Getting It Right for NJ Ag
Leadership
Energy
Tunnels
Soil
Crops
Agritourism

Rutgers
New Jersey Agricultural Experiment Station

Northeast SARE
Sustainable Agriculture Research & Education
Highbush blueberry farmers in New Jersey’s Pineland region—a freshwater resource for 2.6 million people—often spray insecticides on the entire farm to avoid crop failure caused by their most threatening pest, the blueberry maggot.

Blueberry farmers can now protect their crop with less pesticide use, thanks to a SARE-funded project comparing whole-farm integrated crop management (ICM) with standard treatment practices.

Eight farms involved in the study, covering 1,200 acres of blueberry production, or 16 percent of New Jersey’s total acreage, each saved from $75 to $118 per acre annually because they reduced labor, gas and insecticide costs by adopting whole-farm ICM. The environmental benefit of reduced pesticide use and fuel emissions was an added bonus.

Blueberries are vital to the state’s agriculture, cultivated on 7,500 acres of land at a value of over $80 million.

Employing spatially-based ICM techniques, Rutgers University researchers used large-scale monitoring to find hot spots for maggot populations and encouraged farmers to target sprayings to those areas.

Throughout the project, more than 130 blueberry growers were trained on the new ICM guidelines. Beyond New Jersey, project results reached over 300 growers, and researchers found ICM adoption rates among blueberry farmers increased by 39 percent in mid-Atlantic states and 57 percent in New Jersey.

For more information on this project, see www.sare.org/projects, and search for project number LNE08-273.

SARE: Advancing the Frontier of Sustainable Agriculture in...

New Jersey

Project Highlight: Cutting pesticide use in highbush blueberries

$2.7 million in total funding

72 grant projects

(since 1988)

For a complete list of grant projects state by state, go to www.sare.org/state-summaries

SARE’s four regional programs and outreach office work to advance sustainable innovations to the whole of American agriculture.
SARE has awarded a total of 72 grants in New Jersey since 1988.

SARE’s Impact

53 percent of producers report using a new production technique after reading a SARE publication.

79 percent of producers said they improved soil quality through their SARE project.

64 percent of producers said their SARE project helped them achieve higher sales.

Contact Your SARE State Coordinator

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For detailed information on SARE projects, go to www.SARE.org

SARE is funded by the USDA’s National Institute of Food and Agriculture (NIFA).
Although farmers are a minority (less than 2%) of the U.S. population, people care what farmers think and need their input on many issues.

The production of food is at the center of many hot button issues in modern society: land and resource use; community development; jobs and labor; food safety; and, family health and well being.

Get together, get engaged, get heard.

Continue reading @ SUSTAINABLE-FARMING.RUTGERS.EDU
DRIVES AG SUSTAINABILITY

Ag still exists in our urbanized state for three reasons:

- Strong leadership by professional farmers and ranchers, NJDA, and NJFB
- A long history of dissemination of evidence-based agricultural advancements via Cooperative Extension
- The support of NJ voters, who recognize that the presence of successful agricultural businesses directly benefits their communities.

Ag leadership development is fundamental.

Many present day leaders remark on how membership in Future Farmers of America ignited the development of a leadership style that has served them well throughout their careers. FFA activities are among the first experiences that mold young men and women into determined, capable Ag leaders.

“I believe in the future of agriculture, with a faith born not of words but of deeds - achievements won by the present and past generations of agriculturists; in the promise of better days through better ways, even as the better things we now enjoy have come to us from the struggles of former years.”

SARE aims to advance agricultural innovations that improve profitability, stewardship, and quality of life through investment in research and education.

The NE SARE/NACAA Fellows Program enhances leadership capacity by developing participants skills over a two year period. Fellows gain a broad and deep perspective on practices incorporating both profitability and stewardship that ultimately benefits their own state programs and stakeholders. Ag Agent Michelle Infante-Casella helped originate the Fellows Program. NJ’s most recent participant is Ag Agent Steve Komar. Read more @ nesare.org

The Ag Leadership Development Program continues to do the important work of shaping farmers into articulate, knowledgeable, and skilled leaders who encourage positive change on key issues, policy, and economics to advance New Jersey’s Ag industry. The mentoring and networking opportunities provided are invaluable.

