

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RESIDUE MANAGEMENT, SEASONAL
(ACRE)
CODE 344

DEFINITION

Managing the amount, orientation and distribution of crop and other plant residues on the soil surface during part of the year, while growing crops in a clean tilled seedbed.

PURPOSES

This practice may be applied as part of a conservation management system to support one or more of the following:

- * Reduce sheet and rill erosion.
- * Reduce soil erosion from wind.
- * Conserve soil moisture.
- * Provide habitat for wildlife.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all cropland and other land where crops are grown.

This standard includes residue management methods practiced during the part of the year from harvest until residue is buried or incorporated by tillage for seedbed preparation.

CRITERIA

General Criteria Applicable to All Purposes Named Above

Loose residues to be retained on the field shall be uniformly distributed on the soil surface. Where combines or similar machines are used for harvesting, they shall be equipped with spreaders capable of redistributing residues over at least 80 percent of the working width of the header.

Residues shall not be burned.

Additional Criteria to Reduce Wind, Sheet and Rill Erosion

The amount of residue shall be sufficient to provide a minimum of 50% ground cover, using the line transect method. Partial removal of residue by baling or grazing shall be limited to retain the amount needed. The remaining residue shall be maintained on the surface through periods when sheet and rill erosion occurs, or until planting, whichever occurs first.

Any tillage that occurs during the management period shall be limited to methods which leave residue on the surface and maintain the planned cover condition.

Additional Criteria to Provide Habitat for Wildlife

The amount of residue, height of the stubble, and length of the management period necessary for meeting habitat requirements for the target species or wildlife population shall be determined using an approved habitat evaluation procedure.

For example, for quail, height of protective cover is most often the limiting factor. Other species, like wild turkeys or white tail deer are limited by the amount of food available.

Residues shall not be removed unless it is determined by the habitat evaluation procedure that such removal will not adversely affect habitat values.

Tillage shall be delayed until the end of the management period to maintain the food and cover value of the residue.

CONSIDERATIONS

Excess removal of plant residue by baling or grazing often produces negative impacts on

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resources. These activities should not be performed without full evaluation of impacts on soil, water, animal, plant, and air resources.

Production of adequate amounts of crop residue necessary for the proper functioning of this practice can be enhanced by selection of high residue producing crops and crop varieties, by the use of cover crops, and by adjustment of plant populations and row spacing.

Crop selection influences residue persistence. Grass residues generally persist longer than legumes. Residue from mature plants generally persist longer than from immature plants.

When planting on a clean seedbed, exposure to erosion and loss of soil moisture can be minimized by completing tillage and planting in a single operation, or by the delay of primary tillage as much as practical before planting.

The value of residue for wildlife habitat can be enhanced by leaving rows of unharvested crop standing in appropriate locations for use by desired wildlife species. For example, quail and rabbits will only utilize food adjacent to heavy cover.

PLANS AND SPECIFICATIONS

Specifications for establishment and operation of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation and Maintenance described in this standard.

Specifications shall be recorded using approved certification sheets, job sheets, narrative statements in the conservation plan, or other acceptable methods.

OPERATION AND MAINTENANCE

Operation and maintenance shall be in keeping with this standard.