# Ag & Energy Conservation Practices Lesson 3

**Tillage Energy Estimator**

For the first three questions start with the base scenario: Farm near Des Moines, Iowa (zip code 50312). 300 acres corn, 200 acres soybeans. Diesel fuel cost of $2.30 per gallon.

1. How many gallons of fuel could be saved if changing from conventional tillage to no-till? \_\_\_\_\_\_\_\_\_\_\_
2. How many dollars could be saved in switching from conventional tillage to mulch tillage? \_\_\_\_\_\_\_\_\_\_\_
3. If a farmer is using no-till practices, how much would total fuel cost increase if the price of diesel increased to $2.40 per gallon? \_\_\_\_\_\_\_\_\_\_

Consider a farmer near Omaha, Nebraska (zip code 68022) with 250 acres of corn and 250 acres of soybeans.

1. If diesel costs $2.40 per gallon what is the total fuel cost for conventional tillage? \_\_\_\_\_\_\_\_\_\_
2. What is the total fuel cost for no-till? \_\_\_\_\_\_\_\_\_\_
3. If the farmer switched all their acres to no-till corn how much would total fuel cost be? \_\_\_\_\_\_\_\_\_\_\_ And if they switched all acres to no-till soybeans? \_\_\_\_\_\_\_\_
4. How much money would the farmer save if they only planted soybeans? \_\_\_\_\_\_\_\_

Consider a farmer near Havre, Montana (zip code 59501) with 150 acres of barley and 150 acres of winter wheat. Diesel is $2.70 per gallon.

1. How many gallons of fuel would the farmer save if they switched from conventional tillage to no-till? \_\_\_\_\_\_\_\_\_\_\_\_