



DEMONSTRATION PROJECTS: The Critical Difference

Presented to:
Oklahoma GROW Conference
November 12, 2008

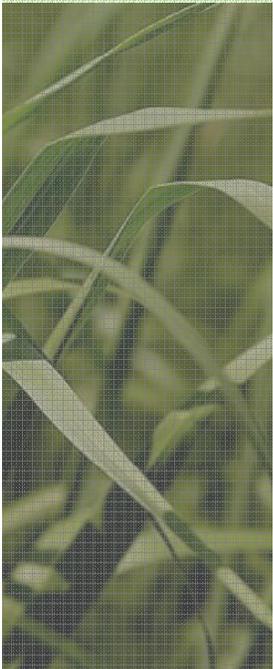
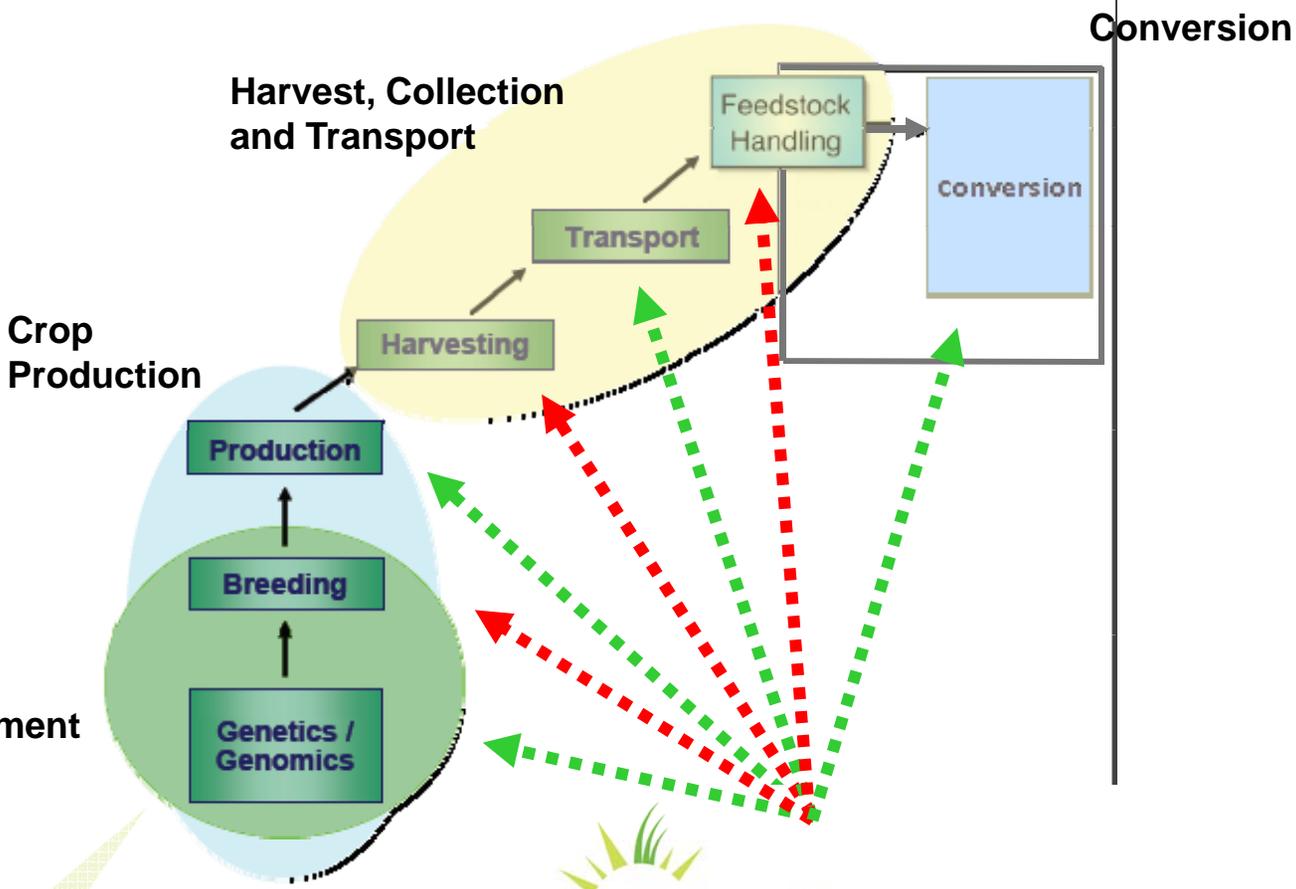
Presented by:
Steven Rhines
The Noble Foundation

Oklahoma Bioenergy Center

- Contributing Institutions:
 - Oklahoma State University
 - University of Oklahoma
 - The Noble Foundation
- Purpose: Conduct research and establish the outreach programs to:
 - Foster the development of a **biofuels industry in Oklahoma**, and
 - Contribute to the **national research effort**.



