

ALMA STUDENT-LED, FACULTY GUIDED TECHNICAL ASSISTANCE PROJECT SUMMARY

May 30, 2018

BACKGROUND:

The project, which now has the name *Highland 365*, grew from a group of five students in Alma College's Public Affairs program that Dr. Ed. Lorenz directs. There were multiple origins, however, for the project. First, for more than a decade several faculty and many students at the college have been concerned with the social, economic, environmental, and health problems arising from the region's existing and evolving agricultural and food systems. The system has created psychological burdens on many of our food producers, including migrant workers, continual economic worries for many farmers, serious environmental contamination, while not supplying sufficient quantities of low-cost nutritious food for K-12, college and health care food services. Since many of these problems related to the North American food production and distribution system, our initial focus was to facilitate education about the origins and responses desired by food producers.

As early as 2006 we sought and received a small grant through the Kellogg Foundation to foster a discussion between U.S. and Mexican farmers and others involved in food production. Professors Murray Borrello, from the college Environmental Studies Department, and Janie Diels, from the Communication Department became involved in that project. The college's leadership program, which at various times was headed by both Professors Lorenz and Borrello, gave special attention to food issues, bringing in Dr. Maury Luetkemeier, who teaches nutrition courses. Several Alma's best students joined in these efforts. In 2014, a team of five students produced a report for REI focused on the need for cooperatives as a structure to better address the regions development needs.

During 2016-2017, the professors began planning a set of linked first-year courses – *Stuffed and Starved* – to launch an intensified discussion of global food issues and suggest a local response. Funded under a grant from the Mellon Foundation, *Stuffed and Starved* was three linked courses, worth a total of 13 credits where all students studied agronomy under Dr. Luetkemeier, food communication under Dr. Diels and food policy under Dr. Lorenz. Simultaneously, several of the first-year students joined some upper-class students enrolled in Public Affairs Leadership and Communication under the direction of Professors Borrello and Lorenz to apply what they were studying to a community project.

Five of the students, Maliena Boone, Atulya Dora-Laskey, Brittany Pierce, Jacob Templeman and Jaycee Wise, went with Dr. Lorenz to the September 2017 Innovate Michigan Summit sponsored by REI. On the return trip to Alma from the summit, these students developed, with

Dr. Lorenz, the outlines of a plan to move beyond all the previous study and advocacy and launch a food production effort to model and help address the food related problems of the community. While these students and Dr. Lorenz launched this project by seeking support from REI, all of the faculty and students mentioned above, joined in the fall 2017 by Dr. Sara Neumann, a college botanist, and a number of other students supported launching this project.

However, from the start, all involved emphasized this effort was not to be an Alma College project. To succeed, this project needed to engage a cross section from the community. Emblematic of this commitment, the originators of the project sought out a ‘community name.’ Since the City of Alma calls itself “Scotland USA” and hosts an annual Highland Festival and Games, the founders picked the name *Highland 365* to united both the Scottish links and the year-around food production idea.

PROJECT GOALS:

Beginning especially in the fall 2017 work in *Stuffed and Starved* and in the Public Affairs leadership class, the organizers of the project saw a need to address three interrelated food issues. There was a major problem with the availability of nutritious fresh food during the winter in Alma. But, while worst in winter, the problem remained for many people in the region throughout the year, with the cheapest foods available often being the least nutritious. As the team investigated the source of the region’s food problems, they heard similar stories – usually in the form of passionate complaints - from players and coaches of athletic teams, parents of K-12 students familiar with school food, farmers seeking to produce food for local consumption, and health professionals concerned with their patients.

