



WORKSHOP SERIES TEMPLATE

For

Advanced Soil Health Training for Illinois Ag Professionals

Implemented: March 2016 – June 2017

Draft template prepared for SARE: Our Farms Our Future Conference, April 2-5, 2018

PURPOSE & NEED

There is, appropriately, increasing attention towards “soil health” in the agricultural and conservation communities. A common response is: “healthy soil has a high percentage of organic matter” or “soil is not eroding” or “it is not compacted”. But those are simply descriptions of the physical characteristics of the soil – they are not describing the soil as a living, dynamic community.

The NRCS defines soil health as *the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals and humans*. Cornell University adds that *a healthy soil can be used productively without adversely affecting its future productivity, the ecosystem or the environment*. Soils have physical, chemical and biological properties that all need to be “healthy” to be fully functioning; and these properties need to be managed well. In the agricultural community a lot is understood about the physical (% sand, silt and clay; bulk density; percent organic matter) and chemical (pH, N, P, K, micronutrients, cation exchange capacity) properties of soil. These properties can be measured in a lab. However, the biological aspect of the soil is much less understood and is so complex that measuring various biological components is challenging and still developing within the scientific and agricultural community.

On the ground, farmers and their advisors need to understand how this complex system works to make good decisions in their crop rotation, nutrient management, planter setup, and weed and insect management – a systems approach to soil health. In addition, one also needs to understand that soils change slowly, and it may take several years to see improvement.

This document describes a workshop series developed by the American Farmland Trust and Ag Conservation Solutions which was implemented in 2016-2017. The purpose of this document is to provide readers with the information to repeat the series. The topics will not, and should not, be exactly similar in future sessions, but the learning outcomes are the same.

GOALS OF THE PROGRAM

- Up to 20 conservation/agricultural professionals with previous experience delivering soil health information to Illinois farmers and landowners will be trained in advanced principles of soil health and how to manage for soil health on the farm (i.e. achieve stated learning outcomes).
- Create a peer-group of 20 “Soil Health Specialists” with a common grounding in soil health knowledge and experience; and a desire to promote soil health practices among Illinois farmers and landowners

LEARNING OUTCOMES

- Comfortable describing soil while standing in a soil pit, or with a shovel-full of soil
- Familiarity with common soil health demonstrations (slake test, infiltration test, small and large scale rainfall simulators) and ability to execute demonstrations at workshops and field days.
- Can relate soil characteristics with management action
- Can judge improvements in soil due to management action

- Understand the dynamic properties of soil (moisture, SOM, etc.)
- Know the 4 pillars of soil health management (do not disturb, living root, keep it covered, crop rotation) and how these impact the dynamic properties of soil
- Knowledgeable of current research on soils and ability to keep up with new research

GENERAL FORMAT of the SERIES

The workshop series takes just over 18 months to complete. It consists of 6, 2-day in person workshops which are spaced out approximately bi-monthly from March of Year 1 through June of Year 2. Preparatory time is also necessary to recruit your steering committee and recruit trainees (3-4 months). This may seem like a very generous time frame, but you will be working with individuals (college professors, industry specialists, farmers, etc.) that have existing full time commitments. Your training cadre will have the same constraints and will appreciate well-spaced time commitments with plenty of advanced notice to help them adjust their work schedules. Because you are working within a very seasonal and weather dependent profession, you will need to adjust training around the farmers' (and farmer advisors') schedules. Don't plan a workshop during planting or harvest!

Step 0: Establish workshop leaders

A 6 workshop series is not an undertaking any single individual can take on alone, especially given the breadth and complexity of the topic. We recommend establishing a 2-person leadership team:

- Lead facilitator: this individual is the project lead. S/he is keeping everyone on track, leading the steering committee, setting agendas, and facilitating workshops. The lead facilitator ideally has a lot of support to help with all the logistics of each meeting, but s/he is ultimately responsible for finalizing the workshop agenda and coordinating the workshop.
- Lead technical expert: this individual is the "soil health expert" for the project. S/he has a well-rounded knowledge and experience of soil health and a thorough understanding of the specific topics to be covered in each workshop. S/he is typically teaching technical content at each workshop, is identifying topic experts, research articles or other learning materials, and ideally knows successful soil health farmers and farming operations to draw from.

