



Agent's Overview - Soil Health

The health of agricultural soils in New Jersey continues to be an issue on our farms. Grower reliance on routine applications of nitrogen-phosphorous-potassium fertilizer may help maintain yields for awhile but can eventually degrade soil health. Poor soil health is caused by depleting dozens of other soil components which lead to an unsustainable farming practice, harm of to the environment and significant costs.

What is going on with our depleted soils? Well, the problem is not just in New Jersey but nationwide. Mineral soil suffer first from the elimination of soil life. Relying on purely chemical inputs ignores and condemns the beneficial biology of soil life. Bacteria, fungi, and numerous other micro-critters are all members of this underground food web. Petrochemical based N-P-K products produce acidic toxins against this natural chain of life. Following up the unintended assault with soil insecticides, fungicides, herbicides and excessive tillage exerts further damage to the soil rhizosphere. There are "softer" alternatives to



many of these practices.

While N-P-K helps provide macro-nutrients for improved plant growth with carbohydrate, protein and fat storage, such fertilizer does little for the other vital micro-ingredients like vitamins, flavor factors and medicinal components. To produce such desirable traits for our local moneymakers like tomato, pepper, cantaloupe, herbs and blueberries; plants need this living foodweb to better supply the complex building blocks that its root system can't obtain.

To receive some of these valuable micro-nutrients, plants have evolved a feedback system to squirt a little sugar out their roots and feed their friends in the soil. These friends reciprocate by scavenging key substances in the soil for the root hairs of the crop. Unfortunately, this wonderful symbiotic relationship is destroyed by frequent and excessive use of synthetic soil chemicals. To get the most out of your soil system one needs to feed soils biologically. There are tons of unused horse manure around that of-

(Continued on page 2)

New Jersey Ag Convention

Class VII of the NJ Agricultural Leadership Development Program convened at the NJ Agricultural Society Convention in Cherry Hill on February 9-11, closing in on their second year of the program. A highlight of this seminar was the nomination of the NJ Secretary of Agriculture, Douglas H. Fisher. Governor Corzine appeared at the convention to show his support for Assemblyman Fisher, telling those in attendance that Fisher 'has character, knowledge, and the ability to deal with the political process that invariably comes with this territory'. After his speech, the Governor took time to briefly talk with Class VII and take pictures. The class



had the opportunity to learn the process by which the new Secretary was chosen by hearing from Noble McNaughton, President of the State Board of Agriculture, and Bill Randolph also from the State Board of Agriculture, and NJALDP Alumnus. Reviewing the qualifications, job description, and interview questions of the applicants gave the participants great insight on the duties and responsibilities of the Secretary of Agriculture.

The class also participated in workshops designed to strengthen public speaking skills and lead more effective meetings using Roberts Rules and facilitation skills.

Diane Zahorsky

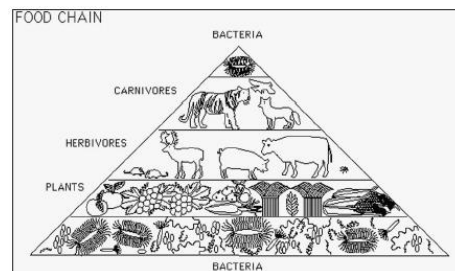
(Agent's Overview continued from page 1)
 ten goes straight to the dump! Also, plowing in green plant manure, composted manures, municipal leaves and other biomass sources provides a feast for key beneficial bacteria like actinomycetes. Growers know this microbe by that sweet earthy smell it gives off in rich, healthy soil. Also, mycorrhizal fungi break down this new food supply and quickly multiply.

Such beneficial organisms greatly enhance soil health while improving nutritional quality and culinary taste. We simply need to pay attention to the biology of Mother Nature. Certainly, organic farmers have learned this lesson well and it's time for conventional growers to more fully adopt these soil building methods. A grower needs to conserve this natural balance by trying minimum and no-til methods and using IPM strategies with the least injurious pesticides. Often organic approved materials substitute well such as the insecticides spinosad or pyrethrum, the biologically based fungicides that are and non-selective herbicides as vinegar, citric acid and others that are used with shielded sprayers.

