

New Jersey Department of Agriculture: A Record of Accomplishment in Keeping New Jersey Agriculture Green and Growing September , 2009

The New Jersey Department of Agriculture's diverse programs and services reach a wide array of individuals, businesses and organizations throughout New Jersey. Whether protecting farmland, keeping our family farms viable, ensuring the health and safety of plant and animal resources or annually distributing millions of pounds of food to New Jersey's schoolchildren and neediest citizens, the NJDA's activities directly impact daily life in the Garden State. Following are the Department's major areas of responsibilities and highlights of recent initiatives.

Planning for Agriculture

Retaining New Jersey's farms requires more than just protecting the land. We also need to make sure that farmers are successful so they can continue to stay on the land and keep it in active production.

The NJDA in 2003 developed an Agricultural Smart Growth Plan – the first in the nation – to ensure all levels of government, the farming community and the public have the necessary guidance and tools to plan for retaining our farms, agriculture and the benefits they offer while accommodating necessary growth. The plan, which was updated in 2006 and can be accessed at www.nj.gov/agriculture/pdf/smartgrowthplan.pdf, recognizes farmland preservation as a cornerstone of those efforts along with four other linked components: innovative planning techniques; economic development; natural resource conservation; and supportive programs and policies that help sustain agriculture. The NJDA also developed an accompanying on-line Smart Growth toolkit (www.nj.gov/agriculture/divisions/anr/agriassist/smartgrowth_toolkit.html) of resources to assist municipalities, businesses, nonprofit groups and local citizens in including agriculture in planning at the local level.

The NJDA's Agricultural Smart Growth plan provided the foundation for the State Agriculture Development Committee's July 2007 adoption of sweeping new rules that streamline and improve the farmland preservation process. A cornerstone of those new rules is the establishment of a new county planning incentive grant program that requires participating counties seeking farmland preservation grant funding to develop strategic farmland preservation plans that detail not only plans to preserve farmland but also plans for efforts to support and retain agriculture as an industry.

Seventeen counties took part in the SADC's new County Planning Incentive Grant Program in FY09. The program was the centerpiece of new rules adopted in 2007 to streamline the Farmland Preservation Program and make it more efficient and effective. Under the new program, counties develop comprehensive farmland preservation plans that not only establish long-term preservation goals, but also explore a wide array of strategies to attract and retain thriving farm operations and a sustainable agricultural industry. Coordinated with the 17 county plans are 42 municipal comprehensive farmland preservation plans developed through the Municipal Planning Incentive Grant Program. Altogether, the county and municipal plans target the preservation of 4,100 farms covering more than 240,000 acres.

Preserving Our Farms

Permanently preserving privately owned productive agricultural land ensures a stable land base for the future of the agricultural industry and offers a whole host of other public benefits, including maintaining our rural and open landscapes and the quality of life in our communities; ensuring access to fresh local produce and other farm products, as well as on-farm recreational activities; helping towns avoid the negative impacts of development, including traffic and

overcrowded schools; and stabilizing property taxes by remaining on the local tax rolls as privately owned, tax-paying land that requires far less in services than residential development.

As of September 10, 2009, 1,867 farms covering 180,995 acres have been permanently preserved. Of that, 74 farms covering 10,881 acres have been preserved in the Pinelands and 384 farms covering 32,491 acres have been preserved in the Highlands. Of the more than \$1 billion invested in farmland preservation to date, the State has provided 65 percent of that funding.

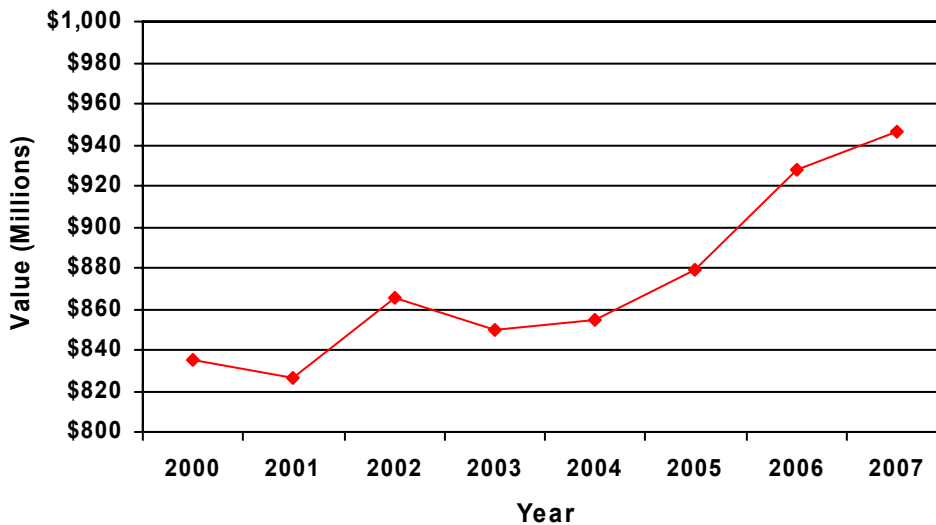
Fostering Economic Growth

Ensuring farmers have as many advantages and opportunities as possible in marketing their products is key to their success and in New Jersey's efforts to retain farmland. In working to expand economic opportunities for farmers, the NJDA focuses on building and strengthening brand identity, and creating new markets and supporting existing ones.

The success of these efforts is reflected in the fact that New Jersey's agricultural economic indicators have risen while those in neighboring states and nationwide have remained flat or declined. New Jersey's agricultural operators' cash receipts rose for the fifth straight year to \$1.12 billion in 2008, according to the National Agricultural Statistics Service (NASS). Combined with an increase in net farm income over the same period, the data show an improving trend for the Garden State's farmers.

From 2003-07, New Jersey's overall farm cash receipts increased by 11 percent. The rise in farm gate receipts compared favorably to downward trends regionally and nationally.

Cash Receipts



These successes have been made possible by an interconnected network of programs designed to foster increased awareness and preference of New Jersey agricultural products by consumers.

Building on the success of the 25-year-old Jersey Fresh program, the Department has developed new branding initiatives for horticultural products grown in New Jersey (Jersey Grown) and seafood harvested wild or grown through aquaculture operations (Jersey Seafood), each with an accompanying website (www.jerseyfresh.nj.gov, www.jerseygrown.nj.gov and www.jerseyseafood.nj.gov) and other promotional tools. In addition, branding was expanded to

equine and livestock through the Jersey Bred Program. The initiatives tie together all of New Jersey's grown and harvested product under the Jersey "family" of brands that consumers have come to recognize, trust and prefer, and that is supported through quality standards and routine inspection that ensure a high-quality product. They also have a significant economic effect: As documented by Rutgers University, every dollar spent on the Jersey Fresh program returns more than \$54 to the state's economy.

Through its Division of Marketing and Development, the NJDA has assisted in the establishment of new community farmers market that expand access to fresh agricultural products for consumers while increasing sales opportunities for farmers. The number of community farmers markets in New Jersey increased from about 50 in 2002 to 131 in 2009.

In an effort to foster growth in a variety of agricultural sectors, the NJDA annually identifies and develops more than 100 strategies directed at improving the economic return to New Jersey's farmers. The strategies www.nj.gov/agriculture/conventions/2009/strategies.html, which are evaluated against performance measures on an annual basis, cover the produce, horticulture, seafood, dairy, field crop, livestock, poultry, organic, equine, wine, and agri-tourism sectors. For example, the Department developed a Jersey Fresh Hospitality Industry Program that is working closely with the produce sector to strengthen the marketing of Jersey Fresh produce to hotels, restaurants and institutional food service. During the growing season, the Department distributes a weekly email to supermarkets, restaurants and other buyers detailing the current and projected availability of Jersey Fresh fruits and vegetables to encourage locally grown purchases. A recently developed seafood industry report aims to inform a similar audience.

Linking Agriculture to Nutrition Programs

The NJDA provides approximately 40 million pounds of food annually to schools, institutions, summer camps, day care centers and those most in need, and administers the federal School Lunch and Breakfast Programs. In administering these programs, the NJDA capitalizes on opportunities to offer New Jersey-grown food items to ensure the freshest, most nutritious food products for consumers and expand outlets for New Jersey farmers.

Complementing these efforts, the Department also administers the State Food Purchase Program established by Governor Corzine in 2007 under the Governor's Hunger Initiative. This program has provided \$14 million over the past three years to help the state's emergency feeding organizations purchase healthy and nutritious foods for the hungry, with an emphasis on buying locally produced food first and meeting federal nutrition requirements. The Governor has continued that program for the 2010 Fiscal Year, with \$3 million allocated to feed the hungry through the Department's State Food Purchase Program. www.nj.gov/agriculture/divisions/fn/fooddistrib/foodpurchaseprogram.html.

To increase healthy offerings in New Jersey's schools, the Department developed the most comprehensive Child Nutrition Rule in the nation, which was implemented in all public schools as of Fall 2007. The measure ensures students have healthy, nutritious food choices, are given useful nutrition information and are encouraged to be more active. Under the rule, soda and candy or other food items listing sugar as the first ingredient may not be sold or served during the school day, and there are limits on fat content of snack foods and on beverage size.

To encourage students to eat the healthier offerings in their school cafeterias, the Department joined in 2006 with the New York Jets football team for the *Eat Right, Move More* program. The campaign challenges school each year to submit their menus that most creatively use the state's nutrition standards. The schools must also show they have made great strides in their wellness programs. Since September of 2006, 15 schools in the state have received visits from Jets players and two schools have sent representatives to Jets games to be honored on the field for their nutrition programs.

