Willow Lake Student Farm Revitalization Project
K-State Green Action Fund Proposal
November 20th, 2015

Personnel

Student Project Leaders:
- Spencer Hess (Senior in Horticulture)
- Amanda Woolley (Sophomore in Horticulture)
- Zach Bailey (Senior in Entrepreneurship)
- Nelson Pence (Senior in Entrepreneurship)
- Charlie King-Hagen (Senior in English and French)
- Courtney Hess (Junior in Nutritional Sciences)
- Kody Henrichs (Junior in Civil Engineering)

Administering Department:
- Horticulture, Forestry, and Recreation Services

Project Advisor:
- Dr. Candice Shoemaker, Department Head of Horticulture, Forestry, and Recreation Services

Project Background

The Willow Lake Student Farm was, according to its website, “founded in 2008 to provide a hands-on learning experience for KSU students and Manhattan community members. ...Previous managers and interns have established a good reputation of Willow Lake Student Farm as being a provider of high quality, organic produce to the Manhattan community.”

Planned events for this coming spring semester include growing herbs and microgreens, starting an on-campus farmer’s market stand, doing some round-the-farm maintenance, hosting a book club over Michael Pollan’s *The Omnivore’s Dilemma*, providing lectures and workshops on organic farming and sustainable living, and offering field trips to scenes both local and across state lines.

The problem is this and thus: while the Willow Lake Student Farm was once a highly active and productive place (buzzing, you might say), over the past several years it has not been graced with the amount of faculty and student energy and enthusiasm with which it once was. Given that, it’s on-campus visibility is rather subtle and understated, to put it charitably. While there is an active, involved core, this too is not what it once was.

Our goal this spring is to give Willow Lake our time and our tender loving attention with a mind toward improving its productive capacities and aesthetic appearance, and to increase awareness about who we are and exactly what services we offer.
Our goal, going further forward, is to offer ever more educational opportunities to K-State and the greater Manhattan community.

We are submitting this proposal request for the lump sum of $10,000 with the dream that your hoped-for invested money will be matched by our invested effort, and that the two combined will create a space for students of all ages to come together and learn about holistic ways to farm and to live.

We are requesting funding for the following purposes:

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**Budget Breakdown**

**High Tunnel Maintenance/Repairs ($2,500)**
Our high tunnel is in need of a retrofit. According to an estimate from K-State Extension Specialist Dr. Cary Rivard, it will cost between $1,500 and $2,000 to replace the deforming end walls, and somewhere betwixt $400 and $600 to replace the currently tattered plastic. Given all that, we’re asking for $2,500 for this renovation project.

**Tractor Maintenance/Repairs ($2,000)**
Our charming Hesston 55-66 tractor is also in desperate need of repairs. According to the Horticulture Department’s Dr. Charles Barden, it will take anywhere from $1,000-$4,000 total to get it back up and running. Dr. Barden for his part is willing to match whatever the student farm commits, which is why we’re requesting $2,000.

**Greenhouse Production Materials ($1,000)**
We are hoping to start growing plants as soon as the new semester kicks off. Given our access to the Throckmorton greenhouses, all we need is money for seeds ($650), potting media ($300), and row trays ($50). Granted this initial investiture, we can begin growing herbs and microgreens (which are plants harvested at an early stage in their development and that are 20-60 times more nutritious than their fully grown counterparts) for distribution through our planned on-campus farm stand.

We will measure success here by the total number of potted herbs grown and sold; microgreens will likewise be reckoned up by weight.

**Farm Production Materials ($350)**
Thinking farther out, we hope to complement our greenhouse production with produce from the farm itself. The best way to do this is to get plants started in the Throckmorton greenhouse, then to transplant them into the farm’s soil. For this part, we’re asking for $350 to cover the expenses of more seeds and more potting media.

We will measure success here by either the amount or the weight of plants sold.

Ancillary Production Materials ($1,000)
Along with money being required to get plants to start growing, money is also necessary to provide the tools and the resources to keep them growing.

