



Agent's Overview

Farmer Joe awakened to a loud rooster call simulated from the digital alarm **“Cock-a-doodle-dooooo”!** As Joe staggered to the bathroom and on over to breakfast, the holographic image of the Secretary of Agriculture automatically came on and discussed the economic disaster of slumping prices for pork and grain. Joe smiled and cared not. With great foresight and wisdom, Great Grandfather had given up those commodity markets in the late 1990's and transitioned to new emerging Ag opportunities.

Fellow farmers of that time said Great Grandfather was foolish. **“A bird in the hand is worth two in the bush”**. But as **“Mavericks”**- they undertook some serious risks. Fortunately, the family had prudently done their homework, prospered and outlasted the conventionalists. Now Joe was reaping the benefits of their foresight and the generous passing of their preserved farms over the last six



decades in New Jersey. With a steaming cup of Jersey Fresh, greenhouse grown organic coffee, Joe walked outside to proudly view their families collective creation; 257 acres of:

- ◆ 12% organic matter soil for growing nutritious foodcrops
- ◆ Beautiful rolling pastures permanently sequestering carbon into rich, fertile soil providing a permanent income flow through natural resource rebates
- ◆ Clean, flowing springs that provided drinking and irrigation water derived from the watershed buffer and recharge programs. This open space farmland was recharging fifty million gallons annually amidst **“Water Wars”** throughout the region.
- ◆ Lush forest in a woodlot management program gave carbon tax credit and yielded cleaner - cooler air.

(Continued on page 2)

2010 Atlantic Coast Agricultural Convention and Trade Show

Planning is well underway for the 2010 Atlantic Coast Agricultural Convention and Trade Show sponsored by The Vegetable Growers Association of New Jersey. This annual event is a cornerstone for the ag community within the Garden State and well beyond. Once again, it will be held at the Taj Mahal in Atlantic City, on January 12, 13 & 14. The entrance fee for the three day event is included in the annual membership of \$100. The farmer member and one guest are admitted under each membership. Additional guests are \$25 each. One Day Passes will be \$50. Room rates at the Taj are dropping to \$79. The wine and cheese has been incorporated into the Tuesday night Social.

The Educational Sessions are organized by Rutgers Cooperative Extension Specialists and Agents. They do an outstanding job of tapping into leaders in each of the many subjects covered throughout the event. Sessions on classic topics include Sweet Corn, Cucurbits, Peppers and Tomatoes. A new look at an old theme is the session on Specialty Potatoes. This should appeal to many who target a retail clientele. Customers are al-

ways interested in something a little different. Tree fruit, blueberry and small fruit sessions round out the production aspect. This convention is more than just vegetables, and is designed to bring together many aspects of ag production. To that end Animal Topics are included on Tuesday along with Bedding Plants. Cut Flowers are addressed on Wednesday and the cutting edge subject of Bioenergy, including producing bioenergy crops, is scheduled for Wednesday and Thursday. New Farmer Training also spans the two days but for farmers facing the challenges of running an existing business, Wednesday's session on Ag Mediation and Leadership offers insight into conflict management. Wes Kline will address Food Safety on Wednesday followed by an update on Third Party Audits on Thursday. For a complete listing of the most recent schedule of Educational Sessions visit the VGANJ website at www.njveggies.org.

We hope to see you there!

Pegi Ballister-Howells

(Continued from page 1)

Joe had calculated that the white oak and hazelnut stands provided five thousand BTU's cooling for each forty foot tree while culled trees sold for firewood contributed to the cash flow.

- ◆ The biomass digester utilized alternative energy sources and helped recycle the farm animal manures and community lawn, leaf and food waste.
- ◆ Geothermal, solar and bio-fuel powered array of greenhouses provided year-long cash crops.

Joe then sauntered over to the farm's new carbon-fiber, turbine windmill and watched the electric meter go backwards! Life was good. Life was green environmentally, ecologically and economically. Energy was renewable, local and low cost.

