

# Soil Health Questionnaire: costs and benefits for farms in New York State

**Background:** This questionnaire for farmers is coordinated by Cornell University as part of the New York State Soil Health Initiative, funded by NYS Ag & Markets. The initiative is focused on soil health, farm sustainability, environmental quality, and resilience of agriculture to extreme weather events. Completion of this questionnaire is voluntary and anonymous.

**Instructions:** For farmers only! Complete all sections that apply to your primary farm only. If a question does not apply, leave blank or write "NA". This form can also be completed online at: <https://tinyurl.com/NYsoilsurvey>

**Mail completed forms to:**  
**New York State Soil Health Initiative**  
**126 Plant Science Building**  
**Cornell University**  
**Ithaca, NY 14853**

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<https://blogs.cornell.edu/soilhealthinitiative/>  
 Follow us on Facebook at: fb.me/NYsoilhealth

Please indicate the location of your farm ("your farm" is the farm where you contribute most significantly in planning and operation; *report for this farm only*):

State: \_\_\_\_\_ County(s): \_\_\_\_\_

Do you consider any of the following factors to be significant constraints on crop production at your farm? (Circle all that apply):

- |                               |                      |                             |
|-------------------------------|----------------------|-----------------------------|
| a. Soil compaction            | e. Flooding          | i. Low soil fertility       |
| b. Soil erosion               | f. Poor weed control | j. Insufficient labor       |
| c. Inadequate water retention | g. Insect pests      | k. Other constraints: _____ |
| d. Poor drainage              | h. Crop diseases     |                             |

In the following table, please indicate the approximate number of acres you have in production for each crop category at your farm, and check the boxes as applicable:

<i>Cropping system</i>	<i>Number of acres</i>	<i>In rotation?</i>	<i>with cover crops?</i>	<i>with reduced tillage?</i>	<i>Certified organic?</i>
<i>Grains, oil seeds, dry beans</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Corn or soybean for feed</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Tree fruit and/or grapes</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Berry crops (incl. strawberries)</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Vegetables (incl. potatoes)</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Alfalfa, pasture, hay</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other forage crops</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other crops: _____</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Complete the following sections as applicable:

**Tillage Practices:** For approximately how many years have you used reduced tillage (no-till, zone-till, strip-till) on your farm? (Circle only one):

- |                  |                       |   |
|------------------|-----------------------|---|
| a. 1 to 5 years  | c. 10 to 20 years     | e. Reduced tillage is not used (skip to Cover Crops, next page) |
| b. 5 to 10 years | d. More than 20 years |   |

What are your added expenses associated with your reduced tillage practices, compared to conventional tillage? (Circle all that apply):

- |                                   |                                    |                       |
|-----------------------------------|------------------------------------|-----------------------|
| a. Specialized tillage equipment  | c. Greater herbicide-related costs | e. Other costs: _____ |
| b. Specialized planting equipment | d. Increased labor                 |                       |

What reductions in expenses do you attribute to your reduced tillage practices? (Circle all that apply):

- |                               |  |                             |
|-------------------------------|--|-----------------------------|
| a. Reduced insecticide inputs | d. Reduced labor, fuel, or equipment     | g. Easier or faster harvest |
| b. Reduced herbicide inputs   | e. Less erosion or sedimentation repairs | h. Reduced irrigation       |
| c. Reduced fertilizer inputs  | f. Avoided drainage investments          | i. Other reduction: _____   |

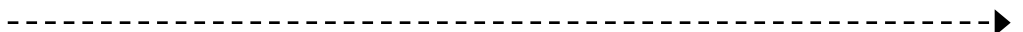
What effect on farm income do you attribute to your reduced tillage practices? (Circle all that apply):

- |                   |  |                                  |
|-------------------|--|----------------------------------|
| a. Greater yields | c. Access to cost-share programs or incentives: Please list: _____ | d. Other effect on income: _____ |
| b. Reduced yields |  |                                  |

