



Graduate Research Assistant *or* Post-Doctoral Research Scientist *on*
**Carbon and climate outcomes of U.S. agricultural land
conservation programs**

Summary: The University of Wisconsin-Madison's Center for Sustainability and the Global Environment ([SAGE](#)) seeks an exceptional PhD candidate or post-doctoral scientist with expertise in carbon cycling, ecosystem modeling, or agricultural land use to study soil carbon fluxes and climate mitigation opportunities associated with U.S. grasslands, croplands, and the USDA Conservation Reserve Program (CRP). This person will lead research aimed at improving the management, policy, and climate outcomes of one of the world's largest voluntary land-based conservation programs.

Job Responsibilities: The candidate will help design, conduct, and disseminate analyses of conservation lands and have the freedom to propose and evaluate innovative program modifications, priorities, or approaches to increase the climate mitigation potential of the CRP and other working lands initiatives. Potential analyses include comparing soil carbon and net GHG outcomes of alternative cropped and non-cropped land uses, including those with and without conservation practices, or quantifying the avoided emissions opportunities for the grasslands CRP subprogram. The candidate may work closely with collaborators at Michigan State University, the USDA's Farm Production and Conservation mission area, and USDA's Working Lands for Wildlife initiative.

The candidate will also have opportunities to collaborate on analyses of sustainable bioenergy production and/or natural climate solutions (NCS) at nationwide, continental, or global scales depending on the candidate's availability and interests.

Ideal qualifications include some of the following:

- Expertise in terrestrial carbon cycle science, modeling, and assessment
- Experience with process-based ecosystem models, data synthesis, or statistical analyses
- Interest in using cloud-based computing resources (e.g. Google Earth Engine) for large-scale geospatial data processing to help solve global environmental challenges
- Familiarity with agricultural conservation practices and/or impacts of agroecosystem management and land use changes (e.g. nutrient use, biodiversity)
- Possess a Ph.D. (for post-doc appointment) or an M.S. or research experience (for graduate RA)

The researcher will be joining a highly collaborative and energetic team working directly with [Dr. Tyler Lark](#) and other members of the [Global Land Use & Environment](#) lab who have significant experience in carbon modeling and land system science. The city of [Madison, WI](#), is widely recognized for its warm community, high quality of life, culture and arts scene, and easy access to natural areas. Costs of living are moderate, public transportation and bicycle paths are easy transportation options, and there is a vibrant international community.

Applications will be reviewed upon submission. The position is available immediately for an initial appointment of up to 3 years, with strong potential for continuation pending funding and performance. Salary is commensurate with experience and a minimum of \$51,957 per year (for post-doc), plus health insurance benefits. The position is based in Madison, WI, with potential for hybrid work.

To apply, please submit an electronic cover letter detailing qualifications, CV, and phone and email addresses of three references to Dr. Tyler Lark, lark@wisc.edu.