Residue and Tillage Management, Reduced Till (Code 345)

Residue and tillage management, reduced till practice manages the amount, orientation, and distribution of crop and other plant residue on the soil surface year round while limiting the soil-disturbing activities used to grow and harvest crops in systems where the field surface is tilled prior to planting.

Practice Information

This practice includes tillage methods commonly referred to as mulch tillage where a majority of the soil surface is disturbed by noninversion tillage operations such as vertical tillage, chiseling, and diskling, and also includes tillage/planting systems with relatively minimal soil disturbance.

Mulch tillage includes the uniform spreading of residue on the soil surface, planning the number, sequence, and timing of tillage operations to achieve the prescribed amount of surface residue needed and using planting equipment designed to operate in high residue situations.

This practice benefits soil by increasing organic matter, improving soil tilth, and increases productivity as the constant supply of organic material left on the soil surface is decomposed by a healthy population of earth worms and other organisms.

Operations and maintenance for this practice includes evaluating the crop residue cover and orientation for each crop to ensure the planned amounts, orientation, and benefits are being achieved.

Common Associated Practices

Residue and Tillage Management, Reduced Till (Code 345) is commonly applied with practices such as Conservation Crop Rotation (Code 328), Nutrient Management (Code 590), Integrated Pest Management (Code 595), and Irrigation Water Management (Code 449).

For further information, contact your local NRCS field office.