This worthwhile program of the New Jersey Agricultural Society, administrated out of Burlington County College, is supported by NJ Farm Bureau and the NJ Department of Agriculture.
Energy cost savings are particularly important for NJ’s mid-size farms with narrow profit margins. Often, savings can be found by fine tuning farming practices and on-site transportation activities. Check for ways to minimize energy expenditures to improve your bottom line.

Maximize Farm Energy Efficiency

Continue reading @ SUSTAINABLE-FARMING.RUTGERS.EDU
ENERGY EFFICIENCY

Small-Farm Equipment Demo:

- Matching the Tool to the Job
- Equipment Maintenance

Tillage and other field operations consume more energy, and profits, when equipment is not properly sized for the job or if it is poorly maintained.

Learn more @ http://youtu.be/gdYlj2iPUiE

Farm Energy Audits
Performing an audit can vary in scope from looking at a single energy expense to evaluating all energy inputs. They can vary in complexity from self-performed to professionally performed audits using computer simulation.

All energy audits should include review and analysis of energy records, a walk-through of the farm facilities characterizing equipment and systems, and identify specific energy conservation opportunities. Read more @ http://sustainable-farming.rutgers.edu/farm-energy-use-self-audits/

Electricity Monitors
Monitoring energy usage is essential for managing energy costs and consumption on the farm. As tools to monitor electricity have become more versatile, available, and less expensive, their use on farms to identify short and long term trends and patterns is increasingly practical.

Watch for additional workshops from NJAES Ag Engineer Tom Manning with support provided by USDA NRCS NJ and NJFB. Read more @ http://sustainable-farming.rutgers.edu/electricity-monitors/

Assessing Farm Equipment Efficiency
Electric motor costs account for a large part of a farm’s monthly energy bill. If motors are not properly matched to the intended load, energy and money is wasted. Motor efficiency deteriorates over time, which also adds to energy and profit losses.

Assessment is best done on an annual basis to make sure your operation’s costs remain as low as possible. Read more @ http://sustainable-farming.rutgers.edu/assessing-farm-equipment-efficiency/
The economic benefits from high tunnels have been well documented. Their use is a sustainable practice. High tunnels offer an edge to NJ growers by protecting high-value crops from the effects of marginal low temperatures, wind, rain, some insect and foliar disease pests, as well as wildlife damage.

Join thousands of growers using high tunnels to increase profits and conserve resources.

**Build a High Tunnel**
Rutgers NJAES Investigators A.J. Both, Steve Garrison, and Wes Kline demonstrate construction of a modified Penn State high tunnel design with improved end wall construction and automated roll-up side vents.

“Build a high tunnel. You make money in farming by satisfying your customers. Be in the market long enough during the year to hold your customers, with exceptional quality produce. That’s what high tunnels do for you.”
More @ http://sustainable-farming.rutgers.edu/high-tunnels-in-new-jersey/

**Fig Trees Under High Tunnels**
NJ grower Maurice Sheets completed a NE-SARE Farmer Grant program trial which showed that high tunnels have the ability to bring figs, a high value Mediterranean crop, to the colder areas of the Northeast.

The goal of the Farmer Grant program is to help farmers explore new sustainable production and marketing practices, often through an experiment, trial, or on-farm demonstration.
Read more @ http://www.nesare.org/Grants/Get-a-Grant/Farmer-Grant

**Grafted Tomatoes in High Tunnels**
Grafting is particularly useful in High Tunnel culture where crop rotation options are limited. Grafting has been successfully used to battle diseases like Verticillium and Fusarium wilt, corky root rot and bacterial wilt, among others.

