



PA Farmers for the Land Soil Health Learning Circle Planning

Learning Circle #1: On-Farm, 9 AM-3 PM

Goals: introductions, networking, intro to soil health principles, soil health assessment

Discussion leaders: Lisa Blazure, Charlie White (proposed)

Homework: try out one soil health assessment on your farm

Learning Circle #2: Virtual, 2 hours

Goals: review soil health principles, review soil health assessment, intro to soil health practices

Discussion leader(s):

Homework: soil health goal setting virtual worksheet

Learning Circle #3: Virtual, 2 hours

Goals: continue learning about soil health practices, connect management goals with soil health outcomes

Discussion leader(s): Sarah Bay Nawa (management goals and outcomes)

Homework: continue and revise soil health goal setting worksheet

Learning Circle #4: Virtual, 2 hours

Goals: Share soil health goals, overview of soil health management plan

Discussion leader(s):

Homework: begin to think about soil health management plan using guiding questions

Learning Circle #5: Virtual, 2 hours

Goals: Share homework, in-depth introduction to soil health management plan

Discussion leader(s): Lisa Garfield

Homework: create draft soil health management plan

Learning Circle #6: Virtual, 2 hours

Goals: Workshop draft soil health management plan with peers and service providers

Discussion leader(s):

Service providers to invite: Sue Ellen Johnson (TeamAg)

Homework: revise and finalize soil health management plan

Learning Circle #7: On-Farm, full day

Goals: Network, celebrate, present soil health management plans, tour a soil health successful farm

Discussion leader(s):

Service providers to invite:

Learning Circle #1: On-Farm, October 26 2022

Hosted by Gay Rogers at Hameau Farm, 6365 SR 655 Belleville, PA 17004

9 AM to 3 PM

By the end of the session, participants will:

- ✓ Connect with one another and with local service providers
- ✓ Review properties of soil
- ✓ Review key traits of healthy vs. unhealthy soil
- ✓ Understand life underground and the food web
- ✓ Learn about on-farm and laboratory assessments of soil health
- ✓ Create a plan to assess the health of their soil

9-10 AM: Welcome, introductions: tell us your name, describe your operation, and share your answers to the prep questions:

1. Why is soil health integral to the future of your farm?
2. What are you hoping to try in the next 1-3 years?
3. What challenges do you anticipate facing?
4. What are you starting to think about as possible indicators for measuring success?

10:00-11:30 Technical Discussion 1: Introduction to Soil Health: Principles, practices and benefits

Discussion leader(s): Lisa Blazure, Stroud Water Research Center and PA Soil Health Coalition

- Start with participants: what are the top 3 questions you have about soil?
- Tabletop Demonstration : infiltration, penetrometer, slake test, slump test
- Field walk to demonstrate principles - dig soil holes, discuss soil structure, soil organic matter, root systems, surface residue, etc

11:30-12 :30 Lunch, Networking, Farm Tour

12:30-2:00 Technical Discussion 2: Soil Health Assessment:

- Why assess the health of your soil?
- What are your goals with your soil health assessment? Your goals will impact what type of assessment you choose and which indicators you are looking at.
- When will you do your assessment? Timing can impact some soil health indicators
- What are key indicators of soil health (i.e. what are you measuring with your chosen assessment)? What is worth measuring? Which indicators are most responsive to measurement?
- Types of assessment:
 - In-field: NRCS Soil Health Card, NRCS Pasture Condition Scorecard
 - Lab tests: Cornell Comprehensive Assessment of Soil Health, Haney Test
 - Long-term study in PA: Soil Health Benchmark Study

Include a field walk for this discussion - evaluate/compare field soils, nearby hedgerow/undisturbed soil, and degraded soil (may need to be collected prior to the event from another farm)

Discussion leader(s): Madeline Luthard and Zoelie Rivera-Ocasio, PSU,

2:00-3:00 Review & Wrap-Up

- Tie together themes: Based on what you have learned, have any of your answers to the prep questions changed?
- Discussion among participants regarding lessons learned: how do you plan to assess the health of your soil? What methods are you most likely to use?

Homework: Use one or more methods you learned today to assess your farm's soil health. Be prepared to share what you did and what you learned at our next meeting on [DATE].

Adjourn

Learning Circle #2: Virtual (2 hrs)

By the end of the session, participants will:

- ✓ Review soil health principles
- ✓ Review key traits of healthy vs. unhealthy soil
- ✓ Understand how soil health practices can implement soil health principles
- ✓ Begin thinking how soil health can be managed on their land

Welcome, introductions, sharing of assessment choices (15 minutes): how did you choose to assess the health of the soil on your land? How did it go? Any challenges? Successes?