These two individuals are leading the workshop series and must be willing to contribute a significant amount of time to make this project successful – they should be paid staff with permission from their employers to execute this series.

Step 1: Recruit a steering committee

Recruit a steering committee to help you design specific agendas, recruit trainees, and recruit topic experts for your workshops. An ideal size for a steering committee is 5-6 individuals, but don't hesitate to pull in up to 10. Steering committee members will float in and out – working hard for you on particular topics and maybe not at all on others. Hold the first steering committee meeting in person to enable everyone to get to know each other better and get to know you. Potential steering committee members include, but are not limited to:

- USDA Natural Resources Conservation Service soil health specialists
- Professors of agronomy, soil science, ecology or other related field – especially look for professors actively conducting research in soil health
- Individuals with experience teaching and developing teaching plans
- Agronomists in the retailer sector – especially individuals with experience selling services related to soil health (cover crops) and the "4Rs" nutrient management program.
- University of Illinois Extension

Steering committee meeting #1 goals:

- Everyone gets to know each other and each other's skills.

The soil health community in Illinois is pretty small, probably everyone already knows each other, but maybe not very well. Or maybe they've only heard of each other's work. Start the meeting with an icebreaker and a warm-up to the subject – do around the room introductions but ask them to also name “the thing that excites them the most about soil health right now” or “the most critical issue in the soil health movement today”.

- Everyone understands their role and time commitment
This need be the ONLY in person meeting. You can easily manage your steering committee remotely after the first meeting. You'll be having conference calls prior to every training workshop – the steering committee will help set the agenda, recruit experts to the workshop, help find good workshop locations. You won't need the whole steering committee for each workshop – expect to have a couple people help you with each one depending on their unique skills and expertise. Your steering committee member may also be your presenter at workshops!
- Review learning outcomes and a general flow of topics
Come up with particular learning outcomes for this workshop series. Start with the above stated outcomes and modify according to your discussion with the steering committee. Work through a general flow of workshop topics – start with the flow suggested below and modify accordingly. Discuss the dates of each workshop, in general terms only – does the calendar suggested in this template seem reasonable? Begin to piece together ideas for locations and topic experts. Do not set workshop agendas in this meeting – just a general flow and some light brainstorming.
- Outline a process for recruitment
Review the sample application with your committee and modify accordingly. Discuss the ideal trainee and does your application capture key characteristics. Discuss how you will recruit trainees. In the first workshop series the steering committee assembled a list of names and we never opened the recruitment to the general public. Set the timeline – when will a call for applications go out and when will you be reviewing applicants?
- Begin a discussion on tracking learning outcomes
How will you know if your workshop series is successful? See the section in this manual for ideas. Begin this discussion now, but don't expect to finish it in this first meeting
- Set a date for next meeting to review applications.

Step 2: Recruit trainees

This is an “advanced” soil health training workshop series, not “101”. Your ideal trainee has a passion for this work and this progressive style of farming. Rather than recruiting new “salespeople” of any particular soil health practice, you are actually recruiting members of a movement to shift agriculture in Illinois to soil health based systems. Ideally your trainees are already engaged in such activities. For example, they are already engaged in a few of the following activities: they host field days, they are conducting plot/strip trials, they attend conferences on soil health/cover crops/no till, they provide 1:1 technical assistance to farmers on practices, they serve on SWCD boards or similar, they are “farmer leaders” in their communities, etc.

A critical aspect of this series is the fact that it is a progressive series and trainees are expected to attend all the workshops. Make this clear in the application and ask for a commitment to attend at least 4 of the 6 workshops. Do not allow trainees to decide which workshops they want to go to and which ones they want to skip. Ideally you want ALL trainees at all workshops – the topics will be progressing in terms of complexity. You are also relying on the knowledge and experience of each trainee to enhance learning, i.e. you are setting up a peer to peer learning environment. For every workshop you'll have some trainees that know the topic well and feel like they don't need to attend – but the group needs their knowledge. No one wants to spend two days listening to Powerpoint presentations and not interacting.