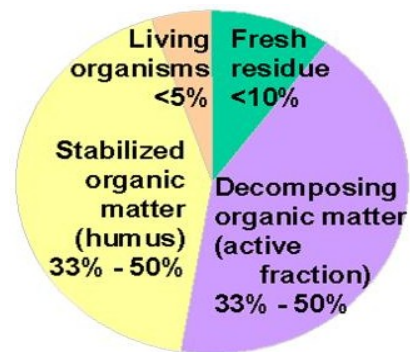
We don't want a dust ball in our Garden State. Former president Franklin Roosevelt said "**The nation that destroys its soil destroys itself.**" - Great words for any great nation that wants to exist for five hundred years or more. For example, it's well known from USDA Research that carrots grown in rich Michigan soils are quite superior in every way to carrots grown in infertile Florida soils in terms of protein, carbohydrates, vitamins and flavor. New technology and the miracles of chemistry can only go so far.

A grower who wants to increase the nutritional quality, medicinal benefits and culinary taste of his/her fruits or vegetables

needs to invest long term in their soil bank; these horticultural returns are scientifically documented. A better balance of soil life wards off attack by phytopathogens in the soil by out competing them for space in a healthy soil environment. Plant cell



walls grow stronger and thicker when fed by organically based fertilizers and thus can better resist foliar attack by pests. Food plant storage



organs contain higher vitamin levels and more nutritional compounds. Our emerging science database now reveals that good soil health leads to our foods having more ascorbic acid (vitamin C), more anti-oxidants (prevent cancers, heart disease) more flavinoids (better taste) and more resveratrol (anti-aging). Conversely, unhealthy soils leave plants with few micro building blocks to create these valuable substances. One can be left with bland tasting produce pounded by excessive pesticides that may look good enough in terms of size and yield but actually is just a sack of water logged cells lacking sugar and other vital nutrients.

Concentrating on food quality is something our grandfathers really did well before the advent of advanced labor saving machinery and plant protection chemicals. They manured their field deeply and selected varieties on the basis of taste – not transportability. Better taste indicates better food quality – generally our tongues detect sugar or acid, salty or bitter lycopene or carotenoid and we can then determine what is good for our bodies.

Parents are especially becoming aware of such important nutritional health needs especially for children. After all, **we are what we eat** and consuming high quality foods adds high value all around. Building soil health is the first step to more effectively engaging this knowledgeable market locally with high value food, less food mileage, more recycled farm soil amendments and more nutritional produce. This is the "story" we want to tell our customers – we're not just commodity crops coming from some mega-industrial farm thousands of miles away. We're environmental stewards of the land, we're proud of our produce and here's why.....Growing sustainably is good in both the long and short run.

So please think about the biological life in your soil and how improved soil health can fit your operation. Help stop the decline in rich farmland soil, enrich food quality and reinvigorate the green machine under our feet. As President Franklin implied, unsustainable Ag slowly destroys our soil and is doomed to collapse. Let's focus our sustainable farming on the horticultural, nutritional and economic laws of Mother Nature, not those dictates of Mega-industry.

CALENDAR

MARCH 2009

13 - Renewable Energy Training for Farmers - Warren Cty Extension, 165 County Rd. 519 S., Belvidere 8:30am—1 PM.

17 - Surviving in the Horse Industry A short course for barn managers. 9am-4PM. Bethlehem, PA 973-948-3040.

24 - 9 - Intermediate Grape Grower Workshop - Southern Maryland in Hughesville

26 - Third-Party Audit Update & Produce Food Safety Refresher for 2009 - RCE Cumberland 856-451-2800

28 & 29 Horses 2009
www.escrutgers.com/Horses2009

April

9 - Intermediate Grape Grower Workshop - Northern/Western Maryland at Howard County Fairgrounds

MONMOUTH COUNTY BOA
 7:30 PM - 4-21, 5-19

BASIC PESTICIDE TRAINING CORE—9 am - 1 pm 2009
 4-14, 5-5, 6-2

Category 3B - 9 AM - 3 PM
 3-24, 4-21

Category 3B - 3 PM - 9 PM - 6-16-09

Category 3A - 3 PM - 9 PM - 5-19-09
 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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2009 Farmers Market Tuesdays Noon—5 pm June 23—Sept. 8 Rain or Shine



Waretown Recreation & Lake Area
 Wells Mills Rd. (Route 532)
 Exit 69 - make right—recreation area is 1 mile on left
 Township of Ocean Recreation
 50 Railroad Ave.
 Waretown, NJ 08758
 609-693-5407
recreation@townshipofocean.org

PLANT & PEST ADVISORY

a seasonal management newsletter available in four editions:

- ♦ Vegetable Crops (weekly) ♦ Fruit (weekly)
- ♦ Landscape, Nursery & Turf (biweekly)
- ♦ Cranberry (biweekly)

<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

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 New Jersey Agricultural Experiment Station**

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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.