Conserving Natural Resources

The NJDA helps to protect the state's soil health, water quality and related natural resources through the stewardship efforts of its natural resource conservation program, which offers technical, financial and regulatory assistance and provides educational outreach to landowners throughout the state. These programs protect the natural resources that sustain our farms and all of New Jersey, while also maximizing agricultural productivity.

The SADC in FY2009 approved 27 cost-sharing grants totaling \$661,000 to assist landowners in implementing soil and water conservation projects on farms that are permanently preserved or enrolled in eight-year programs.

The NJDA spearheaded the establishment of the New Jersey Conservation Reserve Enhancement Program (CREP), a federal-state partnership that provides financial incentives to encourage farmers to establish and maintain stream buffers on farmland to maintain and improve water quality. New Jersey's CREP program is sponsored by the Farm Service Agency at the federal level, and by the N.J. Departments of Agriculture and Environmental Protection. A total of \$77 million in federal funds and \$23 million in state funds have been earmarked for New Jersey's program. Approximately 275 acres of filter strips, 93 acres of grassed waterway, 188 acres of riparian forest buffer & 15,108 feet of lined waterway have been contracted under this Program.

Through its Division of Plant Industry, the NJDA works to protect plants and trees from numerous potentially devastating diseases and pests – both on an emergency basis, as seen in aggressive efforts to eradicate and contain the threat from the Asian long-horned beetle, and on a routine basis, such as in evaluating and addressing the cyclical threat from the gypsy moth. The Asian long-horned beetle, which can destroy maple and other hardwood trees, was first detected in Jersey City/Hoboken in 2002-03 and was declared eradicated in April of 2008. A separate infestation occurred in Middlesex and Union counties in 2004-06. The Department has coordinated the response, which has included inspections, quarantines, removal of more than 20,000 infested trees and preventive treatment of more than 30,000 additional trees.

The Department on an annual basis coordinates aerial spray treatments to control the gypsy moth, which can cause widespread defoliation and, in the case of successive defoliations, kill trees. The Department's gypsy moth suppression program is a voluntary cooperative program that involves municipalities, county agencies, state agencies and the USDA Forest Service. The Department's annual gypsy moth aerial defoliation survey showed 91,890 acres of trees experienced some level of leaf loss in the state this year, as compared with 339,240 acres last year. In 2009, the NJDA treated a total of about 35,816 acres in 15 counties, 55 municipalities and 11 agencies statewide with the insecticide *Bacillus thuringiensis*, or Bt. The Department will work to formulate a plan for 2010 to protect trees from further damage.

The NJDA's Phillip Alampi Beneficial Insect Rearing Laboratory works to reduce pest damage in forest and agricultural crops and to protect natural areas from invasive weeds through the rearing and introduction of natural beneficial insects, such as predatory beetles and parasitic wasps. These efforts reduce pesticide applications – saving an estimated \$101 million in 2007 – reduce insect resistance to pesticides and lower the amount of excess chemicals in the environment. The Mexican bean beetle program saved growers more than \$1.2 million in pesticide costs in 2007 and since 1985 has eliminated the need for the use of more than one million pounds of pesticide. A report on the laboratory's activities is available at www.nj.gov/agriculture/divisions/pi/pdf/NJBioControl07.pdf.

Advancing Food Safety

The NJDA administers programs to ensure that New Jersey farms produce the highest quality products using the safest handling practices, and coordinates with the U.S. Department of Agriculture on national food safety-related issues.

Following the 2006 outbreaks of E. coli in West Coast spinach, the NJDA quickly responded to consumer concerns by reaching out to state and federal lawmakers, meeting with growers, addressing retailer concerns and launching a public education campaign to re-establish consumer confidence in New Jersey-grown spinach. It also formed a Produce Safety Task Force, incorporating the New Jersey Department of Health and Senior Services as well as leaders throughout the produce industry. The task force has resulted in the training of more than 1,000 farmers in food safety basics and continues to examine the best ways to ensure New Jersey producers can meet new, higher food-safety standards that may be required either by future government action or within the produce industry.

The Department's Jersey Fresh program is not just a branding program but also requires that producers who display the logo meet the highest quality standards of the Jersey Fresh grading program. Nearly 300 growers annually participate in this program. The NJDA, along with the U.S. Department of Agriculture, also offers a voluntary third-party auditing program that allows growers, packers and shippers of fresh produce to verify to buyers that produce has been harvested, packed and shipped in a safe and sanitary manner. Forty-eight packers/producers successfully completed third-party audits in 2008. The NJDA also secured an \$85,000 Federal-State Marketing Improvement Program grant from the U.S. Department of Agriculture to develop a program of "mock audits" for New Jersey farmers to familiarize them with the requirements of a third-party food safety audit and to better prepare them to successfully complete those audits.

Also related to food safety, the Department worked in 2007 and 2008 to educate the managers and vendors at community farmers markets on the need to comply with Chapter 24 of the Health Code when making prepared foods and items other than fresh, uncut produce available for purchase. The issue surfaced in the 2007 market season, when local health officers in several locations began demanding that home-baked pies and other foods other than produce be removed from sale because they were not prepared in licensed and inspected kitchens as called for in Chapter 24. Working with the Department of Health and Senior Services, as well as Rutgers' Food Innovation Center (FIC), the Department developed and distributed both laminated charts and a paper handbook, "Chapter 24 and You," detailing what vendors had to do to comply with Chapter 24 when offering such foods. The Department also is working with FIC and various community groups to establish "community kitchens" where these foods can be prepared in accordance with health regulations.

Protecting Animals

Through its Division of Animal Health, the NJDA administers disease control programs to protect the health and well-being of livestock and poultry in New Jersey. It tracks information about emerging diseases around the world that may impact the Garden State, conducts investigations of livestock diseases and operates the only animal health diagnostic laboratory in the state providing disease testing for all domestic and wild animals. The Department serves as the state's lead agency for the development of plans for disasters involving all animals and is a permanent invited member of the Domestic Security Task Force. It established best management practices and developed emergency preparedness and bio-security plans and procedures for the various agricultural sectors, as well as developed fact sheets on how to care for pets and livestock during disasters.

The NJDA developed the first comprehensive humane regulations specifically for livestock in the nation; has increased surveillance to decrease the incidence of low-pathogenic Avian Influenza in live bird markets, resulting in a significant drop in the prevalence of infected markets (www.nj.gov/agriculture/divisions/ah/diseases/avian_influenza.html); worked with the veterinary

community and horse owners to raise awareness about a vaccine to protect horses from West Nile Virus, resulting in no cases reported in 2005, 1 in 2006, 2 in 2007, none in 2008 and 1 case in 2009, compared with a record 150 cases in 2003.

Pursuing Green Energy and Related Opportunities

The NJDA coordinates efforts to ensure that farmers – who are both consumers of energy and producers of the raw materials that can be used to make renewable fuels – take a leadership role in shaping New Jersey’s energy future.

The Department developed a green energy strategy that encourages farmers to integrate alternative energy – such as solar and wind power – on their farms and to develop new markets through production of feedstocks for bio-fuels, as well as target agricultural and municipal solid waste for use in such processes as anaerobic digestion.

To help make alternative-energy integration into farm operations more feasible for farmers, the Department worked to support legislation that restored a property-tax exemption, which had been allowed to expire in 1987, on alternative-energy systems installed on residential or business properties. That bill was signed into law by Governor Corzine in October 2008.

The Department also is an ongoing partner with other state agencies in the development of the State Energy Master Plan (EMP). Among Agriculture’s contributions to the plan is the call for a mandated 2-percent content of biodiesel in all home heating oil by 2015 and 5-percent biodiesel content by 2020.

To provide comprehensive guidance to companies interested in locating biofuels facilities in New Jersey, the Department formed the multi-agency Biofuels Action Group – including representatives of the Department of Environmental Protection, Board of Public Utilities, Governor’s Office of Economic Growth, Commerce and Economic Development Commission, Science and Technology Commission and Rutgers University – to make recommendations and initiate projects aimed at creating a more conducive atmosphere for biofuel companies. This group generated the creation of Rutgers’ “Biomass Inventory,” an accounting of all possible biofuel and bioenergy feedstocks (including waste stream items) and their locations throughout the state to help companies determine whether sufficient feedstocks for their processes were located in-state or would have to be transported. DSM, a company looking to transform part of a Warren County vitamin plant into an ethanol-production facility, used information gathered from the group to modify its plans to focus on next-generation ethanol feedstocks, which led to a recent awarding of a \$33 million federal grant to the company.

Additionally, the Department has begun working with the USDA’s Natural Resources Conservation Service to develop a program of encouraging farmers to use marginal land for growing grasses that can be used either in the making of biofuels or pelletized to be burned in wood stoves.

Other opportunities tied to reducing energy use could benefit New Jersey’s agriculture as well, and thus have been promoted by the Department. These include encouraging developers to use “green roofs” on buildings, in which plantings are employed to naturally cool the structure and thereby reduce the demand for air conditioning. This increased use of native plant life would expand and enhance the market for ornamental horticulture, the leading sector of New Jersey agriculture.