Technical Discussion: Soil Health Practices 1 (90 minutes)

Discussion leader(s): Mary Barbercheck, PSU

- Ideally link discussion of practices back to participants' discoveries in their assessments, including soil health assessments if available and possible
- Touch on cover cropping, tillage reduction, rotational grazing, nutrient management, organic amendments, mulching
- Small groups based on production system to target more specific practices?

Homework (on Survey Monkey, Microsoft or Google forms):

1. What are 1-2 soil health practices you have tried in the past few years?
2. What challenges did you face implementing these practices?
3. What worked well for you?
4. What key lessons did you learn over time?
5. What soil health practices would you like to try next?
6. Review your goals for your farm: why did you see soil health as integral to your farm's future?
7. Review your soil health assessment
 - i. What did you measure? How?
8. Identify your biggest concerns/ questions related to soil health
9. Identify practices you'd like to implement that form a system to address your concerns and questions
10. Connect your soil health system with your farm goals: does this reflect your original plan, or differ from it?
11. Identify partners: who else (on your farm or off it) needs to be involved for you to succeed?
12. Identify measures of success that you'd like to incorporate: what will it look like if you succeed beyond your wildest dreams?

Wrap-Up and Review: What stood out to you in today's presentation? What practices would you like to delve into more deeply in our next session? What questions do you have about the homework?

Adjourn

Optional Q&A Time

Learning Circle #3: Virtual (2 hrs)

By the end of the session, participants will:

- ✓ Review soil health practices covered in the last session
- ✓ Review how soil health practices can implement soil health principles
- ✓ Learn more about how soil health practices can impact soil health via Pasa Soil Health Benchmark Study
- ✓ Learn more about soil health practices of particular relevance to their production systems
- ✓ Begin thinking how soil health can be managed on their land through specific practices and systems

Welcome, Introductions and Check-Ins (15 minutes): Questions about homework?

Technical Discussion: Soil Health Practices 2 (90 minutes)

Discussion leader(s): Sarah Bay Nawa

- Share Benchmark Study research on how management appears to impact soil health indicators
- Continue discussion on cover cropping, tillage reduction, rotational grazing, nutrient management, organic amendments, mulching
- Deeper dive on practices identified as of interest or relevant to participants
- Small groups based on production system to target more specific practices?

Wrap up & Review (15 minutes): How can we manage for soil health? Overview of soil health as a management system. Set up for next session's discussion on soil health management plans.

Homework: *continue and revise soil health goal setting worksheet*

Adjourn

Optional Q & A

Learning Circle #4: Virtual (2hrs)

By the end of the session, participants will:

- ✓ Connect with one another through sharing homework
- ✓ Set soil health management goals for their farms based on soil health assessment
- ✓ Connect soil health management goals with larger farm goals
- ✓ Begin to consider the components of a soil health management plan

Welcome, introductions, check-ins (20 minutes)

Discussion of homework (60 minutes)

Discussion leader(s):

Components of a Soil Health Management Plan (30 minutes):

Discussion leader(s):

- Farm Description and Management History
- Soil Health Goals and Management Units
- Assessments and Results
 - Celebration
 - Constraints
- Options for Action
 - Short-Term Schedule of Management Activities
 - Long-Term Strategy and Direction
- Implementation, Monitoring, and Adaptation Plan
- What kind of help will you need to make management changes?

Wrap up and Homework (10 minutes):

Refine your farm and soil health goals. Begin thinking about how you'd construct a soil health management plan that would integrate with other plans (pasture rotation, planting and harvest schedule, etc.) you work with daily.

Adjourn

Optional Q&A

Learning Circle #5: Virtual (2hrs)

By the end of the session, participants will:

- ✓ Understand the components of a soil health management plan
- ✓ Draft a soil health management plan for their farm

Welcome, introductions, reactions to homework (15 minutes) how is a soil health management plan different than a list of practices you'd like to try?

Technical Discussion: introduction to soil health management planning (75 minutes)

Discussion leader(s): Lisa Garfield, Future Harvest

- Possible farmer testimonial: invite a women farmer to share her soil health management plan

SHMP Template (15 minutes)

Discussion leader(s): Lisa Garfield, Future Harvest

Wrap up and Homework (15 minutes)

For next session – create a draft of your soil health management plan to share with peers and service providers next session. You will have a chance to share and workshop your draft, then finalize it for our presentations at the field day on [DATE].

