

**Rutgers University of New Jersey**  
**Final Activity and Outcome Summary for the 2011-2014 State Program Project**  
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**Project Title:** Sustaining urban fringe farming on coastal plain soils

**Performance Target**

- 5 ag professionals will become more competent and confident to recommend, teach, and advise on alternative cover crops and leaf application.
- Farmers: Overcome barriers and grower resistance to see a 50% increase in the utilization of municipal collected waste leaves in NJ.

**Performance Target Outcomes Reported**

- 9 agricultural service providers incorporated information and/or used skills learned through the project trainings in educational activities, services and/or information products that reached 40 farmers. Their activities included:
  - 3 Workshops
  - 3 On-farm demonstrations
  - 5 Webinars/presentations
  - 7 Articles (press, newsletter); 1 Fact sheet
  - 14 Web content elements
  - 70 Individual consultations
- **22 new farmers** obtained permits for using municipal-collected leaves since 2011 according to NJDEP data (data collection discontinued by NJDEP in 2014). NJ state program does not claim sole credit for this increase, but numbers of farmers using leaves is substantially higher in the 3 counties where Extension agents hosted multiple learning events and consultations.
- **2 farmers managing 575 acres** who worked closely with the state program began applying un-composted leaves
- **Number of farmers** using roller crimper for no-till pumpkin, winter squash, sweet corn **increased from 4 to 15**
- **6 equine operators in 3 state** constructed aerated static pile composting facilities using state program-developed materials

Project Milestone Activities Conducted	Participants
9 Workshops 8 On-farm demonstrations 13 Webinars/Presentations 58 Individual consultations	10 from Extension 17 from NRCS 1 from other state/federal agencies 2 from Non-profits 8 Farmers were active partners/demonstration site hosts
Assessments of Learning	
<p><b>25 ag service providers and 74 farmers</b> verified an increase in knowledge and skills as a result of learning through state program events.</p> <p><b>28 service providers and 10 farmers</b> verified intention to use the new knowledge/skills.</p> <p><b>Key knowledge and skills taught through the program included:</b></p> <ul style="list-style-type: none"> <li>• Cover crops for:               <ul style="list-style-type: none"> <li>*Use in fields and high tunnels</li> <li>*Building OM, CEC, soil quality</li> <li>*Reducing subsoil and root zone compaction</li> <li>*Use in summer</li> <li>*Weed suppression</li> <li>*Disease suppress and fungicide reduction</li> </ul> </li> <li>• Use of municipal collected leaf mulch to build organic matter</li> <li>• Use of roller crimper for cover crops termination and no-till</li> <li>• Benefits of fallowing field</li> <li>• Construction and management of static pile composting facilities</li> </ul> <p><b>Significant new understandings and intentions among service providers and farmer were:</b></p> <ul style="list-style-type: none"> <li>• That improving soil OM reduces incidences of soilborne diseases and fungicide expenses</li> <li>• That specific cover crops can impact specific soilborne pest problems</li> <li>• Service providers are likely to recommend and farmer are likely to use un-composted municipal leaves as a soil amendment</li> </ul>	

### Publications/ Products

Recognizing that farmers desire to make management decisions based on scientific data and Extension educators need evidence-based information to teach and advise farmers, the NJ state program devoted substantial efforts to produce:

- 4 multi-page guidance documents based on data from state program demonstrations about cover crops and use of un-composted leaf mulch
- 11 “Farm Calls” articles that describe answers to questions posed to educators in one-on-one consultations
- 6 Articles for the Rutgers hosted, state program managed website ***Sustaining Farming on the Urban Fringe***; this site with **427 subscribers (110 from Rutgers Extension) receives an average of 2,060 page views/month.**
- 2 Videos – about tillage (494 views) and backpack sprayers (>6,000 views; this video extended outreach of a SARE PDP project in NJ)

### Additional Outcomes

- Ag Deans, State Depts. of Ag and NGOs better recognize and support visible programs connected to farmers that also have a quality web presence. For example, as a result of PDP outreach, in 2014 Duke Farms (2,700-acre farm supported by the Doris Duke Foundation) invited NJ SARE PDP to advise them on their cover crops initiative and participate on their NRCS CIG. They are supporting a \$7,000 a year ag student stipend for three years to manage the cover crops relationship between Rutgers and the farm.
- The state program efforts to address coastal plain soil improvement coincided with the USDA NRCS national focus on soil health and cover crops. This helped renew programming relationships between the sister agencies of Cooperative Extension and NRCS that had declined over many years. As a result of the SARE PDP, Extension is integrated on the state NRCS soil health team, and NRCS members have become the best PDP training collaborators. **Ag service provider relationships were rebuilt that will last well beyond the end of the project, probably career long trust has been established.**

### Outreach about SARE Programs and Projects

A 16 page publication (2014) for ag leaders titled *Getting it Right for NJ* summarizes work of the NJ state program and other SARE projects in NJ, emphasizing their value to farmers and the ag economy. (325 distributed)

During the 3-year project, the NJ state program routinely shared Information about SARE grant opportunities and projects via the Sustaining Farming on the Urban Fringe website and Rutgers listservs, and at agricultural meetings and conferences throughout the state.