

# UNIVERSITY OF MINNESOTA

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Mindy Granley  
Director, UMD Sustainability

RE: UMD Land Lab/SAP Farm

The UMD Land Lab (aka the Sustainable Agriculture Project or the SAP Farm) was founded in 2009 to promote research, teaching and public engagement around sustainability in food, water, energy and biodiversity within a landscape scale ‘land lab’. Repurposing university land previously associated with the abandoned Northeast Agricultural Experimental Station (1912-1976), this 30 acre SAP field site offers a space to devise and model human systems at a regional scale against the backdrop of rapidly changing earth systems.

SAP collaborates with researchers from the humanities, social sciences, the natural sciences and engineering on solutions-oriented action research projects. Community organizations and governmental units collaborate on diverse activities on site and more than a thousand students annually participate in experiential learning activities.

A series of foundational projects animate the workings of the 30 acre field site and create the linkages for the researcher-student-community interface:

- SAP uses organic agricultural field practices to manage 6 acres of vegetable production, and the working farm is used as a classroom for researchers, college and public school students, and community. This organic farm offers UMD a way to the growing local food movement with all the health, ecological and economic benefits it can provide.
- UMD’s Dining Services purchases the organic produce (more than 20,000 pounds in 2015) and supports a full time farm manager and seasonal student-farmers. All produce is served on campus, creating a systems-change vehicle linking academics and operations for mutual benefit. Collaboration on changes in staff training, expansion of refrigeration facilities, and acquisition of processing equipment in the UMD Dining Services kitchen has explored a process for institutional change.
- A farm scale wind turbine –conceived, evaluated, and installed by UMD’s Departments of Mechanical and Electrical Engineering, Office of Sustainability, Facilities Management and other partners-- provides renewable energy for SAP as well as research and learning for engineering faculty and students. The turbine project also engaged UMD biologists and EPA scientists to establish baseline data over two years on potential impacts on birds, bats and other wildlife at the SAP landscape.
- A Minnesota Department of Health funded Teacher Training Garden is located at SAP to partner with the Duluth Public School Systems and the Duluth Community Garden Program in training teachers in siting, managing and integrating school gardens into

curriculum and onto K-12 school yards. SAP has hosted all public school 7<sup>th</sup> grade students in a field day, bringing 550 students onto the farm in groups to learn about local food and agriculture.

- SAP hosts a western honeybee apiary (managed by the Northeast Beekeepers Association) and native pollinator habitat (via the Xerces Society) and related educational activities with community groups on these important insects relative to both human and non-human life.
- SAP hosts a collaboration with the Intertribal Agriculture Council over the past four years in growing tribally held corn varieties, squash, beans and related processing and educational activities.
- SAP hosts action research relevant to regional climate change manifestations: exploring a 'keyline' terra-form system for 'catch and release' strategies appropriate for both drought and flood conditions; and in partnering with the Natural Resources Research Institute on a pending biochar research program that would explore options for amending boreal soils for agricultural production against the backdrop of regional climate change.

In sum, the UMD Land Lab/SAP Farm hosts research, teaching and community engagement around regional scale systems within the broad frame of changing earth systems. If you have any questions, please do not hesitate to contact me.

Best,

*Randel Hanson*

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