



United States Department of Agriculture

PA Practice 420 Wildlife Habitat Planting Implementation Requirements -- Grassland

Participant: [] Contract #: []
Location: [] County: []
Farm Number: [] Tract Number: []

Definition:

Establishing grassland habitat by planting herbaceous vegetation or shrubs.



An established field of native grasses and wildflowers.



Native warm-season grasses providing winter habitat for wildlife.

Purpose:

This practice establishes vegetative cover of grasses, forbs and/or legumes, and sparse shrubs on eligible land, to:

- 1.
2.

Description:

Restoration of herbaceous habitat is vital to wildlife like grassland birds. These species need open areas that contain a variety of primarily native grasses and wildflowers, with only scattered shrubs and few or no trees. Such habitat is increasingly rare in Pennsylvania, due habitat loss to agriculture and development or habitat alteration by invasive plants and forest succession.

Wildlife Habitat Plantings will restore or create plant communities that provide food and cover for targeted wildlife species or groups for the full 5-year lifespan of the practice. Wildlife Habitat Plantings may include low numbers of native shrubs, but will not include trees. If trees are desired, implement appropriate practices as separate areas; examples include vegetative setbacks via Hedgerow (422) or Tree and Shrub Planting (612), barriers for visibility or spray drift via Shelterbelt/Windbreak Establishment (580). Annual food plots will be implemented via Upland Wildlife Habitat Management (645).

This practice will create grassland habitat for the following wildlife species or groups:

Enter species here

The plant communities required by the targeted wildlife species or groups are:

Grassland wildlife: roughly 50% grasses and 50% forbs, with up to 20 native shrubs scattered throughout. Plant >75% of the total acres to a mix of ≥3 native grasses and ≥5 species of native forbs. If used, introduced grasses or clovers must be planted separately in a distinct area <25% of the acres (not mixed with native grasses).

SITE-SPECIFIC NOTES	Enter text here
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Practice Guidance for Wildlife Habitat Plantings:

Establish grasses, wildflowers, legumes, and/or sparse shrubs in the fields indicated in Table 1 and on the Conservation Plan Map, by following the Site Preparation and Planting Guidance below. Weed control (mowing or herbicide treatment) during the period of three years after seeding may help native grasses, wildflowers, and shrubs establish successfully. After the wildlife habitat is established, follow the Operation and Maintenance requirements below.

Site Preparation for Wildlife Habitat Planting(s)

Site preparations for Field(s) [redacted] will be done by

Select a site preparation method [redacted]

FALSE

SITE-SPECIFIC NOTES	Enter text here
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Site preparations for Field(s) [redacted] will be done by

Select a site preparation method [redacted]

FALSE

SITE-SPECIFIC NOTES	Enter text here
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NATIVE GRASS OPTIONS				lbs of seed needed	Items in gray for USDA use only Seed tag verified? Yes <input type="checkbox"/> No <input type="checkbox"/>
Seed Mix and drainage class*	lbs / ac	Acres			
<i>All native warm-season grasses (choose one mix)</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Switchgrass (3 lbs) and deertongue (3 lbs) <i>WD, MWD, SPD, PD</i>	6		0		
<input type="checkbox"/> Big bluestem (3 lbs), Indiangrass (1 lb), and Little Bluestem (2 lbs) <i>EWD, WD, MWD</i>	6		0		
<input type="checkbox"/> Big bluestem (3 lbs), Indiangrass (2 lbs), and switchgrass (1 lb) <i>EWD, WD, MWD, SPD</i>	6		0		
<input type="checkbox"/> Big bluestem (3 lbs), Indiangrass (1 lb), Little bluestem (2) and switchgrass (1) <i>EWD, WD, MWD, SPD</i>	7		0		
<i>Mixed native warm-season and cool-season grasses (choose one mix)</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Big bluestem (2 lbs), Indiangrass (1 lb), Little bluestem (1 lb), switchgrass (1 lb), sideoats grama (1 lb), and Canada wildrye (2 lbs) <i>EWD, WD, MWD</i>	8		0		
<input type="checkbox"/> Big bluestem (3 lbs), eastern gamagrass (2 lbs), switchgrass (1 lb), deertongue (1 lb), and Virginia wildrye (3 lbs) <i>MWD, SPD</i>	10		0		
<input type="checkbox"/> Riverbank wildrye (5 lbs), Virginia wildrye (5 lbs), and switchgrass (1 lb) <i>WD, MWD, SPD, PD</i>	11		0		
<input type="checkbox"/> Canada wildrye (4 lbs) and switchgrass (3 lbs) <i>EWD, WD, MWD, SPD</i>	7		0		
<i>Native cool-season grasses (choose one mix)</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Canada wildrye (3 lbs), Virginia wildrye (3 lbs), Riverbank wildrye (2 lbs), and Bottlebrush (2 lbs) <i>WD, MWD, SPD</i>	10		0		
<input type="checkbox"/> Canada wildrye (4 lbs), Virginia wildrye (4 lbs), and Riverbank wildrye (2 lbs) <i>EWD, WD, MWD</i>	10		0		
<input type="checkbox"/> Riverbank wildrye (4 lbs), Virginia wildrye (4 lbs), and Canada wildrye (2 lbs) <i>WD, MWD, SPD</i>	10		0		
* Abbreviations represent the following soil drainage categories: EWD = Excessively Well Drained; WD = Well Drained; MWD = Moderately Well Drained; SPD = Somewhat Poorly Drained; PD = Poorly Drained					

