**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. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.

**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 requests for food and prizes but will consider proposals on a case by case basis.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability.
6. SSC can provide departments with loans for projects with a distinct payback. 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.

**Instructions**

*Submit this completed application and one map, graphic, or picture to* [*Sustainability-Committee@Illinois.edu*](mailto:Sustainability-Committee@Illinois.edu)*. Please adhere to the session word counts. The committee holds the right to decline applications over the designated word counts. If you have any questions about the application process, please contact the Student Sustainability Committee Coordinator at* [*sustainability-committee@illinois.edu.*](mailto:sustainability-committee@illinois.edu.)

**Project Name:**  Improving UI campus land sustainability with cover crops

**Total Amount Requested from SSC:** Total = $117,500

* Student labor 500 hours x $15/hr = $7,5000
* Hiniker 15’ Air Seeder = $40,000 (use old equipment as trade-ins to reduce this cost)
* Corn Head Air Seeder = $15,000
* Cover Crop Seed:
* Year 1: 200 acres of seed @ $75/A = $15,000
* Year 2: 400 acres of seed @ $75/A = $30,000
* Soil samples = $10,000 (2 years of sampling)

**Primary Project Leader Name & Email:**  Allen Parrish aparrish@illinois.edu

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| **Project Abstract:** In less than 100 words, briefly describe your project. |
| Our campus has made a commitment to regularly add cover crops to production acreage across the College of ACES south farms. Cover crops are not harvested, they are included in between cash crops to protect soil from erosion and nutrient losses. Within ACES, agricultural land used for corn silage, small grains, and nursery work are optimal for cover cropping due to their earlier harvest times compared to the traditional corn/soybean rotations . Students will gain hands on experience in all aspects of cover cropping systems while conducting research to evaluate changes in soil fertility and cash crop yields. |

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|  | Education | Energy | Food & Waste | Land & Water | Transportation |
| Project Category | x | x |  | x | x |

**Project Team Member List** (student projects must include their faculty/staff advisor’s information)

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| --- | --- | --- |
| Name | RSO/Department | Email Address |
| Allen Parrish | Crop Sciences | aparrish@illinois.edu |
| Jonathon Mosley | Animal Sciences | jfmosley@illinois.edu |
| María Villamil | Crop Sciences | villamil@illinois.edu |
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| Questions | Yes | No |
| Is this a student-led project? |  | x |
| If applicable, have you received approval from Facilities & Services and/or site manager? | x |  |
| Do you have a plan for ongoing funding beyond SSC? (SSC cannot guarantee ongoing financial support) | x |  |
| Beyond SSC, do you have sources contributing funding or support (ex. staff time, external grants, etc.) to this project? | x |  |
| Have you applied for SSC funding previously? | x |  |

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| **Project Timeline** |
| SSC funding agreements remain active for two years. Please list your project’s timeline and/or milestones. |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Project components** | 2021 | | | | 2022 | | | | |  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | **Obj. 1): Research experiences for undergraduates** |  |  |  |  |  |  |  |  | | Student recruitment and project allocation |  |  |  |  |  |  |  |  | | Soil and cover crop measurements |  |  |  |  |  |  |  |  | | Statistical analyses |  |  |  |  |  |  |  |  | | Social media based on experiences |  |  |  |  |  |  |  |  | | Posters and reports writing and presentations |  |  |  |  |  |  |  |  | | **Obj. 2): Increase efficiencies to reach ICap goal of 20% cover crops** |  |  |  |  |  |  |  |  | | Purchasing air seeder for corn head and purchase 15’ air drill |  |  |  |  |  |  |  |  | | Planting cover crops |  |  |  |  |  |  |  |  | | Soil sampling, and plot maintenance |  |  |  |  |  |  |  |  | | Cash crop harvesting |  |  |  |  |  |  |  |  | | **Additional activities and outcomes** |  |  |  |  |  |  |  |  | | Larger scale proposal writing |  |  |  |  |  |  |  |  | |

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| **Project Description** |
| In 250 words or less, describe your project. What does your project hope to accomplish? What are your project’s deliverables? Bullet points welcome. |
| Cover crops are increasingly common in agricultural settings as a tool to increase sustainability of farm operations. A workforce with the skills and experience to work with and assess results from cover crops is urgently needed to encourage adoption of this practice throughout the Midwest region. Graduating students currently lack the required experience. The project’s main goal is to fill in this gap allowing students to gain hands-on experience in all aspects of cover cropping while simultaneously evaluating impacts of this practice on soil fertility and crop yields. Our second goal is to obtain the equipment needed to seed large acres for cover crops in an efficient and sustainable manner. In this regard, the use of an air seeder while harvesting corn would allow for the two farm operations, harvesting cash crops and seeding of cover crops, to happen simultaneously, saving resources and reducing labor costs. We will evaluate a wide range of cover crop seed blends on their fall establishment, overwintering capabilities, as well as most benefits to soil quality and cash crop yields. The deliverables for this project include education and hands on experience for our students, and a thorough evaluation of cover cropping practices for our UI agricultural land, within the College of ACES. |

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| **Environmental Impact** |
| In 200 words or less, how does your project increase environmental stewardship at UIUC? If applicable, what is the carbon, water, waste, and/or energy savings? Does your project relate to the iCAP? Bullet points welcome. |
| This project will help create a path forward for the College of ACES in developing and maintaining a cover crop educational program while fulfilling our commitment to the campus mandate. This ultimately will establish and develop protocols to increase environmental stewardship. Not all cover crops are equal and there is a learning curve to understanding how they can impact the soil quality while still providing the optimal production of cash crops. Cover crops can help sequester carbon, scavenge and retain nutrients, increase water infiltration, and reduce soil erosion. They could provide energy savings if they are used as a replacement for fall tillage too. The true energy savings could be an additional data point to collect. Cover cropping 20% of the College of ACES south farms is a new iCAP goal. Creating a baseline soil fertility map is also an iCAP objective. Farm budgets are strained due to low commodity prices, high input costs and the impact of COVID-19 on external funding sources, making these purchases unfeasible under current budgets. |

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| **Student Impact** |
| In 200 words or less, how will this project benefit students? How will students be involved with this project? What educational components are in your project? Bullet points welcome. |
| Students will participate and gain experience and skills in all aspects of this project. Students interested in cover cropping will be recruited to assist with the planting, evaluation, and sampling while working on their own individualized research projects. Students will develop essential questions to guide their research, analyze their data, and prepare posters and presentations at local and national venues according to their preferences. They will learn about crop rotations, equipment maintenance, calibration, as well as getting first-hand experience operating farm equipment (after completing proper safety training). The students will have the opportunity to work with the college of ACES marketing department and UI Extension to create short social media pieces on their experiences with cover crops. |