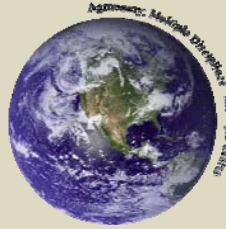


Why Review Agronomy?

- New faculty
- New administration
- Ensure program relevancy
- Reality check
- It's time



Change in University Leadership

- France Córdova
President - 2007
 - New strategic plan
 - University accreditation, 2010
- Randy Woodson
Provost - 2008



Change in Ag. Leadership



Chuck Hibberd
Extension Director
2007



Jay Akridge
Dean
2009



Jess Lowenberg-DeBoer
Int'l. Prgm Director
2007



Sonny Ramaswamy
Research Director
2006



Pamala Morris
Diversity Director
2006



Dale Whittaker
Academic Prgm Director
2002

Purdue is BIG!!!

- Comprehensive University: 10 Colleges
- Over 800 student organizations
- Over 400,000 living alumni
- Campus: 2,500 acres
- Ag. Land: 14,500 acres
- 2nd largest international student population
- Ranked 26th of top 50 public institutions
- One of top 25 universities for Peace Corps volunteers

Discovery Park *Integrated Centers*

The Centers excel in five dimensions:

- Quality
- Economic development
- Interdisciplinary
- Leverage
- Leadership



Ag is important to Indiana: \$25B industry

(5% of economy, 15% of workforce)

- Land: 23.2 M acres
- Farmland: 15.5 M acres
- Cropland: 12.9 M acres
- Corn: 5.1 M acres (5th)
- Soybean: 5.7 M acres (4th)
- Ducks: 1.1 M (1st)
- Layers: 21.9 M (5th)
- Hogs: 3.5 M (5th)

Comprehensive College of Agriculture

- Agricultural and Biological Engineering (35)*
 - Agricultural Economics (45)
 - Agronomy (43)
 - Animal Science (34) **2,500 undergraduate student**
500 graduate students
 - Biochemistry (19)
 - Botany and Plant Pathology (24)
 - Food Science (22)
 - Forestry and Natural Resources (32)
 - Entomology (21)
 - Horticulture and Landscape Architecture (29)
 - Youth Development and Agricultural Education (9)
- * number of faculty



Predicting the Future

- **National initiatives**
 - USDA, NSF strategic plans
- **State initiatives**
 - ISDA strategic plan
- **University initiatives**
 - Purdue/College of Ag. strategic plans



A Sense of Urgency for Agriculture

- Global competitiveness for Indiana agriculture
- Food safety and security (e. coli, salmonella, BSE)
- Enhancing human health through nutrition (obesity, diabetes)
- Biobased economy (energy security)
- Environmental stewardship and sustainability
- Improving economic viability of rural communities

Society looks to us for answers; requires systems thinking



Lilly Hall of Life Sciences

Home to Agronomy

Other locations:

- Whisler
- Plant & Soils
- USDA
- Soil Erosion Lab



Diversity is our Strength

- **One of larger departments in the College (375 total)**
 - 43 Faculty + 9 USDA-ARS
 - 21 Post docs/visiting scientists
 - 70 Support Staff
 - 168 undergraduate students
 - 64 graduate students
- **Comprehensive Department**



Earth and Crop Sciences Work Together

- **Earth System Science**
 - Soil biology, chemistry, physics, mineralogy, fertility
 - Soil classification, land use, conservation
 - Remote Sensing
 - Watershed hydrology/biogeochemistry
 - Meteorology/climatology
- **Crop Sciences**
 - Cropping systems/plant nutrient management
 - Plant Breeding/Genetics/Genomics
 - Crop physiology/agroecology
 - Turfgrass science



Multiple Disciplines/Multiple Scales

➤ Signature Areas

- Genetic Improvement of Economic Crops
- Environmental Soils and Landscape Scale Processes
- Cropping Systems and Plant Nutrition
- Turf and the Urban Interface



