**Funding Criteria**

**A. General Rules**

1. Students, faculty, and staff are encouraged to submit requests for funding. Student-led projects require a faculty or staff sponsor in order to have funds awarded.
2. Funding can only go to university-affiliated projects from students, faculty, staff, and departments.
3. All SSC projects must make a substantial impact on students. This may be a direct impact or an impact through education and engagement. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.
4. SSC encourages innovation and new technologies – creative projects are encouraged to apply.
5. Unless a type of expense is specifically listed below as having restrictions, SSC can generally fund it. The items referenced below should not be taken as comprehensive list.

**B. Things SSC Can Fund, On A Case-By-Case Basis**

1. SSC can fund feasibility studies and design work; however, it must work toward ultimately addressing a sustainability need on campus.
2. SSC can fund staff positions that are related to improving campus sustainability. Strong preference will be given to proposals receiving matching funding from departments and/or plans for maintaining continuity of the position after the end of the initial grant.
3. SSC can fund outreach events with a central theme of sustainability, provided their primary audience is the general campus community.
4. SSC discourages funding requests for food and prizes but will consider proposals on a case by case basis that prove significant reasoning.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability; however, a preference is shown to projects utilizing new or innovative ideas.
6. SSC can provide departments with loans for projects with a distinct payback on a case by case base. Loans will require a separate memorandum of understanding between SSC and departmental leadership pledging to repay the award in full and detailing the payback plan.

**C. Things SSC Will Not Fund:**

1. SSC will not fund projects with a primary end goal of generating revenue for non-University entities.
2. SSC will not fund personal lodging, food, beverage, and other travel expenses.
3. SSC will not fund any travel expenses.
4. SSC will not fund tuition or other forms of personal financial assistance for students beyond standard student employee wages.

**Your Step 2 funding application should include this application, the supplemental budget form, and any letters of support.**

*Please submit this completed application and any relevant supporting documentation to* *Sustainability-Committee@Illinois.edu**. The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the Student Sustainability Committee at* *sustainability-committee@illinois.edu.*

**General & Contact Information**

**Project Name:** Woody Polyculture Work Study

**Total Amount Requested from SSC:** 20000

**Project Topic Areas:** [ ]  Land & Water [ ]  Education [ ]  Energy

[ ]  Transportation [x]  Food & Waste

**Applicant Name:** Branham

**Campus Affiliation (Unit/Department or RSO/Organization):** Crop Sciences

**Email Address:** bbranham@illinois.edu

**Check one:**

 [x]  This project is solely my own ***OR***

 [ ]  This project is proposed on behalf of (name of student org., campus dept., etc.):

**Project Team Members**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Bruce Branham | Crop Sciences | bbranham@illinois.edu |
| Eric Wolske | Crop Sciences | wolske2@illinois.edu |
| Michael Douglass | Crop Sciences | msdougl@illinois.edu |
| Name | Department/Organization | Email Address |

**Student-Led Projects (Mandatory):**

Name of Faculty or Staff Project Advisor:
Advisor’s Email Address:

**Financial Contact *(Must be a full-time University of Illinois staff member)***

Contact Name: Shawna Graddy

Unit/Department: Crop Sciences

Email Address: sgraddy@illinois.edu

**Project Information**

*Please review the proposal materials and online content carefully. It is highly recommended you visit a working group meeting sometime during the proposal submission process.*

**Please provide a brief background of the project, its goals, and the desired outcomes:**

*You may copy and paste your Step 1 application answer if nothing has changed.*

The Multi-functional Woody Perennial Polyculture (MWP) study was started in 2015 with a grant from iSEE as an ecological study on agroforestry for food production. We planted currants in the spring of 2015, the understory crop, and three tree crops: chestnuts, hazelnuts, and apples. The hazelnuts have been ordered 3 times, planted twice (one order of tissue-culture propagated hazels were defective and died in the greenhouse), and have now failed twice. The chestnuts were planted in 2017 and have failed in the areas of the site that have persistently wet ground. We have determined that is best to replant both tree crop species, while the apples are doing well and will continue to grow. While we are at the northern edge of Pecan growing region, one of the treatments in this study, a highly diverse planting of native fruit and nut crops, has pecan trees that have performed very well. We have decided to replace chestnuts with pecans. We acquired seed for the pecans from the same source used previously and those will be planted very soon (this spring). The hazelnuts are a challenge because the Amercian hazelnuts have good disease tolerance but poor nut quality. The ones we initially planted were out of an Oregon breeding program and presumed adaped to our climate, but we have since determined they are not. So, we want to purchase a variety that has known tolerance to Midwest winters and can be transplanted next spring. This 30 acre site has been counted as part of the campus plan to increase the number of acres of trees so we feel it is critical to keep this site going.

The second part of this project is to hire three undergraduate students (2/3 requested funds, 1/3 outside existing funds) to work on agroforestry for food projects this summer. We have several sites that will require a significant amount of hand labor, the MWP site, the original agroforestry for food project, which we've called Woody Perennial Polyculture (WPP), and three currant trials. Currants (Ribes spp.) are a highly nutritious berry crop that can fill the understory niche of a polyculture system. We have a trial of 24 currant varieties that are grown in full sun and under 50% shade cloth. This trial provides valuable information on currant performance in the Midwest and under shade. We also have a currant germplasm trial that will provide important Midwest performance data that will be useful in future breeding programs. All of these trials will require hand labor for weed control, harvest, pruning, and other field maintenance tasks. These will provide undergraduate students with an unparalleled learning opportunity in agroforestry for food production. Food-producing agroforestry systems holds tremendous promise as a form of agriculture that will promote carbon sequestration, soil conservation, nutrient and pesticide input reduction, all while increasing biodiversity. These are systems that are vital to help mitigate climate change.

