Less Till, More Yield

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Problem
Erosion of farmland in southeastern Idaho

How Does No-Till Work?
- Crops left on ground after annual harvest
- Root systems hold soil particles together
- Soil is not washed or blown away

Costs and Benefits

Tillage Comparison
No-Till
- Planting and spraying only

Conventional Tillage
- Cultivating
- Planting
- Disking
- Plowing

Assessment Steps
Measure changes in crop yield, soil erosion, and soil quality
- Compare to USDA's Web Soil Surveys from 1981 and 2011
- Talk to farmers and local soil surveyors

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References
Hoffmann, Glenn. Email interview. 12 Nov. 2013.

Background
- Prime farmland
- High winds
- 5.8 tons/acre/yr lost
- Sporadic heavy rainfall

Solution
No-till farming

Costs and Benefits

Economics of Conventional Tillage Vs. No-Till

- Increased crop yield
- Reduced soil erosion
- Low running cost
- More organic soil
- Better for environment
- Soil moisture control