Agronomy Mission

We serve our broad based clientele by:

- Providing progressive and relevant education
- Conducting high impact fundamental & applied research at multiple scales, addressing immediate & future challenges
- Engaging partners in public & private sectors
- Contributing to national & international agendas



Department is Healthy

- Undergraduate student numbers up
- Graduate student numbers steady
- Faculty FTE's increased by 5 since 2002
- Research expenditures highest in College
- Extramural funding up
- Private giving up
- Rankings (Academic Analytics; Chronicle HE)
 - 2006/2007; Soil Sci., 3rd; Crop Sci. 6th



Over A Century of Purdue Agronomy

- 500 Alumni, Faculty, Staff, Students, and Friends
- 100 Years of Excellence
- 18 States Represented
- 12 Legends of Agronomy

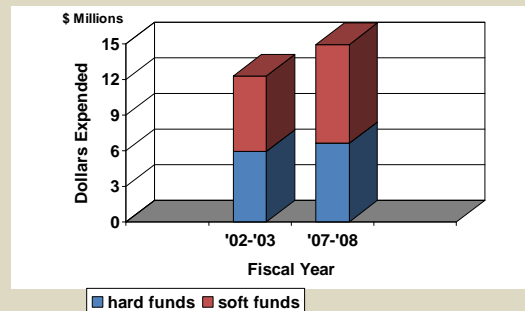


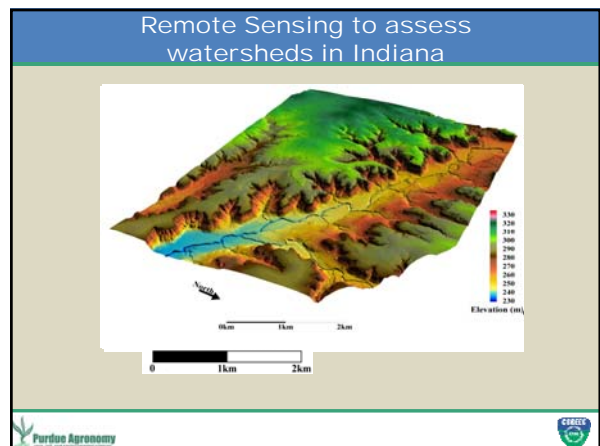
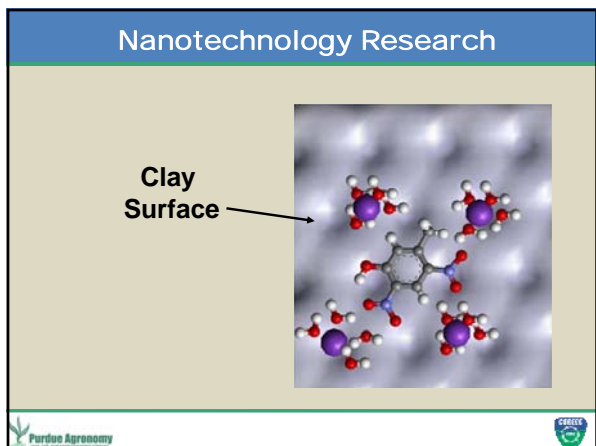
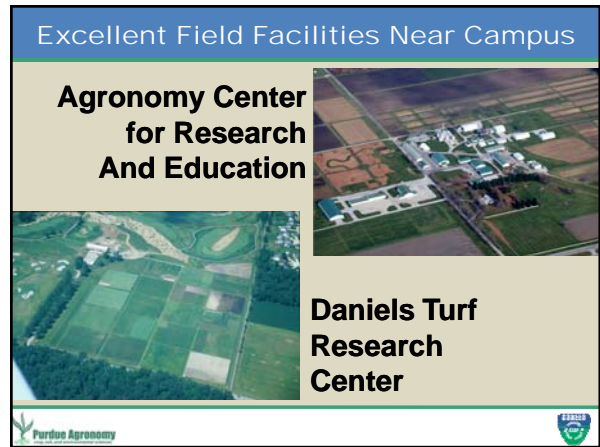
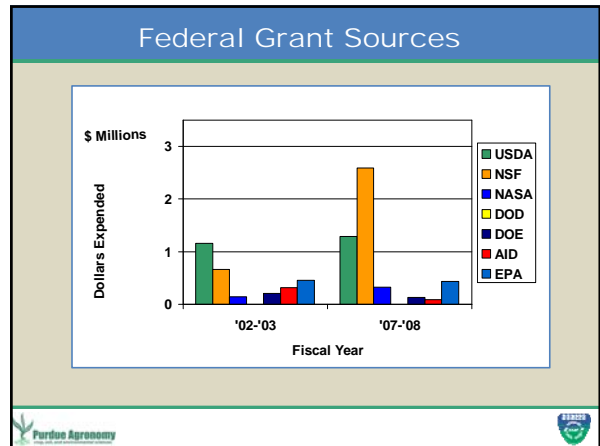
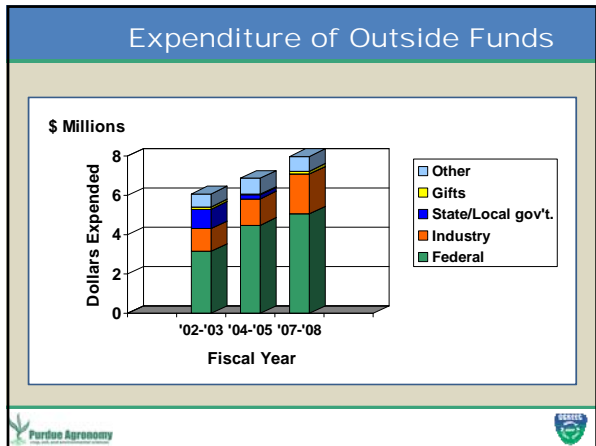
Faculty Achievements