Neighbors on the urban fringe envied this independent lifestyle – a green-minded, high tech approach that emphasized on-farm, sustainable input methods rooted in concepts from old school agriculture. Nonetheless, Joe straddled both sides of the invisible ionic fence when it came to specialty cash crops. There were 55 acres of bio-dynamic organic vegetables and 55 acres of conventional IPM foodcrops each rotated annually. Crop diversification, growing method and planting schedule were based on climatic and economic data provided by the Virtual Extension Agent using university models tracking local, regional and global market dynamics. Local customers relished this delicious Jersey Fresh produce and had no qualms about safe new age synthetic chemicals that provided great selectivity, low mammalian toxicity and minimal environmental risk.

It was time to activate the pilotless Electrical Tractor with its well worn auto-steer GPS system. With a few clicks on the wireless computer netbook, the JD Direct started up quickly to cultivate the new field before precision seeding the next successive crops. Alongside, the methane fueled Accu-pest Manager wheeled into action in the adjacent sweet corn and tomato fields to pinpoint and pyrolize weeds with a flaming gaseous burst using its optical laser sensor that distinguished weeds from crop. Above, the IPM drone inspected pests.

The ever-humorous mechanical mutt barked digitally and chased critters from the farm in a seemingly happy manner. Soaring overhead, the robotic hawk intercepted geese and blackbirds with a piercing attack call that prevented flocks from landing.

As the sun rose over these precious lands, farmer Joella well understood that uncommon sense and an appetite for progress had triumphed in the rapidly changing arena of agricultural enterprise. She held her husband's hand and soaked in the warm morning glow of the Springtime sun and spoke to the wind, "We have thought globally and acted locally. And we're leaving a healthy and better place for the next generation."

Bill Sciarappa

P.S. You're invited to take a step in building that bridge to your next generation. Plan on attending the **Atlantic Coast Conference** sessions in Atlantic City on January 13, 14, & 15. Especially look towards Wednesday and

Bio-Energy Sessions at the Atlantic Coast Agricultural Convention

WEDNESDAY AM JANUARY 13	WEDNESDAY PM JANUARY 13	THURSDAY AM JANUARY 14
Bioenergy Overview Diamond Ballroom D William Hlubik Middlesex County Ag Agent, RCE	Applied Efforts in Renewable Energy Diamond Ballroom D Dave Specca Ag and Bioenergy, Rutgers EcoComplex	Producing Energy Crops Diamond Ballroom B Bill Sciarappa Monmouth County Ag Agent, RCE
9:30 - Alternate Energy Ag Overview Zane Helsel, Ext. Specialist in Ag Energy, RCE	2:15 - Wind Energy Roger Dixon, NJ farmer	9:30 - Switchgrass & Miscanthus Stacy Bonos, Rutgers Specialist
10:00 – Information from Our Exhibitor Wayne Knerr, Helena Chemical	2:45 - Solar Energy Ray Hlubik, NJ Farmer & Bill Hlubik, RCE	10:00 – Ag Residues & Feedstocks Zane Helsel, Specialist in Ag Energy
10:10 - Rutgers Project Overview Peggy Brennan-Tonetta, NJAES	3:15 – Information from Our Exhibitors Wayne Knerr, Helena Chemical	10:30 – Information from Exhibitors Wayne Knerr, Helena Chemical
10:40 - Farm Bureau - Bio-energy Results with NJ Farmers - Tom Beaver, NJFB	3:25 - Energy Audits & Efficiency Tom Manning, Rutgers Bioresource Engineer	10:40 - Greenhouse Experiences Arie Van Vugt, NJ grower
11:10 - BPU Energy Program for Agriculture Larry Barth, BPU	3:55 - Producing & Using Methane Gas AJ Both, Extension Specialist, RCE	11:10 - Energy Programs & Ag Paul Hlubik, FSA Director/ Bill Hlubik

Climatology on the Farm and in the Community

David A. Robinson, Ph.D., New Jersey State Climatologist



Office of the New Jersey State Climatologist (ONJSC) is our hub for extending climate services. We keep residents aware – and one step ahead – of their dynamic environment. The ONJSC collects and archives weather and climate observations.

