Once home to a number of food processing industries that canned or froze fresh New Jersey farm products, there now only exist a couple of companies that continue to do so. One plant, nestled in their heart of New Jersey’s vegetable producing region of Cumberland County, has been producing frozen foods from New Jersey and other regional farms for over thirty years. Seabrook Brothers and Sons contracts with farmers in New Jersey, Pennsylvania, Delaware and Maryland to grow a variety of vegetables for their frozen food plant. A vegetable unloaded from the field may only spend 21 minutes following its path through the plant before it is quick frozen. They supply products for industrial ingredients, food service, private label retail, as well as Seabrook Farms branded items, distributed nationally as well as internationally.

As a food processing plant, Seabrook has been innovative in reducing their waste and energy consumption. A geothermal closed loop system saves energy to condense and recompress refrigerant. A field of solar panels is currently being installed at their plant to provide one third of their electric supply. Seabrook worked with dairy farmers to process their sweet corn waste to the proper moisture and consistency for use as feed. While many food processing plants left New Jersey to be closer to warmer states with longer growing seasons or year round production, Seabrook manages production within the range of our local growing season. The bulk of their employees work during the growing season, but some of their products such as creamed corn and spinach are processed year round. They also repack products in the off-season. Quick frozen products stored in cartons are repacked into bags during the winter so that their wholesale buyers may obtain year round supply.

While a consumer would not be able to identify Seabrook Farms products that are used as ingredients in brand name processed foods, they can find the Seabrook Farms brand in the frozen food section of many local supermarkets. A listing of where to find Seabrook Farms products can be viewed at http://www.seabrookfarms.com.

Footnote: Although the current Seabrook company dates back to the seventies, the original family business began decades earlier and played an integral part in the relocation of Japanese Americans from internment camps post World War II. Read about the history at: http://www.co.cumberland.nj.us/content/171/217/841.asp

What’s Cooking at the Rutgers Food Innovation Center

Rutgers Food Innovation Center located in Bridgeton, NJ, along with the New Jersey Department of Agriculture received a USDA grant to create new food items derived from New Jersey agricultural products for use in the National School Lunch Program.

The challenge of introducing local farm products into New Jersey schools has been hindered by the growing season not being in sync with the school year. In addition to fresh products that meet nutritional and portion control requirements, there is potential product development that meets shelf life requirements which allows for distribution of seasonally-harvested fruits and vegetables throughout the school year. It will also evaluate the suitability of value-added produce items for vending machine distribution in schools.

The Department of Agriculture will work with Rutgers Food Innovation Center to implement the project which is expected to begin after October of this year and should be completed by the end of 2011.
And the Heat Goes On

Farmers always keep their eye on the sky because their livelihood depends on the weather. When faced with weather extremes such as this summer’s high heat and excessive dryness, they have to kick into gear methods to protect employees from heat exhaustion and acres of crops from loss.

Rutgers NJAES agricultural meteorologist Keith Amesen, Ph.D., indicates that for April, May, June and into July, the state’s average rainfall for each month has been 1” below normal, which he admits is not a huge amount in the short term. However, he adds, it is the combination of heat and dryness which takes the most toll on crops. Despite the dryness, New Jersey has only recently declared drought conditions for the northeast region of the state due to the large influx of water into our aquifers and reservoirs during March, which according to Amesen was “off the charts” above normal rainfall.

The weather conditions have both positive and negative impacts on our state’s agriculture. Andy Wyenandt, Ph.D., Rutgers NJAES vegetable plant pathologist, reports that the long periods of hot, dry weather over 90°F have been unfavorable to the development of many vegetable diseases. This is a huge relief after last year’s cloudy and cool conditions spurred the spread of Late blight on tomato and potato crops throughout the region.

While there is little disease pressure, some insects which are pests to certain vegetable crops, thrive in high temperatures. The Rutgers NJAES vegetable Integrated Pest Management program provides recommendations to farmers to scout their fields for their presence and to spot treat to control these populations before they get out of hand.

The heat can also hinder a plant’s ability to produce fruit. Wes Kline, Ph.D., Rutgers NJAES agriculture agent for Cumberland County reports that loss of flower buds and flowers due to high temperatures and drought stress is a serious problem in bell peppers, more so than other types of peppers. Also, tomato pollination depends on both nighttime temperatures between 55° and 75°F and daytime temperatures between 60° and 85°F, with extreme high temperatures causing the flowers to drop.

Farmers first line of defense for dealing with weather extremes is irrigation. Modern irrigation methods are more effective at conserving water than older methods that resulted in water losses due to evaporation. Jack Rabin, Rutgers NJAES associate director for farm services notes that modern center pivot, low pressure irrigation systems use drop nozzles which sprays the water straight down onto the plant (see photo), with little water lost in the air. This type of irrigation can also cool plants off, but does increase conditions conducive to disease. Drip or trickle irrigation, efficiently applies water to the root zone, resulting in even less evaporation. Rabin points out that the costs of irrigation are not cheap. Simply in terms of energy costs, in the US, 6% of all farm expenses are related to running pumps for irrigation.

Despite the consequences of excessive heat and dryness, Wes Kline points out that growers would rather have dry warm weather than rainy or rainy and cold weather. Under those conditions there are more disease problems. And, Kline reveals another benefit: hot weather will increase sugar in some crops like tomatoes, watermelon, muskmelon, etc. as long as growers have sufficient water to keep the crops growing at a normal rate.

The same holds true for Jersey peaches. Jerome Frecon, Rutgers NJAES agricultural agent for Gloucester County reports that this year’s peach crop is also sweeter than usual, and the warm weather was also responsible for the crop ripening two weeks earlier than usual.

So, if you’re looking for an intense sweet experience, visit a local farmstand and get them while they’re hot!