildflowers, with a few scattered large trees. Grasses, wildflowers, and trees common to savannas have evolved to be fire tolerant, and relied on periodic fires to maintain this plant diversity. Today, Michigan has lost over 99% of its original savannas.

Native grasses found in savannas were present in Michigan when Europeans arrived. Some of the more common native grasses that grow well in Michigan include warm-season grasses such as Big Bluestem, Little Bluestem, Indian grass, and Switchgrass as well as native cool season grasses like Canada and Virginia Wild Rye. Common wildflowers include Black-Eyed Susan, Purple Coneflower, Coreopsis, and others.

Savanna plantings of warm-season grasses provide excellent nesting and winter cover for wildlife. These tall, stiff, upright grasses stand up well to snow and ice. These grasses put most of their growth on in the heat of the summer, unlike the cool-season grasses (found in most lawns) which grow best in the spring and fall.

Savannas also contain large trees along with grasses and wildflowers. Some of the common trees found in

savannas include fire-tolerant hickory (shagbark and pignut) and oak (red, white, black, bur, etc.).

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

### ELIGIBILITY

To be eligible for this practice with the Conservation Reserve Program, the land must have a crop history (4 out of 6 years from 1996-2001). Further, the site must be within 0.5 miles of a Savanna as identified on the Pre-Settlement Vegetation Maps found in Section I of the Field Office Technical Guide.

### CRP POLICY

For General CRP, **at least 5 NATIVE grasses plus at least 10 NATIVE wildflowers plus 30 NATIVE trees per acre** will be planted. Any other plantings are not eligible. **Only NATIVE grasses, wildflowers, and trees may be planted for this practice** (see MI NRCS Biology Technical Note #13 for a list of native vs. non-native plants in Michigan).

Savanna plantings will be established according to the Restoration and Management of Rare and Declining Habitat (643) standard in the local Field Office Technical Guide (FOTG), and they must be planted within 12 months of contract approval to remain in compliance. If circumstances beyond the landowner's control prohibit the planting within the first 12 months, the local FSA County Committee may approve an extension to the next planting season.

### PLANTING

It is very important to plant native grasses and trees into a weed-free, firm seedbed. If the field is currently in cropland, weed control efforts should begin prior to planting. Use herbicide or tillage to eliminate competing vegetation. If necessary for erosion control, seed a temporary cover. Eliminate the temporary vegetation at planting time with tillage or herbicides.

If the field is currently in sod, begin weed control efforts using broad-spectrum herbicides in the fall. Apply herbicides again after the spring green-up prior to planting (if possible, a prescribed burn prior to spring green up to remove the dead litter from the fall treatment will provide best results).

Broad-spectrum herbicides will provide good initial weed and sod control for fall and spring applications.

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Other herbicides labeled for warm season grass establishment may be used alone or mixed with broad-spectrum herbicides to provide residual weed control, which may result in faster establishment of the native grasses. Contact your local Michigan State University Extension Agent for specific herbicide recommendations. **Apply all herbicides according to the label.**

Plant grasses and trees according to the attached plan/design sheet, and apply lime and fertilizer according to needs determined by a soil test and MSU recommendations.

Use a specialized no-till drill that is able to handle native grass seeds (possibly available at some local Conservation District offices, DNR offices, Pheasants Forever chapters, etc). Plant the seeds **no deeper than** 1/8 inch.

If a native grass drill is not available, the seed may be broadcast or aerial seeded. In either case, the seedbed must be worked up and firmed with a cultipacker or similar equipment. A carrier such as potash may also be needed in order to spread the seed evenly. **After seeding, the site must be rolled or cultipacked to ensure proper seed to soil contact.** Plant the seeds **no deeper than** 1/8 inch.

Since warm-season grasses are slow starters, it is important to control unwanted vegetation, especially the first year after planting. Use mowing or herbicides as needed until a Final Status Review is issued to control unwanted vegetation. Mow when competing weeds are taller than the planted grasses and wildflowers, and at a height above the planted grasses and wildflowers. Some herbicides labeled for warm season grass establishment will provide residual weed control without damaging the planted grasses. For additional information on herbicide controls, see Conservation Management Sheet "Establishing Prairie Grass Buffer Strips" and contact your local Michigan State University Extension Agent for specific herbicide recommendations. **Always apply herbicides according to labeled directions.**

Weed Control is also important to ensure survival and maximum growth of the trees after they are planted. A 3-foot radius around each tree should remain weed-free to maximize tree growth. Contact your local Michigan State University Extension Agent for specific herbicide recommendations. **Mowing is not recommended as an option for tree weed control.**

## OPERATION AND MAINTENANCE

Noxious weeds and other undesirable plants, insects, and pests shall be controlled, including such maintenance as necessary to avoid detrimental effects to the surrounding land.

