

Ph.D. Position – Regenerative agriculture in the western U.S.

Boise State University, Idaho, USA

Agricultural lands in the western U.S. produce an incredible diversity and abundance of food, including fresh fruits and vegetables, hops and wine, dairy products, and meats. However, farmers and ranchers are faced with a variety of stressors, including climate change, drought, declining soil health, and changing economics of agriculture.

Innovative regenerative agriculture practices are necessary to ensure the future of western agriculture, but the bulk of the current research on regenerative agriculture is conducted in coastal or midwestern states where humidity, and rainfall are more abundant, and relatively little is known about regenerative agriculture in the diverse systems of the arid West.

We are recruiting a Ph.D. student to join a trans-disciplinary team studying regenerative agriculture in Idaho, which is home to a variety of agricultural systems, such as irrigated cropland and dairy in the south, hay and ranching in the mountain valleys, and dryland production in the north. The ideal student will have two main characteristics:

- Experience with agricultural production systems in the United States and a strong interest in conducting research and stakeholder engagement. In particular, this project will be conducted in collaboration with The Nature Conservancy - Idaho, and other community partners, and the research outputs will be used to support on-the-ground agricultural and conservation decision-making.
- A strong background in geospatial analysis, and a desire to develop advanced skills in geospatial and statistical methods, such as the use of remote sensing, machine learning, spatial models, and Bayesian and counterfactual analysis.

There are a wide range of project ideas that the student could pursue. One potential area of emphasis will be to use remote sensing to measure the adoption, implementation and outcomes of regenerative agriculture practices. Another potential area of emphasis is using spatial analysis techniques to inform optimal locations for promoting different types of regenerative practices.

The student will pursue a PhD in EEB (Ecology, Evolution, and Behavior), Geosciences, or Computing. Dr. Jodi Brandt (<https://www.boisestate.edu/hes/people/jodi-brandt/>) will be the student's major advisor, and the student will collaborate with other students in the Human-Environment Systems community. The student will join a vibrant team of faculty, graduate students, and post-docs at Boise State who use geospatial tools for environmental sustainability.

Qualifications

- A Master's degree and research or job experience related to the topics above.
- Experience working in agricultural landscapes, or at the rural-urban interface, in the United States
- Expertise in spatial analysis, remote sensing, modeling, and social-ecological systems.

Stipend and tuition and fees

This position includes four years of support in the form of a graduate or teaching assistantship (renewable, 12-month at \$35,000), tuition and fee waiver, and health insurance. We have grant funding to support the first two years, during which the student would kick-start their research

and apply for additional grant funding. The final two years would be provided by additional grant funding or a teaching assistantship. The position starts Fall (August) 2026.

To Apply

Please send via email in a single file attachment (include your last name in the file name): a cover letter that states qualifications and career goals, a CV with the names and contacts for 3 references, and copies of transcripts (unofficial are O.K.) to Jodi Brandt (email: jodibrandt@boisestate.edu). Please put “PhD application-Regenerative Agriculture.” in the subject line. Applications will be reviewed as they are received until March 15, 2026. Top candidates will be asked to formally apply to a Boise State graduate program. All admission decisions must be approved by the Graduate Dean.

Boise State University embraces and welcomes diversity in its faculty, student body, and staff. Accordingly, applicants who would add to the diversity and excellence of our academic community are encouraged to apply.

About Boise

Boise State is in the beautiful city of Boise, which strikes a perfect balance with close-by outdoor recreational activities as well as a vibrant downtown life. Nestled in the foothills of the Rocky Mountains and the capital of the State of Idaho, Boise is frequently featured as a top-ranked metropolis. The city has ample opportunities for world-class outdoor activities year round and a thriving arts and entertainment culture. To learn more, please view “Visit Boise” link at: <https://www.cityofboise.org/>