ADVANTAGES OF REDUCED TILLAGE

1. Reduces soil erosion by up to 90 percent compared to tilled, unprotected fields with no or limited residue on the surface.

2. Improves water quality by retaining soil and associated nutrients (especially phosphorus) in the field, lessening runoff into waterbodies.

3. Enhances soil health and increases organic matter.

4. Decreases the amount of compaction.

5. More water held in the soil profile due to residues capturing moisture and shading the soil.

6. Reduces soil erosion and runoff due to buffering energy from raindrops.

7. Improves air quality through less wind erosion, tying up carbon in the soil and reducing the release of carbon dioxide into the air.

8. Reduces machinery wear with fewer trips, saving up to $5 per acre on wear and maintenance.

9. Saves fuel by up to 3.5 gallons per acre compared to more intensive tillage.

10. Reduces labor and saves time with fewer trips across the field.

Source: Purdue University