



## Contour Stripcropping and Where It Applies

Contour stripcropping is growing row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips on or near the contour of the field slope. The practice applies to any cropland where there is a sheet and rill erosion problem; and although this practice may be applicable on steeper slopes, it will be less effective in achieving its purpose on slopes exceeding 15 percent.

## Benefits of A Contour Stripcropping System

Contour stripcropping has the greatest impact where cropped or fallow strips having less than 10 percent cover are alternated with close grown and/or grass/legume strips, or with crop strips under residue management (no-till or strip-till) that have a minimum of 75 percent surface cover.

Soil loss can be reduced by as much as 75 percent, depending on the type of crop rotation and the steepness of slope. Strips planted to grasses, legumes, or mixes can provide food and cover for wildlife. Other benefits include moisture retention, soil improvement, increased yields and farm profits.

## Requirements for Establishing A Contour Stripcropping System

To achieve a substantial reduction in soil loss, at least 90 percent of the crop area should have rows within a maximum grade of 1.5 percent on field slopes of 3 percent or more. Row grades cannot exceed an amount equal to one-half of the field slope percent when field slopes are less than 3 percent.

The remaining 10 percent or less of the crop area may have rows with a maximum grade of 3 percent, or one half of the field slope percent, whichever is less. NOTE: Row grade percent or field slope percent refers to the vertical change in feet for every 100 feet of horizontal distance.

Strip boundaries run parallel to each other as long as row grades remain within acceptable limits. When row grades reach the maximum allowed, a correction strip and new baseline are established for the layout of the next crop strip.

The width of crop strips is determined by field slope criteria that can be provided by NRCS.

The width of correction strips may vary, but should be wide enough to accommodate farm implements, which will traverse the strip. These strips should be established to permanent grasses, legumes or grass/legume mixtures.

## Stable Outlets

All runoff from contouring systems shall flow on to stable outlets. Stable outlets include grassed waterways, terraces, diversions, sediment basins, field borders, filter strips and other similar measures.

## Considerations

Landowners may want to consider the possibility of removing obstructions in the fields or changing field boundaries prior to installing contour strip systems. This will create a more effective system and will improve the farm equipment operation and efficiency. (Special attention should be given to *not remove* critical wildlife habitat.)

Additional planning and considerations should be given to establishing any permanent vegetative strips to grasses and/or legume species or mixes to encourage or enhance desired wildlife species and their needs.

Any correction strips that are needed and planned for hay should be wide enough to accommodate harvesting equipment.

In areas of concentrated flow or defined drainage patterns, waterways or other conveyances may be needed to prevent erosion.

Field borders and/or filter strips should be considered at the end of the strips and at the lower edge to receive and handle any diverted surface runoff. These areas should be planned for permanent vegetation for use as hay or wildlife habitat.

Permanent vegetative strips may be considered as well through the field to permit readjustment of row layout. This may be necessary on ridge tops or irregular slopes to realign row patterns to accommodate farm equipment for planting, tillage, and harvesting.

The conservation crop rotation on stripcropped fields should be consistent with the farm enterprise crop mix and/or associated livestock operation. These will influence the proportion of row crops, close growing crops, and meadow crops.

To avoid wide fluctuations in acreage of different crops from year to year, fields having identical crop rotations can be set up that are nearly equal in size and have offset years of rotation commencement. The number of fields needed to produce a nearly constant acreage of each crop for each year in the rotation is equal to one half of the years in the rotation. Even-year rotation lengths are preferable to odd-year rotation lengths for ease of design.

Additional conservation practices may need to be used in combination with the contour farming practice to meet the goals of the conservation management system.

## Operation and Maintenance

Conduct all farming operations parallel to the crop strip boundaries.

Substituting a crop different from one called for in the planned crop rotation, or adjusting the crop rotation due to failed crops or loss of stand, is acceptable, provided neither situation allows two adjacent erosion-prone strips.

Width and alignment of contour strips will be maintained in accordance with original design.

Soil test at least once every 3 years, and apply needed lime and fertilizer on the correction strips to maintain a vigorous and dense growth of vegetative cover.

Control weeds and woody growth on vegetated correction strips by appropriate methods. For wildlife benefits, do not mow during the nesting season (April 1 - August 15). NOTE: Removal of the cut material by haying, etc., will enhance wildlife habitat. Do not leave a stubble height of less than 8 inches when cutting native warm season grasses.

Monitor the contour stripcropping system on a continuous basis and inspect for row breakovers and/or excessive scouring along row furrows. NOTE: Measures should be taken to correct any problems detected as soon as feasible and practical.

Maintain diversions or terraces, installed in conjunction with a contour stripcropping system, in accordance with their respective original design, layout, and construction.

Periodically inspect, and adequately maintain grassed waterways, field borders, filter strips, turn strips, or other measures used to receive and convey runoff from the field, and/or used to facilitate equipment operation.

# Contour Stripcropping Layout and Planned Rotation

Landowner \_\_\_\_\_ Tract # \_\_\_\_\_ Field # \_\_\_\_\_

## Stripcropping layout

Strip width (ft.) \_\_\_\_\_

Rotation \_\_\_\_\_

## Plant Materials Information

Seeding Date	Est. Acres	Species	Seeding Rate lbs/acre <sup>1/</sup>	Total Seed lbs.	Lime tons/acre <sup>2/</sup>	Totals
					Fertilizer lbs/acre <sup>2/</sup>	
					N	
					P	
					K	

1/ Pure Live Seed

2/ Rates based on current soil test

## Correction Strip Establishment (If Applicable)

### Site Preparation

Prepare a weed-free, firm seedbed. Apply lime and fertilizer (in accordance with a current soil test) at time of seedbed preparation, and incorporate into the top 3 to 6 inches of soil.

### Planting Methods

Drill grass and/or legume specie or mixes \_\_\_\_\_ inches deep uniformly over the area. May include small grain or a summer annual as a nurse crop at the rate of \_\_\_\_\_ pounds per acre. Note: Clip or harvest the nurse crop before it has an adverse effect on the growth of the permanent species.