

NATURAL RESOURCES CONSERVATION SERVICE  
MONTANA CONSERVATION PRACTICE SPECIFICATION  
**CONSERVATION CROP ROTATION (ACRE)**

**CODE 328(D)**

**ANNUAL CROP-HAYLAND/PASTURE**

**DEFINITION:** A sequence of adapted crops designed to maintain, protect, or improve the health and productivity of the soil and related natural resources. This rotation applies to all land where all annual crops make up at least one-third of the crop sequence on a time basis.

**Annual Crop Rotation: Annual Crop - Hayland/Pasture Rotation:** This rotation is designed to include numerous years of annual crops and then rotated to a perennial forage crop appropriate for hayland and/or pasture use. This rotation applies where irrigation water is available or when growing season precipitation plus stored plant available soil moisture is greater than 9 inches 7 out of 10 years.

**CONSERVATION MANAGEMENT SYSTEM:** A conservation crop rotation is established as part of a conservation management system to address the soil, water, air, plant, animal, and human needs as related to the owner's goals and objectives. It is important to consider nutrient and pest management, crop residue management, agricultural waste utilization, and other supportive conservation practices when designing a crop rotation. A properly designed crop rotation can also provide substantial forage for livestock and improve soil health and the overall sustainability of the agricultural production system. A crop rotation is most effective in providing conservation benefits when used in combination with other agronomic or structural practices.

The crop rotation, in combination with other supporting practices, must include enough high residue producing crops to protect soil from erosion (planned to "T" or below). High residue crops include corn or sorghum for grain, small grains harvested for grain, alfalfa and grass cut for hay, winter cover crops, or the addition of manure (10 tons per acre is approximately equal to 20-30% residue).

If crop residues are to be removed or low residue crops are grown, protection against erosion may be provided by fall seeded small grain crops, cover crops, legumes, grasses, or the addition of residue or manure.

Perennial crops should be used to build and maintain soil quality. High organic matter levels are needed to maintain or improve infiltration rates, soil structure and tilth, and soil fertility. Practices that will maximize precipitation utilization and allow the most infiltration into the soil should be used.

When excess soil moisture exists beyond normal rooting depths, planting perennial crops such as grasses and alfalfa may be necessary for several years to reduce water tables and potential salinity problems.

**WILDLIFE:** Crop rotations can enhance wildlife objectives depending on the vegetative species used and management practiced. Consider using species that can provide food and cover for important wildlife and pollinator species.