

Stripcropping, Field (Acre) 586

DEFINITION

Growing crops in a systematic arrangement of strips or bands across the general slope (not on the contour) to reduce water erosion. The crops are arranged so that a strip of grass or a close-growing crop is alternated with a clean-tilled crop or fallow.

PURPOSE

To help control erosion and runoff on sloping cropland where contour stripcropping is not practical.

CONDITIONS WHERE PRACTICE APPLIES

On sloping cropland and on certain recreation and wildlife land where the glacial topography is too irregular to permit contour farming.

GENERAL CRITERIA

Specify width of strips for different crops, percentage of slopes, and soils. The current erosion prediction technology will be used to determine strip width.

Strips shall be of approximately equal width, with alternating row crops and drilled crops. Drilled crops shall be a small grain crop, or established grass/legume with narrow rows.

No two adjacent strips will be clean tillage or fallow.

Strips shall:

- Be laid out across the general field slope. As a general rule, strips will be designed on the contour as practical but not parallel with the existing field border.

- Follow guidelines laid out about parallel to a contour line.
- Deviate strip width only to the extent necessary for the practical operation of farm machinery.
- Provide adequate row drainage, a slight grade of two percent or less, except that a grade not exceeding three percent can be used for alignment within 100 feet of an outlet.

Grassed waterways, water and sediment control basins, and diversions can be established and maintained where concentrated flow could cause gully erosion.

Field equipment operation shall be parallel to guidelines. Short or point row should be placed in the center of the strip on well-drained soils. (Soil management groups 1-5a.)

Crop residue cover or cover crops will be left over winter where the strips were planted to row crops.

Turn strips and end rows will be protected to prevent erosion above the tolerable soil loss. End row and turn strips subject to excessive water erosion will be seeded to permanent cool season grass and legume cover per the NRCS MI Critical Area Planting standard (342).

PLANNING CONSIDERATIONS

Strip width will consider the soil, topography, soil loss requirement to address the resource concern, crop rotation, herbicide carryover or runoff potential; and machinery used. Use the latest erosion prediction technology to determine strip width. Use the WIN-PST Model to determine herbicide effects on joining crops.

Water quality considerations include: 1) Filtering effects of vegetation on movement of sediment and dissolved and sediment-attached substances; 2) Effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances carried by runoff; 3) Effects on the visual quality of downstream water resources.

Wildlife considerations include:

- Sowing crops in strips that produce seed eaten by mourning doves, quail, geese, pheasant and other wildlife species.
- Using residue management practices such as no-till, mulch tillage or ridge tillage to provide food and cover for wildlife during winter.
- Maintain fencerows, hedgerows, or stone walls for additional food and cover or establishing woody hedgerows to improve wildlife habitat.
- Locate and plant woody hedgerows along the strip boundary to provide winter food, cover and travel lanes for many wildlife species.
- Delay mowing areas maintained in sod until after July 15 to improve survival of ground nesting bird offspring.