Conservation Cropping Sequence

Can be a rotation or the same crop planted continuously

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What is a conservation cropping sequence?

A conservation cropping sequence is the pattern of crops grown on the same piece of land. Crops may change year by year or be the same crop planted continuously.

This may include alternating crops from a high residue producing crop, such as corn or small grain, to a low residue producing crop like soybeans or edible beans. It may also involve a long or short term rotation to a legume or grass. It may include alternating corn or grain sorghum with small grain, which may include a fallow year in western Nebraska. It may include continuous high residue crops like corn.

How it helps the land

The effect a conservation cropping sequence will have on the land varies depending upon the capability of the land, the type of crops grown, whether crops are rotated, how crops are grown, and how crop residue is managed.

Grass or legumes are often the most conserving crop in a rotation. Good stands are needed to produce high yields, increase profit, return more organic matter to the soil, improve or maintain soil tilth, and to do an effective job of controlling soil erosion. Conservation cropping sequences can also conserve soil moisture, break pest cycles, and provide wildlife habitat.

Where the practice applies

Soil-saving conservation cropping sequences can be used where water and wind erosion are a problem in cropland. For water erosion, conservation cropping sequences work best with other conservation practices such as terraces, conservation tillage, contouring, stripcropping, grassed waterways, and others. For wind erosion, conservation cropping sequences work best with other practices such as wind stripcropping, conservation tillage, field windbreaks, row directions perpendicular to prevailing winds, ridge roughness, vegetative barriers, and others.

Where to get help

Your local Soil Conservation Service office can assist in selection of a conservation cropping sequence that will control soil erosion and fit into your farming system.

Requirements for a conservation cropping sequence

In order to reach the planned level of erosion reduction, you must follow the crop sequence listed under the "Conservation Cropping Sequence" in your conservation plan (for specific field(s)).

Applying the practice

This practice is considered applied when the proper sequence of crops has been planted in each specified field. All fields within the cropping sequence will need to be rotated in the proper sequence and the most conserving crop planted in each specified field in the proper year. The "most conserving" crop is the crop with the lowest overall erosion potential in the specified crop rotation.

Other considerations

In general, crops can be categorized into high and low residue producing groups. The high residue producing crops are considered more conserving because they provide better protection to the land than the low residue producing crops. Knowing which kind of crop you are growing can be useful in planning any crop substitutions. Common Nebraska crops are listed below.

High residue crops:

- corn (grain)
- sorghum (grain)
- small grains
- perennial forages (grass or legumes)
- all crops with a winter cover crop

Low residue crops:

- corn (silage)
- cane or forage sorghum (silage, green chop, hayed)
- soybeans
- sunflower
- vegetable crops
- sugar beets
- field beans
- pinto beans
- lima beans
- potatoes

Maintaining the practice

After the most conserving crop is established it will continue to be rotated with the other crops in subsequent years.

Adjusting the sequence

Weather conditions, unexpected herbicide carryover, and marketing considerations may affect year-to-year cropping decisions which may require a change in your scheduled sequence. Simple adjustments can often be made by following these guidelines:

- All crop substitutions for wind erosion plans must maintain the level of residue cover required in March, April, and May.
- Small grains can be substituted for corn, grain sorghum, or low residue crops when the same residue cover is maintained.
- Corn (grain) or grain sorghum can be used to replace soybeans or any other low residue crop when the same percentage of residue cover is maintained.
- For crop rotations which include grasses and/or legumes, the rotation can be lengthened by maintaining the existing hay stand for additional years.
- Grasses and legumes may be substituted for all crops.
- Any high residue crop can be substituted for any low residue crop when the same percentage of residue cover is maintained.
- Crop sequences with grasses and/or legumes cannot be lengthened with additional years of annually planted crops without working with SCS prior to planting.

Any crop substitution which is outside of those identified above should be approved by SCS prior to planting the crop.

This table may be used to help schedule rotations. Fill in the blanks with the appropriate crop for that year. The most conserving crop is circled.

Field # / Tract	_____	_____	_____	_____	_____
Year rotation begins	_____	_____	_____	_____	_____
Year 1	_____	_____	_____	_____	_____
Year 2	_____	_____	_____	_____	_____
Year 3	_____	_____	_____	_____	_____
Year 4	_____	_____	_____	_____	_____
Year 5	_____	_____	_____	_____	_____
Year 6	_____	_____	_____	_____	_____
Year 7	_____	_____	_____	_____	_____
Year 8	_____	_____	_____	_____	_____
Year 9	_____	_____	_____	_____	_____
Year 10	_____	_____	_____	_____	_____

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