After the Final Status Review, use mowing or burning to maintain the stand according to your CRP conservation plan. 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. See the Conservation Information Sheet "Prescribed Burning" for further information. Mow or burn only between Aug 1<sup>st</sup> and Aug 20<sup>th</sup>. If maintenance activities are needed at times other than these, the FSA County Committee **must** approve the maintenance activity **prior to** the activity occurring.

**Mowing for generic weed control or for cosmetic purposes is prohibited.**

## REQUIRED MANAGEMENT

All new CRP contracts must have mid-term 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 savanna plantings include prescribed burning (according to an approved burn plan), disking, interseeding of wildflowers, etc. All management activities must be performed according to NRCS Standards and Specifications as found in the FOTG, and CRP policy. See the attached design sheet for suggested management activities on your property.

## OTHER MANAGEMENT CONSIDERATIONS

For optimum wildlife habitat, plant a diversity of grasses, wildflowers, and trees. This mixture will provide winter and nesting cover, flowers for pollinating insects, as well as a good seed, nut, and insect source for food.

To facilitate future prescribed burning, consider establishing the perimeter of the field to a CP1 (Introduced Grasses and Legumes) mixture such as timothy, orchard grass, and clovers, or Native cool season grass.

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## Rare and Declining Habitat (SAVANNA) CRP CP25

**Landowner:**

**County:**

Farm:

Tract:

Field(s):

Acres:

Date:

### RECOMMENDED SPECIES and SEEDING RATE (PLS #/acre = Pure Live Seed Pounds per Acre)

SPECIES	RATE	TOTAL needed = (RATE X Acres)	
	PLS #/acre	0.0	PLS #
	PLS #/acre	0.0	PLS #
	PLS #/acre	0.0	PLS #
	PLS #/acre	0.0	PLS #
	PLS #/acre	0.0	PLS #
<b>Wildflowers:</b>	<b>1.0</b>	<b>0.0</b>	<b>PLS #</b>
<b>Trees</b>	<b>30</b>	<b>0</b>	<b>TREES</b>

Recommended Wildflowers include:

Required Trees include at least 2 of the following:

### BEFORE PLANTING in Year:

- Herbicide<sub>1</sub> (per label): Dates =
- Herbicide<sub>2</sub> (per label): Dates =
- Tillage: Dates =
- Temporary Seeding:
- Apply fertilizer and lime according to an approved soil test and MSU recommendations for "establishing native grasses".
- Other:

### PLANTING METHOD IN YEAR:

- Tree Planting Method: \_\_\_\_\_ :
- Grass Planting Method: \_\_\_\_\_  
Dates = \_\_\_\_\_  
(If unforeseen circumstances prohibit the planting of the grass by this date, please contact our office as soon as possible)

### TREE POST-PLANTING MAINTENANCE for Pest Control

- Maintain a 3-ft. weed & grass-free radius around each tree for up to 3 years for optimal growth\*
- Tree Herbicide (per label): Dates = \_\_\_\_\_
- Other:\*

**\*\*NOTE:** after the Final Status Review has been issued, other maintenance activities will be conducted between August 1 & May 1, and weeds will be treated on a "spot" basis only, unless prior approval is granted by the County Committee. – Mowing is not an approved method of weed control for tree/shrub plantings.

**GRASS AND WILDFLOWER POST-PLANTING MAINTENANCE** for Pest Control

- Mowing: BEFORE FINAL STATUS REVIEW** = mow 12" high when the weeds are 12" taller than the planted grasses  
**AFTER FINAL STATUS REVIEW\* = 12" MINIMUM Mowing Height\***
  - Grass Herbicide\* (per label):  Prescribed Burning\*: According to an approved plan
  - Other:\*
- \*NOTE: after the Final Status Review has been issued, **MOWING** will be conducted between August 1 & 20, and weeds will be treated on a "spot" basis only, unless prior approval is granted by the County Committee.
- \*\*NOTE: after the Final Status Review has been issued, other maintenance activities will be conducted between August 1 & May 1, and weeds will be treated on a "spot" basis only, unless prior approval is granted by the County Committee.

**LOCATION AND LAYOUT SKETCH & ADDITIONAL INFORMATION**

**ADDITIONAL INFORMATION:**