

GRADUATE AG RESEARCH SPOTLIGHT



Rebecca A. Logsdon

“Ecosystems services looks at a system holistically, so we can make the best decisions across all the benefits we get from the environment.”

—Rebecca A. Logsdon, Ph.D. Candidate, Agricultural and Biological Engineering

THE STUDENT: Second-year doctoral student Rebecca Logsdon grew up in scenic northwest Arkansas, where her love of the outdoors was cultivated on family land adjacent to a state park. Logsdon studied biological engineering at the University of Arkansas. As a junior, she attended the Big Ten+ Graduate School Expo at Purdue, where the interdisciplinary graduate program Ecological Sciences & Engineering captured her interest. Learning that a former UA professor, Indrajeet Chaubey, had joined the Purdue faculty as professor of ecohydrology sealed the deal; Chaubey now serves as Logsdon’s advisor.

THE RESEARCH: Logsdon’s dissertation research focuses on methods to quantify ecosystem services—“generally any benefit that we as people get from the environment,” she explains. In contrast to the more common economic models of ecosystem services, her approach is biophysical: “It’s a great tool to show people how impact to the environment impacts us; that is, how many services you are getting from a landscape and the tradeoff between those services given different scenarios, rather than how much those services are worth.”

CUTTING EDGE: “It’s exciting to be a field that’s brand new,” she says, especially one with prospective future impact on policy. And because ecosystems services is new, Logsdon estimates that she has read most of the literature available on the topic, a feat that can be impossible in long-established fields.

Other countries, especially in Europe, are ahead of the United States in assessing their ecosystems and services, so Logsdon enjoys working on something with such potential here.

LEARNING FROM LEADERSHIP: As a past senator, secretary and president of the Purdue Graduate School Government, Logsdon polished her leadership skills and advocated for graduate students. As a peer ombudsman this year, she coordinates volunteers who act as confidential resources to students with questions, concerns or issues. “The experience makes me very appreciative of my own advisor, department and colleagues, and has provided me with incredible insight to how a large research University works,” she says. She also has been on the leadership team for Purdue’s Women in Engineering program. Off campus, she volunteers on the Education Committee of the Wabash River Enhancement Corporation.

WHAT’S NEXT: Logsdon is working toward an August 2014 graduation and keeping her options open. A post-doctoral opportunity, job in land management or policy decision-making, or a faculty position with an Extension component, are all possibilities. In her time away from the computer, she and her boyfriend enjoy road trips that include hiking and camping, and she is tending a plot in the N-10 Lafayette community garden.