

## POSTER PRESENTATIONS

### ADAPTIVE MANAGEMENT OF CONSERVATION EFFORTS

1. Cover Crops for Use as Forage: What Do We Know About Tradeoffs with Ecosystem Services?
2. Design and Assessment of a Sustainable Project Management Framework (SPMF)
3. Pollinator Habitat Establishment on Salt-Influenced Cropland

### CEAP SHOWCASE

4. Assessment of Partial Conservation Practice Removal on Water Quality in a CEAP Watershed, Beasley Lake, Mississippi
5. Assessment of Sugarcane and Flooded Rice Crop Rotation Effects on Soil and Water Quality in the Everglades Agricultural Area, Florida
6. CEAP Special Project: Assessing Conservation Practice Impacts on Reducing Soil Loss from Ephemeral Gullies within CEAP Watersheds
7. Concentration-Discharge Dynamics Across Temporal Scales in a Drained Agricultural Watershed
8. Eddy Covariance and Satellite Evapotranspiration Assessment for Irrigated Citrus in the Kaweah Basin, California
9. Evaluating Seasonal R-Factor Values Based on Modern Rainfall Data to Account for Seasonal Land Cover Conditions
10. Fertilizer Placement Affects Subsurface Phosphorus Loss
11. The Upper Washita Basin: Highlights of Recent and Current Activities and Outcomes
12. How Does Conservation Implementation Affect the Relationship Between Caloric/Protein Production as a Function of Nitrogen and Phosphorus Runoff Losses?
13. Incorporating Long-Term Edge-of-Field Monitoring Sites into Colorado's New CEAP Project
14. Influence of Agricultural Managed Aquifer Recharge (Ag-MAR) and Organic Amendments on Soil Nitrogen Balance
15. Integrated Hydrologic Model Calibration with Groundwater Age Tracer Data
16. Irrigation Pond Water Storage and Nutrient Variability Using Field and Remotely Sensed Data

17. Modeling Nitrate Removal from Subsurface Drainage by Saturated Buffers
18. Nutrient, Instream Habitat, and Fish Responses to Planting Grass Filter Strips Adjacent to Agricultural Headwater Streams
19. Scaling-Up: Does the Overapplication of Fertilizer to a Single Field Affect Watershed Water Quality?
20. Soil Health Responses to Cropland Management
21. STEWARDS: Watershed Data System History and Future
22. The Many Benefits of Buffers on Cropland Soils with High Runoff Potential
23. Two-Stage Ditch Nitrogen (N) and Phosphorus (P) Retention During Five Flow Regimes
24. What Does Microbial Enzymatic Activity Tell Us About Organic Soil Conservation Associated with Cover Cropping within the Everglades Agricultural Area of South Florida?
25. Land Use Specific Tracer Illuminates Agricultural Nitrate-N Fate in the CEAP Choptank River Watershed

### **CIG SHOWCASE**

26. Agricultural Informatics for Sustainable Soil, Crop and Landscape Management
27. Biocarbon-Driven Dairy Manure Management Demonstration for Enhanced Water Quality
28. Climate-Smart Productive Alley Cropping System (PACS) for Income Diversification and Farm Resiliency
29. Colorado Soil Health Program: Supporting Producers Improve Soil Health
30. Covering Ground: Investigation of Cover Crops for Soil Health in the Great Lakes Region
31. Exploring Relay Intercropping in Iowa: Early Findings from Farmer Engagement
32. High Clearance Robotic Irrigation for In-Season Nutrient Management
33. Innovative Technologies to Reduce Beef Industry GHG Emissions
34. Leveraging Soil Health Data for Improved Cotton Yield Prediction to Nitrogen Fertilization
35. Mitigating Enteric Methane Emissions in Dairy Cows via Feed Management Practices: Dairy Farm Advisors' Perspective
36. Modernizing Fertilizer Recommendations: The Fertilizer Recommendation Support Tool (FRST) Project