In conjunction with these efforts, the Department developed an Agriculture and Green Energy web page (www.nj.gov/agriculture/news/hottopics/topics060222.html) to assist farmers and others interested in incorporating alternative energy into their operations.

Supporting the Agricultural Industry

The Department advocates on behalf of agriculture, representing its interests with other federal, state and local agencies on a wide array of issues, provides farmers with guidance on the nature and intent of other agencies' policies and regulations and how they may affect their operations, and administers a wide variety of programs to help the agricultural industry succeed.

For example, the Department worked with blueberry growers to ensure they were aware of new Canadian regulations for shipment of fresh blueberries into that country, including conducting training to help growers comply. Growers participating in the program exported approximately 7.64 million pounds of New Jersey-grown fresh blueberries to Canadian markets under this program in 2007. The NJDA's deer fencing program, conducted in cooperation with Rutgers Cooperative Extension, over the past four years has provided 210 farmers with fencing posts and related materials to protect their crops from white-tailed deer damage.

The NJDA established an aquatic farmer license program for the possession and ownership of aquatic stock, and developed recommended management practices for aquatic farms and an aquatic organism health management plan. This program protects aquatic farmers, aquatic organisms and the environment. The Department also developed a New Jersey Aquaculture Guidebook to assist aquatic farmers through the permitting process, and help with site selection, accessing of information and development of viable business and marketing plans.

The Department in 2007 teamed with Rutgers University's Food Innovation Center to offer training programs to assist farmers and workers, including a series of entrepreneurial training seminars. More than 400 people took advantage of these opportunities. The training was made possible by a grant from the Department of Labor and Workforce Development. The Department continues to work with Labor and Workforce Development on literacy training for farm workers.

The Department administers the Agricultural Education/FFA program that prepares high school students for leadership and careers in the science, business and technology of agriculture. In the past five years, five new FFA chapters were established, bringing the total number of participating schools in New Jersey to 37.

The NJDA developed a new comprehensive website in 2006 to serve as a one-stop reference for those in the agricultural industry. Through this website (www.nj.gov/agriculture), producers can access necessary forms and applications, and information on state and federal grant and financial assistance programs; review rules proposed by the Department regulating different aspects of the agricultural industry, and view informative and helpful publications. In addition, special pages to assist farmers were developed, including disaster assistance (www.nj.gov/agriculture/grants/disaster.html); motor vehicle laws and regulations affecting farmers (www.nj.gov/agriculture/divisions/md/prog/farmermotorvehicles.html); the Highlands Act and agriculture (www.nj.gov/agriculture/divisions/anr/agriassist/highlands.html); and food safety (www.nj.gov/agriculture/news/hottopics/approved/topics070319.html). In Fall 2006, the Department's website was named the Best Official State Web Site of the Year by the Documents Association of New Jersey. The group selected the NJDA's website for the award, which recognizes the department web site that documents librarians feel is especially useful or informative.

Highlights of Recent Initiatives

State Agriculture Development Committee

The State Agriculture Development Committee (SADC) leads in the preservation of New Jersey's farmland and promotes innovative approaches to maintaining the viability of agriculture. It administers the state Farmland Preservation Program and the Right to Farm program, staffs the Transfer of Development Rights Bank and operates a Farm Link Program to assist farmers in locating land and other resources.

Farmland preserved – As of September 10, 2009, 1,867 farms covering 180,995 acres have been permanently preserved. Of that, 74 farms covering 10,881 acres have been preserved in the Pinelands and 384 farms covering 32,491 acres have been preserved in the Highlands. Of the more than \$1 billion invested in farmland preservation to date, the State has provided 65 percent of that funding.

- *Funding Secured* – In addition to state funding, the SADC has secured more than \$25 million in federal farmland preservation funding over the past dozen years through the U.S. Department of Agriculture's Farm and Ranch Lands Protection Program.
- *Preservation Process Streamlined* – The SADC is implementing new rules adopted in July 2007 that streamline and simplify regulatory and administrative procedures for the Farmland Preservation Program to make them more efficient and effective, while maintaining the same high degree of accountability to the public. This includes establishment of a county-wide planning incentive grant program as an alternative to the traditional county grants program. This program encourages counties to plan not only for the preservation of farmland but for the retention of the agricultural industry, will eliminate administrative duplication at the state and county levels, and will provide financial incentives to counties that expend funding as expeditiously as possible. A total of 15 counties are participating in the first year of this new program, targeting the preservation of more than 150,000 acres of farmland.
- *Right to Farm Upheld* – The New Jersey Supreme Court in 2002 held that the Right to Farm Act preempts municipal land use authority over commercial farms, ruling in a case involving a dispute between a greenhouse operator and Franklin Township, Hunterdon County. The court ruled that county agricultural development boards and the SADC have primary jurisdiction over disputes between municipalities and commercial farms, but noted the boards must give appropriate consideration to local ordinances and regulations, and consider the impact of agricultural management practices on public health and safety. The ruling reinforced New Jersey's Right to Farm Act as among the strongest in the nation.
- *Agricultural Management Practices Developed* – The SADC adopted agricultural management practices (AMPs) for the installation of fencing, on-farm composting operations, aquaculture, and for equine operations. The SADC also is in the process of developing agricultural management practices for agritourism. Farmers who conform with agricultural management practices that have been adopted by the SADC are eligible for protection under the Right to Farm Act provided they meet the Act's other qualifying criteria.
- *TDR Expanded Statewide* – The State Transfer of Development Rights Act signed in 2004 authorized municipalities statewide to enact TDR ordinances and the State TDR Bank Board to provide municipalities with maximum \$40,000 planning assistance grants to further the process. The TDR Bank Board awarded \$40,000 matching grants to five municipalities in 2005, six municipalities in 2006, and two more municipalities in 2008, and continues to work with other towns interested in participating in the program. The TDR Bank Board also is integral in assisting in the development of a Highlands TDR program. In October, Woolwich Township adopted a TDR ordinance, making it the first municipality to approve a TDR program since the 2004 State TDR Act made TDR available to municipalities statewide. Prior

to that, municipal TDR was available only to towns in Burlington County under a pilot program. For more information, visit

www.nj.gov/agriculture/news/press/2008/approved/press081218.html

- *Farm Transfer Guide Developed* – The SADC developed a new publication to assist farm families in undertaking the financial planning needed to ensure they can successfully transfer their farms to the next generation. This type of planning is essential to prevent farm families from being forced to sell their land to pay inheritance taxes or to help them ensure an equitable distribution of estates among heirs. The guide is available at www.nj.gov/agriculture/sadc/publications/transferprofilesbooklet.pdf.
- *Brochure Assists in Preventing Conflicts* – More than 50 farmers share their advice and experience on how to avoid conflicts and maintain good relationships with neighbors and municipalities in a new publication developed by the SADC in cooperation with several other agencies and organizations. The brochure, “Farmer to Farmer Advice for Avoiding Conflicts With Neighbors and Towns,” is available at www.nj.gov/agriculture/sadc/publications/farmersadviceforavoidingconflicts.pdf.

Division of Agricultural and Natural Resources

Playing a central role in planning for agriculture, the Division of Agricultural and Natural Resources led development of the NJDA’s Agricultural Smart Growth Plan for New Jersey, along with an accompanying toolkit for municipalities, the public and others interested in planning to retain agriculture in their communities. The Division serves as agriculture’s voice in state and regional planning processes, representing agriculture’s interests on the State Planning Commission, and with the Highlands Council and Pinelands Commission. It regularly works with other state agencies to minimize adverse regulatory impacts on farmers and assist farmers through regulatory issues and concerns.

The Division administers policies and programs to conserve and develop the state’s soil, water and related natural resources on agricultural and urban lands through NJDA’s State Soil Conservation Committee (SSCC) and the 15 local soil conservation districts (SCDs) in partnership with other federal and state agencies. Division staff address issues including non-point source pollution control, animal waste management and agricultural water use and supply. Through the SSCC, the Division establishes standards and oversees the SCDs’ implementation of programs regulating land disturbances for the control of soil erosion and sedimentation, and authorizes stormwater discharges.

The Division also proactively works to implement conservation practices on farms, including administering programs that provide financial cost-share assistance to farmers for soil and water conservation projects that prevent or control pollution; coordinating with the DEP to identify ways to address regulatory requirements for the protection of natural resources on farms through the development and implementation of farm conservation plans; partnering with USDA’s Natural Resources Conservation Service to provide additional conservation technical assistance to landowners that cannot be delivered due to federal funding limitations; and contracting directly with soil conservation districts to provide technical assistance for state conservation programs that tend to backlog in the local federal offices.

Additionally, the Division oversees watershed studies related to the development of stormwater models to address water quality issues. Conservation Education programs are conducted in conjunction with conservation partners to educate students about the importance of natural resource conservation.

