

CONSERVATION CROP ROTATION

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service



CONSERVATION CROP ROTATION

This practice means growing various crops on the same piece of land in a planned sequence. This sequence may involve growing high residue producing crops such as corn or wheat in rotation with low residue producing crops such as vegetables or soybeans. The rotation may also involve growing forage crops in rotation with various field crops.

PRACTICE FUNCTIONALITY

The effects crop rotation have on the land varies with the soil type, crops produced, farming operations, and how the crop residue is managed. The most effective crops for soil improvement are fibrous rooted high residue producing crops such as grass and small grain. Perennial plants used for forage are very effective in crop rotations due to increases in organic matter and reduced soil erosion. In

addition, crop rotations help break insect, disease and weed cycles.

Rotations add diversity to farm operations and often reduce economic and environmental risks. Crop rotation is a low cost practice that often forms the basis for other conservation practices. Practices such as residue management, contouring, stripcropping, diversions, terraces and grassed waterways may not function properly without a planned crop rotation. Major benefits include:

1. Reduced runoff and erosion
2. Increased organic matter
3. Improved soil tilth
4. Reduced pests
5. Fewer chemicals needed
6. Better moisture efficiency
7. Higher yields
8. Improved aesthetics and wildlife habitat