Date of Report Submission: 8-25-2014

Project PI & Dept/School: Glensheen – UMD School of Fine Arts

Project Title: Glensheen Greenhouse Workshop

Grant Amount $: $2,500

**Project Context & Purpose**

*Please include the original project purpose statement and revise for any changes that occurred in the project after the start date with a short explanation of the changes.*


When Chester Congdon built the Glensheen Mansion on the shores of Lake Superior at the dawn of the twentieth century, his estate was a model for sustainability. Throughout his 22 acres of land were verdant flower, fruit tree, and vegetable gardens tended meticulously by a full-time gardener who lived on the grounds. In order to provide for the Main House year-round, 4 large greenhouses were built adjoining the Gardener’s Cottage by Lord & Birnham Company in 1907. “The Greenhouse”, as the series of conjoined houses were collectively known, was comprised of four rooms: the Palm House, the Rose House, the Carnation House, and General Growing House. The Palm House was the largest and most stylistic section of the Greenhouse and was used to store exotic plants such as orchids and banana trees. The General Growing House, the second largest structure, was used for seeding and bedding over 6,000 plants annually- plants that would be transplanted through the estate grounds after the spring thaw. Unfortunately, the cost of heating these beautiful glass structures with coal eventually spelled demise for the Glensheen Greenhouse in January of 1971, shortly before the University of Minnesota acquired the property. Today all that remains are the old roof lines on the back of the Gardener’s Cottage where the Greenhouse once stood.

Forty years after its demolition, discussion has begun about the reconstruction of Glensheen’s Greenhouses, and renovation of the historic Gardener’s Cottage. Plans include state-of-the-art sustainable agriculture classroom space, restrooms, and a tea house inside the renovated Cottage space. Key players in this interdisciplinary plan come from Glensheen and its administrative home the UMD School of Fine Arts, the UMD Sustainable Agriculture Program, UMD’s Food and Vending Services, UMD Facilities Management, and the Minnesota Agricultural Experiment Station- bringing together Arts & Humanities, Museum Science, Ag & Horticulture, and the Social Sciences. Together, these partners will envision a classroom where students can study better growing methods, space where they can plant,
harvest, and research foods that are most successful in the northern Minnesota region, and apply critical and creative thinking skills for farm management.

As a catalyst for this cross-discipline group, we would like to put forth a request for funds to an all-day planning session, featuring a keynote speaker to be determined, to take place at the Bagley Nature Center space during the summer or fall of 2013.

A speaker from the Frick Historic Center in Pittsburg is a likely candidate for this planning session. Originally built in 1881 by artist Henry Clay Frick, the Frick museum has rebuilt their historic greenhouse structures that were also demolished long ago. Reconstructed with original historic plans, the exterior of these greenhouses look just like those which once stood on the estate, but internally, they now house a sustainable agriculture program. Through the Frick Museum’s partnership with Grow Pittsburgh, a community group that promotes sustainable agriculture, a wide variety of vegetable and flowers are grown- many of which are used to prepare foods in the Café on the premise of the museum. This is an excellent, working model of what could be accomplished at Glensheen.

**Work Completed**

*Please provide a summary of the work that was completed for the mini grant project.*

On June 23rd, Glensheen organized an all day workshop focused on the utilization of the Glensheen Greenhouses if they were to be rebuilt. To help facilitate ideas and conversation a guest speaker was flown in from GrowPittsburgh, which is a non-profit that operates the greenhouse on the Henry Frick Estate in Pittsburgh.

In addition to the speaker, a light breakfast and lunch with refreshments throughout the day were provided for workshop attendees.

After introductions from around the room, about half an hour was spent discussing the history of the original Glensheen greenhouses. Much of the focus was on the size and material used to build the greenhouses. It was figured that there was approximately 3,000 sq ft of space and with the average building cost of $250, it would cost around $750,000.

After this discussion Cassandra Morgan spoke for approximately two hours. She covered the following topics.

Size and materials of their greenhouse

Uses of greenhouses – Education and revenue generation

Types of products sold – seedlings, flowering plants and vegetable plants

Amount of money earned from different ventures – typically around $30 to $40,000. Overall operation was heavily subsidized to exist.

Recommendations on how to retain organic nature of the greenhouse with the typical abundance of pests. – companion plants, cleanings, etc

Recommendations on how to better build our space to fit retail needs
Overall recommendations on greenhouse gardening – have all floors level or on ramps, have a larger area for potting, have more sinks.

After her discussion ended, we broke up to have lunch.

After lunch we broke into two groups to discuss possible uses for the Glensheen Greenhouses.

After an hour of discussion in the two groups we came together as a whole and combined different aspects of each group.

After several hours of discussion and brainstorming the workshop ended.

**Partnerships & Collaborations**

*Please provide a summary of the project personnel, partnerships and collaborations that worked directly on the project or were started as a direct result of the mini grant project.*

There were a total of 10 attendees. Below is the list of attendees and their perspective affiliations to the potential project.

Dan Hartman – Interim Director – Glensheen
Amanda Kasperson – Business Manager – Glensheen
Roger Johnson – Head Gardener – Glensheen
James Litsheim – Senior Architect – University of Minnesota
Chuck Liddy – Principal – Miller Dunwiddie
Melissa M. Ekman - Architect - Miller Dunwiddie
Claudia EngelMeier – UMD Catering
Thomas Linderholm – Head Chef – UMD Catering
Corbin Smyth – Associate Vice Chancellor – UMD Student Life

Cassandra Morgan - Guest Speaker - Grow Pittsburgh

**Project Outcomes & Impacts**

*Please provide a summary of the outcomes and/or impacts of the mini grant project including future plans for the project.*

Below are a couple of ideas that came forth from the workshop.

**Larger idea:**

Idea 1.

Because of the nature of Glensheen and the number of visitors that come to Glensheen each year and because Duluth does not have an indoor conservatory or a visitor friendly Greenhouse it made sense to focus the angle of the greenhouse around tourism. Another reason for this decision is because we won’t be able to create enough revenue from the produce to pay for the staff to harvest it, unless an outside subsidy were found.
The conceptual idea would be to create the Bay Tree Greenhouse and use it as a classroom environment for teaching gardening, but also to orientate groups taking a tour through the greenhouses. From there, groups would walk into the rehabbed gardener’s cottage with exhibit didactics on the history of Glensheen gardeners. From the Gardeners cottage visitors would walk into the first gardener’s cottage, which would be gardened with techniques of the early 1900s, while the second section would use current methods. The third greenhouse would showcase new methods being designed by the University of Minnesota and potential plants of the University as well. Lastly, the palm house would have focus on exotic plants such as a Banana tree. This space could end up being a popular location for photos. All greenhouses would choose plants around the concept of the tour. In other words you may have some edible plants and some sensory to touch and feel. Instead of choosing plants to resell, plants would be chosen to heighten the educational and visitor experience.

**Other ideas that were presented:**

Idea 2.

Grow produce and resell to UMD Dining Services as a revenue generator. Downside to this idea is that revenue generated will not be enough to cover costs to produce and does not mix well with current operations.

Idea 3.

Grow specific produce to have a fundraiser dinner with all food produced from the Glensheen Gardens. Work with UMD Catering to select produce that would be ideal.

**Immediate Results**

Since many of the ideas can used currently in our existing non-greenhouse gardens we are rethinking what we will plant for next year in regards to its visitor experience, but also for its resale value to UMD Dining Services. This will result in potentially more tour revenue, but directly a new revenue generator with UMD Dining Services.