Protecting Soil and Water Resources

- *Adoption of Strategic Plan for Conservation* – The NJDA’s State Soil Conservation Committee developed a strategic plan to strengthen the state’s soil conservation program and articulate a clear direction for the NJDA, State Soil Conservation Committee and soil conservation districts. The plan, which was adopted by the State Soil Conservation in December 2004 and readopted in January 2008, has three goals: Support and enhance existing conservation programs; identify and develop strategies to address statewide natural resource management needs not currently being met; and increase the general public’s awareness of the program’s role, achievements and relevance.
- *Conservation Planning* – The Division has been working to encourage the DEP to initiate a permit-by-rule approach in their regulations for agricultural activities and uses. Under this approach, natural resource concerns identified in specific regulations would be addressed through the development and implementation of Farm Conservation Plans. Farm Conservation Plans are site-specific plans that prescribe land treatment and related conservation and natural resource management measures determined to be practical and reasonable for the conservation, protection and development of natural resources, the maintenance and enhancement of agricultural or horticultural productivity, and the control and prevention of non-point source pollution. Plans can be written to address all natural resource concerns – soil, water, air, plants and animals, including endangered and threatened species. Section 4 of the Field Office Technical Guide identifies more than 200 conservation practices that can be implemented, depending on the resource concern. These plans can be used in a proactive way to protect the natural resources on our farms.
- *Animal Waste Rule* – The Division’s Animal Waste Management rule was adopted in 2009 and a web page was developed to assist farmers at www.nj.gov/agriculture/divisions/anr/agriassist/animalwaste.html.

Fish and Seafood Development

- *Aquatic Farmer licenses* – The Department adopted an aquatic farmer license rule to establish a program to license the possession and ownership of aquatic stock. The rule establishes provisions to protect the environment, wild stocks and the growing New Jersey aquaculture industry. More than 160 aquatic farmer licenses have been issued. The Aquatic Farmer License Application is available both in hard copy and online at www.jerseyseafood.nj.gov/NJDA AFLappl.pdf.
- *New Jersey Aquaculture Guidebook* – The NJDA developed an Aquaculture Guidebook to assist individuals with the permitting process, site selection, accessing information and developing viable business and marketing plans. The guidebook is available both in hard copy and online at www.jerseyseafood.nj.gov/Guidebook%20to%20Developing%20Aquaculture.pdf.
- *Aquatic Organism Import Permits* – To protect wild stocks, the environment and the growing aquaculture industry, the Division worked closely with the Division of Animal Health to develop a permitting system for the importation of finfish. The system includes provisions to prevent the importation and possible release of exotics into the waters of the state. The permit application is available in both hard copy and online at www.jerseyseafood.nj.gov/AquaticOrgImportPermit.pdf.
- *Aquaculture Management Practices (AMPs)/Aquatic Organism Health Management Plan Adopted* – The Division developed AMPs to assist aquatic farmers in complying with appropriate environmental regulations, facilitate the permitting process and preserve environmental integrity. The Health Management Plan was developed to minimize disease risks that may be detrimental to a new and growing farming sector. It provides a proactive mechanism to predict and minimize disease outbreaks, protects wild and cultured stocks from

disease introductions, provides a means to confine disease outbreaks if they occur, and affords Right to Farm protections for producers who comply.

- *New Jersey Aquaculture Directory* – The Division developed this directory that lists individuals and businesses involved in the production of aquatic species and those related businesses that support the aquaculture industry in New Jersey. The directory is available both in hard copy and on-line at www.jerseyseafood.nj.gov/2006NJAquaDir.htm.
- *Organic Aquaculture Grant* – The USDA granted \$61,000 to the Department to evaluate and quantify the market opportunities for organically grown U.S. aquaculture products. The research provided insights into consumer attitudes about seafood products in general, farmed aquatic products and organically grown aquatic products. It also investigated the willingness of supermarket retailers to include organically grown aquatic products in their seafood programs. The Department developed draft standards for organically grown aquatic products and submitted them to the National Organic Standards Board, which is seeking to develop national standards for growing aquacultured products organically.
- *Ethnic Live Market Study* – The Department received a \$56,500 USDA grant to assist local aquatic farmers in increasing their market share in ethnic live markets. The project will gather information on the size and nature of live fish markets in the Northeast, assembled a retail directory of live markets in the region www.jerseyseafood.nj.gov/Ethnic%20Live%20Seafood%20Directory%20web.htm , and strengthened networks among buyers and sellers.
- *Shellfish Management Practices* – The Department coordinated with USDA-NRCS, as well as Rutgers Cooperative Extension, the DEP's Bureau of Shellfisheries and the industry, to develop specific Shellfish Aquaculture Management Practices that enable New Jersey's 130 shellfish farmers to access \$4.7 million in Federal Farm Bill funding through the Environmental Quality Incentives Program (EQIP). This program provides cost-share funding for the implementation of conservation practices to protect natural resources, but that funding previously was not available for aquaculturists. Aquatic farmers began registering for the program in September 2007. To date, three applicants have received \$56,000 to assist in improvements in coastal air quality and shoreline erosion protection.
- *Jersey Seafood Brand* – The NJDA developed quality standards for selected farmed seafood products to be marketed under the Jersey Seafood brand, an extension of the popular Jersey Fresh brand. Depending on interest, those standards could be expanded to include wild harvest seafood products. The seafood and aquaculture industries add \$10 million to New Jersey's economy.
- *Aquatic Health Inspections* – The Department worked with the Division of Animal Health Laboratory to develop new proficiency in aquatic animal health inspection and diagnosis in 2006. Since then, the NJDA has conducted disease certifications for New Jersey's only private trout hatchery. These efforts enabled this farm to continue to sell trout out-of-state. Because of this testing ability, the NJDA has been able to respond to federal orders on fish diseases and also contribute to the development of the USDA National Aquatic Animal Health Plan.

Agricultural/Natural Resource Education

- *FFA Leadership Event* – This annual event is held during National FFA Week to prepare students to be advocates for agriculture and connect them with industry representatives, college officials and other key individuals.
- *Lesson Libraries* – The Department provided seven lesson libraries (in Agri-science; Plant, Animal and Soil Science; Horticulture; Environmental Resources; Agribusiness

Management; Agricultural Mechanics Technology, and Biological Science Applications in Agriculture) to each of the 67 agriculture teachers in the state. The lessons all correlated to the State Core Curriculum Content Standards.

- *Agricultural Leadership Classes* – Since 2002, four classes of farmers and other members of the agricultural community completed training through the New Jersey Agricultural Leadership Development Program, a collaborative effort of the New Jersey Agricultural Society, New Jersey Farm Bureau and Rutgers Cooperative Extension. The goal of the program is to provide participants with the skills and knowledge to make better decisions for themselves, their operations, the food and agricultural industry, and their communities.
- *Envirothon* – The Department annually coordinates a natural resource-related problem-solving competition for high school students. In 2009, 50 teams and 25 students representing 34 schools from 17 counties participated.

Division of Animal Health

The NJDA's Division of Animal Health maintains disease control programs to protect the health and well being of livestock and poultry in New Jersey. The division tracks information about emerging diseases around the world that may impact the Garden State; conducts epidemiological investigations of diseases infectious to livestock and poultry; operates the only animal health diagnostic laboratory in the state providing disease testing for all domestic and wild animals; and supports aggressive disease control programs. The division has been very active in homeland security and disaster preparedness, serves as the state's lead agency for the development of plans for disasters involving all animals and developed best management practices for the various agricultural sectors.

- *Humane Standards for Livestock* – The Department developed and adopted Humane Standards for Livestock, the first comprehensive humane regulations strictly for livestock in the country. These standards use a holistic approach to determine if an animal is being treated in an inhumane manner. They ensure that practices that are taught in land grant universities, agricultural extension agencies and schools of veterinary medicine are not deemed cruel by laymen and will be modified as new science becomes available on the humane treatment and care of livestock.
- *AI Surveillance* – The Department increased surveillance to lower incidence of Avian Influenza in Live Bird Markets following the outbreak of Low Pathogenic Avian Influenza (LPAI) in our neighboring states. The Division of Animal Health implemented additional protective measures to prevent infected birds from entering the state. Since the LPAI program was initiated in New Jersey, the prevalence of infected live bird markets has significantly decreased. A monitored flock program was created to allow New Jersey residents a means to ensure their birds are healthy and marketable in this system. Monitoring for LPAI provides for an immediate response in the event a more pathogenic strain of this virus were identified in the state. The Department established a web page on Avian Influenza at www.nj.gov/agriculture/divisions/ah/diseases/avian_influenza.html.
- *Bird Flu Preparedness* – The Department developed a comprehensive emergency response plan for adoption by the State Office of Emergency Management. As part of this response, the Department has been identified as the lead agency for detection, surveillance, eradication and response in all birds in the state.
- *Animal Health Diagnostic Laboratory* – The Division's diagnostic laboratory has been identified as an extension of USDA's National Veterinary Laboratory system for the foreign animal diseases Avian Influenza and Classical Swine Fever. Testing for these diseases can be performed only with USDA approval and places the Division in a preferable position to

receive funding. Under the guidance of the Laboratory's assistant director, additional tests have been developed and offered to veterinarians in New Jersey and neighboring states. Tests for diseases of major concern such as Canine Influenza Virus, Equine Herpes Virus and Strangles are recent additions to the tests performed daily by the only animal diagnostic laboratory in New Jersey.

