**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:** South Farm Draper Purchase

**Total Amount Requested from SSC:** $50,000

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

[ ]  Transportation [x]  Food & Waste

**Applicant Name:** Allen Parrish

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

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

**Check one:**

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

 [x]  This project is proposed on behalf of (name of student org., campus dept., etc.): Crop Science and Ag Engineering

**Project Team Members**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Allen Parrish | Crop Science | aparrish@illinois.edu |
| Nick Eisenmenger | Crop Science | Neisenm2@illinois.edu |
| Tim Lecher | Agricultural Engineering | tlecher@illinois.edu |
| Dr. Carolyn Butts-Wilmsmeyer | Crop Science | Cjbutts2@illinois.edu |

**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: Jennifer Black

Unit/Department: Crop Sciences

Email Address: jkblack@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 South Farms are a valuable asset to the University just like any other lab or research facility. The biggest impact from research comes from using the best equipment and techniques for data generation. As a university one of our missions is to provide applicable research to improve the quality of human life. We are requesting money to assist in purchasing a combine draper head that would increase productivity, diversify the crops that can be harvested, and put our program on par with current farming techniques.

**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.*

**Since this would be an attachment to a combine, it would be used on Crop Science and Ag Engineering fields. There are no special permissions that are required.**

**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.*

All groups working on the South Farms would benefit from this piece of equipment. Small grain researchers would get field scale data collected with the latest commerical technology. Cover crop researchers would gain access to more acres since crops could be harvested quicker. This would allow for more cover crop growth and see a higher environmental return on their use.

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

*This includes both direct and indirect impact.*

 **The South Farms engages with many of the students through onsite classes and field days. Experienced staff help facilitate those learning experiences and students would get opportunities to have discussions with the operators and the benefits of using a draper head. Students will get to see the versatility of a draper head as it will be used to harvest soybeans, wheat, oats, sorghum and native grass seed. Social media and educational videos can be taken on these various crops which can help assist farmers diversify their farm commodities and practices. There are no draper heads currently being used on any equipment on campus which puts us behind the most current farming practices and deprives our research staff of being able to collect actionable data for more sustainable farming. Our research faculty can use on farm data in the classroom to enhance the educational experience of students. As a university we have an obligation to demonstrate the value of land stewardship and can help model future farming practices.**

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

I plan to work with our ACES public relations liason to generate video content that can be assessible for viewing on our ACES Youtube channel. Additionally we can highlight our sustainable farming practices to those outside our immidate community. Harvests will highlight the diversity of crops and management schemes the Crop Sciences and Agricultural Engineering Departments focus on as well as promote the efforts made by the SSC and the University to promote sustainable agriculture.

# 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?**

No.

**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.*

No. This would be a one time purchase and the farm operations would pick up any ongoing maitenance costs.

**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 not applied for any other funding. Funds set aside for farm operations and maintenance could be used to assist in the purchase. The additional harvest of grain and the reduced maintenance cost will provide the additional money to fund the draper head.

# 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 capabilities of a draper head are considerably superior to the current auger head being used. They are more efficient, have a wider daily harvesting window, reduce grain loss from reel shatter, harvest the crop closer to the ground, increase travel speed, and harvest crops that have become tangled more easily. The ability to become more efficient by upgrading out of date equipment allows for resources to be used for other farm priorities and reduce waste which is a goal of iCAP. The ability to remove crops from fields in a timely manner also allows researchers the ability to conduct other postharvest studies prior to winter. Even though campus agriculture is accounting for 1% of emissions on campus, there is a lot of agricultural ground that could be used to offset the carbon impact from the rest of campus. The hardest part of planting cover crops in the northern half of Illinois is getting them planted at the right time and a draper head will help speed up harvest for timely planting of cover crops which aids in carbon sequestration. As a research and education center, we can provide technical information specific to Illinois growers for implementing sustainable agricultural practices and carbon sequestration.

**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 are always actively seeking out tools that will make our farms a model for future farming. Technology is expanding and sorting out which tools to invest in can often be hard to sort out. As we look to harness all the data our farms generate and mine it for best management pracitices, we can help fullfil our mission. The draper head will be one of those proven tools that will help us modernize and become more efficient. Efficiency reduces our carbon footprint, and frees money for more sustainable upgrades such as cover crop planting, and maintenance to our tile network. Cover crops build soil organic matter, which increases soil water holding capacity during the growing season as well as prevents soil erosion. Upgrading tiles is also important to prevent old tiles from failure as well as reduce ponding in fields which reduce crop stands and provide a refuge for weeds.**

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

**Outreach is an essential function of the Crop Science Research and Education Centers. We welcome groups throughout the year to participate in hands on learning. Supporting work on the South Farms further highlights the efforts made to the surrounding community since we are a highly trafficed part of the area. As people drive around our farms on their daily business, they won't have to hear about sustainable agriculture but they will get to see it in practice.**

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

**Rural communities around the United State experience a higher poverity rate than their urban counterparts based on a recent report by the US Department of Agriculture. There is a lot of land that could be managed more effectively to promote economic development in these rural communities. Sustainable practices on farms can provide opportunities to be better stewards of the land as well as provide economic opportunities in these depressed economic areas through maximizing land use year round compared to just during the optium growing season. Smaller farmers, who may not be able to justify purchasing new equipment for sustainable farming, could partner with larger growers who lack the manpower to integrate sustainable farming. These cooperative efforts will not just benefit these individual farmers but the ecosystems they help manage. "The wealth of Illinois is in her soil and her strength lies in its intelligent development" is just as true now as when President Andrew Draper said it in the late 19th century as our first University President. https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being#geography**