37. Perceptions of Adoption and Environmental Benefits of Silvopasture Systems by Forage-Livestock Producers in the Southeastern United States
38. Progress and Status of the Data-Intensive Farm Management Project
39. Soil Health Management Systems on Orchards in the Central Valley
40. Solar Corridor Cropping System: An Emerging Climate-Smart Agricultural Practice
41. Using 3-D Imaging to Map Cover Crop Biomass Predictions in Cereal Rye (*Secale Cereale* L.)
42. Water Quality Assessment Under Wireless Soil Moisture Sensor-Based Irrigation Scheduling System in South Carolina
43. Illuminates Agricultural Nitrate-N Fate in the CEAP Choptank River Watershed

### CLIMATE-SMART AGRICULTURE

44. A County-Specific Tool for Evaluating the Impact of Irrigation on Soil Water, Crop Water Use, and Crop Water Stress in South Carolina
45. Assessing Corn Response to Cover Crops and Nitrogen Fertilization in a No-Till, Three-Year Rotation in Northeast Kansas
46. Assessing the Impact of Trees in a Temperate Agroforestry System on Soil Organic Carbon Accumulation
47. Automating the Application of Water and Nitrogen for Cotton Production Using a Center Pivot
48. Carbon Dioxide Emission from Regenerative Cotton Cropping Systems in the Texas Plains
49. Conservation and Conventional Production Systems in Midsouth Cotton: A Six-Year Study Comparing Irrigated and Rainfed Management on Production, Runoff Water Quality, and Greenhouse Gas Emissions
50. Covering Ground: Enhancing Soil Health through Interseeding in Late-Season Vegetables
51. Effects of Perennial Cover Cropping on Soil Moisture and Temperature in Almond Orchards
52. Impact of Climate Change on Climate-Smart Agriculture: Soil Carbon and GHG Mitigation Potentials
53. Improving Almond Orchard Resilience to Climate Change with Deep Root Irrigation

- 54. Incentivizing Climate Smart Practices in South Carolina
- 55. Network Strategies and Studies to Advance Science for Climate-Smart Agriculture in the LTAR Network
- 56. Soil Hydrological Responses to Stacked, Regenerative Management in California Vineyards
- 57. Soil Water Conservation in Semi-Arid Regenerative Agricultural Cotton Systems
- 58. Illuminates Agricultural Nitrate-N Fate in the CEAP Choptank River Watershed

## CONSERVATION ECONOMICS AND POLICY

- 59. Ranch Economics of Lesser Prairie Chicken Conservation

## CONSERVATION IN ORGANIC, SPECIALTY, SMALL-SCALE, OR URBAN AGRICULTURE

- 60. Transitioning to Organic Farming: Enhancing Soil Health and Weed Control through the Implementation of Living Mulch and Grazing Methods

## CONSERVATION MODELS, TOOLS, AND TECHNOLOGIES

- 61. A Data-Driven Irrigation Decision Support System for Irrigation Scheduling of Cotton
- 62. A Novel Framework for Farm Irrigation Optimization via GPR-Based Intelligent Multi-Layered Subsurface Soil Moisture Assessment
- 63. Drone-Based GPR Hardware Implementation and Data Acquisition
- 64. Forecasting Daily Reference Evapotranspiration and Rainfall for Water Resources Conservation and Sustainable Agriculture
- 65. Measuring Farming Sustainability in the Fieldprint Platform

## CULTIVATING CONSERVATION TECHNICAL ASSISTANCE, COMMUNITY, AND NETWORKS

- 66. ArcGIS StoryMaps as a Tool to Increase Sustainability Awareness on Campus
- 67. Correlation of Extension Livestock Water Quality Screenings with Livestock Water Developments and Water Quality in North Dakota Counties
- 68. Crop Farmers Information and Knowledge Sharing Networks: Evidence from Ohio and Michigan