Our estimates are as follows:
- $450 for tools (i.e. shovels, digging forks, a wheel repair kit, hoes, etc.), of which we have much too few.
- $200 for irrigation equipment (id est hoses, high-quality drip tape, header and PVC pipe, etcetera) to replace our current worn down irrigation setup. The reason we’re asking for so much here is because we’re hoping to buy nicer, longer lasting pipes, limiting the amount of plastic required to operate.
- $200 for post-harvest materials like harvest buckets, coolers, and salad spinners, of which we have practically nothing.
- $150 for organic insecticides to protect our plants from pesky predators.

Marketing ($150)
We plan to partner with the UPC to set up an on-campus farmer’s market stand. On our end, we’ll need to help create printed materials to raise awareness that a.) We and our farm stand exist, and b.) We offer other services (workdays, workshops, and fieldtrips) to which both Farm Club members and non-members alike are welcome.

We hope to use mostly laminated, higher quality reusable materials, instead of throwaway pamphlets and posters. Several student leaders interested in entrepreneurship (Zach Bailey, Nelson Pence, and Charlie King-Hagen) will be planning and leading this part of the revitalization project, helping to make widely available to the student body our healthy produce, and simultaneously spreading the word that we offer more than just food.

Labor ($3,000)
Given these fairly weighty projects (the greenhouse and farm productions and the time and planning required to repair the high tunnel) we are asking for $3,000 to be devoted for the purpose of justifying student participation. At $7.25 an hour, that pays for a sum total of 414 hours. We hope to come in under this amount and to return some of this money back into GAF’s coffers, although without being able to know what will and will not happen, this is not a promise we can guarantee.

Projected Timeline
January:
- Meet up collectively and make sure everybody's on the same page
  - Divide people and responsibilities into subgroups to make sure everything gets accomplished
- Begin growing herbs and microgreens
- Begin growing plants for transplant to the farm when ready

February:
- Continue to improve on microgreen operation
- Make sure relations between Farm Club and UPC are in proper place, and that we're ready for the farm stand to open up on a regular, sustained basis
- Get tractor repaired
- Buy the materials and enlist the expertise necessary to repair the high tunnel

March:
- Debut the farm stand and our microgreens (and herbs, if any are ready)
- Repair high tunnel

April:
- Continue to run the farm stand and to grow the food sold there
- Have the farm stand set up for SEA’s Earth Day on the 22nd

May:
- Continue to run the farm stand and to grow the food sold there

June:
- Deliver report over project success(es).

**Conclusion**

We believe the Willow Lake Student Farm is important for a number of reasons. Firstly, it provides a place for students to experience nature in a way that our settled urban existences tend to exclude. Secondly, it offers a chance for us to explore deeper the possibilities presented by our chosen future career paths, whether that be through growing vegetables in a greenhouse, interacting with customers in a market setting, learning about the ins and outs of operating a tractor, repairing a high tunnel’s frame and reupholstering its plastic, or in directing a farm improvement operation. Thirdly, it provides a place for those of varied majors and sundry interests to converge over the prospect of growing healthy food sustainably, to learn why it’s so valuable and so important to do so, and to offer what comes of both to the wider community.

We sincerely thank you for taking the time to consider our proposal. Please know that an investment sowed in the Willow Lake Student Farm will not primarily pay off through what we grow and to whom we sell this spring (though we do believe that will be a net benefit to K-State); it’s true, full fruits will be reaped in future years to come. We hope you will support us on our path to regenerating Willow Lake, and we in turn hope to take what we learn about sustainability and about growing and about life to K-State, to Manhattan, and to the wider world to which we will one day disperse.
The Most Important Metric of Success:
The amount of students who change something about their lives – whether that be through changing what they eat, nurturing a budding interest in ecology or going green or at least considering whether we should bother to take care of the planet on which all our lives desperately depend, or joining a super-awesome student farm club.

Only the last one we can conclusively quantify, and we will let you know come June.