Oklahoma Bioenergy Center

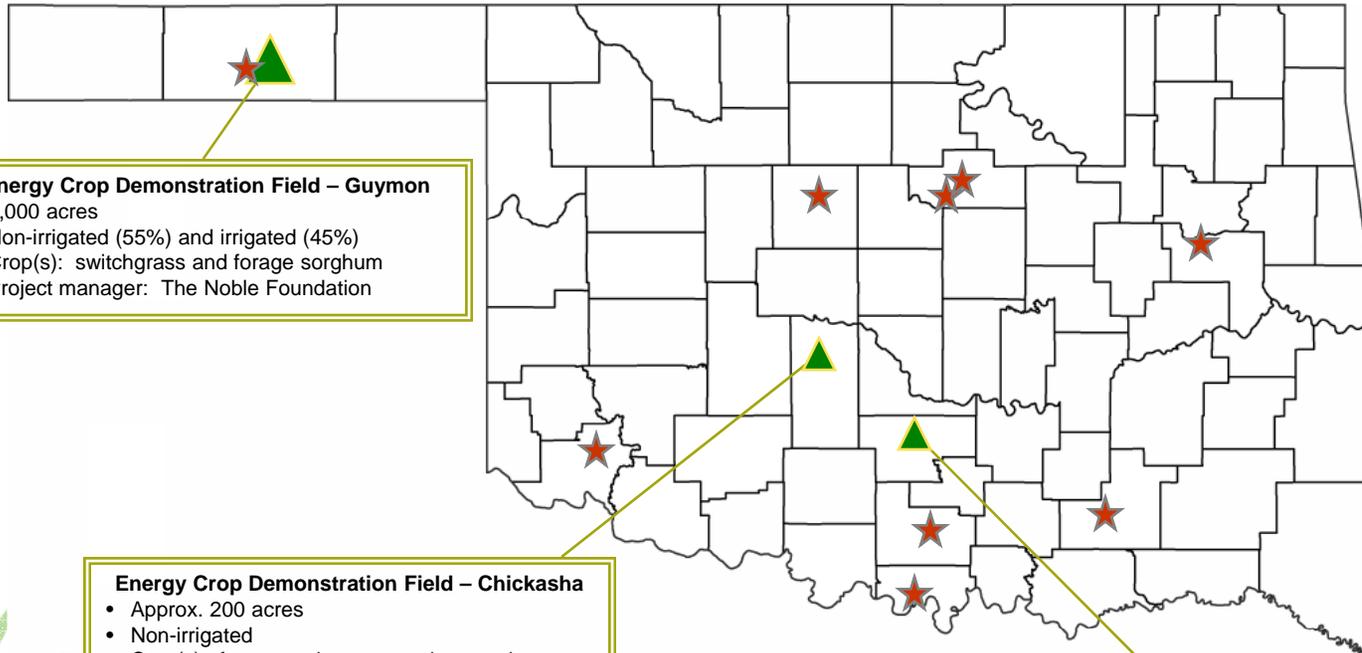


Demonstration projects

- **Critical research to support:**
 - Crop production
 - Harvest, collection and transport
- **Demonstration fields**



Demonstration fields and projects



Energy Crop Demonstration Field – Guymon

- 1,000 acres
- Non-irrigated (55%) and irrigated (45%)
- Crop(s): switchgrass and forage sorghum
- Project manager: The Noble Foundation

Energy Crop Demonstration Field – Chickasha

- Approx. 200 acres
- Non-irrigated
- Crop(s): forage and sweet sorghum and switchgrass
- Project manager: Oklahoma State University

Energy Crop Demonstration Field – Maysville

- Approx. 115 acres
- Non-irrigated
- Crop(s): switchgrass
- Project manager: The Noble Foundation