As they tried to respond to what they learned, the creators of *Highland 365* realized to succeed they need to keep in balance three **equally** important goals or purposes:

1. PRODUCTION: Establishing a sustainable year-around in-door fresh food production facility;

2. EDUCATION: Focus on educating the community, from K-12 students, through college and non-student adults in both production, preparation, and consumption of nutritious and tasteful food. The great cuisines of the world are heavily based on fresh vegetables and fish. Equally important, has been the goal of educating people about reuse of abandoned buildings; and

3. GOVERNANCE: Model for the community a cooperative or triple-bottom-line management structure that seeks to balance benefits for those working at the facility, those using the products, and the wider community, to assure the work of the facility is beneficial for all.

While some might warn achieving three primary goals may be too much for a start-up enterprise to focus upon, the founders countered that achieving only one of the three goals would likely take the project onto a tangent that ignored the important benefits of the other two goals.

PROJECT DEVELOPMENT STEPS:

Once the team received REI grant support, they launched a multi-pronged effort to gain both local support and the technical expertise necessary to achieve the three purposes of *Highland 365*. Below in chronological order is a listing of the formal meetings and events members of the team have either organized or attended and consultations with experts or technical experts.

Kick-off Luncheon: On January 24, we held a luncheon at Alma College to reach experts from the local community. At this point, we did not preempt responses from community leaders by proclaiming the three linked goals. Led primarily by students, we tried to facilitate a discussion out of which the goals emerged. We were exceptionally pleased to have the following organizations represented: MSU Agriculture and Natural Resources, East Michigan Council of Governments, 4-H, Masonic Pathways (the large retirement community in Alma), local organic farmers, SODEXO (food service for both the college and hospital), State Farm Insurance (a cooperative), the Cooperative Group (helps develop coops), and both U.S. Senators' regional offices. One of our most pleasant early surprises in this process was to win a commitment from the SODEXO regional management to purchase all food we produce. This commitment was our hope from the beginning, since we modeled our idea on the Evergreen Cooperatives in Cleveland, Ohio, that also had a stable customer base provided by the institutional food users in the city.

City-Manager: On February 8, we had a very positive meeting with Alma's City Manager to discuss local government support or concerns with the project. There we received encouraging support committing to finding an in-door cultivation location. We also became aware of some details of competition for in-door cultivation space by proponents of a medical marijuana facility. Unlike, us they seem to have no problem with money and owners of potential facilities seem to be adjusting their prices accordingly.

Vertical Farm Conference Call: On February 13, we had a conference call with Dr. Dickson Despommier of Columbia University about vertical farming. He brought to our attention some in-door farming facilities in the region that could be models for our plans, including Green Spirit arms in New Buffalo, Michigan. He arranged a follow-up conference call with Milan Kluko the owner of Green Spirit Farms. On February 16, we joined the world-wide Vertical Farming Association.

Live-Well Gratiot Meeting: As a result of the meeting on January 24, we were invited to join Live Well Gratiot, a project of the local (Gratiot County) health department. On February 15, we did a presentation before the monthly board meeting and won the support of the organization for our efforts. Several members agreed to serve on the board of *Highland 365*.

A week later, on February 22, we had a meeting with two local individuals involved in redevelopment of old business structures. They had approached us after learning from a colleague at Alma College about the project. While somewhat premature, the meeting did give us a sense of costs for returning an old big-box structure to functionality.

On March 3, two of the students and Ed Lorenz went to a retreat of state cooperative leaders at the Circle Pines Center in Delton, Michigan. We had been asked to make a presentation on our plans and were paired with another presentation on the Evergreen Cooperatives in Cleveland, Ohio, on which we were modeling our development. Following our morning presentation, we spent lunch and the afternoon with an attorney and other experts on cooperative organization. During the remainder of March and during April, following on advice at the retreat we began the process of incorporating the non-profit that will raise funds for *Highland 365*. We also launched an effort using a student in a grant-writing class, to identify specific fund-raising steps to launch the project.

On March 8, we met with staff of Michigan State University Extension to expertise and services they can provide us. We especially focused on assistance through the MSU Product Center, signing a confidentiality agreement with them covering technical assistance for the project.

