

Report on activities of the Sustainable Land Management Committee

Dr. Adam Davis, 10/13/2022, SLMC chair

During Academic Year 2021-2022, the Sustainable Land Management Committee was charged by Dr. Madhu Khanna (Director, iSEE) with three responsibilities, including 1) 'develop a plan for evaluating/ inventorying existing sustainable land management practices on the south farm', 2) 'Update Agronomy Handbook with relevant and recommended sustainable land management practices', and 3) 'Work with interested tenants on University-owned land to showcase the recommended sustainable land management practice in the updated Agronomy Handbook.' The committee, comprised of eleven UIUC faculty and staff, met several times during AY 2021-2022 and developed a plan, which was shared with Dr. Khanna and Dr. Fraterrigo, and ultimately presented to the Campus Sustainability Council during early summer of 2022.

Of the several proposed activities presented in the plan, there are a few which are moving forward.

First, management practices on the South Farms are adapting in response to the Sustainable Land Management Plan. The Department of Crop Sciences is committed to increasing the acreage of winter cover crops planted (approx. 115 ac in Fall 2021) in coming years. We are unable to implement this activity in fall 2022 as we are going through a farm staff transition that leaves the team focused entirely on crop harvest at the moment. We are hiring more staff, and will work to increase cover crop acres in following growing seasons (hopefully with CSC financial support for seed). We are also increasing the diversity of crop species grown on non-research acres on the South Farms, planting small grains on a portion of this land in support of seed increase for the small grains research program. We do not anticipate composting animal waste at the moment, however there may be potential to develop recipes for composting pre-consumer food waste in combination with crop residues and liquid manure.

Second, we now have a new Field Crops Extension Agronomist in Crop Sciences, Dr. Giovanni Preza-Fontes. Dr. Preza-Fontes has expressed interest in helping to craft a chapter for the Agronomy Handbook on sustainable production practices. If there is still the potential for funding to support part of a postdoc, I support the participation of Dr. Preza-Fontes and his team helping to craft this chapter.

Finally, we are working with Dr. Emily Heaton and her research team to aggregate management and soil records for the South Farms over the past decade to create a database that serves as a baseline for evaluating the impact of management activity on sustainability outcomes.