- 69. Cultivating Continued Conservation Through Networking
- 70. From Streams to Solutions: A Summer in Water Quality Extension
- 71. New Mexico Restoration and Soil Health Initiatives
- 72. Saving Tomorrow's Agriculture Resources (STAR): Illuminating the Path to Farmer-Led Conservation
- 73. Watershed Outreach and Management: StoryMaps as a Tool for Virtual Place-Based Education

### **HEALTHY FOREST ECOSYSTEMS: RESEARCH, POLICY, AND APPLIED SCIENCE OF ECOLOGICAL CONSERVATION AND RESTORATION ACROSS LANDSCAPES AND WATERSHEDS**

- 74. Tracking the Flow of Nutrients in Forest Ecosystems Using Plant Root Simulator (PRS) Probes

### **OUTREACH, EDUCATION, AND COMMUNITY ENGAGEMENT**

- 75. Accelerating the Implementation of Agricultural and Forestry BMPs through the Regional Conservation Partnership Program
- 76. Equipping Tomorrow's Conservation Workforce: Our Year in the SWCS Emerging Leaders Program
- 77. The Right Message, The Right Messenger: The Importance of Farmer Networks in Increasing Conservation Adoption

### **SOCIAL SCIENCES INFORMING CONSERVATION**

- 78. Analyzing Perspectives on the Motivations and the Knowledge Gaps Impacting CRP Participation in the Midwest and Southern United States

### **SOIL HEALTH RESOURCES, INDICATORS, ASSESSMENT, AND MANAGEMENT**

- 79. Comparative Effects of Diverse Cover Crops on Corn Yield and Soil Health in Midwestern Agroecosystems
- 80. Cover Crop and Tillage Interactions for Better Soil Health in the Coastal Plain, North Carolina

81. Defining Soybean Yield Reduction on Soils with Increasing Saltwater Intrusion Issues in the Coastal Plain, North Carolina
82. Influence of Fertility and Tillage on Soil Carbon Indicators after 50 Years
83. Measurement of Biological Nitrification Inhibition (BNI) Activity in Maize Varietals via *Nitrosomonas europaea*
84. Phosphorus Dynamics in a Palustrine Wetland Chronosequence in the Northern Mississippi Embayment
85. Predicting Soil Protein Using Dynamic Soil Properties for Soil Health Data
86. Prioritizing Soil Health Metrics for Predicting Edge-of-Field Water Quality Outcomes in the Great Lakes Basin
87. Simultaneous Determination of  $\beta$ -Glucosidase,  $\beta$ -Glucosaminidase, Acid Phosphatase, and Arylsulfatase in Double Cropping Wheat Agroecosystems Across Texas
88. Soil Health Impact of Different Methods of Establishment of Organic Native Warm Season Grasses
89. The Effects of Manure Applications on Crop Growth and Soil Greenhouse Gas Emissions in The Texas High Plains
90. To Improve Soil Health, Sorghum Is Cultivated Alongside Alfalfa or Sainfoin in an Intercropping System
91. Transition to Sufficiency Phosphorus Management and the Effect of Cover Crop Presence on Dynamic Soil Health Indicators in a No-Till Corn and Soybean Rotation

### WATER RESOURCE ASSESSMENT AND MANAGEMENT

92. Appraisal of AquaCrop Model for Barley Crop Production under Semi-arid Conditions of Haryana, India
93. Evapotranspiration of Rain-fed Mixed Perennial Grass Production Systems in Western Nebraska
94. Flood Detection by Using Polarimetric Synthetic Aperture Radar (PolSAR) Decompositions and the Deep Residual U-Net Approach to Enhance Food Security
95. Investigating the Effect of Invasive Plants-Derived Biochar on Heavy Metal Adsorption
96. Monitoring Field Scale Soil Moisture with sUAS Mounted L-band Radiometer
97. The Arkansas Discovery Farm Program: Documenting the Impact of Poultry Litter on Water Quality and Soil Health in Rice Production
98. Western Lake Erie Basin - Manure Nutrient Recovery