

Precision technology in agriculture on display at Demonstration Field Day

AT A GLANCE

Area growers, researchers and ag industry representatives explored cutting edge technology designed to improve modern agriculture.

The Situation

Agriculture is changing. Technology is becoming available that will radically change the way we go about modern agriculture. This new technology comes with an up front cost and a long term opportunity. The costs are the hi-tech equipment and the time spent to learn how to use it and maintain it. The opportunities are many. This technology can enable the more efficient use of expensive inputs, potentially reducing the impacts and expense of wasted fertilizer, pesticides, seed, and fuel. However, this technology can be very confusing to understand and even harder to adopt for practical use.

Our Response

University of Idaho Extension Educator, Doug Finkelnburg and University of Idaho Regional Approaches for Climate Change program Extension Specialist, Dr. Kristy Borrelli, collaborated with leading agriculture and precision technology researchers from the University of Idaho and Washington State University to host a Precision Agriculture Field Day. The goal for hosting this event was to enable regional agricultural interests to explore emerging technologies and interact with the experts developing them. Included at the event were private industry stakeholders, such as CHS-Primeland, St. Johns Hardware, and Decagon Devices who are currently deploying commercially available precision technology.



Dr. Dev Shreshta shows two types of drones, or unmanned aerial systems, being used to collect images of crop land.

After a review of Pacific Northwest Agriculture and the potential benefits of adopting precision agriculture technology titled “Farming into the Future” given by Dr. Kristy Borrelli, attendees were split into small groups and rotated through the demonstration sites – giving ample opportunity for direct interaction with presenters. Area grower Robert Blair related his experiences using drones, or unmanned aerial systems, and Dr. Dev Shreshta (UI) described practical issues surrounding the deployment of these tools in a talk titled, “How to Begin Using Remote Sensing and Precision Agriculture.” Dr. Lee Vierling (UI) and graduate student Troy Magney had attendees use hand held light meters to aid their discussion of “Remote Sensing for Nutrient Management and Crop Performance.” Dr. Dave Huggins (WSU) and graduate student Tabitha Brown showed off a 4-wheeler mounted rapid pH sampler while explaining their work “Identifying and Managing Soil pH Zones in the Palouse Landscape.” Dr. Dave Brown (WSU) and

graduate student Matteo Poggio demonstrated how growers can map compaction zones and other characteristics of their sub-soil using a modified truck-mounted hydraulic probe; “Proximal Soil Sensing, Remote and Proximal Sensing for Managing Soil Moisture.” Finally, while enjoying a delicious lunch of VandalMeats™ burgers, Dan Harwood from the Palouse-Rock Lake Soil and Water Conservation District explained how growers can take advantage of cost sharing programs to aid adoption of new technologies with his presentation “Supporting Conservation and Precision Agriculture.”

Program Outcomes

This event reached 87 participants from diverse backgrounds.

- 28% - Growers and Ag Industry
- 17% - State and Federal Ag Agency
- 41% - Students and Faculty
- 4% - Press
- 10% - Other

Participants were happy with the educational product.

- 94% of attendees reported that their expectations were met or exceeded by the field day

More than half of those who came broadened their knowledge base of precision agriculture.

- 55% of attendees increased their understanding of precision agriculture

Testimonials

- “Useful information” - Agri-business Attendee
- “Very interesting event” - Agri-business Attendee
- Awesome fun stuff! Loved it! - Ag Agency Rep
- Great speakers, great lunch, great vibe! -Student

This event was the focus of ten media stories including print, radio and a feature on local nightly television news.

The Future

This event was very well received and generated great interest among agriculture stakeholders including growers, researchers, private industry and commodities commissions. Plans are underway to continue the collaboration among Universities and private interests to hold annual precision agriculture technology focused field events.

FOR MORE INFORMATION

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