The Regional Feedstock Partnership
A Joint Sun Grant and DOE Effort

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August 2008
Regional Feedstock Partnership

• A joint effort between the US Dept. of Energy and the Sun Grant Initiative
• Regional Sun Grant Centers lead effort to address barriers associated with a sustainable and predictable biomass supply
• National task teams working in specific crop areas, such as herbaceous crops, crop residues, woody crops, etc
Feedstock Partnership Focus

- Biomass Resource Assessment
  - Regional Workshops
  - Regional Supply Curves and GIS
- Biomass Resource Development
  - Field trials of dedicated feedstocks
  - New crop development
  - Impact of residue removal on yields
- Biomass Education and Outreach
  - BioWeb
Regional Workshops

- Southeastern Region
  - May 2006

- Western Region
  - August 2007

- Northeastern Region
  - November 2007

- North-Central Region
  - August 2006

- South-Central Region
  - October 2007
Research Needs

• A repository of existing literature
• Crop breeding and genetics
• Investigation of long-term management systems for perennial and woody crops
• Integrated systems research involving several feedstocks – diverse ag, forestry and urban landscape
• GIS framework to assess potential supply curves for various feedstocks – land and climate changes
Partnership Task Teams

1. GIS Resource Assessment
   Team Lead: Tris West, ORNL

2. Sustainable Corn Residue Removal
   Team Leads: Doug Karlen & Wally Wilhelm, ARS

3. Herbaceous Biomass Feedstock Development
   Team Lead: Vance Owens, South Dakota State Univ.
Partnership Task Teams

4. Woody Biomass Feedstock Development
   Team Lead: Tim Rials, Univ. of Tennessee

5. Sustainable Cereal Crop Residue Removal
   Team Lead: Russ Karow, Oregon State Univ.

6. Education and Outreach
   Team Lead: Jim Doolittle, South Dakota State Univ.
Current Partnership Efforts

Regional Biomass Energy Feedstock Partnership 2008 Bioenergy Crop Trials

- Planted Field Trials
- Planned Field Trials
- Organization Location
- Total Trials = 38

CRP
Energy cane
Switchgrass
Miscanthus
Sorghum
Corn Stover Removal (All include ARS)
Silva Task Team

★ Regional Leaders
Dan Robison (Southeast Woody Crops) – North Carolina State University
Tim Volk (Northeast Woody Crops) – State University of New York
Bill Ferguson (North Woody Crops) – University of Minnesota, Duluth
Jamie Shuler (South Woody Crops) – University of Arkansas, Monticello
Brian Stanton (West Woody Crops) – Greenwood Resources
Tom Richard (Forest Resource) – The Pennsylvania State University

Forest Service Partners
Bryce Stokes – Washington Office
Marilyn Buford – Washington Office
Jim Perdue – Southern Research Station
Don Riemenschneider – Northern Research Station

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Silva Task Team

• Woody crops scope of work includes
  – Literature review and summary of research to date
  – Investigation of existing plantations
  – Breeding and selection of new planting stock
  – Establishment of demonstration scale plantings in each region to collect data on performance/yield and their relationships with the environment, soils, etc
Silva Task Team

- Forest resources scope of work includes
  - Literature review and summary of research to date
  - Establishment of research/demonstrations in each region to collect data on resource removals and other operational practices and their relationships with the environment, soils, etc
Summary

• A significant, coordinated effort underway to further develop and promote biomass feedstocks around the nation
• Issues related to genetics, production, logistics, and policy are being addressed
• A unique partnership between universities and DOE
• Additional partnerships needed to maximize information
Thank You

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