AGENCY UPDATES



Tri-County Cooperative Auction Market Association Pegi Ballister-Howells, Market Manager

Tri-County Cooperative Auction Market Association is a produce auction located just outside of Hightstown, New Jersey, in East Windsor. Long known as the Hightstown Auction, Tri-County was started in 1931 and opened for business in 1934. The auction sits on a 10 acre flag lot on Route 33. Al-

though almost hidden from view from the road, the location is ideal. Dead center in the State, it is a stone's throw from Route 130 and minutes from Exit 8 on the New Jersey Turnpike. Even many long time local residents are unaware of its existence. That is going to change.

Tri-County is a night auction. Direct sales to customers take place from 5 PM right up until the auction starts at 7. This allows buyers of smaller quantities to come and go quickly as well as allowing larger buyers to buy exactly what they need without the risk of the auction block. Growers pay 10% commission and auction buyers pay \$5 buyers fee. Direct Sales customers do not pay a buyers fee. \$150 annual membership is required to sell at the auction but until May 1, early bird membership is \$100. Currently 57 members bring product to the auction during the season, peaking in late August through September.

STARTING EARLY

The auction has always been open M-W-F nights starting in early July, in time for the holiday. This year, in addition, the auction will open May 6 and will be open every Wednesday evening in May and June. We welcome sellers and buyers of early spring crops, bedding plants, vegetable plants and nursery stock. South Jersey growers of early spring crops are welcome and Kevin Flaim of Panther Brand will be bringing up a wide range of early Jersey products to help round out the product line.

SOMETHING NEW-A CSA

New for 2009, Tri-County is offering a Community Shares Agriculture Project. For \$500, individuals or families can purchase a share of fresh Jersey produce. Available for pick-up on Tuesday or Thursday mornings before noon, a milk crate of produce will be waiting for our CSA members. This will last for 20 weeks and will begin in mid-June. The product will be a diverse assortment of local produce grown by our farmer members. While a traditional Community Supported Agriculture farm offers shares in what that farm produces, this program offers a share in the bounty of many local farms. For more information contact Pegi Ballister-Howells at 609-575-5585 or call the Auction at 609-448-0193.



USDA



Farmers Needed for New Community Farmer's Markets

Call Monmouth County Extension for details 732-431-7260 or contact: Ron

Good or Bill Walker at 609-984-2278 or 292-8854.

Established farm markets can be found on our website

www.state.nj.us/jerseyfresh

Direct & Counter Cyclical (DCP) signup - Signup for the 2009 Direct and Counter-cyclical payment (DCP) Program continues until June 1, 2009. The June 1, 2009 deadline is mandatory for all participants. FSA will not accept any late filed applications.

FSA Farm Loans Available to Beginning Farmers - Beginning farmers or ranchers may obtain a farm ownership loan by using funds set aside especially for them by the Farm Service Agency. These loans can be financed up to the \$300,000 loan limit, and the term of the loan can be up to 40 years.

United Fresh Produce Association President Optimistic About East Coast

Tom Stenzel, President of the United Fresh Produce Association, stopped by the Rutgers Food Innovation Center in Bridgeton for a town hall style meeting arranged by the New Jersey Department of Agriculture. He spoke to a standing-room only audience of growers and industry personnel of opportunities for the produce industry that will assure that East Coast producers are not written off anymore.

Stenzel identified three opportunities that will yield great benefits for fruit and vegetable growers. First, after 35 years in existence, the national Women, Infants and Children (WIC) program will be providing vouchers to purchase fresh produce for the first time. Each eligible mother will be given \$8 per month, there are over 500,000 eligible women in New York alone, and overall, there will be \$500 million available through the program.

The second opportunity is in the new Farm Bill that sets the USDA agenda for the next five years. This Farm Bill addresses the unique needs of specialty crops, including fruits and vegetables, by devoting \$3 billion to key areas –

- research on food safety at \$50 million per year;
- \$75 million annually from the USDA to State Departments of



Pres. Tom Stenzel - UFFPA, center, Director Lou Cooperhouse, L, Al Murray—NJDA R.

Agriculture proportional to the value of each state's specialty crops with a block grant program.

