

## small studio wins Honor Award for Design at the Sustainable Student Farm

The *small studio*, an ongoing series of teaching and research projects that focus on detail and tectonics at the School of Architecture of the University of Illinois at Urbana-Champaign, received the 2012 Honor Award for Sustainable Design from the Central Illinois Chapter of the American Institute of Architects

Studio Critic Professor Jeffery S. Poss, FAIA received the award on behalf of his spring 2012 graduate architecture design studio and summer 2012 research team for their projects with the Sustainable Student Farm on the Urbana-Champaign campus.

Thus far the small studio team has completed: 1) graphics and master plan concepts for the farm, 2) a pair of Portable Deployable Farm Stands to transport and display produce, and, 3) the first phase of the *Wash/Pack Pavilion*, a multi-use structure for preparing produce for market, and as a location for the *Fresh Press* crop waste papermaking startup.



2012 AIA Central Illinois Design Awards Submittal - Sustainable Design

**GENTLE STEPS ON GOOD LAND**  
The small studio builds Sustainability and Community

**Project Name:** Wash-Pack Pavilion  
**Project Location:** Sustainable Student Farm, University of Illinois @ Urbana-Champaign (UIUC)  
**Substantial Completion:** Phase One: August 2012

**Design Team:** small studio (Arch 571), UIUC, Spring 2012  
**Team Leader:** Jeffery S. Poss, FAIA  
**Graduate Students:** Rebecca Beshover, Jordan Buckner, Morgan Carlson, Daniel Jauk, Zachary Henrich, Charles Huss, Michael Johnson, Shuler Kirby, Ethan Rafferty, Fadi Salem, Elvir Swerby

**Structural Consultant:** Marc O'Brien, PE

**Design/Built Team:** gaitll studio, UIUC, Summer 2012  
**Team Leader:** Jeffery S. Poss, FAIA  
**Research Assistants:** Jordan Buckner, William Burtall, Morgan Carlson, Daniel Jauk, Ethan Rafferty, Fadi Salem

**Client:** Sustainable Student Farm, University of Illinois @ Urbana-Champaign (UIUC)

**Sponsors:** Sustainable Student Farm, UIUC  
Fresh Press, UIUC  
Office of the Chancellor, UIUC  
Student Sustainability Committee, UIUC  
The Barn, Inc.  
Amerlux International, LLC

**Photography:** Drawings: small studio, UIUC



**GENTLE STEPS ON GOOD LAND**  
The small studio builds Sustainability and Community

**Project Description:**

**Introduction:**  
This project began in a spring 2012 graduate architectural design studio at the University of Illinois. The focus was to create needed equipment and infrastructure for the campus Sustainable Student Farm (SSF). This student-operated farm, initiated in 2009 to promote alternative growing practices and agriculture research, produces significant quantities of fruits and vegetables for purchase on campus and for use in the university's food service operations. The goal of the farm is to be prototypically "off the grid," and every project undertaken on the farm must contribute to that goal. In consultation with the SSF manager, we decided to approach the farm's needs through three projects.

One: develop designs for deployable farm stands.  
Two: begin to implement designs for structures needed on the farm with an ultimate goal of realizing some of our visions.  
We began this endeavor with little money to support our ambitions, but we did have potential funding sources, and hoped that if everything came into alignment the resources would follow.

**Project One: Multifold Portables**  
The architecture studio began with a four-week project to design Portable Deployable Farm Stands (PDFS). As individual concepts emerged, trends became apparent, and some projects were consolidated and teams of two to five students. We then sought construction funds for two designs (one powered by a bicycle and one loaded into the back) reviewed from the Student Sustainability Committee (SSC), a student resource for sustainable campus projects.

Funding from the SSC was approved in March 2012, and we proceeded to develop the prototypes in parallel to Project Two, for completion in two months. These prototypes deliver and display their produce in local marketplaces, become demonstrators of design solutions that serve the environmental needs of the local community, reduce transport carbon emissions, and act as movable "hubs" for local market goods.

**Project Two: The Wash-Pack Pavilion**  
The second project focused on the design and development of a "Wash-Pack Pavilion," a protected location where crops could be sorted, triple washed, and packed for transport to market. In addition, the Fresh Press, an agit-floor paper laboratory, required a protected space for the collection of paper and packaging from leftover crop waste. Finally, the classroom portion would educate college, high school, and elementary school children on small farm food production. Combining these functions with an existing storage shed allowed the program space to overlap, the use adapting to daily, weekly and seasonal changes. The scope of the project precluded that the semester would end before much of the Wash-Pack Pavilion could be constructed. The images and ideas generated by the studio were packaged and sent to potential funding sources. The Chancellor responded and awarded the project funds to employ five of the studio participants during the summer (2012).

**Impact and Future Development**  
This design-build studio dealt with actual current needs and limited methodology to opportunities to positively impact people's lives. Students have demonstrated that they were totally engaged and challenged by a methodology that required them to think and act to solve evolving problems. Students understood that constructing things with their hands not only develops useful skills, but also brings them into contact with the essential aspect of their innate intelligence. It provides an opportunity to create architecture at a personal scale, with direct physical connection to the site of the human body.

In this project that intimate scale is best represented through the rainwater collection system conceptualized last spring and begun this summer. The system "tunes" the collection of rainwater like a musical instrument, which reveals and synthesizes the important connection between rain and food crops, between sky and land, that is always evident but rarely considered in the rural landscape.

The build-out of the farm will continue. At present, there are plans to expand the Wash-Pack Pavilion to the north to complete the classroom portion, and to the south to create a headquarters for the Fresh Press. That build-out of the pavilion includes embedded solar panels and wind turbines, with the goal of creating a totally off-the-grid facility.



### Project Credits

#### **small studio (Architecture 571) Spring 2012**

Critic: Jeffery S. Poss, FAIA, Professor, School of Architecture

Students: Becca Bierbower, Jordan Buckner, Meagan Calnon, Robert Deering,  
Zac Helmick, Chuck Huss, Danny Jeuk, Michael Johnson, Kwansoo Kim, Shafer Kirby,  
Brad Mitzelfelt, Ethan Rattray, Fadi Salem, Elyse Townley, Madina Sharipova, Xiaozhon Zou

#### **small studio (Funded Research) Summer 2012**

Advisor: Professor Jeffery S. Poss, FAIA

Research Assistants: Daniel Jeuk, Jordan Buckner, Meagan Calnon, Ethan Rattray, Bill Bodel,  
Fadi Salem

#### **Advisors:**

Eric Benson, Associate Professor, School of Art and Design; Co-Director, Fresh Press

Zachary Grant, Manager, Sustainable Student Farm

Marci Uhlein, PE, Assistant Professor, School of Architecture

#### **University Sponsors:**

Office of the Chancellor

Sustainable Student Farm

Student Sustainable Committee

Fresh Press

School of Architecture

School of Art & Design

#### **Corporate Sponsors:**

AmeriLux International, LLC

Tire Barn, Inc



#### For further information:

Jeffery S. Poss, FAIA

Professor, School of Architecture

University of Illinois at Urbana-Champaign

Principal, Jeffery S. Poss, Architect

[www.jefferyspossarchitect.net](http://www.jefferyspossarchitect.net)