Agroecological Living Laboratory (ALL) at Eagle Heights

Problem/Need

The Eagle Heights Community Garden provides a space for faculty, staff, students, and community members alike to come together and share food, culture, and stories; building a diverse multi-generational community. Many international students and their families garden here, providing a rich opportunity for cultural exchange around gardening techniques in a local and global context. While this area is a beautiful productive place where community members and students can come together, it is missing two components that would enhance the experience for everyone involved:

- A space that specifically integrates community knowledge and leadership, under the consultation of an external partner, and using the intellectual and organizational resources of UW-Madison.
- An agroecological area that demonstrates and honors the Traditional Ecological Knowledge around perennial foodways.

Vision Statement

The Agroecology Living Laboratory (ALL) at Eagle Heights demonstrates the possibilities of alternative agricultural systems that build more sustainable and resilient food systems and strengthen partnerships and understanding among multiple campus and community entities.

Goals/Objectives

To meet these needs, we propose the creation of an agroforestry demonstration site, using perennials that are native to Wisconsin, on the plot of land that was formerly used by CALS as an agricultural research station for annual crops. This land use change will likely increase biodiversity, reduce local runoff and soil erosion, reduce the need for routine mowing and maintenance, increase local carbon sequestration, increase the diversity of foods grown in the area, and provide an aesthetically appealing, natural community gathering space.

Our specific goals are as follows:

- Design a one-acre agroforestry system, which features native, perennial crops and utilizes indigenous cropping systems.
- Create a living-learning laboratory that is open to faculty, staff, and students alike. The space will provide opportunities for classroom involvement and various school programs focused around indigenous foodways, food sovereignty, and agroforestry.
- Disseminate knowledge of climate resilient agricultural systems and the diversity of locally-grown foods.
- Strengthen the relationship between UW-Madison and experienced agricultural consulting partners like the Savanna Institute.

Long-term Project Viability
Due to the perennial nature of this project, after the initial planting of the plot, additional funding will only be needed to maintain the plot and support campus and community learning activities. Undergraduate programs F.H. King and the Greenhouse Learning Community will provide continued maintenance of the area with support and guidance from Agroecology graduate students and faculty. The institutional alignment of the project with the Horticulture program will ensure instructional and outreach support for the project.

The strategies to continue this initiative are multiple: 1) we will work with the Horticulture department at UW-Madison to create an institutional home which will connect classes to this site as well as devote staff time to ensure communication and engagement with all the stakeholders; 2) the Greenhouse Learning Community, a sustainability-themed residential learning community with an existing rooftop greenhouse and ¼-acre vegetable garden adjacent to our proposed site, will be a central partner in this initiative, ensuring undergraduates are introduced to the land and engaged with the initiative; 3) the Agroecology program, out of which this initiative grew, is committed to maintaining the physical space and to providing mentorship for undergraduates as part of the graduate student activities.

Organization
This project is a collaboration among both campus and community stakeholders. The on-campus organizations we are working with include the undergraduate sustainable agriculture organizations F.H. King and Greenhouse Learning Community, the Lakeshore Nature Preserve, and the College of Agricultural and Life Sciences (CALS). The consulting partner outside of UW-Madison is the Savanna Institute, which is a 501(c)3 nonprofit group that is working to increase agroforestry initiatives in the Midwest. The student groups will play an important role with regards to physically developing and maintaining the agroforestry demonstration site. While students come and go at UW-Madison, the organizations that they are a part of remain to carry on the work that they started. The Lakeshore Nature Preserve owns the property on which the demonstration site will be built, so they are also a key campus partner. Their staff is composed of city planners and landscape architects, and they will provide much needed historical context for the property.

Within CALS, there are two specific programs that are taking on substantial roles in the project: the Agroecology Program and the Horticulture Department. These programs have made indigenous food sovereignty a core focus of their academic research, educational courses, and special events. The UW campus is also committed to the Our Shared Future campaign to deepen our community's understanding of the Ho-Chunk Nation, as well as other regional Indigenous histories. We will be partnering with these on-campus groups to develop a perennial, Indigenous cropping system that stays true to these ideals. The Savanna Institute will be a valuable outside consulting partner due to their extensive experience creating sustainable, resilient agroforestry systems in the Midwest. They have agreed to help in the sourcing of germplasm, trees, and shrubs for agroforestry initiatives.They will also advise UW faculty and students on the design and implementation of Indigenous, perennial cropping systems.

Timeline

Month	Activity	Deliverable
April - September 2020	Agroecology students partner with the Savanna Institute, LSNP, and CALS faculty to design an indigenous perennial cropping system suitable for the plot.	A formal landscape design schematic, complete with plant varieties and on-site crop locations.
Fall 2020/ Spring 2021 (circumstances permitting)	Begin transition from experimental annual crops to agroforestry by clearing land and planting cover crops. Student, faculty, and community volunteers work with Savanna Institute to plant perennial crops. This will be done on work days sponsored by student groups.	Land cleared, ready for perennial crop development. Cover crop planted. Some perennial crops will be planted in late fall of 2020, others will be planted in spring 2021 depending on crop physiology and availability from local nurseries