Activity highlights directed toward agriculture are experienced by “touring” our website: <http://climate.rutgers.edu/stateclim>. You will find links to historic temperature and precipitation data, real-time weather observations, and current National Weather Service forecasts. Irrigators can evaluate current water resources by visiting the NJ Water Watch web portal. Summer 2009 was very wet, ranking as 5th wettest back to 1895. Conversely, there may be considerable surprise to learn a warm August balanced out summer’s cool start. Thus summer temperatures were close to normal. Hydrologists and meteorologists use the data to monitor and respond to flood and drought; products are utilized by farmers for agricultural insurance concerns; and by Mosquito Control programs.

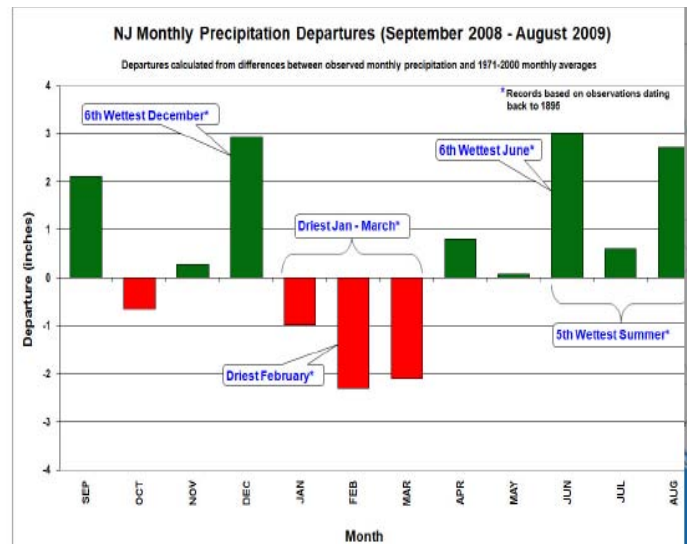
New Jersey’s diverse climate spans rural, urban, and coastal environs from High Point to Cape May. Ironically, climate affects our daily living so pervasively, that we tend to ignore its impacts until dramatic events. However, meeting endless challenges of monitoring, interpreting, and predicting ever-changing climate and weather are core to helping professionals, farmers, and communities invent and test practices maintaining consistent yields and minimizing impacts. Some of the spectacular stories of history are the stories of human failures to overcome climate and weather risks while sustainably meeting human needs.

Where does Climatology fit in Sustainable Farming?

Sustainable agriculture is a farming system durable enough to withstand being buffeted by farming’s big five resource risks, meeting human needs, while not depleting our resource base. We know farming’s five risks.

- ◆ Economic (interest rates, finance, or debt)
- ◆ Human (family or workers)
- ◆ Marketing (selling what you sow)
- ◆ Legal policies, regulations, property rights
- ◆ Production climate & weather, soils, or pests

If farmers are beset by heat or drought, we design—and they invest in – supplemental irrigation. Engineers use climate to predict system capacity and use. Our climate has predictable frost dates, so we extend seasons using high tunnels and greenhouses to protect crops. We use accumulated temperature records to predict when pests may emerge, or when crops will mature: degree-days. We predict weather to “make hay while the sun shines.” Timely reports of snowfall events (on our website throughout winter) are used by snow plowing operators as an unbiased source of data.



Farmers know local rain, snow, or hail differences are so vast that a dense network is vital. Over 300 residents signed on to take CoCoRaHS observations. We seek to enlist additional volunteers taking a few minutes daily to report amounts of rain or snow that fell in their backyards. All that is required to participate is an inexpensive plastic rain gauge, a ruler to measure snow, a computer, and the desire to watch and report weather. Observations are displayed in tabular and map formats. For more information or to sign up, visit our website: <http://www.cocorahs.org>. Also, we invite you to contact the ONJSC with questions, comments, or needs: support@climate.rutgers.edu.

Tomato Taste Tests – What They Tell Us

The first thing the tomato taste tests tell us is that people (New Jerseyans) love to taste tomatoes. Of the hundreds and hundreds of people that show up for tomato tasting events around NJ, including the Rutgers sponsored taste tests, they will endure long lines for many hours of sampling dozens of varieties of tomatoes – and then come back for more!