Following up on earlier contacts with Mike Polzin of Public Policy Associates, on April 5 we met in Lansing with Mike and Nancy McCrohan to consider ways we could work together to plan implementation of the project.

Following up on the Live Well Gratiot presentation of February, we did an invited presentation to the Gratiot Collaborative Council's April meeting (April 25) at MidMichigan Health – Gratiot Hospital in Alma. As with the Live Well Gratiot event, this provided us an opportunity to meet and win the support of the major health and social service non-profits, including the hospital, in the region.

Then, on May 4, we attended the Regional Economic Development (RED) Teams joint meeting with the East Central Michigan Council of Governments in Gladwin. While we received much encouragement at the meeting, we had concrete follow-up meetings with regional grant administrators for the U.S. Department of Agriculture and the U.S. Department of Commerce, Economic Development Administration.

Finally, on May 10, we held a prospective 'board of directors' luncheon attended by people from previous meetings and contacts. While not all the attendees would serve on the board, we anticipate most would either serve on our board or as advisors. Those attending included a couple who have long been donors to Alma College, two members of the Alma City Commission (who also have had positions with Alma College), a leader of the Regional Educational Service District (who is a former student of Ed Lorenz), the 4-H leader at MSU Extension, the head of the local farmers' market, the Superintendent and primary agriculture teacher at the Alma Public Schools, a leader of the regional health department, and leaders of Child Advocacy and Day Dreams (a program for autistic youth). The meeting generated a good discussion of next steps to assure the *Highland 365* project does not stall during the summer break that so often undermines continuity in projects sponsored by schools and colleges.

PROJECT STATUS LATE SPRING AND SUMMER 2018:

Having won nearly unanimous support from a cross section of local organizations and their leaders, from schools, health institutions, child and general social services, nutritionists and food

production leaders, our challenge has been to keep-up with the expectations of supporters. But, of course, a bigger challenge has come from the rising costs of potential facilities resulting from the seeming popularity of medical marijuana and the result speculative financial calculations of realtors.

However, we have been fortunate to secure the help of an expert at grant writing who happens to be the parent of one of the kids who many think benefit from work in such year-round food production facilities. Also, we have been fortunate to win additional skilled faculty support from a college botanist, Dr. Sarah Neumann, who has many contacts with colleagues at MSU, her Alma Mater.

We are therefore moving ahead with purchasing an aquaponics unit to be installed in the Alma College greenhouses this summer so that we can train both the leaders of this project and interested community partners. In addition to getting the system operating before the end of the summer, the plan is to conduct full scale operation throughout the fall as we work to secure more funds and a permanent home.

We must emphasize that while the original organizers were all either faculty or students at Alma College, this is not a “college project.” This is a community project that intentionally will have its own corporate structure to raise funds and start operation. Certainly, having the support of a number of students and faculty at the college has given us all sorts of free or low cost logistical support, as in use of the green houses at the college, but we emphasize to all that we are a community project with three goals.

We are acquiring a system from Nelson and Pade, Inc., of Montello, Wisconsin. The company seems to have an excellent reputation working with the University of Wisconsin -Stevens Point, the Oneida Nation, and K-12 schools. At this point, at least Professor Neumann is planning to attend the “Master Class” in aquaponics that is offered in Montello later in the summer.

Also, our grant writing volunteer is about to begin work especially on a group of U.S. Department of Agriculture grants and some foundation grants to fund building acquisition and equipment installation. As classes end for the academic year, those of us in higher education are hoping the summer provides time to produce the grants that will result in start-up funding for *Highland 365*.

