



Soil Health Basics for Technical Service Providers			
April 27-29, 2021			
Tuesday, April 27 - Virtual Day 1 (6 hours, 10 minutes) – Eastern Time			
Lesson Title	Time Allotted	Instructor	Format
Introductions & Logistics – 1. Introductions 2. Course logistics	30 minutes 10:30 – 11:00 a.m.	Bianca Moebius-Clune, Ph.D. Brandon Smith, Ph.D.	Live Presentation
Module: Soil Health Basics 1. Overview of Soil Health Management Plan Template 2. Historical context of soil health 3. Soil health demonstrations 4. Define soil health and how soil functions and its impact on resource management	1 hour, 15 minutes 11:00 a.m. – 12:15 p.m.	Bianca Moebius-Clune, Ph.D.	Live Presentation On-demand video soil health demos Watch as a group Soil Health Demos (slake, aggregate stability, slump)
Lunch	30 minutes		
Module: Linking Soil Biology to Soil Health 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, 20 minutes 12:45 – 2:05 p.m.	Willie Durham	Live Presentation
Module: Soil Health Planning Principles 1. Minimize disturbance 2. Maximize diversity 3. Maximize living roots 4. Maximize soil cover	1 hour 2:05 – 3:05 p.m.	Marlon Winger	Live Presentation
Module: Resource Concerns and Soil Health Indicators 1. Identifying resource concerns through conservation planning 2. Identifying soil health indicators 3. Infield Soil Health Cropland Assessment Worksheet 4. How to use Conservation Management Unit (CMU) grouping format	1 hour, 35 minutes 3:05 – 4:40 p.m.	Rachel Seman-Varner, Ph.D.	Live Presentation
Daily Wrap Up: Questions, Follow up and Logistics for Day 2	30 minutes 4:40 – 5:10 p.m.	Brandon Smith, Ph.D.	



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Wednesday, April 28 - Virtual Day 2 (5 hours, 15 minutes) – Eastern Time

Lesson Title	Time Allotted	Instructor	Format
Welcome and Day 2 Overview	15 minutes 10:30 – 10:45 a.m.	Brandon Smith, Ph.D.	
Module: Cover Crop Management 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. Cover crop decision tool NECC/ARS, Indiana, MWCC	1 hour 30 minutes 10:45 a.m. – 12:15 p.m.	Marlon Winger	Live Presentation
Lunch	30 minutes		
Module: Grazing Management to Improve Soil Health 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	1 hour 30 minutes 12:45 – 2:15 p.m.	Stan Boltz	Live Presentation
Module: Social and Economic Considerations 1. Value of improving soil health, reducing risk, and building resilient soils 2. Cost of soil health improving practice 3. Let's strategize for change. Learning from and leveraging others' successes	1 hour, 30 minutes 2:15 – 3:45 p.m.	Nathan Lowder	Live Presentation
Daily Wrap Up: Questions, Follow up and Logistics for Day 3	30 minutes 3:45 – 4:15 p.m.	Brandon Smith, Ph.D.	



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Thursday, April 29 - Virtual Day 3 (5 hours 15 minutes) – Eastern Time

Lesson Title	Time Allotted	Instructor	Format
Welcome and Day 3 Overview	15 minutes 10:30 – 10:45 a.m.	Brandon Smith, Ph.D.	
Module: Developing a Soil Health Management Plan 1. In depth view of Soil Health Management Plan Template a. What identifying practices means in the CAP 116 b. Developing the practice alternatives with the producer	1 hour (3 hours, 30 minutes total) 11:45 a.m. – 12:45 p.m.	Nick Sirovatka	Live Presentation
Lunch	30 minutes		
2. Introduction to evaluation tools and resources a. RUSLE 2, WEPS b. WINPST c. Soil Health Impacts on Pasture Condition Score Sheet or Determining Indicators of Pastureland Health (DIPH), Rangeland Assessment 3. Conservation Planning Requirements Overview for TSP’s a. Steps for development and submission to state TSP coordinators	2 hours, 30 minutes 1:15 – 3:45 p.m.	SHD Staff Candy Thomas Nick Sirovatka Stan Boltz Conservation Planning Branch	Live Presentation
Daily Wrap Up: Questions, follow up and logistics for course completion	30 minutes 3:45 – 4:15 p.m.	Brandon Smith, Ph.D.	
Proficiency Exam			Exam link will be sent to registered participants

Resource Links:

Climate Change and Adaptive Management for Agriculture Video	35 minutes	Weathering the Change
Soil Health Management Plan Template		Soil Health Management Plan Template