Remote sensing

- 1. What are the biggest obstacles to utilizing remote sensing in potato production or breeding?
- 2. How can public sector extension contribute to overcoming these obstacles?
- 3. How can public sector research contribute to overcoming these obstacles?



Remote sensing

1. What are the biggest obstacles to utilizing remote sensing in potato production or breeding?

Showing a return on investment Simplifying management Keeping focus on what matters most Truly improving management



Remote sensing

2. How can public sector extension contribute to overcoming these obstacles?

Help with collaboration

Demonstration/large scale plots



Remote sensing

3. How can public sector research contribute to overcoming these obstacles? Proof of concept



Does Remote sensing Simplify or complicate management?

- Turn one field into 100+ fields and decisions
- Can make management much more complex



- Good data supports good decisions as long as you can collect and interpret it.
- Sampling gives confidence to actions and identifies opportunities early.
- Understanding trends can identify opportunities.
- Utilizing appropriate technology will help us be more effective and efficient



Return on Investment

University of Idaho 2016 cost of production south central Idaho

	yield	price		incentives	\$/acre		\$/acre		ROI
non fumigated	430	\$ 7	.50		\$	3,225			
Fumigated	475	\$ 7	.50		\$	3,563	\$	338	.85



Return on Investment

University of Idaho 2016 cost of production south central Idaho

	yield	price		ince	ntives	\$/acre		\$/acre		ROI
non fumigated	430	\$	7.50			\$	3,225			
Fumigated	475	\$	7.50	\$	0.50	\$	3,800	\$	575	1.44



Return on Investment

University of Idaho 2016 cost of production south central Idaho

	yield	\$/acre	cost/acre	return	ROI	
non fumigated	430	\$ 3,225	\$ 2,719	\$ 506	1.19	
Fumigated	475	\$ 3,800	\$ 3,117	\$ 446	1.22	
			\$ 398			



What if something happens

- Crazy storm, frost
- Market, contract rejected
- Money is already spent
- Highest risk dollars
 - •3 to 1 return



Making a difference in cost of production

- Its easier to raise production 10% than cut cost 10% long term
- When remote sensing simplifies management allowing us to focus on what's most important
- Venture capital over funded remote sensing companies
 - We will see a high failure rate