These informal tests can give us an indication of what stand out as the popular varieties, or “wow” consumers with aesthetic appeal – exotic colors or shapes, but what these studies don’t tell us requires another kind of study: scientific taste testing. Why after having hundreds of tasters at public tastings does it not result in a lot of scientific data and evidence of what consumers prefer?

While the Rutgers public taste testings do incorporate surveying strategies, there are a few uncontrollable variables that come into play at the public tastings. Outdoor taste tests often occur on hot sunny days in which hundreds of volatile compounds that comprise tomato flavor may be quickly lost to the elements. Public tastings are a fun event for family and friends – but a true measure of one’s perceptions may be tainted by outside influences such as, “George – you gotta try this one!” or “Eww – it looks like a rotten potato!”

So, how can taste tests give us the hard data we need to really know what people like? Scientific taste tests, or “sensory evaluation” is tasting samples in a controlled environment, following a strict protocol. Rutgers professor of food science, Dr. Beverly Tepper contrasts the sensory evaluation laboratory environment to an informal tasting. The lab booth offers samples in cups with code numbers so tasters cannot identify names of tomato varieties. Lab tasters are not subject to outside distractions and answer more questions.



The first thing that these sensory evaluations tell us is people (New Jerseyans) love to taste tomatoes! Tepper notes that when e-mail notices to recruit for tomato tasters are sent to the college, “we get responses back literally three seconds later, rivaling in popularity to tastings for cookies and ice cream.” Tepper’s lab evaluation results don’t just identify which varieties are favored in their taste and texture qualities, the analysis is linked to people’s background information (age and sex) as well as personal preferences and buying habits. This type of analysis gives an inside look at not only what people prefer, but who prefers them.

While these taste testings are more revealing, the Rediscovering the Jersey Tomato project (<http://www.njfarmfresh.rutgers.edu/JerseyTomato.html>) has only been able to conduct a few of these controlled tastings. The old time tasty varieties of the Jersey Tomato have been evaluated, along with other flavorful alternatives such as grape tomatoes (see article below for the scoop on a super sweet grape tomato). The factor limiting the frequency of tomato tasting studies and other research involving factors influencing tomato flavor is cost – research requires funding.

This consumer-driven research has been resonating with people who want tasty tomatoes – especially in New Jersey, home of the Jersey Tomato. We are now offering the opportunity for tomato lovers to help support these efforts. If you would like to become a Jersey Tomato Advocate by supporting us, your tax deductible donation to our tomato research fund can help us continue this type of research. For further information, visit our Jersey Tomato Advocate web page: <http://njfarmfresh.rutgers.edu/>

Jack Rabin - NJAES Associate Director - Farm Programs

Jersey Jems™ Grape Tomato for Tomato Lovers

Consumers seeking flavor that standard round shipping tomato varieties fail to provide have turned to alternatives. Over the last decade, improved grape tomato varieties emerged as a tasty, convenient phenomenon. They are naturally “hand-food” packaged for healthy snacking. They are portion controlled. They serve easy and hold well. Tomato lovers chose with their mouths and voted with their wallets.

Most importantly, when measured, the standout varieties of grape tomatoes in our Rutgers tests frequently have more of everything tomato lovers want. More sweetness. More tartness. More flavor intensity.



Identifying great tomatoes from farm to fork is our goal. In our Rutgers field trials and taste tests we identified a fabulous grape tomato; well adapted to NJ growing conditions and stunning in its culinary quality. To help local farmers, and protect tomato lovers’ ability to reliably identify the best when selecting locally grown grape tomatoes at their favorite markets, we created Trademark brand label identification for farmers to use when growing fine grape tomatoes. We introduce to you Jersey Jems™, and hope you will look for them at your favorite farmers or other markets in 2010. The attraction of grape tomatoes is more than just natural packaging and convenience. In our sensory evaluations at Rutgers, we simply let people respond to tomato quality experiences, and tell us their preferences, in order to incorporate tomato lover information into production recommendations for farmers. There are preliminary plans to continue this pilot program in 2010. If you are interested in participating, please contact Jack Rabin or Peter Nitzsche
Rabin@njaes.rutgers.edu nitzsche@njaes.rutgers.edu

Jersey Fresh

The Jersey Fresh program is recognized nationally for its continued success in promoting New Jersey's freshest fruits and vegetables. Jersey Fresh branding provides instant recognition for consistently high-quality New Jersey products upon which the consumer can rely on day after day. New Jersey's location on the east coast between the New York, Philadelphia and Washington D.C. provides access to diverse clientele, giving the state a competitive edge in the produce market. In 2009, New Jersey growers produced approximately \$300 million of food products.