Adjourn

Optional Q&A

Learning Circle #6: Virtual (2hrs)

By the end of the session, participants will:

- ✓ Workshop their soil health management plan with peers and service providers
- ✓ Establish an implementation timeline for their plan
- ✓ Identify costs associated with their plan and resources to cover those costs, including NE-SARE funding

Welcome, introductions, reactions to homework (15 minutes)

Small group breakouts to workshop soil health management plans (30 minutes)

Questions:

1. Does the plan contain all the necessary components?
2. Does it have an action plan that is economically and logistically feasible, both in the short term and the long run?
3. Has the farmer identified her support system? Who will she go to for implementation help? Who will she go to if she has questions or needs to troubleshoot?

Report out and problem-solving (30 minutes)

- Were there questions identified in small groups that could use input from the larger group?

Implementation timeline and budgeting (30 minutes)

Discussion leader(s):

Wrap Up and Homework (10 minutes):

For next time, finalize your soil health management plan and be ready to present to the group!

Learning Circle #7: On-Farm, 10 AM to 4 PM, March 2023

10 AM to 4 PM

By the end of the session, participants will:

- ✓ Workshop their soil health management plan with peers and service providers
- ✓ Establish an implementation timeline for their plan
- ✓ Visit a farm demonstrating healthy soils practices
- ✓ Network with peers and celebrate their successes

10-11 AM: Welcome, introductions

11-12:30: First round of presentations and feedback

12:30-2:00: Lunch, farm tour

2:00-3:30: Second round of presentations and feedback

3:30-4:00 Wrap up and evaluations



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Discussion leader: Lisa Blazure, Stroud Water Research Center and PA Soil Health Coalition

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- Types of assessment:
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 - Long-term study in PA: Soil Health Benchmark Study

Include a field walk for this discussion - evaluate/compare field soils, nearby hedgerow/undisturbed soil, and degraded soil (may need to be collected prior to the event from another farm)

Discussion leader(s): Madeline Luthard and Zoelie Rivera-Ocasio (PSU), Suzette Truax and Melissa Erdman (NRCS)

2:00-3:00 Review & Wrap-Up

- Tie together themes: Based on what you have learned, have any of your answers to the prep questions changed?
- Discussion among participants regarding lessons learned: how do you plan to assess the health of your soil? What methods are you most likely to use?
- Set a date and time for our next virtual soil health learning circle!

Homework: Use one or more methods you learned today to assess your farm's soil health. Be prepared to share what you did and what you learned at our next meeting.

Adjourn



QR Code for Learning Circle Evaluation



Learning Circle #2: Virtual (2 hrs)

By the end of the session, participants will:

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- ✓ Understand how soil health practices can implement soil health principles
- ✓ Begin thinking how soil health can be managed on their land

Welcome, introductions, sharing of assessment choices (15 minutes): how did you choose to assess the health of the soil on your land? How did it go? Any challenges? Successes?

Technical Discussion: Soil Health Practices 1 (90 minutes)

Discussion leader(s): Dr. Mary Barbercheck, Penn State University

Homework! Link [here](#)

Wrap-Up and Review (15 minutes): What stood out to you in today's presentation? What practices would you like to delve into more deeply in our next session? What questions do you have about the homework?

Adjourn



Learning Circle #3: Virtual (2 hrs)

By the end of the session, participants will:

- ✓ Review soil health practices covered in the last session
- ✓ Review how soil health practices can implement soil health principles
- ✓ Learn more about how soil health practices can impact soil health via Pasa Soil Health Benchmark Study
- ✓ Learn more about soil health practices of particular relevance to their production systems
- ✓ Begin thinking how soil health can be managed on their land through specific practices and systems

Welcome, Introductions and Check-Ins (20 minutes): What are your farm goals for 2023? How can building healthier soil help you achieve them?

Technical Discussion: Soil Health Practices 2 (90 minutes)

Discussion leader(s): Sarah Bay Nawa, Pasa Sustainable Agriculture

- Share Pasa's Soil Health Benchmark Study research on how management appears to impact soil health indicators
- Continue discussion on cover cropping, tillage reduction, rotational grazing, nutrient management, organic amendments, mulching
- Deeper dive on practices identified as of interest or relevant to participants
- Small groups based on production system to target more specific practices

Wrap up & Review (15 minutes): How can we manage for soil health? Overview of soil health as a management system. Set up for next session's discussion on soil health management plans.

Homework: *continue and revise soil health goal setting worksheet*

Adjourn

Optional Q & A