INTRODUCED GRASS OPTIONS					<i>Items in gray for USDA use only</i>	
Seed Mix and <i>drainage class</i> *			lbs / ac	Acres	lbs of seed needed	Seed tag verified?
<i>One grass and one legume</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>	
Timothy (<i>WD, MWD, SPD, PD</i>)	<i>or</i>		4		0	
Orchardgrass (<i>EWD, WD, MWD</i>)	<i>or</i>		5		0	
Kentucky bluegrass (<i>WD, MWD</i>)	<i>or</i>		7		0	
Smooth brome (<i>WD, MWD, SPD</i>)			7		0	
AND						
Birdsfoot trefoil (<i>WD, MWD</i>)	<i>or</i>		6		0	
Ladino clover (<i>MWD</i>)			2		0	
<i>One grass and three legumes</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>	
Timothy (<i>WD, MWD, SPD, PD</i>)	<i>or</i>		4		0	
Orchardgrass (<i>EWD, WD, MWD</i>)	<i>or</i>		5		0	
Kentucky bluegrass (<i>WD, MWD</i>)	<i>or</i>		7		0	
Smooth brome (<i>WD, MWD, SPD</i>)			7		0	
AND						
Ladino clover (<i>MWD</i>)	<i>and</i>		1		0	
Red clover (<i>WD, MWD</i>)	<i>and</i>		2	0	0	
Alsike clover (<i>SPD, PD</i>)	<i>and</i>		1	0	0	
<i>Two grasses and two legumes</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>	
Timothy (<i>WD, MWD, SPD, PD</i>)	<i>and</i>		4		0	
Orchardgrass (<i>EWD, WD, MWD</i>)	<i>and</i>		5	0	0	
Red clover (<i>WD, MWD</i>)	<i>and</i>		2	0	0	
Alsike clover (<i>SPD, PD</i>)			2	0	0	
OR						
Orchardgrass (<i>EWD, WD, MWD</i>)	<i>and</i>		5		0	
Smooth brome (<i>WD, MWD, SPD</i>)	<i>and</i>		6	0	0	
Red clover (<i>WD, MWD</i>)	<i>and</i>		2	0	0	
Ladino clover (<i>MWD</i>)			2	0	0	
<i>Three grasses and three legumes</i>					Yes <input type="checkbox"/> No <input type="checkbox"/>	
Timothy (<i>WD, MWD, SPD, PD</i>)	<i>and</i>		3		0	
Orchardgrass (<i>EWD, WD, MWD</i>)	<i>and</i>		3	0	0	
Smooth brome (<i>WD, MWD, SPD</i>)	<i>and</i>		4	0	0	
Ladino clover (<i>MWD</i>)	<i>and</i>		1	0	0	
Red clover (<i>WD, MWD</i>)	<i>and</i>		2	0	0	
Alsike clover (<i>SPD, PD</i>)			1	0	0	
* Abbreviations represent the following soil drainage categories: EWD = Excessively Well Drained; WD = Well Drained; MWD = Moderately Well Drained; SPD = Somewhat Poorly Drained; PD = Poorly Drained						