The program also has a valuable tool for dealing with food safety, which is a significant issue of paramount importance to the New Jersey Department of Agriculture. Each year hundreds of New Jersey growers of fresh fruits and vegetables voluntarily register for quality and grade inspections under the Department's Jersey Fresh Quality Grading Program. Through the program, the Department has taken the initiative to advance homemade value added products by publishing the "Chapter 24 and You: A Practical Guide To Selling Safely At Farmers Markets". The guide lays out the steps that are needed to comply with



Chapter 24 of the State Health Code. The Department is actively identifying community based kitchens that meet Chapter 24 certifications, and partnering them with the farmers who could use them; helping to strengthen the value added potential for the farmer.

To further encourage the development of Jersey Fresh branded products, Rutgers University Agricultural Experiment Station Operations recently opened the Food Innovation Center in Bridgeton. The center will be able to provide cutting edge technology to New Jersey farmers so that they improve their ability to reach underserved and new areas of our state's population with products that are healthy and nutritious.

These Jersey Fresh, Jersey Seafood and Jersey Grown programs will continue to provide New Jersey with financial benefits in the future. The Jersey Fresh Program will help to improve the name recognition of agricultural goods produced in the state, and that will make the program increasingly important as the costs associated with production and distribution continues to pressure New Jersey farmers.

Hugh McKittrick,
NJ State Board of Agriculture



DeWolf Farm features classic tractor Amidst Halloween harvest



DiGregorio Farm has hay rides, flowers, mazes and much more



FSA's Tim Dey certifies corn yield harvest with farmer Garrett Woolf



RU Asst. Farm Manager Doug Reichert leads fruit harvest at Cream Ridge farm



Master Gardeners enjoy fruits of their labor after harvesting Cynthiana grapes for RCE



Ag Agent Gary Pavlis examines grapelod in Cream Ridge research plots

AGENCY UPDATES

USDA - New CONSERVATION STEWARDSHIP PROGRAM Sign-up through January 14, 2010

The Conservation Stewardship Program (CSP) sign up is on-going, with the cutoff for the current round of funding scheduled for January 14, 2010. CSP encourages agricultural and forestry producers who have achieved a high level of stewardship on their farm or woodlot to maintain existing conservation activities and adopt additional ones.

CSP is available on private agricultural lands and nonindustrial private forest lands. There are two possible types of payments - an annual payment for installing new conservation activities and maintaining existing activities, and a supplemental payment for participants who also adopt a resource-conserving crop rotation.

To apply for CSP, potential participants are encouraged to use the self-screening checklist first to determine program suitability. The checklist is available on the NRCS Web site and at NRCS field offices. Applicants who apply ahead of the deadline will have the greatest flexibility in reviewing their options with NRCS using the Conservation Measurement Tool. For additional information about CSP please visit http://www.nrcs.usda.gov/programs/new_csp or NRCS office 732.432.0075 ext. 3.



Farm Service Agency

COUNTY COMMITTEE ELECTIONS—Just a reminder: Be watching your mailbox for your official county office committee ballot starting early next month. Ballots will be mailed to all eligible voters starting on November 6, 2009. If, for some reason, you don't receive a ballot, feel free to notify the county FSA office. Completed and signed ballots are due back in the county office by the close of business on December 7, 2009.