Include in the application the general flow of topics, the first workshop date and approximate dates of subsequent workshops, and some “pre-test” questions to give you an idea of your trainees’ existing skills and experiences. (See appendix for an example application)

The training is intended for individuals with the following characteristics:

- Has a basic soil health knowledge, alternatively, may be well versed in one aspect of soil health but not at all in others (i.e. chemistry, biology)
- Has good people skills and regularly works with farmers on management practices, alternatively, supervises and trains staff who regularly work with farmers
- Has a passion for the topic – this is hard to define, but we want people who, if given this information, will use it to train others or bring it directly to farmers. (Someone willing to commit to six workshops probably has the passion...)
- Diversity is important: looking for farmers, retailers, gov’t/non-profit staff, District staff, CCA’s, agronomists, etc.

Step 4: Implement your evaluation plan

Based on your discussions with your steering committee, you’ll probably want to administer a pre-test prior to the first workshop. Your pre-test will be repeated at the end of the series to gauge knowledge gained. Be prepared to collect feedback after each workshop – this feedback can also have questions that help you gauge effectiveness of the series.

Step 5: Implement your workshops

In the next section, we detail the learning outcomes and topics covered in each of the workshops that were implemented in 2017/2018.

In general, for each workshop you will:

1. Host a steering committee call – start with the general topic you identified earlier and decide on specific learning outcomes.
2. Set date and location (brainstorm locations with the steering committee)
3. Brainstorm potential speakers/topic experts and find out if they are available to participate and what their needs are (travel covered? Stipend?).
4. Create a detailed agenda and confirm special guests. with the steering committee and host a conference call to hash out the specifics. Work through details and the flow of your agenda, identify topic experts and invite them to participate
5. Implement the workshop
6. Collect feedback from the workshop

Keys to workshop success:

- Discussions over lectures – make the workshops as interactive as possible.
- Build in lots of “down time” for unstructured, but still topical, discussions among the trainees, presenters and guests.
- Hold the workshops on farm and ask the farmer and his/her community to participate
- Build in time for a shared meal
- Build in small group work/break out groups/learning activities that get folks up and out of their chairs, especially after lunch.
- Get out in the field, even in inclement weather – use soil pits, view equipment, etc.

Step 6: Celebrate! ...and set up the new peer network for continued learning

For trainees that complete the series, prepare certificates and build in time to celebrate. An ideal time to do this is at dinner during the 6th workshop. Consider awarding special recognition to trainees who attended all six workshops. Build some time in your last workshop to discuss ongoing collaboration and learning. By now your training cadre will be a true peer group and will want to keep in touch.

Prizes!

Meaningful, but inexpensive, prizes included signed copies of David Montgomery's "Soil Trilogy" and slake test kits.

WORKSHOP by WORKSHOP

Workshop #1: Soil Health and Sustainability, March 29-30, McLean County

The goal of this workshop, led by the NRCS Soil Health Division, was to start everyone off with the basic soil health framework: what is soil, what does it mean to be healthy, and the core concepts of managing for soil health. An overall goal of the workshop series is to be consistent with NRCS on soil health definitions and messaging.

Agenda, day 1, indoors

8:30 – 9:00	Registration, continental breakfast provided
9:00 – 9:30	Welcome, introductions and logistics
9:30 – 10:30	Introduction to Soil Health principles
10:30 – 10:45	Break
10:45 – 11:30	Soil biology “deep dive”
11:30 – 12:00	Farmer testimonials from host farmers - background on their operation, relating their management to ideas we just learned.
Noon – 1 pm	Lunch, provided
1:00 – 1:45	Soil Health Indicators
1:45 – 2:15	Managing for soil health: inherent v. dynamic properties
2:15 – 2:30	Break
2:30 – 3:15	Soil health assessment tools- chemical and biological
3:15 – 4:00	Wrap Up: Conservation Cropping Systems
6:30 pm	Optional group dinner

Tip: your workshops will be progressive in topic complexity. But consider making them progressive in terms of controversy as well. Reserve potentially controversial topics, or topics where the science isn't clear yet, for later in the series when trainees know each other well, respect each other's knowledge and are comfortable disagreeing with each other and hearing conflicting opinions.

