

**Integrating Wind Energy  
Resource Information  
into the  
Michigan State University  
Extension System**

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Michigan State University

Presented to the Wind Working Group April 28, 2005

# Funding:

- \$90,000 from State Energy Office via U.S. DOE, separated into two grants
- One administered from campus (\$75,000)
  - Travel, project coordinator, supplies
- One administered through Grand Traverse Extension(\$15,000)
  - Extension staff salary savings/travel

## **Long Term Goal:**

To provide good advice to Michigan farmers on the implementation of renewable energy projects

# Campus and Extension Staff Team

- Campus
  - Steve Harsh, Professor, Ag Econ
  - Scott Loveridge, Professor, Ag Econ
  - David Johnson, Professor, Fisheries and Wildlife
  - Lynn Hamilton, Visiting Assoc. Professor, Ag Econ
- Extension
  - Five farm management extension educators



- MSU Extension offices and staff are in all 83 counties.
- Extension faculty on the MSU campus act as resource people for Extension staff members in the counties.
- More than 29 academic departments and eight colleges work directly with Extension.

**bringing knowledge to life**



## **Mission:**

"To assist farmers, agriculturally related businesses, industries, families, and individuals to improve their lives and achieve their goals through an educational process that applies management, production, and economic knowledge to critical issues, needs, and opportunities."

# MSUE District Farm Management Agents by Region



\*County Extension Director

# **PROJECT OBJECTIVES**

- **To provide MSUE FIRM agents with the capability to be proficient wind energy advisers to Michigan farmers**

# **Objectives, cont.**

- **To develop a decision-making model that will assist Michigan farmers in considering their wind power options.**

# **Objectives, continued**

- **To provide extension programs on wind energy to interested farmers/landowners, and publicize the availability of federal Farm Bill funds for renewable energy.**

# **Objectives, continued**

- **To provide opportunities for stakeholders to visit wind developments in other states, with support and organization from MSUE**

# Project Timeline and Activities

- Funded from July 2004 – December 2005
- Activities so far:
  - Hiring of project coordinator, Lynn Hamilton
  - Two training sessions for FIRM agents – August and September, 2004
  - Wind Energy Team Field trip to Minnesota and Iowa Sept. 29 - Oct 1, 2004
  - Development of capital budgeting model for wind energy investments
  - 10 workshops held throughout state

# MSU's Wind Energy Road Show

<b>Date</b>	<b>Location</b>	<b>Topics/Length of Program</b>	<b>Number Attending</b>
December 6, 2004	Ubly	Overview of project, overview of wind energy in MI and U.S., field trip findings, 2 hours	55
December 16, 2004	Scotville	Same program as Dec. 6	54
January 3	Ludington	Legal Issues, Economics of Wind Power, Small Wind and Funding Opportunities, 4 hours	54
January 4	Ubly	Same program as Jan 3.	56
February 24	Escanaba	Overview of Wind Energy, Small Wind and Funding Opportunities, 2 hours	150
February 26	Ewen	Same program as Feb. 24	20
March 18	Ubly	Legal Issues, Economics of Wind Power, Small Wind and Funding Opportunities, Zoning Issues - 3 ½ hours	110
March 22	Traverse City	Same program as March 18	40
April 12	Bad Ax	Same program as March 18	60
April 14	Alpine Twp, Kent Co.	Same program as March 18	28

Workshops: 10  
 Participants: 627

# Additional outreach opportunities..

- MSU Wind Energy Presentations at:
  - Alternative Energy Technology Conference, October 14, 2004, Traverse City
  - MSU Extension Conference on Alternative Energy Economics – October 2004, E. Lansing
  - Agriculture Credit Conference, November 2004, E. Lansing
  - St. Clair Community College Alternative Energy Conference, April 15, 2005
  - Laker School Earth Day Energy Fair, Pigeon, April 23, 2005

# Website Launched...

<http://web1.msue.msu.edu/wind/>

# Future Activities...

- Work with other energy groups and USDA to expand outreach for Farm Bill energy grants (continuing)
- Take agricultural industry leaders and policy makers on wind energy tour in Midwest (Summer 2005)
- More in-depth study of on-farm small wind (net metering)
- Implement anemometer loan program in state

# Anemometer Loan Program

- \$15,000 pending from DOE for equipment
- Purchase 8 20-meter NRG NOW anemometer systems and related supplies
- Install one at NW Horticultural Experiment Station near Traverse City
- Establish year-long lending program for remaining seven

# Anemometer Loan Program

- Will be available state-wide
- Targeted to agricultural audience
- Applicants must
  - Have a potentially viable project in mind, and good site potential for the anemometer
  - Be willing/able to assist with installation/takedown
  - Be willing to change batteries, data plugs
  - Agree that the data will be publicly accessible
- Timeline...waiting for the \$\$\$!!! Maybe summer

# Conclusion

- Interest in project and wind energy has far exceeded expectations
- Need to connect a few dots...
  - What are next steps, from awareness to “how do I get a wind project going?”
  - Huge interest in small wind – how to support?
  - Need better system for awareness/application preparation for Farm Bill grants – need to create partnerships with USDA/other agencies
- Questions?