- A new Fresh Fruit and Vegetable School Snack Program providing money to individual schools across the country, including more than 30 in NJ, for a free daily fresh produce snack for students. Each school chooses what snacks to serve and will have a portion of \$1 billion over the next 5 years to spend.

Last on the Stenzel's list was *Where are we going?*

The national School Lunch Program. UFFVA has set a goal of "A salad bar in every school."

- Immigration Reform—the produce industry needs a LEGAL workforce, but can't have farmers in the position of policing and enforcement! Food Safety—there WILL be reforms in GAPs, food safety, imports and trace-ability.

Stenzel stated that there is an increasing desire for local produce among many consumers, but no standard definition. Some retailers use distance to determine what's local, while other use state designations like Jersey Fresh. For example a Texas Grown promotion may still come from 1,000 miles away due to the size of the state. He also said some consumers may actually be looking for the "authenticity of the farmer" rather than the miles. COOL regulations allow regional or state marketing programs, like Vidalia onions or Jersey Fresh along with the name of the farm on the box, to identify the country-of-origin.

He then told the Jersey farmers that the increasing demand for 'local' foods is having a more direct impact on them. When he became UFFPA President 15 years ago, some western growers were confident that East Coast producers were on their way out of existence. Now though, he is optimistic for growers in our area. Whether Mid-Atlantic consumers call themselves locavores, 100-mile dieters or they just appreciate the quality of locally-grown, fresh foods, they are causing a resurgence of the Eastern produce industry.

Notes by Rick VanVranken

Farm Bureau holds Agricultural Energy Conference



NJ Farm Bureau held an alternative energy conference at the Ag Building in Monmouth County on March 6. A full house of over 100 growers attended to listen to educational sessions led by Director Pete Furey, organized by Ed Wengryn and videotaped by Rutgers Bill Hlubik.

The Nursery Industry in New Jersey is Thriving

The industry has adjusted to the market and found new ways to add value to products. The New Jersey horticulture industry that includes greenhouse and nursery has been able to hold steady in the economy over the past two years. While some areas of agriculture have seen declines, NJ horticulture has maintained sales at around \$368.5 million dollars, which represents 43% of the states entire agricultural.

The State had two major differences to deal with in 2007 and 2008. The first was the recent closing of Princeton Nurseries. This was a huge loss to the state as a provider of quality nursery stock grown in the garden state. On the up side, the nursery growers have risen to the challenge by filling in the gap that was left when they closed. Growers like Hugh McKittrick, 52, Colts Neck, who is a national supplier of lining out stock to the nursery industry specializing in boxwood and other deer resistant plants, has expanded his family's nursery along with other state growers to meet the demand of the ever-expanding housing market. "Currently we are setting ourselves up to deal with pent up demand for housing, if we don't plant now we can't cash in later.

The second big hit the industry took was the new tax on



wholesale plant material initiated last year. Buyers of plant material adjusted to the increase in costs by reducing their bottom line. One way they did this is to find local growers so that they could cut their fuel costs and still be able to make a profit on their installations. At the recent Home Show at Brookdale Community College, all the landscape exhibitors expressed interest at finding new producers within the state for landscape materials. They want to provide the best quality plants for their customers, and at the same time, reduce lost time by putting together growers of the plant material they can use within a certain mileage radius.

Monmouth county's exceptional soil, helps New Jersey's production growers to be able to deliver a finished product to the market that is superior in health and vigor. New Jersey's central location also makes it ideal for providing plants to the

industry at reduced shipping costs. The need to bring plants in from across the country is unnecessary when they are available right here. This also fits into the "green" customers want, as the demand for environmental stewardship increases. As Ellen Leroy-Reed found out in her article in the American Nurseryman, "The landscape and nursery industries "Were green before 'green' was cool." Putting the industry in harmony with the current move towards earth friendly solutions in lessening the need for fossil fuel consumption. There is strong evidence that even in a struggling economy, the desire for locally grown products is not diminishing, but accelerating. An article in the New York Times, "In a downturn, a Growth Opportunity", the article details uptrend in community supported agriculture shares being bought this winter. New Jersey growers once again are being leaders in trends that other states will follo

Overall, New Jersey is a leader in the plant market place, providing up to date innovative research results to the nursery industry in an evergreener environment that is very encouraging.

Nina McKittrick

Central Jersey Turf & Ornamental Meeting

The 2009 Central Jersey Turf & Ornamental Institute Conference was held on March 4, 2009, at the Battleground Country Club in Manalapan, NJ. Over 190 nursery, greenhouse, landscape and turf maintenance professionals attended the full-day program.

