# Healthy Soils for Sustainable Cotton

**Field Day**

## Improving Soil Health Through a Systems Approach

### Field Day Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m. – 8:30 a.m.</td>
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<td>Welcome and Overview of Activities (Board bus from Robeson County Agriculture Center to Sonny Price's Farm)</td>
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| 9:00 a.m. – 9:30 a.m. | Sonny Price                  | Soil Health Farmer Mentor: Sonny Price  
1. Overview of Soil Health Management System  
   a. How long?  
   b. Equipment used?  
   c. Acres farmed?  
   d. Results  
3:00 p.m. – 3:30 p.m. | Nathan Lowder                | Rain Fall Simulator  
1. Impacts of management on soil function  
2. Soil Health Management Principles  
   a. Minimize disturbance  
   b. Maximize diversity  
   c. Keep living roots growing  
   d. Maintain residue cover  
4:00 p.m. – 4:30 p.m. | Sonny Price                  | Stop 1 Adapting Equipment for Soil Health  
(discuss adjustments and challenges with equipment when moving into a soil health system)  
1. Spreading residue during harvest  
2. Seeding cover crops, e.g. drilling, broadcasting, aerial application  
3. Terminating cover crops, e.g. when & how  
4. Planting into high residue levels  
5. Sprayer tips  
6:00 p.m. – 7:00 p.m. |                              | Lunch and Q&A with Sonny Price’s Farm staff |
## Cotton Field Day Agenda continued

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| 10:30 a.m. – 11:00 a.m. | **Stop 2** Cover Crops used in Cotton Systems | Buz Kloot  
USC Research  
Associate Professor  
  1. Single species versus multi-species cover crops  
  2. How do you determine success?  
  3. High vs. low biomass: Benefits of letting cover crop grow  
  4. Results of testing from Sonny’s fields |
| 11:00 a.m. – 11:30 a.m. | **Stop 3** Linking Soil Biology to Soil Health | David Lamm  
SHI  
Project Manager  
  1. Soil health indicators used to evaluate soil health in the field  
  2. Linking key soil health indicators to the soil health principles and soil function  
  3. Soil functions performed by soil organisms  
  4. Three broad functional groups for soil organisms  
  5. Identify and define biological hot spots in soil and key organisms in each zone/sphere |
| 11:30 a.m. – 1:00 p.m. | Lunch at Robeson County Agriculture Center | David Lamm  
SHI  
Project Manager |
| 1:00 p.m. – 1:30 p.m. | **Why Soil Health Now?** | David Lamm  
SHI  
Project Manager  
  1. Wrangler Jeans and Walmart Foundation involvement  
  2. 10-Year Cotton Sustainability Goals  
  3. Cotton Trust Protocol  
  4. Soil Health Institute |
| 1:30 p.m. to 3:00 p.m. | **DESIGNING A SOIL HEALTH MANAGEMENT SYSTEM** | Nathan Lowder  
NRCS Soil Health  
Specialist  
Buz Kloot  
USC Research  
Associate Professor  
  1. Cover crops benefits and impact on soil function  
  2. Consideration for successful cover crop planning  
  3. Designing multi-species cover crop mixes  
  4. Trouble shooting cover crop problems  
  5. Examples of cover crops in cotton production systems  
  6. Cover Crop decision tool (SmartMix Calculator) |
| 3:00 p.m. to 3:30 p.m. | **Healthy Soils for Sustainable Cotton Challenge** | David Lamm  
SHI  
Project Manager  
  1. Opportunity to commit to a soil health management system in 2 fields: one coming out of cotton and another rotating to cotton  
  2. Spend the afternoon developing a strategy to implement in the fall. Goal: leave with a cover crop mix to use, seeding method, timing and field prep plan  
  3. Discuss follow-up meeting in December to cover:  
     a. Cover crop termination  
     b. Planting challenges  
     c. Nutrient management  
     d. Pest management |