Agenda, day 2, on-farm

8:30 – 10:00	At the farm: Real Life Soil Health Indicators & Farmer Testimonial
10:00 – Noon	Soil Health Management (Divide into 4 groups and rotate among stations)
	Station 1: Cover Crops
	Station 2: Cropping Systems, including nutrient management
	Station 3: Taking Soil Samples for demos (slake, rainfall simulator)
	Station 4: Soil Health Indicators revealed with a soil pit
Noon- 1pm	Lunch, provided
1pm – 1:30	Soil health triage and debriefing
1:30 – 2:00	Group discussion: Overcoming barriers
2:00 – 2:15	Break
2:15 – 3:15	How to start a soil health management plan
3:15 – 3:30	Wrap up

Workshop #2: Adaptive Nutrient Management for Soil Health, June 22-23, Sangamon County

The goal of this workshop was to develop an understanding of how soils in transition use nutrients, and how to incorporate soil health into nutrient management. This topic can be controversial and we don't have all the answers. We required everyone to view the “4Rs of Nutrient Stewardship Training Modules - Site Specific Nutrient Management” located at <http://www.nutrientstewardship.com/4r-training> prior to the workshop.

Agenda, day 1, on-farm

8:00 – 8:30	Welcome
8:30 – 9:30	Role of soil biology in nutrient management
9:30 – 10:30	Nutrient management recommendations and soil testing: a historical perspective

10:30 – 10:45 Break
 10:45 – 11:45 Nitrogen Dynamics
 11:45 – 12:45 Lunch (provided)
 12:45 – 1:45 Farmer discussion: How do growers on the soil health journey make decisions about nutrient management?
 1:45 – 2:45 In the field: Monitoring N movement and setting up N strip trials
 2:45 – 3:00 Break
 3:00 – 4:00 New Tools for monitoring and programs for nutrient management: precision planting - 360 Yield nitrate tool, SPAD meter, chlorophyll meter, etc.
 4:00 – 5:00 Group discussion and wrap up
 6:30 pm Optional group dinner

Agenda, day 2, Soil Health Partnership Public Field day

8:30 – 9:00 Registration, continental breakfast (provided)
 9:00 – 9:40 Welcome, Introductions and SHP research results
 9:40 - 10:00 Summary and update on Lake Springfield Watershed
 10:00 - 11:00 Cover crop considerations in corn/soybean systems
 11:00 - 11:30 Tour of Monsanto nitrogen trials at the farm
 11:30 - 12:15 Lunch (provided)
 12:15 - 1:15 Discussion: N management and tools available
 1:15 - 2:00 Tour of N-watch trials on the farm/discussion of Lake Springfield N-watch trials
 2:00 - 2:30 Farmer Panel

A note on incorporating public field days. . .

Initially we tried to incorporate public field days with each training event but in practice this proved difficult. It is a lot of work planning and executing two separate events on consecutive days. There was greater value in personally inviting local farmers and landowners to participate in the discussion and the training at each event. Trainees reported that they appreciated having more time to talk with each other and a handful of local farmers, and would rather do that than attend a public field day that covers much of the same topic area but in less detail. The one exception to this was when we brought in a national speaker to the 6th workshop. We hosted the public field day first – providing an introduction to the topic suitable for all, but continuing on with a more in-depth discussion with trainees. This format worked out well.

