

# Kansas WAC

Ruth Douglas Miller  
Electrical and Computer  
Engineering  
Kansas State University

Bison on Konza Prairie, Fall 2006

# Kansas Wind

- Lots of western wind
  - Transmission lacking
- Some good east-central wind
  - Flint Hills endangered Tallgrass Prairie
- Major environmental fighting
- Generally regressive utility policy
- Supportive gov't and regulatory agency
- (wind map)

# Supporting Groups

- Kansas Rural Initiative: Dan Nagengast
- KSU Agricultural Extension: Ryan Hamel
- College of Engineering
- Renewable Fuels Research Group
- Rural Communities Research Group
- Civil Engineering Faculty
- Riley County Commission

# Education Plan

- One semester renewable energy course
  - Solar/Wind or Wind: demand-dependent
  - 2007: Power Seminar class collaboration
  - Civil Engineering collaboration?
- One-semester senior design project
- Graduate student coordination--  
continuity

# Class Wiki

- Created by graduate student
- [www.wikispaces.com](http://www.wikispaces.com)
- Fosters collaboration and ownership

# Current Status

- Eight undergrads, one graduate student
- Defining problem
- Considering sites for KSU turbine
- Learning about turbines
- Developing questions for applying schools

# Plans

- Site and erect KSU turbine this semester
  - Competing designs between groups?
- Define selection criteria
- Select first 5 (10?) schools
- Site visits
- Complete 5 sitings in Spring