How would you describe the profitability of your reduced tillage practices on your farm over the long term (compared to 100% conventional)? (Circle only one):

- |                            |                                    |   |
|----------------------------|------------------------------------|---|
| a. Increases profitability | c. Neutral impact on profitability | d. Other impact on profitability: _____ |
| b. Decreases profitability |                                    |   |

Survey continues on other side of page



**Cover Crops:** For approximately how many years have you used cover crops on your farm? (Circle only one):

- a. 1 to 5 years
- b. 5 to 10 years
- c. 10 to 20 years
- d. More than 20 years
- e. Cover crops are not used (skip to **Soil Amendment Practices**, this page)

What are your added expenses associated with establishing and managing your cover crops? (Circle all that apply):

- a. Cover crop seed costs
- b. Cover crop termination costs
- c. Greater nitrogen requirements
- d. Additional research, scouting, or labor
- e. Planting or rolling equipment (modification, purchase, or rental)
- f. An outside party is hired to plant and manage my cover crops
- g. Other costs: \_\_\_\_\_

What reductions in expenses do you attribute to the use of cover crops? (Circle all that apply):

- a. Reduced insecticide inputs
- b. Reduced herbicide inputs
- c. Reduced fertilizer inputs
- d. Reduced labor, fuel, or equipment
- e. Less erosion or sedimentation repair
- f. Avoided drainage investments
- g. Easier or faster harvest
- h. Reduced irrigation
- i. Other reduction: \_\_\_\_\_

What effect on farm income do you attribute to the use of cover crops? (Circle all that apply):

- a. Greater yields of cash crops
- b. Reduced yields of cash crops
- c. Source of animal forage (use/sale) \_\_\_\_\_
- d. Access to cost share programs or incentives. Please list: \_\_\_\_\_
- e. Other effect on income: \_\_\_\_\_

How would you describe the profitability of your cover crop practices on your farm over the long term? (Circle only one):

- a. Increases profitability
- b. Decreases profitability
- c. Neutral impact on profitability
- d. Other impact on profitability: \_\_\_\_\_

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**Soil Amendment Practices:** Do you apply any of the following to your farm fields? (Circle all that apply):

- a. Lime
- b. Vegetative mulch (e.g. straw, bark or woodchips, leaf litter)
- c. Animal manure
- d. Biochar
- e. Compost
- f. Compost tea
- g. Other amendments used: \_\_\_\_\_

How would you describe the profitability of your soil amendment practices on your farm over the long term? (Circle only one):

- a. Increases profitability
- b. Decreases profitability
- c. Neutral impact on profitability
- d. Other impact on profitability: \_\_\_\_\_

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**Weather Extremes:** In your experience on your farm, have any of the following practices. ....

..... improved your soils in ways that minimize the effects of drought on crop yields? (Circle all that apply):

- a. Reduced tillage
- b. Cover crops
- c. Soil amendments
- d. No experience to report

..... improved drainage after heavy rainfall in ways that minimize negative effects on crop yield or field access? (Circle all that apply):

- a. Reduced tillage
- b. Cover crops
- c. Soil amendments
- d. No experience to report

..... reduced erosion losses due to heavy rainfall? (Circle all that apply):

- a. Reduced tillage
- b. Cover crops
- c. Soil amendments
- d. No experience to report

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**Final Section:**

Approximately what percent of your personal livelihood (monetary income and/or other resources) is supplied from your farm? (Circle only one):

- a. Less than 25%
- b. 25% to 50%
- c. 50% to 75%
- d. More than 75%

In how many of the last 5 years did your farm purchase crop insurance? (Circle only one):

- a. 0
- b. 1 to 2
- c. 3 to 4
- d. 5

Would you be willing to further discuss your soil health practices and related economic benefits with a Soil Health Initiative representative? Yes / No

If yes, please provide contact information here (Contact information will be kept confidential):

Email: \_\_\_\_\_ Phone: (     )

Additional information or comments: \_\_\_\_\_

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**Thank You! Your participation in this survey of New York State farms is much appreciated!**