Workshop #3: Measuring Soil Health and Alternative Systems, August 22-23, McDonough County

The goal of this workshop was to discuss in depth the indicators of soil health and the various soil health assessment tools. This is an evolving conversation nationally. We asked attendees to view the webinar: “Biological Indicators of Soil Health: What are they, how are they measured, and what is on the horizon?” archived in the NRCS Science and Technology Training Library: <http://www.conservationswebinars.net/webinars/biological-indicators-of-soil-health> prior to the workshop. On day 2 we held a public field day to showcase a rotational grazing operation and discuss grazing cover crops.

Agenda, day 1, at Western Illinois University Livestock Center and demo farm

8:30 – 9:00 Registration (continental breakfast)
 9:00 – 9:15 Welcome and workshop logistics
 9:15 – 10:00 How are soil tests used today?
 10:00 - 10:45 Evolution of soil *health* testing: Cornell, Haney, etc.
 10:45 – 11:00 Break

- 11:00 – 12:30 Small group activity: broke out into small groups to discuss actual soil health test results and make management recommendations
- 12:30- 1:30 Lunch
- 1:30 – 3:00 Presentations on interpretation of soil health test results
- 3:00 – 3:15 Introduction of outdoor activity: field indicators of soil health
- 3:15 – 3:30 Break, move outside
- 3:30 – 4:30 Small group activity: broke out into small groups to collect data on soil health indicators using 4 different sets of indicators “soil health cards”.
- 4:30 - 5:00 How to set up and execute a rainfall simulator demonstration
- 5:00 – 5:30 Wrap up
- 6:30 pm Optional Group Dinner

Agenda, day 2, on farm

- 8:30 – 9:00 Registration, continental breakfast (provided)
- 9:00 – 10:00 Incorporating cover crops into livestock operations (presentation & discussion)
- 10:00 – 10:30 Incorporating cover crops into livestock operations, economic implications – Farmer Panel discussion
- 10:30 – 12:30 Rotational grazing (presentation and pasture tour)
- 12:30 Lunch

Workshop #4: Cover Crops – Becoming a Master Adapter, November 9-10, Williamson County

The purpose of this workshop was to explore cover crops in more detail, and to discuss soil health management considerations in southern Illinois where the growing season is longer and soils are not as fertile.

Agenda, day 1, University of Illinois’ Ewing Demonstration Center

- 1:00 – 1:30 Registration (drinks and snacks, no full lunch)
- 1:30 – 1:45 Welcome and workshop logistics
- 1:45 – 2:15 Welcome to Ewing Farm
- 2:15 – 4:00 Tour of cover crop plots and discussion on planting dates, cover crop characteristics, and seeding methods of grasses, legumes (especially clovers), Brassicas and mixes
- 4:00 – 5:00 How does nutrient management change as soils become more biologically active? Mike Plumer and Dan Towery presentation of new research
- 6:30 pm Optional Group Dinner

Agenda, day 2, on farm

- 8:00 – 8:30 Registration (continental breakfast)
- 8:30 – 8:45 Welcome and workshop logistics
- 8:45 – 9:30 Topic 1: How does nutrient management change as soils become more biologically active? Review key points from Mike and Dan yesterday; presentation of delayed N application trials
- 9:30 – 10:00 Discussion: What are the implications for management? How does this information translate to your work with farmers?
- 10:00 – 10:15 Break
- 10:15 - 11:15 Panel discussion: Designing strip trials and plot trials
Overview on controlling for bias
Importance of study design – strips and plots
Example: Soil Health Partnership protocol
- 11:15 – 12:00 Discussion, Q&A
- 12:00 – 12:45 Lunch

12:30 – 1:15	Field tour preview: Changing soil and the potential of cover crops in fragipan soils; precision planting trials
1:15 – 3:00	Field tour Stop 1: Soil pits and fragipan. Topics: weed suppression, long term cover crop use/impact on soil type Stop 2: SARE trials. Topics: Benefits of multiple species plantings, pros/cons of different types of seed establishment?
3:00 – 3:45	Effects of residual herbicides on cover crops
3:45 – 5:00	Q&A, Discussion, Wrap up
5:00	Adjourn

Workshop #5: Seasonal Operations and Strategies for Soil Health Systems, March 7-8, McLean County