- *West Nile Virus* – The Department continues to work with the veterinary community and horse owners to raise awareness about preventable risks from this devastating equine disease and others for which vaccines are available to prevent or minimize infection. As a result, there were no diagnosed cases of West Nile Virus in New Jersey horses in 2005, 1 in 2006 and 2 in 2007, none in 2008 and two in 2009, compared with a record 150 cases in 2003.
- *Quarantines* – The Department regularly quarantines premises based on known or suspected animal diseases. In 2006, the Division imposed a six-week quarantine on Monmouth Race Track and a veterinary hospital to prevent the spread of Equine Herpes Virus. Great effort was taken to allow both facilities to continue operations using the strictest biosecurity measures. These actions prevented additional spread of disease.
- *Animal Emergency Working Group (AEWG)* – The Division of Animal Health led in the development of this working group, a coalition of public and private agencies dedicated to the special needs of animals in emergency situations. The working group is creating sheltering plans, developing educational materials, and organizing the state and county animal response teams (SART and CARTs) to respond in natural as well as technological disasters. This group oversees development and implementation, at the municipal and county levels, of emergency plans to handle the impact of all disasters on all animals.
- *NJESF#11* – The Department serves as the lead for New Jersey Emergency Support Function #11 (ESF#11) – Agriculture, which includes preparedness and response relating to food, animal diseases, plant diseases/pests and animals in disasters.
- *Livestock and Poultry Assurance Program* – The Sheep and Goat Health Assurance Program, introduced in 2004, was the latest in the Division's series of best management practices offered to producers. The program is part of the Garden State Dairy Alliance that also includes the New Jersey Cattle Health Assurance Program and the Milk Quality Control Program. The Division aids farmers in gaining input from consultants to help them improve their farms' bottom line by discussing possible management adjustments that will increase the profitability of their operations. The program also educates producers about proper care and husbandry techniques including nutrition, parasite control and signs of disease. Currently, there are two dozen participants in the program.

Division of Food and Nutrition

The Division of Food and Nutrition is responsible for the day-to-day operations of all federally funded food and nutrition programs, other than WIC and Food Stamps, which reach more than 1.3 million New Jerseyans daily. The Division makes a concerted effort to secure locally produced food products first, whenever feasible, and to incorporate federal dietary guidelines to the maximum extent possible in all its food-distribution programs.

The Commodity Distribution Program distributes USDA-donated food commodities to state, county and municipal institutions; schools, charitable and welfare organizations, and needy individuals, while the Emergency Food Assistance Program (TEFAP) distributes federally donated basic food commodities to needy citizens through a network of food centers, food banks and food pantries. The State Food Purchase Program initiated in 2007 through the Governor's Hunger Initiative provides state funding to help the state's emergency feeding organizations

purchase locally grown/processed produce from local farmers and food processors.

School Lunch Program

- *Enhanced Web-Based Application* – The Division of Food and Nutrition implemented a web-based voucher payment system for sponsors participating in the federal National School Lunch, School Breakfast, After School Snack and Special Milk Programs in FY04. The new system provided immediate feedback and accelerated payments to participating sponsors, reducing the amount of time it took to process payments by several weeks. The Division expanded the web-based system on July 1, 2007, to include online renewal of annual applications. The on-line processing of applications resulted in shorter turn-around times for approvals and has facilitated communication between the NJDA and its sponsors. In addition, the 24/7 communication system capabilities now allow the Division to communicate critical information to its sponsors via broadcast messages. This system has further enhanced the NJDA's ability to address critical safety and compliance issues in a timely manner. The Division continues to expand the use of technology in all areas. In FY07, more than \$200 million in federal and state funding was processed through this system.
- *Child Nutrition Rule* – By October 2007, all public schools in New Jersey had implemented the NJDA's model school nutrition policy that promotes healthier eating habits by offering students more nutritious food options. (Fifty-seven percent of schools implemented the policy at least 10 months ahead of the Department's regulatory deadline.) The policy is the most comprehensive in the nation, covering pre-kindergarten through 12th grade students, and limits fat and sugar content in foods offered in a la carte lines, snack bars and vending machines, in school stores and as part of on-campus fund-raisers. In early 2007, the policy was given the full force of state law as the Legislature passed and Governor Corzine signed legislation requiring all public schools in the state and non-public schools that participate in Child Nutrition Programs to comply with the policy.
- *School Breakfast* – School participation in the National School Breakfast program increased in accordance with a new law requiring that schools must offer breakfast if 20 percent of students qualify for free or reduced-priced meals. Breakfast is served to 156,346 students in 1,782 schools daily.
- *Fresh Fruit and Vegetable Program* – 60 schools are participating in the United States Department of Agriculture (USDA) Fresh Fruit & Vegetable Program for the 2009-2010 school year. The fruit and vegetable education program provides fresh fruits and vegetables throughout the school day to teach students the importance of good nutrition and the benefits of including fresh fruit and vegetables in their diet, as well as increasing their consumption of produce. New Jersey receives federal funds to pay for the program.

Food Distribution and Temporary Emergency Feeding Assistance Program (TEFAP) Program

- *DOD Jersey Fresh Purchasing* – The NJDA worked with the Department of Defense to increase participation of New Jersey farmers and producers in supplying New Jersey schools with locally grown fresh fruit and vegetable products. Purchases totaled \$1,241,784 in 2007 and \$1,264,136 in 2008.
- *School Commodity Program* – New Jersey leads the nation in offering a more nutritious selection of food items distributed to participating school districts as part of this program. Among the food products distributed are whole grain rotini and elbow macaroni, fruits packed in their own juices, whole wheat breaded chicken nuggets, and seasonally available local fresh fruits and vegetables.
- *TANF Funding* – Since 2004, the NJDA distributed \$500,000 in funds from the Temporary Assistance to Needy Families (TANF) program to the Department's contracted emergency feeding organizations throughout the state. TANF is a federal cash assistance program for

welfare clients, administered in New Jersey by the Department of Human Services (DHS). The NJDA distributed the funding through a memorandum of agreement it negotiated with DHS.

- *State Food Purchase Program (SFPP) Funding* – The Governor’s Hunger Initiative was established in 2006 – since then, a total of \$14 million has been appropriated for this program. Under this program, the Department provides funding to emergency feeding organizations for the purchase of locally grown, nutritious food items. In the first year, the program was responsible for the distribution of 3.9 million pounds of food that fed an average of 69,110 recipients in need each month. An additional \$1 million was appropriated in FY 2007 for local food pantries, homeless shelters and soup kitchens to make infrastructure improvements, such as the purchase of refrigerators and freezers.

Child and Adult Care Food Program (CACFP)

For-profit child care providers are now eligible to participate in this program if 25 percent of their participants are eligible for free and reduced price meals. A total of 629 sponsoring organizations participated in the Child and Adult Care Food Program in FY 2007, reflecting an average annual increase in participation of 12 percent since 2005. The program serves nutritious meals and snacks to eligible children and adults who are enrolled for care at participating child care centers, day care homes, and adult day care centers. It also provides meals to children residing in emergency shelters, and snacks to youths participating in afterschool care programs.

Division of Marketing and Development

The Division of Marketing and Development works to connect producers with consumers, shorten the market chain and promote value-added opportunities – including branding programs – to enable farmers to realize maximum profits.

- *Improved Online Presence* – The Department overhauled the main NJDA website to make it easier for visitors to navigate and find the programs and services they seek. It also established websites for Jersey Fresh and related branding programs. Web hits for the main site average 147,000 per month; Jersey Fresh, 49,600 per month; Jersey Seafood, 8,300 per month; and the newest, Jersey Grown, 406 per month.
- *New “Jersey Fresh” Campaign* – “Jersey Fresh...As Fresh as Fresh Gets” has been very successful as the new slogan for the Jersey Fresh campaign in 2006. It has been well-received, viewed as the next step in informing the public that Jersey Fresh equals locally grown, fresh produce. The campaign earned the 2007 Eddy Award, the Edible Communities Publications’ national award for advertising. The NJDA also received Produce Business magazine’s 2006/2007 award for advertising for restoring consumer confidence after the West Coast spinach recall in Fall 2006.
- *Record Blueberry Crop* – New Jersey’s blueberry crop in 2008 reached an all-time high for production and value of production, according to the National Agricultural Statistics Service. NASS figures showed there were 59 million pounds of blueberries produced at a value of \$82 million in 2008. New Jersey ranks second in the nation in blueberry production behind only Michigan. In 2007, Michigan farmers produced 93 million pounds of blueberries, valued at \$165 million.
- *Produce Strategies* – In efforts to expand the market for New Jersey-grown fruits and vegetables, the NJDA developed a Jersey Fresh Hospitality Industry Program to strengthen marketing of Jersey Fresh produce to the hotel, restaurant and institutional food service industries. It also produces and disseminates a weekly produce e-mailing with seasonal updates on the availability of Jersey Fresh fruits and vegetables for more than 330 produce

industry buyers, restaurateurs, food communicators, licensed growers and government officials. A recently developed seafood industry report aims to inform a similar audience.

