

# Herbaceous Wind Barriers

## Conservation Practice Job Sheet FL-603-JS



### Definition

Herbaceous vegetation established in rows or narrow strips in the field across the prevailing wind direction.

### Purpose

Herbaceous wind barriers reduce soil erosion from wind, protect growing crops from damage by wind-borne soil particles, and provide food and cover for wildlife. Soil erosion is decreased due to a reduction in wind velocity at the soil surface. Wind-borne soil particles are trapped by the barriers, thereby reducing the potential for damage to adjacent crops. Some wildlife species use herbaceous wind barriers for food, shelter, nesting, and travel lanes.

### Where Used

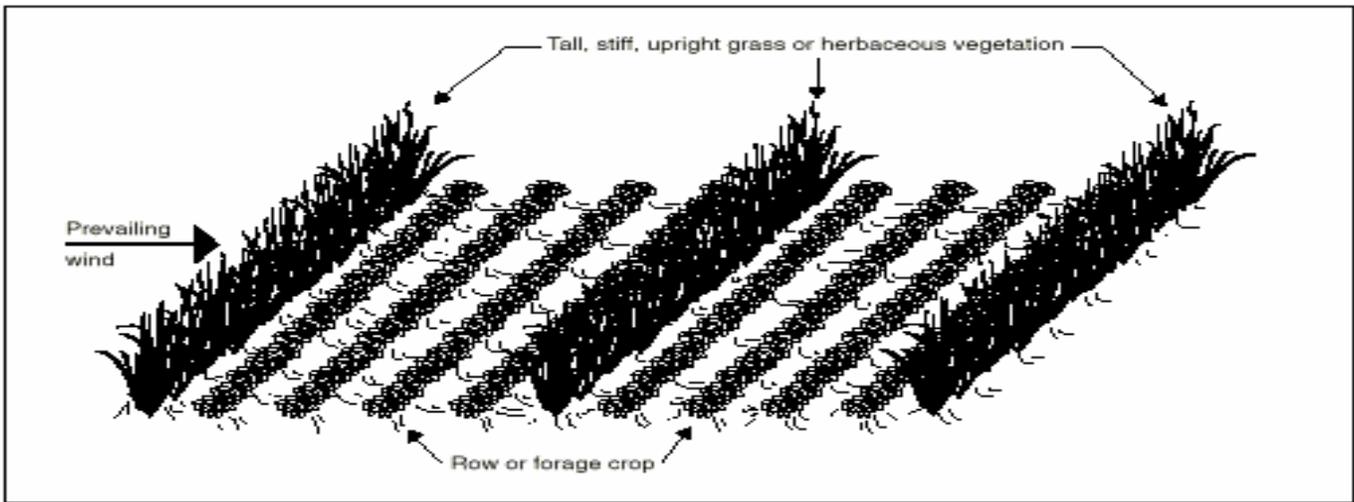
- On cropland and other land where wind-associated problems occur.

- Where wildlife food, cover, and corridors are part of the landowner's desired objectives.
- On irrigated land using center pivot irrigation where taller, woody species would interfere with the pivot system.

### Resource Management System

Herbaceous wind barriers are normally established concurrently with other practices as part of a resource management system for a conservation management unit. Examples include the residue management practices and cross-wind trap strips. Managing crop residues within the field can help reduce the movement of wind-borne soil particles and allow a greater distance between barriers. A cross-wind trap strip established along the windward edge of the

# HERBACEOUS WIND BARRIERS JOBSHEET



Herbaceous wind barriers reduce wind velocity, which prevents wind erosion, protects crop plants, and influences the deposition of sediment, and other wind-borne material. For optimum effect on wind, the barriers should not be farther apart than 10 to 12 times the height of the barrier vegetation

field can induce deposition and reduce transport of wind-borne sediment and sediment-borne contaminants downwind.

Herbaceous wind barriers can also function as an important mitigation technique for other conservation practices, such as pest management. Plant species selected for effective wind barriers can function as habitat for beneficial insects and other wildlife and, therefore, reduce pest problems in adjacent crops.

### Plans and Specifications

Site-specific requirements are listed on the specifications sheet. Spacing of the erosion-susceptible strips is determined using the current NRCS wind erosion prediction technology. Specifications included in this job sheet are prepared in accordance with the Florida NRCS Field Office Technical Guide. See Florida NRCS Conservation Practice Standard, Herbaceous Wind Barriers, Code 603.

### Wildlife

Connecting herbaceous wind barriers with existing perennial vegetation, such as woodlots and woody draws (tree/shrub establishment) or hedgerows (windbreak/shelterbelt establishment), benefits wildlife and aesthetics. Adapted native species that provide wildlife food and cover should be planted.

### Operation and Maintenance

Both annual and perennial herbaceous wind barriers need periodic maintenance. Annual barriers need to be reestablished each year in a timely manner to insure effectiveness during the critical period(s) for which the barriers were designed. Gaps may develop in perennial barriers. These must be replanted as soon as practical to maintain barrier effectiveness. Herbaceous wind barriers often collect wind-borne sediment that reduces the health and function of the barriers. It is important to move and reestablish barriers periodically to redistribute sediment over the field as appropriate.

### Certification

This practice can be certified by completing Table 2.

**HERBACEOUS WIND BARRIERS SITE SPECIFIC SHEET**

Land User:	County:	Date:
Farm #:	Tract #:	Field # (s):
<b>Purpose (check all that apply)</b>		
<input type="checkbox"/> Reduce erosion from wind	<input type="checkbox"/> Protect growing crops from damage by wind-borne soil particles	
<input type="checkbox"/> Reduce wind-borne sediment	<input type="checkbox"/> Provide food and cover for wildlife	
<b>Individual Barrier Layout and Plant Materials Information</b>		
Vegetation type: <input type="checkbox"/> Annual <input type="checkbox"/> Perennial		
Plant species:		
Number of plant rows per barrier:	Distance (inches) between plant rows (if more than 1):	
Seeding rate (number of pure live seeds/foot of row):		
Seeding date:	Seeding depth (inches):	
Planned effective barrier height (inches or feet):		
Total width of each barrier (inches or feet):		
<b>Barrier System Layout</b>		
Distance between barriers (feet):	Total number of barriers:	
Total area in barriers (acres):	Total amount of seed required (pure live seed – lbs):	
<b>Barrier Establishment</b>		
Site preparation and seeding:		
Seedbed:		
Fertilizer:		
Mulching:		
Other:		

**HERBACEOUS WIND BARRIERS SITE SPECIFIC SHEET**

<b>Operation and Maintenance</b>
Pest management:
Other:
<b>Additional Specifications and Notes:</b>

**Table 2 – Certification of Herbaceous Wind Barriers**

Field #	Grass (seeded)	Grass (vegetative)	Legume	Other
<b>Type</b>				
<b>Planting Rate</b>				
<b>Vegetation height (inches)</b>				
<b>Barrier width (feet)</b>				
<b>Date Applied</b>				
<b>Total area in barriers (acres)</b>				

As applied does this practice meet NRCS specifications?     Yes             No

<b>Certified By:</b>	<b>Date:</b>
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