The purpose of this workshop was to explore a typical soil health management system from a seasonal perspective – what types of equipment and management changes are needed throughout the year? Topics were presented in order of decision making, took deep dives into tools and equipment, and discussed planning with the whole system and whole year in mind. We began with these words of caution from a Ray Archuleta presentation to NRCS¹:

- Never make tools (No-Till/Strip-till, grazing, cover crops..etc) a goal.
- If your goal is improving soil quality/health; understanding how the soil functions and Soil Health Management Principles are critical!
- Tools do not build houses, skilled workers do. Without a goal of building a house, tools and workers are wasted.
- You must become the skilled worker with a clear goal in mind; only then do the tools become of lasting value.

Agenda, day 1, at the machine shed

8:30 – 9:30	Welcome, Introductions, Agenda
9:30 – 11:00	Fall operations and management – harvest and cover crop planting Equipment: high clearance sprayer, combine or corn head(s) Topics: residue management, cover crop seeding, fall fertilizer applications
11:00 – 11:15	Travel to local farm
11:15 – 12:45	Winter – planning season Equipment: JD Planters; Tracked Tractors Topics: planter maintenance/updates, traffic management, precision planting, down-pressure
12:45 – 1:45	Lunch
1:45 – 3:00	Spring operations and management – cover crop termination and cash crop planting Equipment: Roller crimper Topics: increasing cover crop options with shorter season varieties, plans A, B and C for cover crop termination/weed control, planting green, starter/pop up fertilizer
3:00 – 3:30	Break, move outside for discussion of biologicals additives
3:30 – 4:15	Summer operations and management Equipment: Haggie High Clearance inter-seeder Topics: interseeding, choosing herbicide programs/effect of residuals
4:15 – 5:00	Discussion and wrap-up
6:30	Optional group dinner

¹ <http://www.conservationwebinars.net/webinars/crop-diversity-rotations-and-systems-for-soil-health>

Agenda, day 2, indoors

- 8:00 – 9:00 Welcome back, agenda for the day/reflections on yesterday. Discuss everyone's most burning questions
- 9:00 – 10:00 Breakout groups – break into groups to answer everyone's most burning questions!
- 10:00 – 11:00 Getting started with soil health – small group discussions to help a farmer new to soil health management systems get started:
Scenario 1: conventional corn-bean, fall tillage
Scenario 2: conventional corn-bean, continuous no till
Scenario 3: Corn-bean + cattle
Scenario 4: Transitioning to organic
- 11:00 – Noon Panel on CSP – local farmers and NRCS staff

*Conservation Cropping Systems "recipes" were created from these breakout sessions, you can find them here:
<https://www.farmland.org/initiatives/soil>*

Workshop #6: Biodiversity of Soil and Reaching the "Early Majority", June 29-30, Marshall County

The purpose of this workshop was to do a deep dive into the diversity of the soil ecosystem, with a special focus on arbuscular mycorrhizal fungi, and to discuss messaging for risk averse farmers. The messaging topic was requested by trainees and revolved around work done through the National Wildlife Federation's Cover Crop Champions network.

Agenda, day 1, Public field day + Advanced Soil Health Training

- 8:00 – 8:30 Registration, continental breakfast
- 8:30 – 9:00 Welcome and Introductions
- 9:00 – 10:00 Arbuscular Mycorrhizal Fungi – keystone species in your microherd, with Wendy Taheri.
- 10:00 – 11:00 Visit soil pits showing different management practices
- 11:00 – Noon Biodiversity in your soil is GOOD, but WHY?
- Noon – 1:00 Lunch (provided) and networking with area farmers

End, public field day.