- *Farm Certification Program (Third Party Audits)* – Thirty-one New Jersey packers/producers successfully completed the NJDA-USDA Good Agricultural Practices/Good Handling Practices Third Party Audit in 2007. The Third Party Audit program is important not only for food safety, but bio-security. In addition, staff members working in conjunction with Rutgers Cooperative Extension provided food safety training to more than 1,000 farmers.
- *Jersey Fresh Quality Grading* – A total of 299 farmers participated in the Jersey Fresh Quality Grading Program during the 2008 growing season. Division staff visited supermarkets in the South Jersey area to encourage produce managers to buy and promote Jersey Fresh whenever possible.
- *Jersey Fresh Premium Peach Program* – As a result of a recommendation by the New Jersey Peach Task Force, a Jersey Fresh Premium Peach program was established to promote the premier taste of New Jersey peaches. The program has four components: Peaches packed must meet the U.S. Fancy grade; peaches must be packed and shipped within seven days of picking to ensure freshness; peaches must be grown and packed under USDA's Good Agricultural Practices/Good handling Practices Verification Program; and, shipments must be inspected by a New Jersey Department of Agriculture inspector.
- *Agri-Tourism* – A National Agricultural Statistics Survey (NASS) study funded by the Department and analyzed by the Food Policy Institute determined that agri-tourism generated \$57.5 million in revenue for the state's farmers in 2006. A new interactive, GIS-based, agri-tourism industry website funded by the Department, www.visitnjfarms.org, makes it easy for consumers to find products and services within a specified driving radius. It also allows farmers password access to the site to provide updates to their own listings.
- *WIC & Seniors Farmers' Market Nutrition Program* – The NJDA recruits and trains local farmers as certified farmer vendors in the WIC & Seniors Farmers' Market Nutrition Program (FMNP). Approximately 200 farmers are certified to directly market their locally grown fresh produce to low-income, nutritionally at-risk individuals (women, children and seniors). This program is a collaborative effort between the Department of Health and Senior Services and NJDA. For the 2008 growing season, the federal Farm Bill provided an addition \$500,000 for the Senior Farmers Market Nutrition Program, enabling 20,000 more eligible seniors than last year to purchase fresh, locally grown produce from New Jersey farmers. The Department works diligently to ensure that farmers know where to go to sell their produce to participants and that these participants are informed about where the certified farmer vendors can be found in the state. Certified farmer vendors sell at roadside stands and/or community farmers markets.
- *Food Export USA* – Of the \$6.9 million available through the USDA Market Access Program in FY2006, more than \$1.5 million went directly to 28 privately owned companies in New Jersey. Those companies used the federal funding to advertise and promote their products overseas. In addition, dozens of other New Jersey food and agricultural companies annually benefit from Food Export USA-Northeast's programs to assist in marketing products abroad.

Agricultural Economic Development

- *Investing in people* – In cooperation with Rutgers' Office of Continuing Education and Cooperative Extension, the Department's Agricultural Development Initiative offers training for producers, managers and workers. In 2007, this included farmer entrepreneurial training, food safety training for more than 700 people and literacy training for workers.

- *Grants Web page* – A webpage was launched in October 2004 listing grants, financial assistance opportunities and special services available for farmers. The page, www.nj.gov/agriculture/grants/index.html, serves as a clearinghouse for free or minimal cost assistance programs to anyone involved in agriculture in the state.
- *Solar Energy Worksheet* – The Department developed a worksheet to guide farmers through the BPU’s Clean Energy website to help them determine if solar energy would be cost-effective for their operations.
- *Reciprocity Agreement* – The Department coordinated development of reciprocity agreements signed by New Jersey and Pennsylvania; New Jersey and Delaware; and New Jersey and New York that allow operators of farm vehicles to drive their vehicles across state borders. The reciprocal agreements recognize each state’s exemption from commercial driver’s license requirement for farmers and “farmer” registered vehicles, enabling farmers to drive their vehicles into the other state without being cited.
- *Commercial Farm Building Code* – The Department provides one-on-one technical guidance to ensure that the construction of commercial farm buildings is not impeded by overly restrictive construction requirements and that New Jersey farmers remain competitive with neighboring states. This counseling, which is provided to construction officials, licensed professionals and farmers, makes the construction process less burdensome to all involved in the process, streamlines the permitting process, and saves farmers building and design construction costs.
- *USDA’s Advisory Committee on Beginning Farmers and Ranchers* – The NJDA is serving on a national committee to build a strong future for our next generation of farmers and ranchers. This committee of 20 members from across the nation will identify ways to increase participation between federal and state programs to provide joint financing for beginning producers. Committee members also suggest agricultural opportunities that will help beginning farmers and ranchers.
- *Farmland Assessment* – NJDA annually responds to hundreds of calls for information and guidance on farmland assessment from landowners, farmers and municipal tax assessors, and works in coordination with the Division of Taxation, including in the publication of an informational guide. There are more than 28,000 applications annually for farmland assessment.
- *Agricultural Recycling* – As part of efforts to promote sustainability, the Department continues to support New Jersey’s existing agricultural plastics recycling program and assess the feasibility of expanding the program to include other materials generated by farmers and aquaculturists. A web page details the programs now being offered: www.nj.gov/agriculture/divisions/md/prog/recycling.html.
- *Risk Management and Crop Insurance Education* – The Department’s Crop Insurance Education program for New Jersey farmers, in partnership with USDA’s Risk Management Agency, works to improve the financial health of all farmers, increase their skill and knowledge in using crop insurance, and increase awareness as additional products and programs become available. With an experienced staff in crop insurance education, NJDA and Rutgers Cooperative Extension have used newsletters, bulletins, websites, agricultural tradeshow exhibits and media coverage to reach 5,000 producers with crop insurance information. Staff has delivered training on crop insurance to more than 1,000 producers, often finding that one-on-one contact with farmers has been an effective method in delivering crop insurance education.

Equine

The Department developed a web site at www.jerseyequine.nj.gov that is one-stop shopping for information on the state's equine industry and details the Department's equine programs.

- *Horse Park Recognized Worldwide* – The NJDA continues to assist in the development of the Horse Park of New Jersey into a world-class equine exhibition facility. In July 2004, the Horse Park hosted for the first time the final mandatory outing for horses and riders competing for a place on the 2004 U.S. Olympic Team for Three-Day Eventing. Of the 15 horses from around the country that participated in the competition, four horses and an alternate were chosen for the Olympic team, which participated in the 2004 Olympic games in Athens, Greece. In 2005, the Horse Park of New Jersey hosted three international-level events, three national championships, four regional championships and countless other shows. In 2006 and 2007, the Horse Park opened in mid-January and closed the weekend before Christmas. In 2007, the U.S. Eventing Team that attended the Jersey Fresh Event at the Horse Park was the Gold medal winner at the Pan-American Equestrian Games. The Jersey Fresh is an international competition, and in 2007 this one event had an economic impact of \$4.1 million to the three-county area.
- *Thoroughbred Industry* – The NJDA has worked with the thoroughbred industry to develop a Thoroughbred Festival, a full day of Jersey Bred events, in the fall at Monmouth Park. The inaugural festival was in 2003 and included a Parade of Breeds as well as other activities. The attendance for the day was more than 9,000 and the total handle was \$3.4 million. The 2005 festival drew 13,018 fans and the total handle for the day was \$2.9 million. This event occurs yearly in the late summer or fall with a full day of New Jersey Bred horses racing for at least \$1 million in purses. In the fall of 2007, Monmouth Park and the State of New Jersey hosted the prestigious Breeders Cup event that brought horses from all over the world to the historic Oceanport site.
- *Jersey Bred Program* – The Department established this branding program in 2004 to allow New Jersey-produced horses or 4-H market lambs to be marketed under a Jersey Bred logo.
- *Standardbreds* – New Jersey-bred standardbreds have always been in high demand at yearling sales, and four of the last five harness horses of the year were sired by New Jersey-based stallions. All of these horses of the year competed at one or more times in their careers in the New Jersey Sire Stakes.
- *Junior Breeder Loan Program* – The loan program has more than tripled in size in the past four years. In April 2005, the Junior Breeder Young Farmer Advisory Committee held a “Project Animal” sale for students to obtain their 4-H project animals and to raise funds for the program. Animals sold for a total of \$7,700, and 15 percent was held by the Junior Breeder program to help offset the cost of the spring symposium. The New Jersey Junior Breeders’ Fund offers loans to help agricultural education/FFA students and 4-H members continue to advance the breeding of purebred livestock and the production quality of grade livestock. The program was created 75 years ago through a grant from the late Senator Frelinghuysen. Today, there are 18 current loans totaling just over \$16,000.

Jersey Seafood Program

- *New Jersey Seafood Brand* – The Department developed a Jersey Seafood brand to promote the state's seafood products. It also launched an accompanying state-of-the-art website, www.jerseyseafood.nj.gov that provides live videos for consumers to find recipes and view seafood preparation.

- *Restaurant Promotion* – The Department teamed with the New Jersey Restaurant Association to place signs in more than 350 member restaurants advertising that the establishments are “Proud to Serve” Jersey Fresh produce and seafood when in season.
- *Seafood Suppliers Directory* – The Department developed an updated New Jersey Seafood Suppliers Directory for distribution to retail and restaurant buyers. The directory is available in both hard copy and in a searchable format on the Jersey Seafood website. The directory helps to drive both domestic and international sales.
- *Point of Purchase Materials* – The Department has distributed recipe cards, posters, price pins, and other point-of-purchase materials to retailers to assist in the promotion of local New Jersey seafood.
- *Bi-Weekly Seafood Availability Report* – The NJDA disseminates this report to provide information on availability and supply of seafood to retail, food service and media outlets.
- *International Marketing* – To help expand international markets, the Department distributes directories and species availability posters to every Foreign Agriculture Service post and at trade shows and other market-building events.
- *National Seafood Cook-off* – New Jersey was represented at the Great American Seafood Cook-off in New Orleans in 2009 by Chef Peter Fischbach of Toms River, who placed 2nd in the contest. He also represented the state in 2008 and came in 6th. New Jersey’s participation in the event highlighted the high quality of Jersey Seafood to the nation.