MEETING REI GRANT GOALS:

As we anticipated in seeking the grant from REI, the project is meeting the program goals:

1. The widespread – almost overwhelming – support we have received in the community arises especially because Gratiot County is an economically and socially stressed community. As we have been invited to join the Live well Gratiot organization we have had confirmed what we stated as a justification of the REI support, that the county, one of the poorest counties in the state. Of the 42,476 people in the county, 16.5 percent (2,575 people) lived in poverty in 2016. Of adults, only 14 percent held a bachelors degree. The median house value was \$88,000. Median family income was only \$41,912. Over half the students in the Alma schools are eligible

for free or reduced lunch, lunches that leaders in *Highland 365* emphasize are often of poor nutritional quality. Even a brief visit to Alma will show typical economic problems of older cities in the state, with multiple abandoned buildings and vacant lots in the core of downtown, three ‘dollar stores’ in a town of 9,000 people and many of the fast food outlets of America and no quality restaurant.

Gratiot County is a microcosm of the rural counties in central and southern Michigan. In our discussions over the last six months, we have had supporters confirm the oddity that many agricultural areas are ‘food deserts’ for local residents. The predominant land use is not for production of healthy foods for human consumption. *Highland 365* will address the lack of quality locally produced food.

2. More than we could have imagined in December 2017 the wider community has welcomed our efforts to launch community engagement in quality food availability. The purposes and structures of our community meetings have been guided by our effort to apply lessons from the Asset Based Community Development (ABCD) model and the learning circle approach developed by the Antigonish Movement in Nova Scotia. Our stated goal has been to remind participants in meetings that we are not solely a local food project, but one that has as a core goal cooperative control and a balancing of the three pillars of triple bottom line management.

3. A core purpose of this effort remains creation of economic opportunities, especially for young people. As we learned of the work of programs such as *Highland 365* helping people with disabilities benefitting from employment in food production, we have added special consideration to working with experts on people with disabilities to our organizational structure. In conversations with the Vertical Farm leaders we have learned of specific examples, such as in Wyoming, where staffing in-door food production has provided positive vocational opportunities for young people with disabilities. While currently confronting competition from the new marijuana industry for facilities, such as the abandoned K-Mart in Alma that would be our preferred location, we continue to see modeling reuse of abandoned business buildings to be a primary benefit of this initiative.

4. Because of our focus on educating about the need and benefits of quality food, the project inherently at its core works to create a knowledge-economy in marketing food. As the nation and state, Gratiot County has moved away from manufacturing and even labor- intensive food production. *Highland 365* aims to teach skills in quality food production and marketing. Our supporters in Live Well Gratiot especially help us in keeping this as a core focus. We have been gratified to see support from the local health and medical community who support our concern with our health challenges growing from our cheap poor-quality food system.

5. While we have encountered some skepticism about the model *Highland 365* is trying to follow from staff of the county economic development agency, who seem more accustomed to providing incentives to wo regular for-profit businesses, we have had cordial meetings that they have attended. Local elected officials, by contrast, seem eager to facilitate the project. We are working closely and sharing information with Michigan State University’s Product Center and other agricultural extension staff.

6. We have a cordial relationship with the regional East Michigan Council of Governments and their economic development staff. We have included 4-H and leaders of Future Farmers of America (FFA). Most positively, we have had supportive discussions with community stakeholders (needing fresh food), including the college, the local hospital, and the resident Michigan Masonic Home, organic farmers, farm market leaders, and K-12 school leaders and parents concerned with school food.

7. While we believe the five original students and Dr. Lorenz have moved the project beyond where we would have hoped it would be when we began at the start of what we call our Winter Term in January 2018, we now must move from creating a structure to raising large sums of money, complete core staff train, and get a food production facility operating. We believe our commitment to buy our first aquaponics unit from Nelson and Pade and to send one or more members of the group to a Master Class at the University of Wisconsin Stevens Point means we will be producing some vegetables and fish in the coming months.

DISSEMINATION PLAN:

We will produce over the summer a summary document and presentation (probably power point), with accompanying images of our initial aquaponics unit. We will identify our grant procedures, corporate structure of *Highland 365*, data on initial costs, initial production data and plans to bring initial production to scale.