Field Day: Precision Livestock Management

AG2PI
Agricultural Genome to Phenome Initiative

IOWA STATE UNIVERSITY | THE UNIVERSITY OF ARIZONA | University of Idaho | UNIVERSITY OF Nebraska Lincoln

Precision Livestock Management on Extensive Rangelands: Challenges and Opportunities

Precision livestock management has ushered in a new era of sensors and technology to monitor the health, reproductive, and nutritional status of individual animals in real time to improve efficiency. Despite these advances, incorporation of extensive rangeland production systems remains relatively absent. Numerous challenges exist including applying and integrating multiple technologies across platforms, effectiveness in a real-world setting, technical skills, knowledge on utilizing real-time data, and achieving economic returns for livestock producers.

Advances in communication technology increasingly connects remote areas, creating new opportunities to improve livestock production efficiency on extensive rangelands. Opportunities exist to refine or develop the next generation of equations or models for individual animal diet selection and supplementation, movement, behavior, water intake, feed conversion efficiency, heat/cold stress, and gain. Enhancing rangeland production using precision technology requires the assessment of potential intended and unintended consequences. Determining systems-level impacts of precision technologies is the next step to substantially enhance livestock performance in extensive systems.
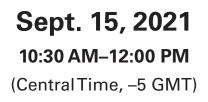
Presenters:

Dr. Hector Menendez is an assistant professor and livestock grazing Extension specialist at South Dakota State University. He specializes in understanding complex agricultural systems and identifying high-leverage solutions using Systems Thinking and System Dynamics modeling. His research includes the application of precision agriculture technology and complex covers for sustainable livestock production.

Dr. Jameson Brennan is an assistant professor of animal science at South Dakota State University. He has extensive experience working in and researching rangeland systems in the western United States. Dr. Brennan also has expertise in analyzing large complex datasets, data science, statistical programming, and incorporating technology into rangeland beef production systems.

Sept. 15, 2021
10:30 AM–12:00 PM

(Central Time, –5 GMT)

Purpose: Discuss challenges and opportunities in precision ag technologies for livestock management and rangelands.

Register for this Zoom virtual meeting:

https://tinyurl.com/AG2PI-FD11

Upon registration, you will receive a confirmation email with information about joining the meeting.

A recording will be available at a later date at: ag2pi.org/