- ~ 3.4 articles/chapters per faculty (2007)
- \$/research FTE/yr (since 2003):
 - Agronomy = \$442,173
 - Ag. College = \$384,788
- Numerous honors, awards, positions of leadership in research, education, and outreach
- Extensive international presence in research, education, outreach

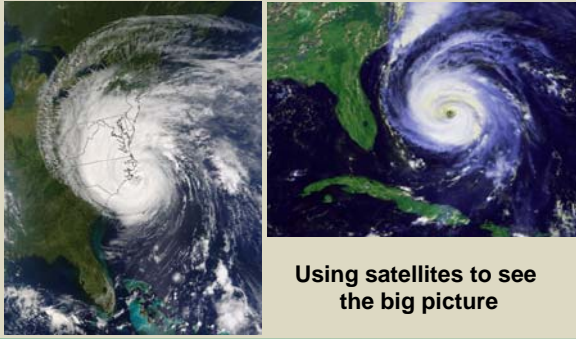


Agronomy Expenditures






Impact of weather on plant growth and human activities




Using satellites to see the big picture

Purdue Agronomy

Plant Breeding & Genetics



Traditional Plant Breeding



Molecular Genetics

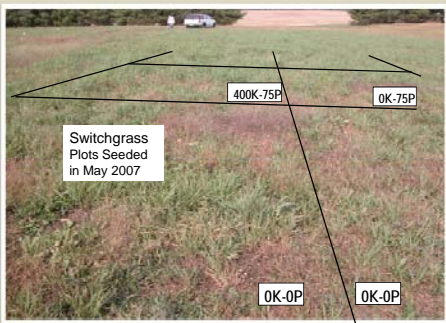
Purdue Agronomy

Turf Management



Purdue Agronomy

Studying Biofuel Alternatives to Corn/Beans



Switchgrass Plots Seeded in May 2007

400K-75P

0K-75P

0K-0P

0K-0P

Purdue Agronomy

Close working relation with USDA-ARS

USDA National Soil Erosion Research Laboratory




Purdue Agronomy

Nationally Recognized Educational Programs

Book of Great Teachers in the Purdue Memorial Union

9 out of 316 university inductees from Agronomy



Purdue Agronomy

Students and faculty work together to create unique learning environments



Opportunities to Combine Laboratory and Field Studies



Engagement is Integral to Our Mission



Beck Agricultural Center

- State of the art outreach educational facility
- 21,000 sq ft., 5 classrooms, multimedia, distance education



