

Landowner _____



WHAT IS STRIPCROPPING?

Stripcropping is growing planned rotations of row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips across a field.

PURPOSE

Stripcropping is used on sloping land where crops are grown to:

- Reduce soil erosion from water and transport of sediment and other water-borne contaminants.
- Reduce soil erosion from wind.
- Protect growing crops from damage by wind-borne soil particles.

HOW IT HELPS THE LAND

Stripcropping is very effective at reducing wind erosion, as well as sheet and rill erosion. It is a low cost conservation practice and provides the opportunity to establish cropping system rotations. Stripcropping slows runoff from the land and increases water infiltration. This in turn increases moisture availability for crops, improves fertilizer utilization and increases crop yields. Crop rotations can be designed to add diversity to the farming operation as well as break pest cycles that may have developed in monoculture operations.

WHERE THE PRACTICE APPLIES

Stripcropping is a conservation option for sloping cropland where sheet and rill erosion is a problem or in fields where wind erosion is a concern.

Stripcropping may need to be used in combination with other conservation practices to achieve desired objectives.

WHERE TO GET HELP

For assistance in planning a stripcropping layout, contact your local Natural Resources Conservation Service or your local Conservation District office.

APPLYING THE PRACTICE

The width of the strips will need to be determined so that the erosion goal for the field is met. Keep in mind to try and install the width of the strips to best facilitate the operation of machinery. This will help to alleviate point rows.

Vegetation in the strips shall consist of erosion-susceptible crops alternated with erosion-resistant or sediment trapping crops such as grasses or legumes, hay crops, fallow un-tilled small grain residue or close grown crops that provide the needed protective cover during the target erosion period.

The strips will be parallel to each other on the field. Strips may be planted to annual crops or permanent vegetation. However, the system works best when the erosion-resistant strip is permanent vegetation.

The strips in the system will be of equal widths. Soil loss from the field will not exceed the soil loss objective. Contact your local conservation office for help with designing strip widths.

Stripcropping for Water Erosion

Stripcropping works best on fields where the slope of the field is even and consistent. When the field has extreme slope changes from side to side, maintaining row grade will be difficult and may require correction strips. Stripcropping works well in reducing sheet and rill erosion but may not control ephemeral erosion. Fields with slopes of 2.5% or greater begin to show evidence of ephemeral gully erosion. Additional practices such as terraces may be needed to control ephemeral gully erosion on these fields.

Strip boundaries shall run parallel to each other and as close to the contour as practical to achieve the greatest erosion reduction

Strips will be alternated down the slope starting with an erosion-susceptible strip followed by an erosion-resistant strip.

Strip widths shall be based on the approved erosion prediction technology. The width of the strip shall not exceed the “critical slope length” for contouring.

When dealing with soils that have slow to very slow infiltration rates or crops which are sensitive to ponding water, row grades should be designed with positive row drainage of not less than 0.2 percent.

The maximum row grade should not exceed one-half the up-and-down hill slope percent used for conservation planning, or 10 percent, whichever is less.

All runoff from stripcropping should be diverted to a stable outlet.

Stripcropping for Wind Erosion

Strips need to be oriented as close to perpendicular to the prevailing wind erosion direction as possible. In Oklahoma, strips designed in an east – west direction will provide adequate wind erosion protection.

The width of the erosion-susceptible strip will be determined using the currently approved wind erosion prediction technology.

Stripcropping – Design Sheet

Purpose (Check all that apply)		
<input type="checkbox"/> Reduce soil erosion by water and transport of sediment and other water-borne contaminants	<input type="checkbox"/> Reduce soil from wind erosion	<input type="checkbox"/> Protect growing crops from damage by wind-borne soil particles

Field	Width of Strips	Number of Strips	Erosion-Susceptible Crop	Erosion-Resistant Crop

Additional Design Information, Management and Maintenance

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