The combination of high tunnels and grafted tomatoes maintain high fruit quality, extend the growing season, and can help overcome crop stressors such as salinity, as well as extremes in soil moisture and temperature.
Read more about No-till @ SUSTAINABLE-FARMING.RUTGERS.EDU
Farmers face conflicting management challenges:

- **Building soils by minimizing tillage, optimizing crop rotations, and cost effectively replacing nutrients;**
- **Controlling weeds, which typically requires significant tillage;**
- **Maintaining economic viability by cash cropping, which exerts pressure to chose sub-optimal crop rotations.**

**Take the Guesswork Out of Soil Inputs**
The path to successful farming starts with good climate and soils. The cropping history of your ground can be telling. A soil test can save money, effort, and time. The crew at the Rutgers NJAES Soil Testing Lab get you off on the right foot when it comes to getting to know your soil needs by measuring organic matter, pH, nutrient levels and ratios.
Get started @ http://njaes.rutgers.edu/soiltestinglab/

**Linking Compost Producers with NJ Farm Needs**
New Jersey has thousands of acres of farmed Coastal Plain soils with extremely low native organic matter and low native fertility that would benefit from manure produced on urban fringe equine farms. An aerated bin composting set-up produces quality compost manure efficiently, quickly, and with minimal environmental impact. Learn how to do it @ http://sustainable-farming.rutgers.edu/composted-manure-nj-farm-needs/

**Summer Cover Crops**
It's tempting to cash crop every season, but eventually you'll run into problems with disease pressure impacting yields. Summer cover crops add versatility to your cropping rotation – another chance to address weed and disease pressure plus build organic matter; another chance to boost future yields. See summer cover crops that work in the Northeast @ http://sustainable-farming.rutgers.edu/selecting-summer-cover-crops/

**Got Municipal Leaves?**
There are some tricks to working with leaves so you get the benefits of moisture retention and increased organic matter, while avoiding nutrient sequestration. Read how grower Bob Muth puts leaves to work @ http://sustainable-farming.rutgers.edu/improving-soils-with-leaves/
Get tips from Dr. Mel Henninger on using shredded leaves @ http://sustainable-farming.rutgers.edu/growing-potatoes-nj/
Contemplating Hops

Get new ventures off the ground by networking with fellow growers, local extension agents, & SARE.

http://sustainable-farming.rutgers.edu/farm-calls-contemplating-hops/
Farmers with an understanding of emerging market trends have a competitive edge. Farmer-entrepreneurs venturing into high value crop operations such as hops, wine grapes, ethnic fruits and vegetables, and oysters, achieve success through collaboration with Rutgers Cooperative Extension and NE-SARE.

Successful Collaborators
RCE ◆ NJ Growers ◆ SARE

World Crops
Locally Grown

Work begun over a decade ago with the Ethnic Produce Production and Marking Program continues, addressing specific crop and individual grower needs through NE-SARE Partnership Grants.

South Jersey grower Morris Gbolo and Atlantic County Agent Richard VanVranken, have partnered with NE-SARE for three seasons researching production systems and cultivar yields of the African crop, Roselle. Read more @ http://www.sare.org/Project-Reports

On-Farm Oyster Research

For 2014, a NE-SARE Farmer Grant funds collaboration between Forty North Oyster Farms and Rutgers Cooperative Extension/Rutgers School of Engineering to test two experimental cage designs in order to improve ease of handling, buoyancy, and balance.

Read more @ http://www.nesare.org/Grants/Get-a-Grant/Farmer-Grant
Giving Customers What They Want
Whether choosing to raise hay or wine grapes or dairy cows, a farmer’s temperament and love for their farm products determine success. This is especially true in Agritourism - you must love dealing with customers and giving them the on-farm experiences they long for.

Behind the scenes, detailed attention to risk is mandatory. Executed correctly, Agritourism provides an additional revenue stream, sustaining urban and suburban farms.

**Doing Agritourism Right**
http://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/

Customers want:

**Friendly, Knowledgeable Staff**

Training develops employee courtesy skills, knowledge of the business, and ability to inspire trust and confidence in customers. Pay close attention to customer feedback in person and through social media. Read more @ http://sustainable-farming.rutgers.edu/agritourism-resources-hospitality-training/

Customers want:

**Festivals**

Events are an opportunity to attract and inform new customers about your products. Remember, all farms need a comprehensive risk management plan to minimize exposure to common business risks: site safety risk, product risk, employee related risk, and financial risk. Read about risk management @ http://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/

Customers want:

**Unique Farm Products**

While the draw in agritourism is the experience, it's just as important to provide quality products throughout the season. Unique on-farm experiences and products set your operation apart from the many city-based “farmers markets” regularly springing up. Develop value-added, signature products and gifts to build customer loyalty.