Jersey Grown Program

Building on the Jersey Fresh brand, the Department established a branding program – Jersey Grown – for the horticultural industry, New Jersey’s largest agricultural sector. The Jersey Grown program continues to gain attention in the horticultural industry as more nurserymen join the program. The addition of Christmas trees to the program has heightened the awareness of the program.

- *Jersey Grown Website* – The NJDA developed and launched the *Jersey Grown* website, www.jerseygrown.nj.gov, to support the industry and promote horticultural products to consumers.
- *Highway Planting Program* – The NJDA worked with the Department of Transportation, through its highway planting program, and the Department of Environmental Protection, through its forestry program, to use New Jersey-produced plantings whenever possible and ensure that all products meet the pest-free standards of New Jersey nursery law and satisfy the quality standards set by the Department’s Jersey Grown rule.

Milk and Milk Products Regulation

The Division of Marketing and Development is authorized by the New Jersey Milk Control Act to effectuate the orderly flow of milk from the farm to the consumer. The Division is assigned the authority to regulate and license all outlets that sell or distribute milk in the state as part of a program to ensure a stable, competitive milk marketing system. The Division also oversees programs that promote the consumption of milk and dairy products.

- *Dairy Regulatory* – The Department initiated a Fuel Adjustment Add-on payment to farmers in February 2007. This Add-on is in addition to the minimum USDA pricing of milk, which does not include fuel costs associated with milk production. To date, the Fuel Adjustment Add-on has created a sustainable source of payment to offset a portion of the rising fuel costs associated with the production and shipment of milk to processors. This program was

initiated with little to no impact to the consumers' purchase price of milk while returning \$471,633.25 to the 102 dairy farmers in the state.

- *Dairy Promotion* – In July 2007, the first milk marketed under the Jersey Fresh logo was introduced. The NJDA had adopted standards for the use of the Jersey Fresh logo on milk produced in New Jersey. In 2005, the North Jersey Dairy Council approved promotional funds to develop the generic logos to promote locally produced milk and value-added milk products through the “Jersey Fresh Dairy” program.
- *Economic Development* –The Department is aiding the dairy industry by providing technical assistance to various producers, processors and organizations that are developing business plans for processing value-added products. Through this effort, the Department is assisting the industry in owning more of the market chain and realizing greater profits. Additionally, the Garden State Dairy Alliance established in 2005 offers the industry access to a multi-disciplinary team of state and federal partners through programs that address animal health, animal well-being, milk quality, nutrient management, bio-security, economic stability, and marketing and dairy industry development.

Commodity Inspection and Grading

- *Organic Program* – Legislation (N.J.S.A. 4:10-79) approved September 10, 2003, directed the Secretary of Agriculture to establish an organic certification program in accordance with the national standards for organic production and handling. In addition, this legislation authorized the Department to establish a transitional sustainable label to encourage conversion from traditional to organic production methods, and adopt any rules and regulations necessary to implement an organic certification program. Rules and regulations, effective December 4, 2006, set forth the organic certification program by which the NJDA certifies producers and handlers of organic products. On April 12, 2007, NJDA was accredited by the USDA-NOP to perform organic certification of production and handling operations. NJDA currently has 64 organic producers, including the first certified organic dairy farm in New Jersey, a milk bottling facility and the largest blueberry producer on the East Coast.
- *Licensing and Bonding for Agricultural Commodities* – As a means of assuring that New Jersey farmers are paid for their product in case of default, the Department endorsed legislation that amended the security requirement for anyone buying or receiving milk, from New Jersey producers. This legislation removed the \$100,000 cap that had been in place since 1972 on the amount of surety required to be posted for milk. In addition, the Department endorsed legislation that increased the amount of surety that is required to be posted for anyone buying or receiving fruits, vegetables, eggs, live poultry, hay, grain or straw. This legislation raised the \$50,000 cap that has been in place since 1978 to \$150,000 for these other agricultural commodities. In calendar year 2007, 84 Commission Merchant licenses were issued and more than \$6 million in surety posted.
- *Agricultural Chemistry* – These programs are administered to protect farmers and consumers by determining the manufacturer's compliance with the guaranteed content of feed, fertilizer and liming materials and to reduce the amount of misbranded and deficient products offered for sale, thereby ensuring the quality and quantity of these materials and promoting crop yield. The Department collected and analyzed 744 random samples. In cases of deficient product, warnings or penalties were issued. Penalties received for deficient fertilizers are returned to farmers to offset losses that may have been caused by lower-quality product. Over the past three fiscal years, \$14,000 was refunded to farmers.

Commodity Inspection and Grading – The Division of Marketing and Development conducts voluntary inspection and grading activities related to fresh fruits, vegetables, seafood, poultry and poultry products. These user-paid fee programs are administered under Cooperative Agreements

with the U.S. Department of Agriculture and the U.S. Department of Commerce to enhance the marketability of these commodities for producers and the food industry and also assure consumers who purchase these inspected commodities that they meet established standards. Shipping Point Inspections totaled 440,552 pounds of product, including 376,020 tomatoes for processing. Terminal Market Inspections totaled 1,478,706 pounds of 53 various fruits and vegetables received from other growing regions. The principal commodities certified were oranges (509,904 pounds) and onions (258,596 pounds). A total of 916,515 cases of shell eggs were inspected (43,992,720 pounds). State and federal inspectors supervised the production of 395,857,971 pounds of liquid/frozen egg product and 8,045,285 pounds of dried egg product. Cross-licensed NJDA staff inspected and graded 17,664,557 pounds of seafood for export in 2007.

Division of Plant Industry

Through its Division of Plant Industry, the NJDA proactively works to protect community and recreational forests and agricultural/horticultural crops from damaging pests and diseases, and to facilitate interstate and international trade of New Jersey produced plants and plant products through inspection programs.

Plant Pests and Diseases

- *Asian Longhorned Beetle* – When the Asian longhorned beetle was detected in Jersey City in 2002, the Department acted quickly to secure emergency funds from USDA to address this threat in cooperation with the USDA’s Animal and Plant Health Inspection Service (APHIS). The Asian long-horned beetle, which can destroy maple and other hardwood trees, was first detected in Jersey City/Hoboken in 2002-03 and again in Middlesex and Union counties in 2004-06. The Department has coordinated the response, which has included inspections, quarantines, removal of more than 20,000 infested trees and preventive treatment of more than 30,000 additional trees. The N.J. Forest Service has managed the planting of approximately 5,400 replacement trees to date. During the height of the tree-removal work, communications were sent weekly to municipal and county officials, as well as state and federal legislators, and then on an as-needed basis afterward. The Department developed a web page for Asian longhorned beetle, www.nj.gov/agriculture/divisions/pi/prog/asianlonghornbeetle.html.
- *Soybean Rust* – In November 2004, the Asian soybean rust, *Phakopsora pachyrhizi*, was first found in the United States in Louisiana. Soybean rust is a serious disease causing crop losses in many parts of the world. The Department secured Section 18 emergency exemption approvals from the Department of Environmental Protection’s Pesticide Control Program and the EPA for a range of fungicides to control soybean rust. The Department worked with Rutgers Cooperative Research and Extension to develop control recommendations for New Jersey growers, and also worked with Rutgers Cooperative Research and Extension and the USDA National Soybean Rust Surveillance Program to monitor sentinel plots to detect the disease and gauge its severity. Soybean rust was not found in New Jersey in 2005-2007.
- *Late Blight* – Following an outbreak of Late Blight disease in tomatoes in 2003 caused by *Phytophthora infestans*, the Department worked with Rutgers Cooperative Research and Extension to secure a Section 18 emergency label from the Department of Environmental Protection’s Pesticide Control Program and EPA for the fungicide Previcur Flex®, and a 24 C Special local need label registration for the fungicide Curzate 60 DF®. EPA approved full labeling Previcur Flex® on tomatoes in 2005, just weeks before the disease appeared again in a localized outbreak in South Jersey. The Department worked with Rutgers Cooperative Research and Extension and N.J. Farm Bureau to alert growers. The use of these two fungicides minimized the spread of the disease, and crop damage was minimal.

