



Post-Doctoral Research Scientist on Carbon Modeling and Climate Impacts of Agricultural Land Use and Conservation:

Summary: The University of Wisconsin-Madison's Center for Sustainability and the Global Environment (SAGE) seeks an exceptional post-doctoral scientist with expertise in carbon cycling, ecosystem modeling, and agricultural land use to study global and U.S. carbon fluxes and climate mitigation opportunities. This position will conduct research, analyses and model development that is focused on improving the climate outcomes of agricultural production, conservation practices, and environmental policy across diverse scales and geographies.

Job Responsibilities: The candidate will lead the creation of a new, globally integrated dataset of soil [carbon](#), [biomass](#), and region- and landcover-specific [emissions factors](#) to improve estimates of emissions from land use change. Together with collaborators at the USDA Economic Research Service, Kansas State University, and Purdue University, the candidate will use their data in concert with global economic models to identify opportunities to reduce the environmental impacts of land use change (e.g. tropical deforestation or temperate grassland conversion) via supply chain interventions, trade policies, or other initiatives. The candidate will also contribute to an assessment of the realizable extent and carbon sequestration potential of agricultural conservation practices (e.g. cover crops, reduced tillage) across the United States. Additional opportunities to collaborate on analyses of sustainable bioenergy production and/or Natural Climate Solutions across the U.S., North America, or globe are also available depending on the candidate's availability and interest.

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, AWS) for large-scale 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. or M.S. plus extensive research experience

The researcher will be joining a highly collaborative and energetic team working with [Prof. Holly Gibbs](#), [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 2 years, with strong potential for continuation pending funding and performance. Salary is commensurate with experience and a minimum of \$51,957 per year, 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.