**Extension Program Mission**

...develop, integrate and extend agronomic information and technology that is timely and relevant to the agricultural and environmental concerns of the residents of Indiana, the nation, and the international community.

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**Extension Program Focus**

- Serve as the definitive source of nonbiased, science-based information
- Maintain and expand proactive and relevant applied research programs

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**Extension Faculty and A/P Changes**

- **Current Extension Faculty FTEs:** 7.68
  - Our Extension faculty FTE has remained stable since 2002
  - We added one additional faculty member with a primary Extension appointment since the last CSREES review
  - Assumes 0.65 FTE Soybean Extension Specialist hire and a replacement for Brad Lee who recently took a position at the University of Kentucky
- **Current A/P FTEs:** 5.25
  - Our Extension A/P FTE has decreased significantly since 2002 (down 11.60)
  - Loss of 12 soil and water conservation program staff

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**Extension Faculty Research Productivity**

- **8 Faculty with > 40% Extension FTE**
  - **Mentored:**
    - 38 of 101 students that have earned an M.S. or Ph.D. since last review
  - **Published:**
    - 12 book chapters
    - 112 refereed journal articles
  - **Secured:**
    - More than $7.5 million in grant support

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**Extension Faculty Teaching Productivity**

- **8 Faculty with > 40% Extension FTE**
  - **Primary Courses Taught:**
    - AGRY 365, Soil Fertility
    - AGRY 515, Plant Mineral Nutrition
    - AGRY 598C, Cropping Systems Research
    - AGRY 597, Communicating with the Public
    - AGRY 696, Graduate Seminar
  - **Dozens of Guest Lectures in AGRY, ABE & ANSC**
Extension Program Areas

- Agricultural meteorology and climatology
- Crop and soil management systems
- Turf management systems
- Water and environmental quality

Agricultural Meteorology and Climatology

Indiana’s Online Climate Database

- Daily weather from 150 NWS cooperators
- Earliest station dates to 1901
- Hourly weather from 20 airports
- Earliest station dates to 1940s
- Automated Purdue stations at 7 PACs
- Established in 1999
- About 100 database queries per day

Agricultural Meteorology and Climatology

Community Involvement

- CoCoRahs – Community collaborative rain, hail and snow network
- Indiana began participating in this national program in 2006
- Currently more than 1000 volunteers across the state
- Faculty, staff and NWS personnel lead an ongoing training program for volunteers
- Daily reports available at www.cocorahs.org

Crop and Soil Management Systems

Websites

- KingCorn.org
  - “Encyclopedia” of corn production
  - 450,000 page views per year
- Chat’n Chew Café
  - Timely agronomic production information
  - 120,000 page views per year
### Crop and Soil Management Systems

#### Workshops and Conferences
- **Diagnostic Training Center**
  - 800 customers per year
  - 40 million acres managed
- **Indiana CCA Conference**
  - 500-650 customers per year
  - 5 million acres managed
- **Kentuckiana/Michiana**
  - 300 customers per year
  - 1 million acres managed

#### Publications and Software
- 120 new/revised publications since 2002
- Corn and Soybean Field Guide
  - 50,000 copies sold per year
- Forage Field Guide
  - 10,000 copies sold (sold out)
- Corn and Soybean Growth & Development CDs
  - 8500 copies sold
- Manure Management Planner
  - Adopted by NRCS and promoted by EPA

### Crop and Soil Management Systems

#### Crop Performance Program
- Advisory board established in 2005
- Small grains were dropped in 2006
- Increase from 6 to 9 sites in 2006
- Income grew from $87K in 2004 to $205K in 2008
- 44% growth in soybean and 7% growth in corn program since 2006
- 10,000 downloads of results in 2008

### Turf Management Systems

#### Websites
- [http://www.agry.purdue.edu/turf](http://www.agry.purdue.edu/turf)
  - The Portal for all things turf at Purdue
  - Extension publications
  - Calendar of events for MRTF activities
  - Links to other turf programs
  - Annual research summaries
  - Turf Tips
    - 100-150 semi-weekly write-ups on current turf management issues

#### Workshops and Conferences
- **Indiana Green Expo**
  - Indianapolis, 2000-3000 customers
- **Midwest Regional Turf Field Day**
  - West Lafayette, 600-800 customers
- **Basic Training: Turf Management**
  - Rotating locations, 150 customers
- **Midwest Turf and Ornamental Seminar**
  - West Lafayette, 70 customers
Turf Management Systems