Demonstration fields – Chickasha

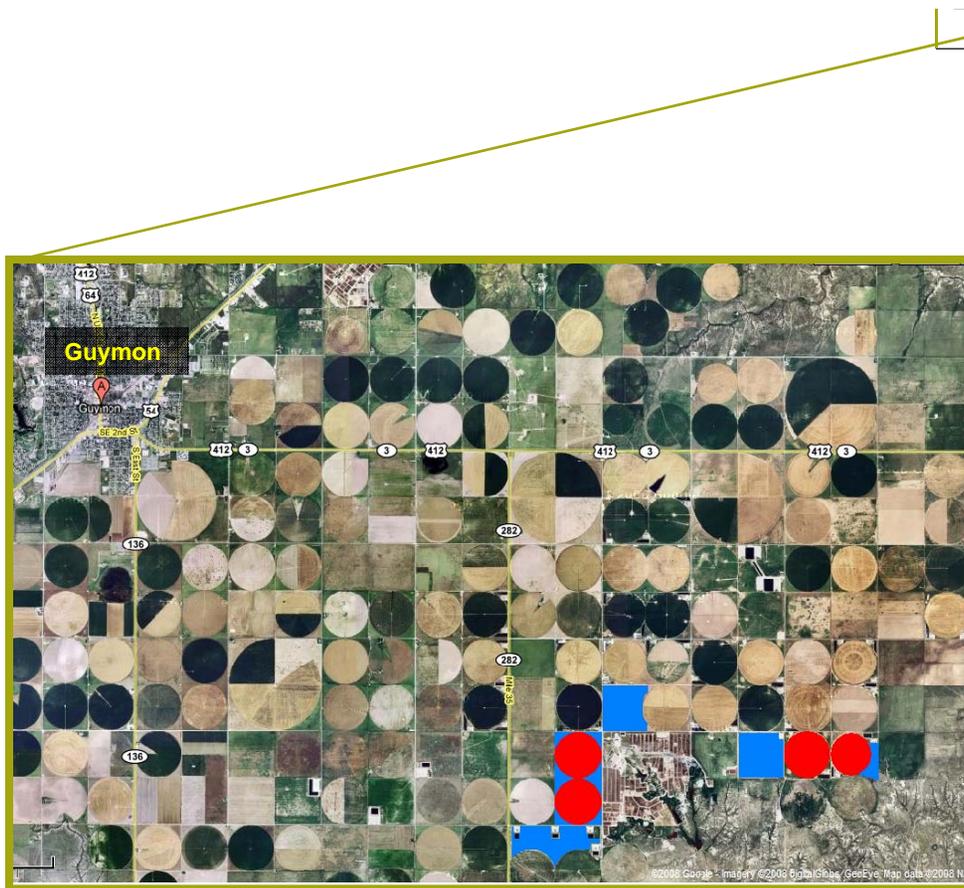


Quick Facts:

- 200 acres
- Oklahoma State University Experiment Station
- Planted early May
- Forage sorghum (three varieties)
- Row spacing and planting evaluations
- Agronomic studies (fertilizer and land treatments)
- Harvest studies
- Storage studies
- **Biofuels Field Day, Oct. 13, 2008**



Demonstration fields – Guymon



Quick Facts:

- World's largest stand of switchgrass dedicated to cellulosic ethanol production
- 1,000 acres
- Non-irrigated: 550 acres
- Irrigated: 450 acres
- Switchgrass
 - Alamo
 - Trailblazer
 - Blackwell
 - Kanlow
- Forage sorghum
 - ES5140 (Ceres, Inc.)
 - ES5150 (Ceres, Inc.)

■ - Non-irrigated acres

■ - Irrigated acres

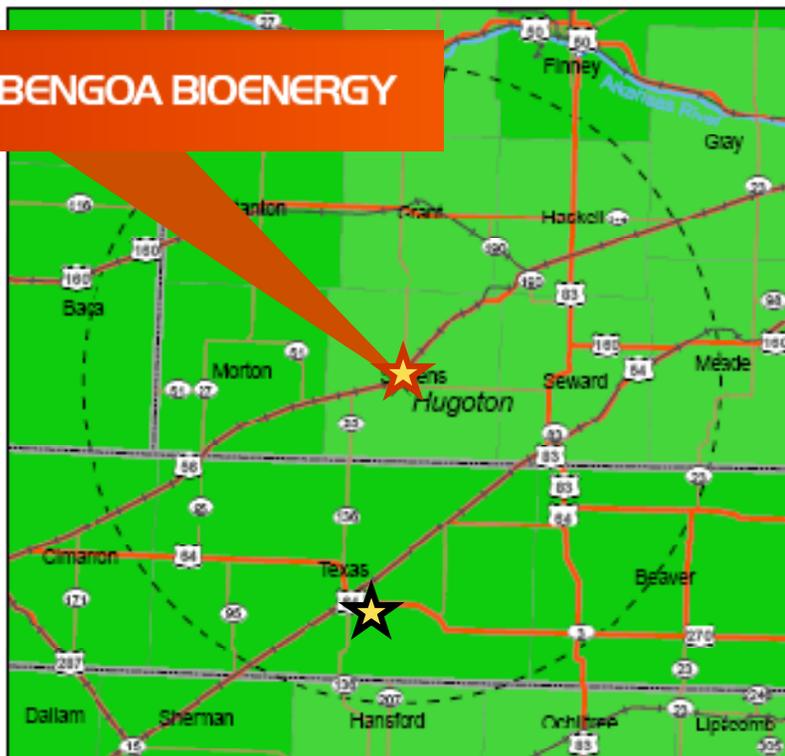
Scale: |-----|
1 mile



Demonstration fields – Guymon

Development of key, national collaborations to address local challenges and contribute to the national effort

ABENGOA BIOENERGY



Hitch Enterprises



Idaho National Laboratory



Ceres, Inc.

c e r e s



Demonstration fields – living laboratories