- *Blueberry Scorch Virus* – Blueberry scorch virus is the most economically important virus disease of blueberries in North America. Plants infected with the virus fail to bear fruit. The Department partnered with researchers at the N.J. Agricultural Experiment Station to develop an immunological test (ELISA) to identify the plant virus, and has offered a testing service to interested growers who produce blueberry and cranberry plants for sale to other growers, or who ship plants out of state and need certification that their plants are free of this disease.
- *Sudden Oak Death* – As part of the nationwide testing program for disease caused by the fungus *Phytophthora ramorum*, one lilac bush at a Cape May County nursery tested positive for the disease in May 2004. All susceptible host plants in the block where the diseased lilac bush was found were destroyed. No additional detections of *Phytophthora ramorum* were found following additional testing in and near the nursery. As part of an outreach effort, the Department mailed more than 1,920 letters and fact sheets to New Jersey nurseries and garden centers about the disease, and the Department, Rutgers Cooperative Research and Extension and the N.J. Nursery and Landscape Association co-hosted two workshops on Sudden Oak Death for nursery professionals, Extension specialists and other members of the agricultural and forestry community. No additional detections of *Phytophthora ramorum* have been found at nurseries in New Jersey, nor in trace forward surveys of nurseries and garden centers that received nursery stock from infested areas.
- *Plum Pox* – Plum pox is a foreign plant virus that affects stone fruits (peaches, nectarines, plums). Previously known to occur only in Europe, the Middle East and Chile, plum pox was recently found in stone fruit orchards in Pennsylvania, Michigan, New York and Canada. Infected trees produce unmarketable fruit and decline in vigor. Leaf samples from all commercial stone fruit orchards in New Jersey were tested in 2002-2004. More than 78,000 samples of leaves were collected and examined, and nearly 21,000 fruit samples were collected and tested. All results were negative. Nurseries producing fruit trees in New Jersey are regularly tested for plum pox.
- *Gypsy Moth Suppression* – The Department carries out the annual Gypsy Moth Suppression Program to protect New Jersey's valuable forested residential and recreational areas from tree loss due to the gypsy moth. The gypsy moth is the most destructive insect pest to infest New Jersey's forests. Repeated defoliation by the gypsy moth represents a serious threat to New Jersey woodland and shade tree resources. The Gypsy Moth Suppression Program is a voluntary cooperative program involving New Jersey municipalities, county agencies, state agencies and the USDA Forest Service. When gypsy moth cycles are at a peak, natural controls have difficulty in preventing severe defoliation. In these cases, the Department recommends and oversees aerial spray treatments on residential and recreational areas using the selective, non-chemical insecticide, *Bacillus thuringiensis*.
- *Apiary Pest and Disease Control* – The Division worked with the Department of Environmental Protection's Pesticide Control Program to secure Section 18 registrations for Bayer Bee Strips® (Coumaphos) to control fluvalinate-resistant varroa mites and small hive beetles, and Apilife VAR, an essential oils treatment for controlling varroa mites resistant to Coumaphos and fluvinate.
- *"Bee-Ginner's Beekeeping"* – The NJDA, in partnership with the Rutgers New Jersey Agricultural Experiment Station, in 2006 established a "Bee-Ginner's" beekeeping program that provided equipment, a starter hive and mentoring to 50 first-time beekeepers that successfully completed a Rutgers University short course in beekeeping. Another 91 people attended two other "Bee-ginner's Beekeeping" courses later that year. The successful program – which is intended to stimulate interest in beekeeping and develop the next generation of beekeepers to ensure pollination of New Jersey's fruit and vegetable crops – was offered again in 2008 and 2009 with 350 people successfully completing the course.

- *Chrysanthemum White Rust* – A hobbyist identified Chrysanthemum white rust, *Puccinia horianna*, in October 2003 and notified the Department. Department and USDA APHIS PPQ staff conducted field surveys in residential gardens in Morris and Middlesex counties to locate and destroy infected mum plants. More than 230 infected chrysanthemum plants were found and destroyed. No signs of the disease were found in follow-up surveys in 2004. In December 2003, white rust was discovered in a commercial greenhouse operation in Passaic County, and in July 2004 in a commercial greenhouse operation. In both cases, the disease was confined to greenhouses. Division staff and USDA APHIS PPQ personnel monitored the destruction of infected mums in both locations. Non-symptomatic plants were treated with a fungicide, and the greenhouses were disinfected.
- *Southern Wilt Of Geraniums* – Department staff and USDA APHIS PPQ examined geranium plants produced from imported cuttings at greenhouse operations in New Jersey for a bacterial disease – Southern Wilt – caused by the bacterium *Ralstonia solanacearum* race 3, biovar 2. In 2003, a total of 88,155 geranium plugs originating from Kenya were received by 30 greenhouse operations throughout the state. One greenhouse operation was found to contain infected plant material, a total of 540 geranium plugs were destroyed and the greenhouse was disinfected. In 2004, Department staff, in cooperation with USDA APHIS PPQ, tested plant material at 12 greenhouse locations in New Jersey that received geraniums from Guatemala potentially infected with *Ralstonia solanacearum*. Clean stock programs initiated by foreign growers, and overseen by USDA APHIS, have prevented the recurrence of disease in geraniums imported into this country.
- *Brown Garden Snail* – Control treatments for the Brown garden snail, *Cryptomphalus aspersus*, using metaldehyde pellets were conducted on nine infested properties in Margate, Atlantic County. *C. aspersus* populations were reduced by 96 percent. Control measures were also carried out in North Cape May on three residential properties where a small infestation was discovered.
- *Emerald Ash Borer* – Surveys were carried out for the Emerald Ash Borer, *Agrilus planipennis*, a foreign wood-boring insect discovered in the Midwest and Canada in 2002. Ash trees at 211 sites in nursery locations, sawmills and native ash stands located in northern and central New Jersey were examined in cooperation with USDA APHIS and the N.J. Forest Service. All sites were negative. A total of 1,862 Forest Pest Alerts were mailed statewide to members of the nursery and landscape industry informing them about this new insect pest.
- *Blueberry Exports To Canada* – New Jersey growers shipped fresh blueberry fruit to Canada under protocols developed by the Canadian Food Inspection Agency (CFIA), the USDA APHIS PPQ and the Department to limit the spread of the blueberry maggot, *Rhagoletis mendax*. Growers participating in the program exported approximately 7.64 million pounds of New Jersey-grown fresh blueberries to Canadian markets under this program in 2007.
- *Seed Research Publications* – The Division’s Seed Lab published two weed seed identification papers since 2002 that contributed to seed research and seed technology in the nation. The papers, focusing on the identification of annual and perennial ryegrass and oat and Orzo rice noxious weed seeds, help to ensure that seeds sold are accurately labeled and help prevent invasive species from entering the United States.

Phillip Alampi Beneficial Insect Rearing Lab – Biological Control

Raising natural beneficial insects such as predatory beetles and parasitic wasps, scientists and technicians with the Phillip Alampi Beneficial Insect Rearing Laboratory have reduced plant pest damage in forest and agricultural crops, and protected natural areas from invasive weeds. These programs reduce pesticide applications, saving farmers money (\$101 million in 2007), reducing insect resistance to pesticides and reducing the amount of excess chemicals in the environment. A

report on the lab's activities is available at www.nj.gov/agriculture/divisions/pi/pdf/NJBioControl07.pdf.

- *Mexican bean beetle* – Approximately 80,000 acres of soybeans were protected from losses caused by the Mexican bean beetle through the release of more than one million laboratory-reared *Pediobius foveolatus*, a parasitoid of the bean beetle. No soybeans required pesticide applications for control of Mexican bean beetle. The Mexican bean beetle program saved growers more than \$1.2 million in pesticide costs in 2007, and has avoided the need for more than 1 million pounds of pesticides since 1985.
- *Purple Loosestrife* – A freshwater wetland plant, *purple loosestrife*, *Lythrum salicaria*, is displacing the native flora of the marsh and threatening many animals that depend on those native plants for nesting, food and shelter. Since 2002, the Department mass-produced and released more than a million *Galerucella pusilla* and *Galerucella californiensis*, two beetles that feed on leaves of purple loosestrife. Dramatic reductions in the pest weed were noted at several locations where native plants are once again reclaiming territory previously lost to loosestrife.
- *Hemlock woolly adelgid* – This is a serious pest of hemlock that has devastated thousands of acres of native hemlocks in New Jersey. A foreign ladybug species, *Sasajiscymnus tsugae*, which feeds on hemlock woolly adelgid, was produced and released in native hemlock stands throughout the state by the Department in cooperation with the U.S. Forest Service as part of a regional program to control hemlock woolly adelgid. Beetles also were supplied to five northeastern and mid-Atlantic states, and as laboratory starter colonies for new biological control projects in the southern Appalachian Mountain region. The Department is rearing two additional predatory beetles for the control of hemlock woolly adelgid – *Scymnus sinuanodulus*, originally from China, under development in the Laboratory in the first phase of building a mass production program, and *Laricobius nigrinus*, a predatory beetle that is native to the Pacific Northwest. The Division's laboratory colony of *S. sinuanodulus* is the second surviving colony in the world, the original colony being maintained at the USDA Forest Service Forest Health Research Laboratory at Hamden, Connecticut.
- *Hemlock Fiorinia scale* – A tiny predacious beetle that feeds on scale insects was originally reared by the Department to control euonymus scale, a serious exotic pest of ornamentals. Adult beetles were found in hemlock forests feeding on Fiorinia scale – serious pest of hemlocks. Releases of the same beetle were made on scale-infested hemlock trees in Passaic and Sussex counties to increase the dispersal rate of the beetle. A total of 34,000 beetles were released in two New Jersey sites, and 30,000 beetles were shipped to the Pennsylvania Department of Conservation and Natural Resources for a cooperative study.
- *Tarnished Plant Bug* – *Peristenus stygicus*, a parasitic wasp, was reared and released in a Gloucester County alfalfa fields to control the *tarnished plant bug*, *Lygus lineolaris*. The tarnished plant bug is a common pest of several fruit and vegetable crops. New laboratory strains of *P. stygicus* from Italy and Spain strengthened the laboratory colony, and host rearing on new artificial diets bolstered parasitoid production and increased field releases in 2004 and 2005.
- *Polygonum perfoliatum* – This invasive vine from Asia, also known as “Mile-a-minute weed,” spreads through forests, floodplains and streamside herbaceous wetlands. The Department developed a mass rearing technique for *Rhyncomimus latipes*, a stem-boring weevil that attacks the “Mile-a-minute weed” and initiated a biological control program targeting Mile-a-minute in cooperation with scientists at the University of Delaware and the U.S. Forest Service. The U.S. Fish and Wildlife Service also is providing additional funding for this project.