The Beck grandkids in front of the Beck Ag. Center



Extension Web sites

Soil Fertility & Corn Extension



www.soilfertility.info

www.kingcorn.org



Department Advances: Increased Intellectual Capacity

- 14 tenure track faculty since 2002 (11.75 FTE's)
- New thrust areas in:
 - Turf physiology
 - Climatology
 - Biogeochemistry
 - Fertility extension
 - Watershed hydrology
 - Landscape scale modeling
 - Maize genetics/breeding



Department Advances: Faculty Support

- Faculty Mentoring committees
- Improved formative and summative faculty evaluation process
- Articulation of professional values
- Grants and contracts office
- Large scale equipment purchases

Department Advances: Facilities Improvements

- \$20+ Mil in actual/planned building/renovation
 - Beck Ag Center, \$5.2M
 - Intermediate term seed handling, \$500k
 - Long term cold storage, \$450k
 - Multiple laboratory renovations, \$1M
 - Land acquisition and improvement at ACRE, \$1.5M
 - Planned seed/tissue handling bldg., \$12M

Department Advances: Curriculum/Students

- Undergraduate curriculum revision
- Learning performance outcomes
- Agronomy Ambassadors
- Increased study abroad
- Graduate curriculum revision
- Industry supported graduate stipends
- Increased graduate stipends
- Graduate student internships



Departmental advances: Improved communication/engagement

- Agronomy Advisory Council
- Department head advisory committee
- Communications specialist
- New departmental Web sites
- More targeted development efforts/increased private giving



The Planning Process

- Planning is part of our culture
 - Annual retreats
 - Bi weekly faculty meetings
 - Bi semester faculty/staff meetings
 - Town hall staff and grad student meetings
 - Semi annual advisory council meetings
 - Department Head Advisory Committee
 - Ongoing committees:
 - grad., teaching, curriculum, earth system science group, crop science group

Planning for the Review

- Initiated planning for review: Fall, 2007 retreat
- Frequent meetings to discuss programmatic areas
- Weekly meetings in fall, 2008 around Grand Challenges
- November, 2008 retreat with Advisory Council
- Document finalized January, 2009

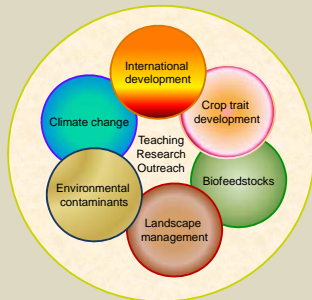
Two-fold Approach to Review Programs/Issues

- **Focus on programs:**
 - Education: Undergraduate, Graduate, Extension
 - Disciplines: Earth System Science, Crop Science
- **Questions asked:**
 - Where are we now?
 - Where do we want to be?
 - How do we get there?

Approaches: Programs & Issues

- **Focus on issues**
 - Grand Challenges (an evolution in our thinking)
 - Bio-feedstocks
 - Chemical/Biological Constituents in the Environment
 - Climate Change
 - Harnessing Plant Breeding and Genetics
 - International Agriculture Research/Engagement
 - Landscape-scale Management

Integrating our Disciplines



Presentation of Programs

- **Education focus – day 1**
 - Undergraduate
 - Graduate
 - Extension
- **Research focus – day 2**
 - Earth System Science
 - Crop Sciences
- **Grand challenges – day 3**

Feedback Needed On:

- **Vision and direction (are we on the right track?)**
- **Areas to grow (priority setting)**
- **Solutions to issues**
- **Ways to enhance visibility**