Driving Innovation in Agriculture
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November 27th, 2018

- Lead Global Online Education
- Make Cutting Edge Discoveries
- Grow Entrepreneurship
- Enhance Partnerships
- Deliver a Global Impact
Scouting Fields for Pests, Disease, Nutrient Deficiencies – 2010

Photos by Tom Campbell, Purdue University
Scouting Fields for Pests, Disease, Nutrient Deficiencies – 2018

https://www.youtube.com/watch?v=QlW5_oqxrZk&t=0s
Picking Strawberries – 2018

https://www.youtube.com/watch?v=M3SGScaShhw
Vision Robotics Grapevine Pruner

Status and Operational Concept
The Power of Spectral Imaging
What does this mean for our farmers and consultants?

- Rural Broadband
  - Every dollar invested in broadband returns $4 to the economy
  - $12B for Indiana in present value of net economic benefits over a 20 year period
  - key gains from rural broadband would be in healthcare and education, economic and workforce development, farm income, and consumer savings.

- The study was conducted by the Purdue Center for Regional Development and commissioned by Indiana Electric Cooperatives and Tipmont REMC with financial support from CoBank.
- Authors: Allison Goedde, Wally Tyner and Larry DeBoer, Purdue University
Digital Agriculture & Data Science

- Undergraduate competency
- Address the Digital Divide
- Enhance partnerships

What does this mean for our students?

- Bring in more diverse students
  - Technical competency and interests
  - Broader Demographics
  - Data Mine

- Utilize Online Tools
  - Professional MS
  - Certificates
  - Workforce Development

- Enhance Entrepreneurship
  - Student Competitions
  - Ag-celerator™
COLLEGE OF AGRICULTURE

What does it mean for our society?

Phillip R. Owens demonstrates how a farmer's field can be mapped to show predicted crop yield (Ag Soil Analytics)

• 2 Entrepreneurs in Residence
• $2 M Ag-Celerator - Venture Capital Fund accessible
• Foundry Launch Box process for start ups
• Certificate of Entrepreneurship and Innovation
How does digital agriculture impact our global presence?

1. Where are Digital Financial Services improving farmer finances?
2. How can Digital Extension Services succeed where analog versions have failed?
3. What does Private Sector Partnerships – Version 2.0 look like?

http://ictforag.org/
Think about a world where:

- Broadband access was available to everyone
- Real time automated decision making was the norm due to analytics
- Autonomous vehicles were on every farm
- Sensors and robots connected every distribution plant and product around the globe
- All transactions were electronic
Digital Agriculture has the potential to disrupt:

- Labor supply and needs
- Global Productivity
- Cybersecurity
- Subject matter experts - Extension
- Entrepreneurship Opportunities
- Trade