



FIELD WINDBREAK

Michigan CONSERVATION RESERVE PROGRAM CRP - CP5A

Natural Resources Conservation Service (NRCS)

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Photo courtesy of USDA NRCS

WHAT IS A FIELD WINDBREAK?

Field windbreaks are linear plantings of single or multiple rows of trees &/or shrubs established for environmental purposes such as reducing wind erosion, protecting growing plants, managing snow, enhancing wildlife habitat, and improving aesthetics.

Field windbreaks intercept undesirable winds from eroding soils and damaging plants and they slow the velocity of wind, allowing the settling out of suspended snow and soil particles. Field windbreaks also provide travel corridors, nesting sites, food, and escape cover for many wildlife species.

ELIGIBILITY

To be eligible for this practice for the Conservation Reserve Program (CRP), the land must have a cropping history (4 out of 6 years from 2002 - 2007), and the site needs protection from wind erosion or enhancement of wildlife habitat.

If the purpose of the windbreak is to protect a homestead or livestock area, or to manage snow, the site is not eligible for a CRP CP5A. However, the site may be eligible for a Shelterbelt (CP16A) or a Living Snow Fence (CP17A) through CRP, or it may be eligible for other USDA cost-share programs.

CRP POLICY

Field windbreaks will be installed according to the Windbreak/Shelterbelt Establishment Standard (380) in the local Field Office Technical Guide (FOTG).

For the Conservation Reserve Program, the maximum width of field windbreaks and the spacing between windbreaks will be the minimum needed to reduce cropland erosion, according to the FOTG, regardless of the purpose of the windbreak (windbreak density of at least 40%).

The windbreak will be oriented perpendicular to the troublesome winds. The interval between new and existing windbreaks, and the spacing between and within the rows will be determined based on the Design and Mature height of the species in the FOTG.

Tree and shrub species selected for the windbreak will be adapted to the site conditions and meet the standards in the local FOTG. Only viable, high quality planting stock will be used.

INSTALLATION

It is very important to prepare a weed-free and firm seedbed before planting the trees and shrubs, and cost-share is authorized for this component. It may be necessary to prepare the site the fall before planting the trees in the spring using tillage, herbicides, etc. Contact your local Michigan State University Extension Office for specific herbicide recommendations. **All herbicides will be applied according to the label.**

Plantings using bare-rooted stock and non-rooted cuttings should be completed in the spring after the ground thaws, but no later than June 1; or planted in the fall after October 1 until the ground freezes when soil moisture is adequate. Containerized and balled and burlap stock may be planted between October 1 and June 1 as local soil moisture and weather conditions permit.

Weed Control is also important to ensure survival and maximum growth of the trees after they are planted. Cost-share is authorized for one weed control application within 24 months after the trees are planted. A 3-foot radius around each tree should remain weed-free to maximize tree growth. Fabric weed barriers are very effective at minimizing weed competition, but are not eligible for CRP cost-share. **Mowing is not allowed for weed control for trees.**

A weed control method **between** rows is to plant non-competitive grasses. **However, the 3-foot weed and grass-free radius around each tree will still need to be maintained to maximize tree growth.** Eligible grasses are found in the Conservation Cover Standard

(327) in the FOTG. **Mowing of these grasses is not authorized.**

Livestock will be excluded without cost-share from all CRP windbreaks.

CONSIDERATIONS

To assure proper alignment of rows and spacing, the windbreak will be staked or laid out prior to planting.

For optimum wildlife winter habitat, plant dense evergreen tree species such as spruce and select shrub species that retain their fruits through the winter such as highbush cranberry.

Following is a list of trees and shrubs referenced in the 380 Standard in the FOTG that are considered Good to Excellent for both Wildlife & Windbreak Suitability. Consult the local FOTG for more information and other species that may be used.

Tree Species	Mature Height (ft)	Windbreak Suitability	Wildlife Suitability
Cedar, Eastern Red*	48	E	G
Cedar, Northern White*	48	E	G
Crab, 'Roselow' Sargent	20	G	E
Cranberry, Highbush*	13	G	E
Dogwood, Gray*	13	G	G
Dogwood Red-Osier*	9	G	G
Hawthorn*	20	G	E
Hazelnut, American*	12	G	E
Plum, American*	8	G	E
Spruce, Norway	81	E	G
Spruce, White*	80	E	G
Sumac, Smooth*	20	G	G
Viburnum, Mapleleaf*	7	G	G

E-Excellent, G-Good; *Denotes Species Native to Michigan

OPERATION AND MAINTENANCE

Noxious weeds and other undesirable plants, insects, and pests need to be controlled, including such maintenance as necessary to avoid detrimental effects to the surrounding land. Prior to receiving the Final Status Review, weed control and maintenance should occur as needed.