- 1:30 – 2:30 Sociology and soil health management: what changes farmers' behavior?
Discussion on current understanding about changing behavior and the diffusion of innovation theory – Jess Espenshade, National Wildlife Federation
- 2:30 – 3:30 Reaching the "early majority" – messaging for the non-innovator – facilitated discussion: *Lessons from the Cover Crop Champions network*,
- 3:30 – 4:30 Collect soil samples and set up soil insect demos, wrap up
- 5:30 – 7:30 Optional group dinner
Wrap up of soil health training – celebration, certificates of Completion and door prizes!
Begin discussion of next steps – getting a network started, keeping the momentum

Agenda, day 2

- 8:00 – 8:30 Welcome (coffee and donuts)
- 8:30 – 9:30 Critters! (look at soil samples)
- 9:30 – 11:30 Taheri presentation: Pesticides/toxins effects on soil life; tillage and weed control/compaction; discussion
- 11:30 – Noon Final wrap up – Complete discussion of next steps for a soil health specialists network in Illinois



Looking for expert presenters? Find them, and more resources for soil health training at the new Illinois Sustainable Ag Partnership:
www.ILSustainableAg.org

APPENDIX A: Application to participate in Advanced Soil Health Training for Illinois Ag Professionals

Introduction:

This unique training course will provide you with the knowledge to the whole soil health system: physical, biological and chemical characteristics of soil and the relationship to farm management. We are recruiting a diverse cadre of trainees and trainers to enhance the learning experience.

We will host six in-person workshops over the course of 12-18 months. Workshops will take place at farm locations across Illinois, to expose you to multiple cropping systems and soil types. Each workshop will pair soil health training with a public field day. The first workshop is March 29-30 in McLean County. Remaining dates and locations have not yet been set, and trainees will have input into dates and locations.

Please respond to the following 7 questions, feel free to add pages if you need more space:

1. Name, address, phone, email:
2. What is your role in the agricultural community of Illinois?
3. What types of outreach do you currently participate in with farmers and other ag stakeholders in Illinois, as it relates to soil health?
4. To help us customize the best possible curriculum, please rank your comfort level with the following topics on a scale of 1-5.
(1= no knowledge or experience, 3 = comfortable with the topic, but need to learn more, 5 = very knowledgeable/I could teach this!)

Topic	1	2	3	4	5
Understanding how soil biology affects chemical and physical soil properties.					
Management of cover crops (selection, planting timing and options, termination)					
Successful no-till & strip-till equipment and management					
Understanding options to improve nutrient efficiency					
Short- and long-term economics of farming to improve soil health					
Potential benefits for utilizing cover crops for grazing purposes.					

Are there other topics you would like to see covered in this training?

5. Why does this training opportunity appeal to you? How will it help you?
6. Funding is provided for travel and related expenses, however we cannot cover the cost of your time. The 6 workshops are progressive and we expect trainees to prioritize their workloads to be able to attend 4 of 6. We understand that unexpected circumstances may arise, but are you willing to commit to 4-6, 2-day in-person workshops over the next 18 months? ___Yes ___No
7. Following the workshop series, each trainee will commit to participating in at least one outreach event in his/her local area. Are you able to commit to this? ___Yes___No

Please send completed applications by February 1 via mail or email to:

**Jennifer Filipiak/SARE project
American Farmland Trust
P.O. Box 987
DeKalb, IL 60115
jfilipiak@farmland.org**

APPENDIX B. Survey distributed electronically after each workshop

1. I attended the sixth soil health training workshop as a (check all that apply):
Trainee
Steering committee member
Floater
Presenter or host
2. Which part(s) of the training did you attend?
Both days
Day 1 only
Day 2 only
3. How well did the soil health training meet your expectations?
Extremely well
Very well
Moderately well
Slightly well
Not well at all
4. Overall, how satisfied were you with the program content?
Extremely satisfied
Moderately satisfied
Slightly satisfied
Neither satisfied nor dissatisfied
Moderately dissatisfied
Extremely dissatisfied
5. I learned something new that I will use at outreach events that are already scheduled.
Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree
6. This training has inspired me to lead or host a new (not previously scheduled) soil health outreach event in my community.
Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree
7. I learned information that will be useful to my customers/clients that I intend to pass along.
Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree
8. Please describe the two things you found most helpful during the soil health training workshop:
9. Please list two topics you'd like to hear more about:
10. We welcome any other feedback you have to make this and future workshops better - any final comments?