Seeding of Wildlife Habitat Planting(s):

Planting/Seeding of Field(s) _____ will be done by
Planting/Seeding of Field(s) _____ will be done by

Select a seeding method

FALSE

SITE-SPECIFIC NOTES	Enter text here
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Establishment of Wildlife Habitat Planting(s):

Native grasses and wildflowers typically need two to three years after seeding to fully establish. During those three years, establishment improves greatly with reduction of competing vegetation and/or weed pressure. As a result, NRCS recommends mowing native grasses and wildflowers as needed to reduce competition at any time during the three years of establishment. Do not mow native grasses or wildflowers below 8 inches. If herbicides are needed, apply as spot-treatments only where needed; follow all label instructions when applying appropriate herbicides. Contact NRCS prior to mowing or spraying, for technical assistance and to document the establishment actions taken.

Introduced grasses and legumes typically need one year after seeding to fully establish. During that year, establishment improves greatly with reduction of competing vegetation and/or weed pressure. As a result, NRCS recommends mowing as needed to reduce competition at any time during the year of establishment. Do not mow introduced grasses or legumes below 6 inches. If herbicides are needed, apply as spot-treatments only where needed; follow all label instructions when applying appropriate herbicides. Contact NRCS prior to mowing or spraying, for technical assistance and to document the establishment actions taken. After the establishment period ends, mowing and spraying must follow the more restrictive timing and guidance given in *Operation and Maintenance*, below. Therefore, NRCS recommends using the available mowing and/or spraying to its full advantage in the establishment years, to promote the most vigorous Habitat Planting possible.

Operation and Maintenance:

Examine the Wildlife Habitat Planting acres a minimum of twice per year (early spring and mid-summer, at least), to monitor the establishment and survival of desirable vegetation and to identify and treat noxious, invasive, or non-desirable vegetation. Noxious plants should be spot-treated with appropriate herbicides or cut *and removed* from the field(s) as soon as possible; do not allow noxious or invasive plants to produce seed, if possible. Management efforts should be adaptive, and match the site- and time-specific needs of the Habitat Planting. Contact NRCS for technical assistance with management of the Wildlife Habitat Planting(s).

To control unwanted vegetation and to maximize the habitat value of the plant cover, focus weed-control actions (spot mowing or spot treatment with herbicide) **on specific, limited locations where weeds occur**. To avoid permanent damage to native grasses and wildflowers, do not mow them below 8 inches; to avoid permanent damage to introduced grasses or legumes, do not mow them below 6 inches. Treatment with appropriate herbicides should always follow label directions for rate, amount, and timing of herbicide application.

For long-term maintenance, mow the Wildlife Habitat Plantings:

in Field(s)

in Field(s)

To prolong the value of Wildlife Habitat Plantings, up to $\frac{1}{3}$ of each field may be mowed in a given year, during the site-specific timeframe given above. The $\frac{1}{3}$ of the field that gets mowed may be any shape, in any location, and may serve a variety of purposes. There is no requirement to mow, but it is likely that some sort of disturbance will be needed to maintain the Planting in the desired state. Large blocks of the field can be mowed in rotation (*see diagram 1, below*); however, a more wildlife-friendly option is to mow the $\frac{1}{3}$ of each field to create trails, cut down woody or unwanted plants, diversify plant communities and their ages, and so on (*see diagram 2, below*). Note that the mowing approach shown in Diagram 2 is far more adaptive and allows better spot-control of weeds or unwanted vegetation.

Diagram 1. Blocks mowed in rotation.

