

Pennsylvania Soil Health and Sustainability for Field Staff, Non-Field Portion
Virtual Delivery – July 10-12th - See specific times below (Times are EST)

Field Day is July 14th in Berks County, PA

Lesson Title	Time Allotted	Instructor	Format
Monday - Virtual Day 1 (6 hours)			
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	Tracey Foster Mark Goodson Yuri Plowden	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, NRCS	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, Stroud	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)	Andy Gaver, NRCS	Activity 4: Live event through MS-Teams Day 1 Wrap-up Activity 5: Scenario Group Meeting
Tuesday - Virtual Day 2 (6 hours and 55 minutes)			
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 NRCS	Activity 6: Live event through MS-Teams Activity 7: Scenario Group Meeting

Module: Ecological Management <ol style="list-style-type: none"> 1. An ecological framework for management 2. Soil ecological engineering 3. SHMS enhance ecosystem processes 4. Group activity 5. Forum activity 	<p>1 hour 10:30 – 11:30 am</p> <p>Scenario Group Meeting: 15 minutes (11:30 – 12pm)</p>	<p>Andy Gaver, NRCS</p>	<p>Activity 8: Live event through MS-Teams</p> <p>Activity 9: Scenario Group Meeting</p>
Lunch 12:00 – 1:00 pm			
Module: Cover Crop Management <ol style="list-style-type: none"> 1. Cover crops benefits and impact on soil function 2. Consideration for successful cover crop planning 3. Designing a multi-species cover crop mixes 4. Trouble shooting cover crop problems 5. Examples of CC in various cropping systems 6. Group activity – Breakout rooms 7. Break (15 minutes) 	<p>1 hour 30 minutes 1:00 – 2:30 pm</p> <p>Scenario Group Meeting: 15 minutes (2:30 – 2:45 pm)</p> <p>15-minutes break: 2:45 – 3:00 pm</p>	<p>Mark Goodson, NRCS</p>	<p>Activity 10: Live event through MS-Teams</p> <p>Activity 11: Scenario Group Meeting</p>
Module: Grazing management to improve soil health <ol style="list-style-type: none"> 1. Incorporating soil health principles into a grazing system 2. Grazing principles that can improve soil health 3. Understanding the impact of manure 4. Grazing impact on nutrient cycling 5. 5-minute daily wrap-up 6. Group activity – Breakout rooms 	<p>1 hour 3:00 – 4:00 pm</p> <p>5-minute wrap-up</p> <p>Scenario Group Meeting and wrap-up: 20 minutes (4:05 – 4:25 pm)</p>	<p>Brian Campbell NRCS</p>	<p>Activity 12: Live event through MS-Teams</p> <p>Day 2 Wrap-up</p> <p>Activity 13: Scenario Group Meeting</p>

Wednesday - Virtual Day 3 (6 hours)			
Module: Strategizing and Implementing a Soil Health Management System (SHMS) <ol style="list-style-type: none"> 1. Considerations for planning and implement SHMS in cropping systems 2. Orchards and Vegetables 3. Cotton 4. Small Grains/Row Crops 5. Grazing/Pasture with Cover Crops 6. Group activity – Breakout rooms 7. Break (15 minutes) 	<p>1 hour 30 minutes 8:30 – 10:00 am</p> <p>Scenario Group Meeting: 15 minutes (10:00 – 10:15 am)</p> <p>15-minute break: 10:15 – 10:30 am</p>	<p>Andy Gaver, NRCS</p>	<p>Activity 14: Live event through MS-Teams</p> <p>Activity 15: Scenario Group Meeting</p>
Module: Social and Economic Considerations <ol style="list-style-type: none"> 1. Value of improving soil health, reducing risk, and building resilient soils 2. Cost of soil health improving practices and ROI 3. Stages of Adoption and social outreach 4. Let's Strategize for Change 5. Learning from and leveraging others' successes 	<p>1 hour 30 minutes 10:30 am – 12:00 pm</p>	<p>Steve Woodruff, NRCS</p>	<p>Activity 16: Live event through MS-Teams</p>
Lunch 12 to 1pm			

Wednesday (continued)

Module: Finalize Soil Health Plans (including, completing Module: Social/Econ section)	1 hour 1:00 – 2:00 pm	Cadre	Activity 17: Scenario Group Meeting
Deliver Soil Health Presentations 10-15-minute group presentations	1 hour and 15 minutes 2:00 – 3:45 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 Farm location: Hoffman Farm, 180 Merkel Lane, Shoemakersville, PA 19555	1 day	State-Led	Activity 20: Live, Field Portion