Dr. Mike Raupp from the University of Maryland, Sean Healy of the Monmouth Country Mosquito Commission and Carl Nordstrom, Executive Director of the NJ Nursery and Landscape Association were some of the

highlighted presenters.

Evaluations provided high marks for the educational value of the entire program as well as for the accommodations and food for this new venue.

Rich Obal



The Return of the Moreton F1 Tomato ... or the Case of the Missing Parent Seed

Rediscovering the Jersey Tomato is a Rutgers NJAES project with a mission to refocus research and extension effort on the "Jersey Tomato flavor" New Jersey is famous for. Part of our project includes identifying excellent eating tomato varieties that were well-adapted to our growing conditions and commercially grown by New Jersey farmers back in the tomato glory days of the 1950's, 60's and 70's.

Bringing back the Rutgers' Ramapo F-1 tomato fulfilled part of the mission for the mid- or main season, but one variety does not a Jersey Tomato make. Jersey tomatoes are a portfolio of varieties that do well under our climatic conditions in a different range of soils and ripening at different times of the season. Ramapo is one among several other tasty varieties maturing mid- to late season. There is a problem with main season maturity, according to Jack Rabin, Associate Director for Farm Programs at Rutgers NJAES. The New Jersey tomato season commences in early July, when thousands of anxious consumers are waiting for their first juicy bite of a Jersey Tomato. With a lack of a tasty



NJAES Director Jack Rabin chats with longtime vegetable grower Wickie Hom of Sun Sang Farms. Wickie has generously provided advice and support to Rutgers for many years.

early season variety, the portfolio is missing its opening act.

Enter Joe Musumeci of Eastern Seed Services, a New Jersey seed processor and Rutgers ag graduate, who is handling Rutgers Ramapo tomato seed sales to commercial growers. Growing up on a South Jersey tomato farm, Musumeci recalled

the early season variety that Jersey Tomato growers referred to as "the July 4th tomato". The Moreton F-1 tomato was Harris Seeds' first F-1 hybrid release in 1953. "For 6 to 10 years", says Musumeci "it was Moreton – probably the first hybrid grown on a large scale in New Jersey. Moreton was a soft tomato and was eventually replaced by Red Pack which was later renamed Pik-Red which had less cracking, but didn't have the flavor of Moreton."

Musumeci knew Harris Seeds had discontinued the production of Moreton F1 hybrid seed. He contacted Harris about the Rutgers project and about re-introducing Moreton seed. Harris provided Musumeci with the Moreton parent line seed.

But, what happened to Moreton that took it out of production? According to Mark Willis of Harris Seeds, Harris Seeds was sold to another company and in 1991 when the New York facility was shut down and its stock seed moved to California, one of the Moreton parent lines was lost.

Back in their New York facility, around 1994, a former Harris employee showed up with a Ball jar of seed he purchased from the auction of the Harris Company. The seed was the missing parent line of the Moreton tomato. And, according to Willis, as the story goes, the lost seeds were traded in exchange for a life-time supply of fava bean seed. Reinstated around 1995, Moreton tomato was produced until 2004, when large production was no longer profitable.

Musumeci found a seed grower to produce a small batch of Moreton that is being reintroduced in 2009 in a cooperative agreement between Eastern Seed Services, Harris Seeds and Rutgers NJAES. For the 2009 growing season, Rutgers will be conducting consumer-driven research to find out how this early season variety rates amongst gardeners and consumers for flavor and production.

Cindy Rovins & Jack Rabin

Central Jersey Vegetable Meeting

The annual Vegetable Growers Meeting for Central Jersey was held on February 6, 2009 at the RCE conference room in Monmouth County. Over 130 participants received agricultural information from various agencies like Farm Bureau with President Richard Nieuwenhuis, Monmouth County Board of Agriculture with President Tom Frieberger, NJDA, FSA, and NRCS; as well as outstanding Rutgers Extension

speakers Pat Hastings, Gerry Ghidui, Brad Majek, Andy Wyenandt, Wes Kline, Bill Hlubik and NJAES Associate Director Jack Rabin. Key topics included updates on agency activities, vegetable pest management, pesticide use, food safety and alternative energy. There was plenty of good dialogue and comments. Meeting evaluations indicated a high level of satisfaction with this annual event.