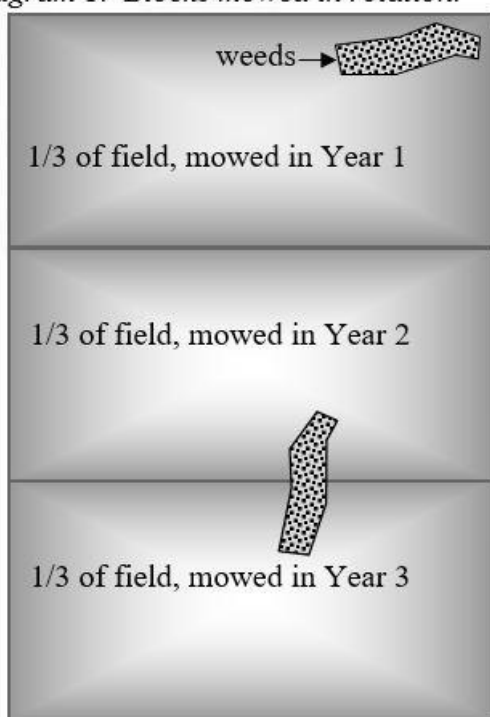
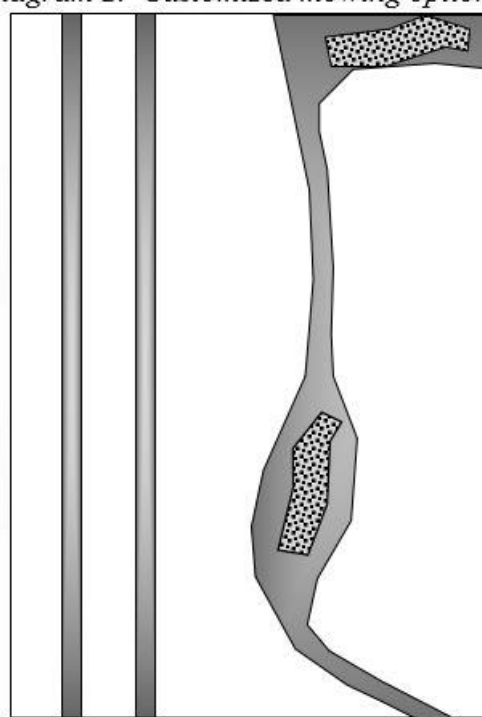


Diagram 2. Customized mowing options.



If bird habitat was the intent of the Habitat Planting, any large-scale mowing must occur between August 1 and August 31 to protect nests and fledgling birds.

Limited haying or grazing of Wildlife Habitat Planting acres may be possible if haying or grazing is a viable way to create habitat conditions that unquestionably benefit the target wildlife species or guild. Haying or grazing **MUST** be planned and implemented for the primary purpose of **improving or maintaining wildlife habitat** (*forage production, while an acceptable secondary benefit, will not be the main purpose of the action*), **MUST** be a viable way to manage vegetation on the site, and **MUST** be implemented according to a guidance document that is reviewed and pre-approved by both a NRCS grazing specialist (*for animal types, numbers, stocking densities, grazing periods, etc.*) and the NRCS State Biologist (*for wildlife-specific concerns and habitat management considerations*).

Control noxious weeds (*see list below*) on all Wildlife Habitat Planting acres over the 5-year lifespan of the practice. Mowing alone may not be sufficient to control noxious or woody vegetation; a follow-up herbicide treatment may be necessary. Any desirable plant cover destroyed must be re-established, by reseeding or replanting; if other portions of the field(s) were successful, seed may be gathered there or plants may be transplanted from there to re-vegetate bare areas.

animated oat	Eur. wand loosestrife	mile-a-minute	shattercane
broomrape	giant hogweed	multiflora rose	tall waterhemp
bull thistle	goatsrue	musk/nodding	wavyleaf basketgrass
Canada thistle	hydrilla	Palmer amaranth	
common waterhemp	johnsongrass	poison hemlock	
dodder	kudzu	purple loosestrife	

CERTIFICATIONS

By signing this document, the participant agrees to implement the Wildlife Habitat Planting practice following the technical recommendations provided by NRCS in this document. Any changes to the practice must be reviewed and pre-approved by NRCS prior to implementation.

Signature of Participant

Date

Certification of Implementation Requirements: This Practice has been planned according to current PA Standards and Specifications for Wildlife Habitat Planting (420).

Signature of Planner (NRCS or TSP)

Date

This section to be completed by NRCS or TSP after practice implementation...

Checkout and Certification of completed Wildlife Habitat Planting:

I certify that the above Implementation Requirements have have not been met in accordance with the criteria of the PA NRCS Conservation Practice Standard for Wildlife Habitat Planting (420).

(items in grey are for USDA reporting only)

Field #	Acres Planned	Year Planned	Acres Applied	Date Applied	Comments

Signature of NRCS representative or TSP

Date

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