Publications

- 47 Turf-related publications
- Agronomy
- Entomology
- Botany and Plant Pathology
- Turf Management Field Guide
  - Currently being developed

Water and Environmental Quality

Workshops and Conferences

- CNMP training
- Conducted across 20 states for NRCS
- New initiative for TSPs nationwide
- Soil and septic systems workshops
  - 60 customers per year
  - Represent 1/3 of Indiana County Health Departments and Indiana State Department of Health regulators

Publications

- Home and Environment Extension Bulletin Series (for homeowners)
  - 215,000 downloads
- Rural Wastewater Extension Bulletin Series (for professionals)
  - More than 40,000 downloads
- Spatial Septic System Permit Database
  - Used by 6 county health departments

Policy Impact

- Help implement national policy
  - EPA CAFO rule
  - NRCS nutrient management policy
- Help implement state policy
  - Assist NRCS with practice standards
  - Help Office of Indiana State Chemist develop fertilizer applicator certification program
  - Helped IN legislature write septic system rule
  - Helping to revise Indiana's CAFO/CFO Rule

K-12 Education

- Indiana hosts the National FFA Convention
- Animated books for young learners
- High school crops judging
- High school soil judging
  - 10 area contests and one state contest
  - 1500 students participate each year
  - 150 high school teachers participate
  - 15 professional soil scientists participate
Where We Want To Go...

**Improve the efficiency of our Extension program delivery**

**Identify and proactively address new areas of Extension**

**Foster acquisition of resources for applied research**

**Develop next generation of Extension specialists**

**Improve Extension’s visibility**

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**Where We Want To Go...**

**Improving Efficiency**
- We should increase our clientele base
- Rural and urban homeowners
- We will address more complex issues
- Carbon crediting, biofuels, etc.
- We are facing a reduction in Extension FTEs
- Support in surrounding states is lacking

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**Where We Want To Go...**

**New Areas of Extension**
- Biofuel Crops
- Air Quality
- Manure-borne Constituents
- Nutrient Criteria and TMDLs
- Comprehensive Land Use Planning
- Climate Change and Carbon Crediting
- New Production Technologies
- Spatial Data Availability

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**Where We Want To Go...**

**New Areas of Extension**
We Can’t Do Everything!!!
Where We Want To Go...
Develop Future Extension Specialists

- Our students are filling our peer institutions’ vacancies
- We have difficulty finding well-rounded faculty candidates
- Soybean Extension Specialist

Where We Want To Go...
Improve Our Visibility

- Extension knowledge/information is used widely by third parties
- The fact that the information delivered came from Extension is a well-kept secret

How We Are Going to Get There...
Improving Efficiency

- Take advantage of emerging distance education technologies
- Adobe Connect, Webinars, E-Extension?
- Deliver more proactive, curriculum-driven workshops
- Must still address in-season issues
- Develop and maintain program balance
- One on one vs. workshops and conferences

How We Are Going to Get There...
New Areas of Extension

- Revisit departmental strategic plan
- Identify
- Prioritize
- Effectively implement
- Align with “Grand Challenges”
- Need a “land use” specialist

How We Are Going To Get There...
Resources for Applied Research

- We have historically believed that this is largely out of our hands...
- However, excellent ideas and programs do attract funds...
- Can we rely on our customers to provide direct support?
- Extension is becoming a fundamental component of larger federal grants
How We Are Going To Get There...

Develop Future Extension Specialists
- Bring more resources to the table
  - 1.75 graduate assistant FTEs in Extension vs. 4.5 FTEs in instruction
    - Includes 1.5 FTEs from DTC
  - Include Extension-related experiences in selected courses
    - Communicating With the Public Seminar (AGRY 597)

We Have a New Extension Director

Chuck Hibberd
- Established Extension Council
- Improve collaboration with field staff
  - March 12 “summit”
  - Make Extension conference relevant
  - “Transformational Extension”
  - What is it? How we do it?

We Have a New Extension Director

Chuck Hibberd
- Organize groups with a finite lifespan
  - Issue based action teams
- Develop outcomes assessment tools
  - Accountability
- Develop a marketing strategy
  - “Valuing” Extension

Extension “Issues”
- We need a “land use” specialist
- Can we really do more with less?
- Can we develop programs that financially support our efforts?
- Inequities in start-up packages