The Agricultural Pollution Prevention Program

Innovative Partnerships and Educational Programs

Julia W. Gaskin

Biological & Agricultural Engineering Dept.,
College Of Agricultural and Environmental Sciences,
University of Georgia
In the age of limited resources……

Need to leverage resources:

- funds
- people
- other resources

Partnerships critical

Good example is AgP² Program
AgP² was started in 1994

Partnership between:

UGA Cooperative Extension Service

Georgia Department of Natural Resources, Pollution Prevention Assistance Division
P²AD recognized:

- Agriculture was $6.22 billion industry in GA
- Farmland occupies substantial portion of land
Our Vision
The vision of the Georgia AgP2 program is for the agricultural community to be actively practicing voluntary pollution prevention with a commitment to reducing emissions, waste, and the use of energy, water, and dangerous materials to the greatest extent possible and practical.
Environmental Assessments

Georgia Farm*A*Syst Program
- Non-regulatory self-assessments

Poultry EMS
- Partners for Agricultural Environmental Management Systems– piloted in GA
Animal Waste Management

AWARE Animal Waste Management in Research and Extension

Coordinates animal waste management issues

TEAM

- scientists, educators, agricultural professionals, and farmers
- UGA, other universities, state and federal government agencies, agricultural associations and businesses
AWARE Goals

1) Identify waste management problems
2) Prioritize research and extension waste management needs
3) Promote statewide communication
4) Develop and provide educational tools/workshops
5) Provide a forum to demonstrate the pro-active nature of Georgia's agricultural industry
6) Provide information exchange and updates
AWARE Accomplishments

Developed training on how to develop Certified Nutrient Management Plans

Developed training for CAFO operators
AWARE Accomplishments

Technical input for regulators, legislators, trade associations, environmental groups in GA on new animal waste regulations

Georgia Phosphorus Risk Index
AWARE Accomplishments

Webpage with current information
Changes in regulations
Deadlines
Current workshops
National news and information

Listserve
Land Application

- Provides technical support for beneficial reuse of by-products in agriculture
- Looks for opportunities that are environmentally safe and are agronomically effective
Land Application

- Poultry litter
- Wood and fly ash
- Municipal biosolids
Land Application

Scrap wallboard gypsum

Engineered wood products

Water treatment residuals
Land Application

Training for regulators on agronomic issues:

- Nutrient management
- Soil fertility

Training for operators thru Georgia Water and Pollution Control Association
Sustainable Agriculture

Sustainable agriculture is:
• profitable,
• environmentally friendly, and
• good for the rural community.

Includes:
• integrated pest management,
• rotational grazing,
• soil conservation, and
• nutrient management.

These practices are integral to pollution prevention.
Sustainable Agriculture

Partnership with USDA SARE PDP

Sustainable Agriculture Research and Education Professional Development Program

Provides scholarship money for extension, NRCS, and farmers
Sustainable Agriculture

Edible aquifer at county agent water quality training

Stream biological assessment at county agent water quality training

Helps fund training

Local food production presentation at Broad River Watershed Association
Environmental Horticulture

Provides technical assistance and education on pollution prevention for:

- Ornamental horticulture producers,
- Commercial landscape enterprises, and
- Residential and commercial landowners
Crop Production

Focuses on pollution prevention strategies that can help farmers reduce their potential impact.

Including:
• conservation tillage systems,
• integrated pest management, and
• safe handling and storage of pesticides/hazardous materials.
Crop Production

Conservation Tillage Pays ... Everyone!

TEAM CONSERVATION TILLAGE

Natural Resource Conservation Service
Auburn University
University of Georgia Cooperative Extension Service

Georgia Conservation Tillage Alliance
Farmer-led, organized 1993
Georgia Dept. of Natural Resources, Wildlife Resources Division
Agricultural Research Service
Conservation Systems Research Team
J. Phil Cambell, Sr. Natural Resource Conservation Center

Exhibit at the 2003 Sunbelt Agricultural Exposition
Crop Production

Rainfall simulator showing the importance of cover in reducing runoff and sedimentation

Getting started exhibit headed up by NRCS
Crop Production

Benefits of improving soil quality AgP² with Auburn University and NRCS Soil Quality Institute

Mini-rhizotron showing plants roots and soil organisms from the ARS lab at Auburn, AL.
Crop Production

Gummy worms and tattoos!

Model showing surface water processes
Success

- True collaboration
- People focused on overall mission of education rather than credit
- Identify and work with the 10% that get things done
- Share resources (use partners strengths)
- Don’t reinvent the wheel
Agricultural Pollution Prevention

Dr. Mark Risse, Program Coordinator

Dr. Gary Hawkins, Crop Production

Ms. Julia Gaskin, Land Application/Sustainable Ag

Dr. Rose Mary Seymour, Environmental Horticulture

Ms. Tina Pagan, Farm*A*Syst

Mr. Tommy Bass, Animal Waste Management