Middlebury College Organic Garden

Food Educator's Report for 2014

Internships
Through the generous support of alumni gifts and earned income from the farm's produce sales, the Middlebury College Organic Farm was able to offer summer internships to four undergraduate students: Maelenn Masson (Middlebury College exchange student from France enrolled in the Food Works program), Marissa Perez ('16), Alison Surdoval ('17) and Katie Weatherseed ('16.5). We also hired two spring interns: Veronica Rodriguez ('15.5) and Krystal Melendez ('16). In the fall we hired interns Jeremy Alben ('18), Margot Babington ('18) and Hannah Habermann ('18).

Student Projects
In the spring two second-year students built a pizza oven and enclosure that would be the center point for the garden as a learning place about food and as a social space. The interns worked with Facilities and local architect Ashar Nelson (who assisted in the Solar Decathlon project) in the design and construction of the oven and shelter. The organic farm student organization held their Harvest Festival at the Farm in October. It was a spectacularly successful inaugural use of the oven with pizzas made using many ingredients from the farm. Adjacent to the pizza oven the summer farm interns built a permaculture herb garden. Made of stone, the spiral herb garden will provide herbs for use by any group using the pizza oven. Two students working with Professor Bill Hegman used drones to complete the most comprehensive GIS mapping of the College Farm. Edward Smythe and Douglas Strong created a map that is detailed enough to reveal where the highest concentrations of photosynthesis are taking place among the garden beds.

School of the Environment
The opening ceremony for the newly created Middlebury College School of the Environment was held at the College Farm in June. President Liebowitz, School of the Environment Director Steve Trombulak and many other college officials attended. The ceremony included the planting and dedication of a native Vermont elderberry seedling. Professor Trombulak intends to incorporate a tree planting ceremony at the organic farm at the opening of the School of the Environment in the summer of 2015.

Production Garden
Despite a late start caused by a very cold and rainy spring our market garden produced a bumper harvest in almost all crops. Our goal is to leave the soil richer each year than the year before even though we are harvesting crops for Dining Services. We’ve developed a core group of crops we sell to Midd Dining that includes Swiss chard, kale, tomatoes, head lettuce, collards and basil. We grow at least 40 other crops for sale to smaller college venues and for Otter Creek Bakery. We also supply a large amount of produce for Weybridge House that is used fresh or preserved for winter use. Our goal is to grow a mix of diversified crops so the interns can learn how to grow many different types of
vegetables, herbs and fruits. We also grow many varieties of flowers including wildflowers. We grow them predominantly for pollinator and beneficial insect food, but we also grow several varieties of flowers for cutting.

**Intern field trips**
As part of their participation in the Food Works program the interns from the College Farm met with other Food Works interns for weekly visits to Vermont farms, food hubs and food conferences. This was the second year the interns participated in the 8 week Food Works program. The organic farm interns stay to work at arm after the Along with the Food Works field trips, the farm interns visited Golden Russet organic farm in Shoreham and helped bake sourdough bread in an outdoor brick oven with Ben and Sarah Wood owners of Otter Creek Bakery in Middlebury.

**Reunion, homecoming and Fall Family Weekend Tours in 2014**
The Organic Garden hosted a tour for alumni. Over 60 alumni came to our 2014 tour and spent time with the interns and farm educator learning about the production methods of our garden. In the many discussions between alumni visitors and current students is the opportunity to connect past and present generations of Middlebury College students. We also run tours of the farm at Homecoming and Fall Family Weekend. Despite poor weather for the initial days of both these events, many interested family members and alumni toured the farm.

**Classes at the Farm**
Classes from the Psychology, Biology, Environmental Studies, Geology, Teacher Education and Dance departments were held at the garden in spring and fall of 2014.

**Research at the Farm**
For several years the organic farm has collaborated with faculty members to create research opportunities for students. As part of each course that uses the farm for research students have opportunities to put theory into practice. The research projects are generated by the focus of each course and needs of the farm to learn more about our unique physical location and microclimate.
For Marc Lapin’s Fall 2014 Environmental Studies introductory course the summer organic farm interns setup an experiment to evaluate two different types of plant fertilization for a single variety of broccoli. Marc’s ES 101 students harvested the broccoli, made measurements of yield for each treatment and evaluated other factors like soil type and previous soil treatment.
Peter Ryan and Jeff Monroe’s soils class did extensive soil, compost and water testing in the fall to help us set a base line for any soil improvement strategies. They also excavated in the transitional soil zone from loam to clay to evaluate how rapidly the change takes place and how that change manifests itself in the soil profiles.
Three of Helen Young’s biology students did independent research projects at the farm in the fall. One student looked at the relationship of flower shape to bee pollination. Another looked at the influence of predation on herbivore populations and, in turn, how that
influences plant health and success. A third student did an observational study of the impacts of Cabbage Moth caterpillars and Tomato Hornworms on two of our crops. As a regular part of the summer internship program at the College Farm, the interns run seed trials as part of our support of farmers and seed producers. With a generous donation of seeds from Renee’s Garden seed company we ran trials on new varieties of Swiss chard, pumpkins, fennel and sugar snap peas. We also trialed a new wildflower mix created to attract a wide range of pollinators.

**Visitors to the garden in 2014**
During the summer the National Vice President of the Future Farmers of America visited the farm accompanied by the Vermont State FFA President. The FFA was interested in our training program for interns. We also had a visit from the Middlebury College Admissions Office staff who wanted to see our intern program first hand. Students participating in the summer MiddCORE program spent an afternoon working at the farm and engaging in a question and answer session about the economics of small farms. Each year the farm hosts a sukkah for the Hillel student organization. The construction of the sukkah coincides with harvest season.