DATES TO REMEMBER

- Nov. 6** - COC Election ballots go out in the mail to all eligible voters
- Nov. 20** - Next NAP sales closing date for some 2010 crops
- Dec. 14** - Deadline to file a Notice of Loss for ELAP

South Jersey Landscape Conference and Nursery Growers Meeting

A well balanced program for Nursery and Landscape Professionals accurately describes the South Jersey Landscape Conference and Nursery Growers Program according to Carl Quazza of the New Jersey Nursery and Landscape Association. "We have a kickoff session for both Landscapers and Nursery Growers on Tuesday, morning December 1, 2009

"Our program is also packed with good and timely information on Pest Management, Pesticide Safety, New and "In Demand" Plant materials," emphasized Jerome L. Frecon, Program Chair, and Agricultural Agent with Rutgers Cooperative Extension. "We also will introduce and review tools like Effective Software for Landscapers, and Soil Testing in the Nursery and Why It is Important", said Frecon.

At the conclusion of each session New Jersey Pesticide Applicator Units for Category CORE will be given. Certified Nursery and Landscape Professional Credits will also be given.

Preregistration is required. Registration forms are available at <http://gloucester.njaes.rutgers.edu> or by calling Jerry Frecon at 956 307-6450 Ext 1.or Carl Quazza at NJNLA at 800 314-4836,

SOUTH JERSEY LANDSCAPE CONFERENCE AND NURSERY GROWERS MEETING



Tuesday, December 1, 2009
MASSO'S CRYSTAL MANOR
South Delsea Drive, Glassboro, NJ

CALENDAR

NOVEMBER

12-13 Mid-Atlantic Veg Workers,
Newark, Delaware
12 - FFA Career Day, Cook Campus,
Rutgers
16-17 Farm Bureau, Princeton
18-19—NJDEP - Water Monitoring
RU EcoComplex
19 - Equine Waste Management Ag
Bldg, Freehold 7-9 PM 732-431-7260

DECEMBER

1 - South Jersey Landscape Confer-
ence and Nursery Growers Meeting-
Masso's Crystal Manor in Glassboro.
856-307-6450
15 - Bio-Energy Ag Training -
Agents & Advisors - EcoComplex

JANUARY 2010

1/12 - 1/14 Atlantic Coast Agricul-
tural Convention & Trade Show -
Taj Mahal, Atlantic City
21- Equine Waste Management Ag
Bldg, Freehold 7-9 PM 732-431-7260

FEBRUARY

5 - Central Jersey Vegetable Grow-
ers Mtg. Ag Building, Freehold, NJ
Call Terry/Madge 732-431-7260

MONMOUTH COUNTY BOA
7:30 PM - 11-24, 12-15, 1-19

BASIC PESTICIDE TRAINING
CORE—9 am - 1 pm 2009
11-10, 12-29

Category 3B - 9 AM - 3 PM
11-24

To register call 800-524-9942

Held at
Rutgers Cooperative Extension
Ag Building
4000 Kozloski Rd. Freehold, NJ
732-431-7260

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January 12-14, 2010

Convention

Atlantic Coast Agricultural Convention and Trade Show
(NJ Vegetable Meeting)
Atlantic City, NJ <http://www.njveggies.org/convention.htm>

GUIDES TO MINIMIZE MICROBIAL FOOD SAFETY HAZARDS
OF MELONS, LEAFY GREENS AND TOMATOES
Dr. Wesley Kline, Agricultural Agent Cumberland County

The Food and Drug Administration published draft guidance documents for melons, leafy greens and tomatoes in July. The industry has approximately 60 more days to comment before final adoption. The documents are available at <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments>



<http://njaes.rutgers.edu/pubs/plantandpestadvisory>


A new Rutgers online resource for vegetable growers. Easily access all vegetable info in one spot. Log in and sign up to receive new content as it becomes available.
www.njveg.rutgers.edu


PESTICIDE CONTROL PROGRAM WEBSITE
Go to website: www.pcpnj.org

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Fax: 732-409-4813

Rutgers Cooperative Extension— Agriculture, Family and Community Health Sciences, 4-H Youth Development, Resource Management, and Marine Studies— welcomes this opportunity to send you the enclosed materials for your information and use. Educational programs and information are provided to all people without regard to sex, race, , national origin, or handicap


Richard G. Obal
County Agricultural Agent


Bill Sciarappa
County Agricultural Agent

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders, Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

New Jersey Agricultural
Experiment Station

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