

Pennsylvania Soil Health and Sustainability for Field Staff, Non-Field Portion

Virtual Delivery – July 7-9th, 2025 - See specific times below (Times are EST)

Field Day is July 11th in Juniata County, PA

Lesson Title	Time Allotted	Instructor	Format
Monday - Virtual Day 1			
Introductions & Logistics – <ol style="list-style-type: none"> 1. Course logistics 2. Introductions 3. Q&As 4. Group designations and scenario assignments 	1 hour 8:30 – 9:30 am	Dan Ludwig	Activity 1: Live event through MS-Teams
Module: Soil Health Basics <ol style="list-style-type: none"> 1. Historical context of soil health 2. Soil health demonstrations 3. Define soil health and how soil functions and its impact on resource management 4. 5-minute break 	55 minutes 9:30 – 10:25 am 5-minute break 10:25 – 10:30 am	Steve Woodruff	Activity 2: Live event through MS-Teams
Module: Linking Soil Biology to Soil Health <ol style="list-style-type: none"> 1. Soil functions performed by soil organisms 2. Defining biodiversity 3. Categorizing soil organisms using three broad ecological groups 4. Soil health principles and relation to soil biology 	1 hour 15 minutes 10:30 – 11:45 am	Lisa Blazure	Activity 3: Live event through MS-Teams
Lunch 11:45 am – 12:45 pm			
Module: Soil Health Planning Principles <ol style="list-style-type: none"> 1. Minimize disturbance 2. Maximize diversity 3. Maximize the presence of living roots 4. Maximize soil cover 5. 15-minute daily wrap-up 6. Group activity 	45 minutes 12:45 – 1:30 pm 15-minute wrap-up Scenario Group Meeting using MS-Teams breakout rooms: 1 hour 45 minutes (1:45 – 3:30 pm)	Mark Goodson	Activity 4: Live event through MS-Teams Day 1 Wrap-up Activity 5: Scenario Group Meeting
Tuesday - Virtual Day 2			
Module: Resource Concerns and Soil Health Indicators <ol style="list-style-type: none"> 1. Identifying resource concerns through conservation planning 2. Identifying soil health indicators and processing the decision tree (In-field assessment) 3. Group activity 4. 15-minute break 	1 hour 30 minutes 8:30 – 10:00 am Scenario Group Meeting: 15 minutes (10:00 – 10:15 am) 15-minute break: 10:15 – 10:30 am	Steve Woodruff	Activity 6: Live event through MS-Teams Activity 7: Scenario Group Meeting

Module: Cover Crop Management <ol style="list-style-type: none"> Cover crops benefits and impact on soil function Consideration for successful cover crop planning Designing a multi-species cover crop mixes Trouble shooting cover crop problems Examples of CC in various cropping systems Group activity – Breakout rooms Break (15 minutes) 	1 hour 30 minutes 10:30 – noon Scenario Group Meeting: 15 minutes (12:00 – 12:15 pm)	Mark Goodson	Activity 10: Live event through MS-Teams Activity 11: Scenario Group Meeting
Lunch 12:15 – 1:15 pm			
Module: Grazing management to improve soil health <ol style="list-style-type: none"> Incorporating soil health principles into a grazingsystem Grazing principles that can improve soil health Understanding the impact of manure Grazing impact on nutrient cycling 5-minute daily wrap-up Group activity – Breakout rooms 	1 hour 1:15 – 2:15 pm Scenario Group Meeting and wrap-up: 20 minutes (2:15 – 2:35 pm)	Brian Campbell	Activity 12: Live event through MS-Teams Day 2 Wrap-up Activity 13: Scenario Group Meeting
Module: Social and Economic Considerations <ol style="list-style-type: none"> Value of improving soil health, reducing risk, and building resilient soils Cost of soil health improving practices and ROI Stages of Adoption and social outreach Let's Strategize for Change Learning from and leveraging others' successes	1 hour 25minutes 2:35 am – 4:00 pm	Steve Woodruff	Activity 14: Live event through MS-Teams
Wednesday - Virtual Day 3			
Module: Strategizing and Implementing a Soil Health Management System (SHMS) <ol style="list-style-type: none"> Considerations for planning and implement SHMS in cropping systems Orchards and Vegetables Small Grains/Row Crops Grazing/Pasture with Cover Crops Group activity – Breakout rooms Break (15 minutes) 	1 hour 30 minutes 8:30 – 10:00 am Scenario Group Meeting: 15 minutes (10:00 – 10:15 am) 15-minute break: 10:15 – 10:30 am	Mark Goodson	Activity 15: Live event through MS-Teams Activity 16: Scenario Group Meeting
Module: Finalize Soil Health Plans	1 hour 10:30 – 11:30 pm	Cadre	Activity 17: ScenarioGroup Meeting

Lunch 11:30 to 12:30pm			
Wednesday (continued)			
Deliver Soil Health Presentations 10-15-minute group presentations	1 hour and 15 minutes 1:00 – 2:15 pm	Cadre	Activity 18: Live event through MS-Teams
Virtual Wrap-up and Field Activity Instructions	15 minutes 3:45– 4 pm	Cadre	Activity 19: Live event through MS-Teams
Field Assessment			
Module: Field Day - starts at 9:00am on Friday 559 Happy Hollow Rd, Mifflintown, PA 17059	1 day	State-Led	Activity 20: Live, Field Portion