impact

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Soil health field day boosts knowledge and builds interest in water-smart practices

AT A GLANCE

The Soil Health Field Day at the Kimberly Research and Extension Center brought 64 participants together to learn about irrigation and soil health practices. Average self-rated knowledge rose 23%.

The Situation

Healthy soil is the foundation of productive, resilient irrigated agriculture in southern Idaho. Producers and natural resource professionals are asking for practical ways to get more from every unit of water and nutrients applied while maintaining soil function and crop health. Practices such as soil moisture monitoring, cover crops and intercropping address these needs, but adoption depends on locally relevant information, hands-on demonstrations, and the chance to talk directly with researchers and peers.

Our Response

University of Idaho Extension hosted the Soil Health Field Day on Oct. 7, 2026, at the Kimberly Research and Extension Center. The program combined research-based presentations and field demonstrations on irrigation management, soil health and best management practices, including soil moisture sensors and sustainable irrigation, intercropping and crop health, and cover crop establishment and nutrient management. Speakers included Emily Bedwell, Extension irrigation specialist; Steven Hines, Extension educator; Selena Davila, Extension educator; Courtney Cosdon, soil health instructor; and Pramod Acharya, Extension forage specialist. An evaluation form collected participants' background, prior participation, knowledge before and after the program, and likelihood of adopting each practice.



Emily Bedwell, Extension irrigation specialist, discussing soil moisture sensors during an in-field demonstration.

Program Outcomes

Participants gained knowledge. Self-rated knowledge of irrigation and soil health practices rose from an average of 3.1 to 3.8 (one out of five), an increase of about 23%.

- 61% of respondents (20 of 33) raised their knowledge rating, and none reported a decrease.
- High self-rated knowledge (four or five) nearly tripled after the field day, from 27% to 73%.
- Among participants who began at three or below, 79% reported a gain.

University of Idaho Extension

University of Idaho Kimberly Research and Extension Center
208-423-6620
3806 E 3600 N, Kimberly, ID 83341

- Between 62% and 70% of respondents said they would "probably" or "definitely" implement or improve each practice: cover crop establishment and nutrient management (70%), soil moisture sensors and sustainable irrigation (67%), and intercropping and crop health practices (62%).
- Participants also shared plans to pass information on to other producers and to continue promoting soil health.

Knowledge ratings are self-reported and collected in a single sitting, so they reflect perceived rather than measured learning.

Table 1. Self-rated knowledge before and after the field day (n = 33).

Measure	Before	After	Change
Average rating (one-five)	3.12	3.84	+.72
Rated knowledge four or five points	3.12	3.84	+ 0.72
Respondents who increased rating	27% (9)	73% (24)	+ 46 points
Respondents with no change	—	61% (20)	—

Most respondents were natural resource professionals (70%), followed by family farm owners (18%), commercial farmers or technicians (15%) and a commercial ag/farm contractor. Many were experienced program participants: 85% had attended another field day in the past four years and 58% had attended another University of Idaho Extension event.

Table 2. Participant likelihood of practice implementation (n=33).

Practice	Yes or probably will implement
Cover crop establishment/nutrient management	70% (19 of 27)
Soil moisture sensors/irrigation	67% (18 of 27)
Intercropping/crop health	62% (16 of 26)

The Future

Evaluation results show strong interest in soil moisture sensors, cover crops and intercropping. Follow-up programming could deepen these topics with on-farm demonstrations, individual property visits and practical guidance on equipment and implementation. Because most respondents already attend field days, future evaluations could ask which practices participants already use, to better document behavior change.

Cooperators and Co-Sponsors

- Innovative Agriculture Marketing Partnership
- Northside, Twin Falls, Snake River and Balanced Rock Soil and Water Conservation Districts
- USDA-NRCS

FOR MORE INFORMATION

Emily Bedwell, Extension Irrigation Specialist • University of Idaho Extension • 208-423-6620 • ebedwell@uidaho.edu
Steven Hines, Extension Educator • University of Idaho Extension, Jerome County • 208-324-7578 • shines@uidaho.edu
Courtney Cosdon, Soil Health Instructor • University of Idaho Extension; NRCS• 208-364-4692• ccosdon@uidaho.edu
Selena Davila, Extension Educator • University of Idaho Extension, Lincoln County • 208-886-2406• sdavila@uidaho.edu
Pramod Acharya, Extension Forage Specialist • University of Idaho Extension • 208-423-6652• pacharya@uidaho.edu

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