

Stripcropping

Nebraska Conservation Planning Sheet No. 6

What is stripcropping?

Stripcropping is a system of growing crops in approximately even width strips or bands to reduce soil erosion, reduce particulate emissions into the air and improve water quality. The crops are arranged so that a strip of protective cover (perennial vegetation or high residue) is alternated with a less protective cover (low residue).

How stripcropping helps the land

A properly functioning stripcropping system is very effective for reducing water erosion, controlling wind erosion and protecting growing crops from damage by wind-born soil particles. Stripcropping can reduce soil loss as much as 75 percent, depending on the type of crop rotation, soil and slope.

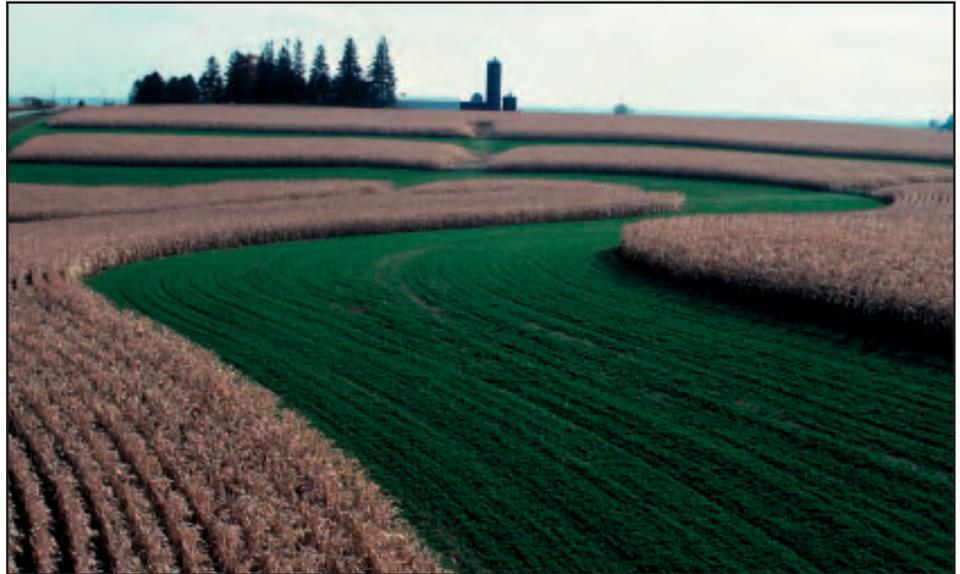
Where the practice applies

Stripcropping is a conservation option for any cropland where water or wind erosion, or crop damage from wind blown soil particles, is a problem.

Where to get help

For assistance in planning and establishing a stripcropping system on your farm, contact the Natural Resources Conservation Service. The NRCS staff can develop a conservation plan for your farm. Refer to NRCS Stripcropping Conservation Practice Standard (585) for specific information concerning:

- Results of NRCS-approved erosion prediction tools
- Width of strips



- Alignment, orientation of strips:
 - Perpendicular to prevailing wind direction (wind erosion)
 - Cross slope or along contour (water erosion)
 - Vegetative cover (crop rotation)
 - Stable outlets (water erosion)
 - Supporting or facilitating conservation practices
 - Adjusting strip widths to accommodate machinery
- Field # / Tract _____
- Strip Width _____
- Rotation _____
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- Rotation _____

Requirements of stripcropping

Here are the maximum strip widths and rotation to be used in your fields:

- Field # / Tract _____
- Strip Width _____
- Rotation _____
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- Strip Width _____
- Rotation _____

Strip widths may be adjusted, generally downward, to accommodate machinery widths.

Crop Rotation Codes:

- A = alfalfa
- O = oats
- C = corn
- SB = soybeans
- W = wheat
- GS = grain sorghum

Applying the practice

This practice is considered to be applied when the strip widths are in place and the most conserving crop has been planted at least once in the field.

Here are tips on planning your system:

- Estimate how many acres of each crop you want every year.
- Make sure your crop rotation allows for alternating row crops or low residue crops with small grains or perennial vegetation.
- Be sure herbicide carry over won't be a problem.
- Decide if you want to remove fences to get longer rows.
- You can do some planning by sketching out your strips on paper and labeling the crop in each strip year by year for the next five to seven years.

Other Considerations

General:

- To be most effective, not more than half the area in stripcropping should be in row crops or low residue crops any one year. Strips of crops like corn, grain sorghum, soybeans, sunflowers, potatoes, sugar beets and all other row crops and/or low residue crops must be alternated with strips of perennial vegetation (legumes, grasses) or small grains. To balance the acres of crop production, the years in the crop rotation divided by 2 should equal the number of stripcropped fields or units. The fields or units should be as close to the same size as possible. Example: A corn, corn, oats, alfalfa, alfalfa

(CCOAAA) rotation would work best with three fields or units of equal size.

Water erosion:

- Stable outlets need to be established as necessary where runoff results in concentrated flow erosion (grass waterways, field borders, filter strips, water and sediment control basins, or underground outlets for use with terraces and diversions).
- Leave grass turn strips where turns become sharp. Turn strips should be wide enough to make a turn with tractor and equipment.
- Odd areas can be tilled and planted parallel to adjacent strips. This will help runoff water move slowly off the field. Odd areas can also be used for hay production or wildlife habitat.
- If strips are not the same length, plant from the longer strip to the shorter one; otherwise, plant from the bottom strip up.

Wind erosion:

- Orient strips as close to perpendicular to the prevailing wind erosion direction as practical. When the orientation of strips deviates from perpendicular, the width of these strips shall be correspondingly reduced.

Protect growing crops from wind blown soil damage:

- Strips shall not exceed the width permitted by the crop seedling tolerance to wind erosion. Listed below is crop seedling tolerance from wind erosion estimates in tons of soil lost per acre per year.

Crop	Estimated Crop Seeding Tolerance (T/Ac/Yr)
Alfalfa	0 to 0.5
Corn	2
Grain Sorghum	1/
Green/snap beans	1
Millet	1/
Peas	1
Potatoes	1
Rye	1/
Soybeans	2
Sugar Beets	0 to 0.5
Sunflowers	2
Wheat	1/
1/ Crops will likely tolerate soil blowing equal to or greater than the tolerable soil loss.	

For more information refer to the Nebraska Field Office Technical Guide (eFOTG) Section IV, Conservation Practice Standard – Stripcropping, (585), available at http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=NE or visit your local Natural Resources Conservation Service office.