**Where will the project be located? Are special permissions required for this project site?**

*If special permission is required for this location, please explain and submit any relevant letters of support with the application.*

 **These projects are located at the Fruit Farm and the Energy Farm on the University of Illinois campus. No special permissions will be required as this land is part of the Department of Crop Sciences and some of the trees are already in place. The currant variety trial has a replicated site in Stoughton, WI that the interns may visit if social distancing restriction are eased during the summer.**

**Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.**

*Please attach letters of commitment or support at the end of the application.*

Housing/Dining services has traditionally taken most of the fruits of our farm labors. We're currently unsure what will happen during the COVID-19 pandemic since there are few students in the dormitory system now and the fall is up in the air. Typically the campus community also benefits from the sale of produce items through the Student Farm Farmstand on the Quad. Again, with the social distancing requirements, the Farmstand will not function in its traditional form this year.

**How will this project involve and/or benefit students?**

*This includes both direct and indirect impact.*

**This project will benefit students in several ways. Working or interning at the Student Farm can be a valuable learning experience and can alter a student's career path. One of our first interns (2010) is currently the small farms extension educator for Champaign County. Many student groups volunteer at the Student Farm, giving them an experience that is valuable, unique, and increasingly rare in our constantly urbanizing society. Lastly, students will be able to taste the difference that occurs when food is grown locally and harvested at the peak of flavor. This is in stark contrast to our global food system of food harvested 1000's miles from where it is consumed.**

**How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported?**

The Student Farm hosts an annual open house for the campus community in September where tours are given to attendees and Dining Services serves food made with farm products. We also recognize the support of the SSC each week the Farmstand on the Quad is operating and on our website, thefarm.illinois.edu.

# Financial Information

*In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee* [*website*](http://ssc.sustainability.illinois.edu/?page_id=2087)*. Submission of both documents by the submission deadline is required for consideration of your project.*

**Have you applied for funding from SSC before? If so, for what project?**

Yes, multiple projects have been funded related to the farm. They include the initial grant to start the SSF in 2009, a 2011 proposal on ensuring the future of the Student Farm, and a recent grant to move the SSF to a farm site closer to campus (although this proposal was funded, I had to return the funding to SSC because the ACES Dean would not approve the project).

**If this project is implemented, will you require any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs?***Please note that SSC provides funding on a case by case basis annually and should not be considered as an ongoing source of funding.*

We will not be asking for additional funding for the MWP project. We are confident that the trees selected are adapted to central Illinois conditions and the project will finally be fully planted. We may request partial support in the future for student interns as we strongly believe this type of summer internship can be a valuable and potentially career changing experience.

**Please include any other obtained sources of funding. Have you applied for funding elsewhere?**

*Please attach any relevant letters of support as needed in a separate document.*

 We have applied for funding from the College of ACES for this project but that request was denied. We have not applied elsewhere for funding since the establishment of trees isn't research. The site, once established and maturing, will offer excellent opportunities for interdisciplinary research on the impact of species number, i.e. monocrops such as corn or soybeans versus agroforestry with 2, 3, or 4 food producing species, on diversity of insects, small mammals, birds; food production potential of these systems versus traditional agronomy among others.

# Environmental, Economic, and Awareness Impacts

**How will the project improve environmental sustainability at the Urbana-Champaign campus? If applicable, how does this project fit within any of the** [**Illinois Climate Action Plan**](https://icap.sustainability.illinois.edu/) **(iCAP) goals?**

The MWP site is a 30-acre agroforestry project that is lacking one thing - trees! The black currants that were planted in 2015 are doing great, but the tree crop portions have failed to establish, with the exception of the apple trees. We do have seed for pecans, but we need the hazelnuts to complete this project. This project will eventually increase local food consumption within the campus, which is an iCAP goal.

**How will you monitor and evaluate the project’s progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?**

*Some examples include carbon emissions, water conservation, green behavior, and reduced landfill waste.*

**We'll be monitoring tree growth on the MWP site by taking yearly estimates of biomass accumulation. We'll also monitor food production including currants and apples in the immediate term and hazelnuts and pecans in a much longer time fram.**

**What are your specific outreach goals? How will this project inspire change at UIUC?**

**We will continue to host field days and student groups to demonstrate the value of local food production and the greenhouse gas mitigation potential of agroforestry.**

**If applicable, how does this project impact environmental injustice or social injustice?**

**Most agricultural produce is harvested by migrant workers who are paid minimum wage or less (if they're paid by the amount they harvest they can actually receive less than minimum wages), perform physical labor that breaks down their bodies, and receive little or no health care, social security, or other benefits normally associated with productive employment. Students will experience first hand the physical nature of food harvesting and gain an appreciation for the labor that goes into the food we should be eating versus the mechanized food production system used to generate the cheap calories and low nutrition foods we should be avoiding.**