



Plant Materials Fact Sheet

USDA Natural Resources Conservation Service

Temple, TX

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HERBACEOUS WIND BARRIERS CONSERVATION PRACTICE 422A



DEFINITION

Herbaceous wind barriers are tall grasses and other non-woody plants established in two rows spaced across the field perpendicular to the normal wind direction. Herbaceous wind barriers may consist of either annual or perennial vegetation. Annual vegetative barriers have the advantage of greater flexibility in accommodating the farming operation and they are often easier and cheaper to establish. However, perennial vegetative barriers will provide year-round protection and are especially effective in those drought years when barriers are difficult to establish but are critically important.

PURPOSE

Wind barriers reduce wind velocity across the field and intercept wind-borne soil particles; protect crops from damage by the wind; reduce pesticide drift; capture drifting snow and enhance soil moisture conservation; and provide food and cover for wildlife. Herbaceous wind barriers are especially useful on irrigated land under center pivot irrigation where taller, woody species would interfere with the pivot system.

PLANT SPECIES*	WILDLIFE VALUE**	GROWING SEASON***
Sorghum/Sudan*	H	A-W
Millet*	H	A-W
Wheat*	M	A-C
Oats*	M	A-C
Tall Wheatgrass	M	P-C
Switchgrass	H	P-W
Eastern Gamagrass	M	P-W
Big Sacaton	L	P-W
Vetivergrass*	L	P-W
<p>* Denotes an introduced species. ** L (Low), M (Moderate), H (High) *** A (Annual), P (Perennial), C (Cool), W (Warm)</p>		

PLANTING CONSIDERATIONS

- Identify the primary purpose of the practice (wind-borne soil retention, crop protection, wildlife habitat, snow retention, reduce pesticide drift etc.).
- Identify the season-of use (spring, summer, fall, or winter). The season-of-use will determine whether cool-season plants, warm-season plants, or a mix of both will provide the appropriate vegetative cover.
- Identify environmental factors affecting installation (soils, topography, rainfall, temperature, etc.).
- Locate available plants or seeds.
- Herbaceous wind barriers are normally established as part of a conservation management system in accordance with the landowner's objectives to address the soil, water, air, plant and animal needs of the land.

MANAGEMENT

Apply lime and fertilizer according to soil test recommendations. Plant into a firm, weed-free seedbed. Mow and fertilize to maintain plant density and vigorous plant growth. Control weeds. Reestablish annual barriers to ensure adequate growth before critical wind period. Replant gaps in perennial wind barriers. Adjust pesticide spraying to maintain wind barriers. Mow after the critical wind erosion period and maintain as much plant height as possible. Delay mowing until after the nesting season for ground-nesting birds and animals.

Specifications should be prepared in accordance with the local NRCS Field Office Technical Guide and the Herbaceous Wind Barrier practice standard (442A).



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