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. **MOWING** is not allowed for weed control for CRP tree plantings. Other maintenance activities will only be allowed outside the designated dates to protect ground-nesting wildlife. Designated dates are from May 1st to August 1st. If management or maintenance activities are needed within these dates, the FSA County Committee **must** approve the management activity **prior to** the activity occurring.

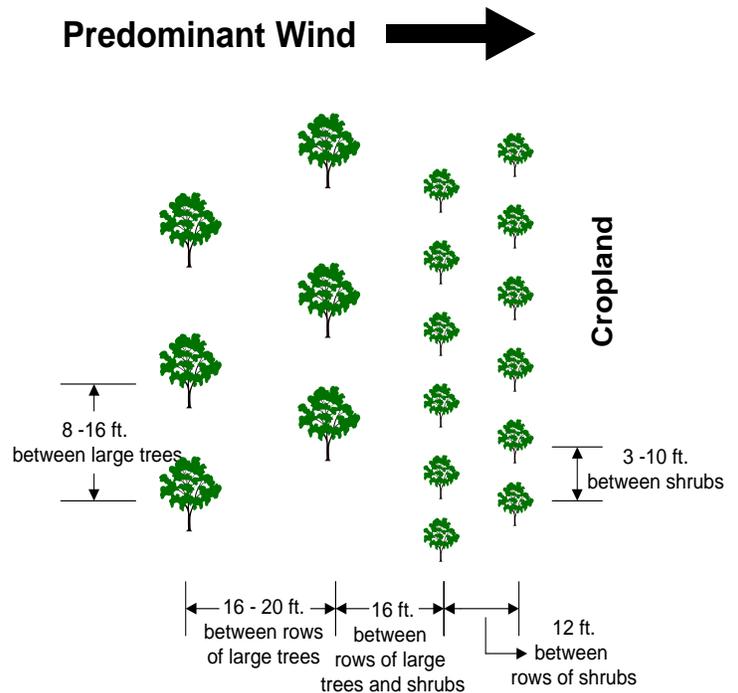
Consult the Windbreak/ Shelterbelt Renovation (650) standard in the FOTG for other maintenance information.

Maintain central stems on trees by pruning to eliminate forks and multiple leaders.

The field windbreak should be inspected on a seasonal basis and following major storm and runoff events. Any damages or sediment accumulation that would adversely impair the function of the windbreak must be corrected immediately, at the landowner's expense.

Replacement of dead trees and shrubs will be needed to ensure that at least 90% of all trees & shrubs are living, and no 2 plants missing together within a row - according to the Tree/Shrub Establishment (612) standard in the FOTG. The landowner is responsible for replacement costs.

Below is a typical layout and design of a CRP Field Windbreak. Note: other designs may also be eligible for CRP.



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FIELD WINDBREAK DESIGN WORKSHEET CRP CP-5A

Landowner:

County:

Farm:

Tract:

Field(s):

Length / Width:

Date:

REQUIREMENTS FOR WINDBREAK

DESIGN CONSIDERATIONS:

(Soils information is based on the FOTG, Section II-N – Windbreak Suitability Groups)

Predominant Soil Type(s): = Windbreak Suitability Group:

20 – Year Height of the Tallest Species in the Windbreak (= H) ft. = Distance Sheltered by the Windbreak (= 10 x H) ft.

	RECOMMENDED SPECIES	TOTAL # NEEDED	RECOMMENDED SPACING (ft)
Row 1:			Within Row 1: <input type="text"/> ft Between Rows 1 & 2 <input type="text"/> ft
Row 2:			Within Row 2: <input type="text"/> ft Between Rows 2 & 3 <input type="text"/> ft
Row 3:			Within Row 3: <input type="text"/> ft Between Rows 3 & 4 <input type="text"/> ft
Row 4:			Within Row 4: <input type="text"/> ft Between Row 4 & field <input type="text"/> ft

BEFORE PLANTING:

- Herbicide₁ (per label): Dates =
 - Herbicide₂ (per label): Dates =
 - Tillage: Dates =
 - Grass - Dates =
- (between rows only):
- Temporary Seeding:
 - Other:

PLANTING METHOD in Year

- Tree Planting Method:** :
- (If unforeseen circumstances prohibit the planting of the trees/shrubs by this date, please contact our office as soon as possible)
- Other:**

POST-PLANTING MAINTENANCE for Pest Control

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

****NOTE:** after the Final Status Review has been issued, other maintenance activities will be conducted outside the primary nesting season (May 1st – August 1st), 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:

Reset Form