

# Nutrient Management Training for Technical Service Providers in Florida

R.S. Mylavarapu, UF  
S.D. Curry, UF  
G. Hendricks, USDA-NRCS  
S.P. Boetger, USDA-NRCS

# Goals

- Provide training for members of approved third party organizations and others desiring to be trained in one or more of the first three of six elements described in the USDA-NRCS Comprehensive Nutrient Management Planning Technical Guidance.
  - Manure and Wastewater Handling and Storage
  - Land Treatment Practices
  - Nutrient Management
    - Record Keeping
    - Feed Management
    - Other Utilization Activities
- Trainees have the opportunity to become Certified Specialists in Nutrient Management and Land Treatment Practices

# Target Audience

- Educational programs deal with the rationale, concepts, and particulars of nutrient management
- Targeted to farmers and ranchers, agency officials, decision-makers, and other citizens who need to become knowledgeable in nutrient management problems and solutions in Florida.



# The Course

- This course was intended for those seeking certification to complete Comprehensive Nutrient Management Plans (Nutrient Management & Land Treatment Practice Elements), Conservation Plans, Nutrient Management Plans, and/or Pest Management Plans.
- Provided at no charge to the participants

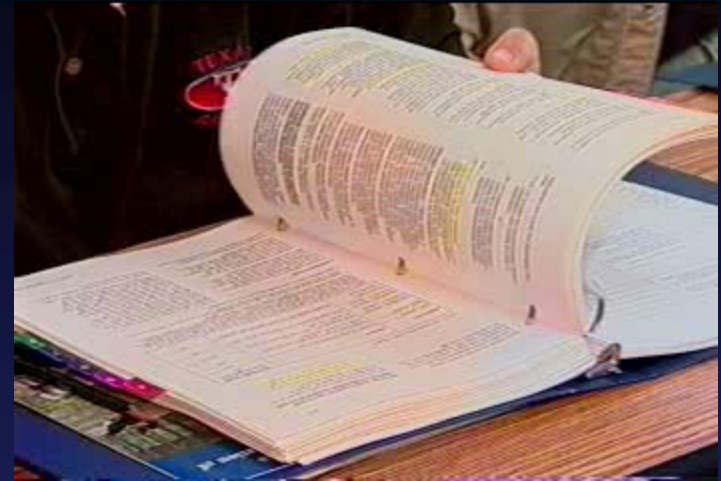
# Prerequisite

- Prior to attending this course the participants should have successfully completed “Introduction to Water Quality”, and “Nutrient & Pest Management Modules 1 – 6” courses offered by the USDA Natural Resources Conservation Service.

<http://www.nedc.nrcs.usda.gov>

# Training Sessions

- Students trained to date - 103
- Average pretest score - 58%
- Average post test score - 83%
- Students: NRCS Agency staff and Technical Service Providers.
- The Technical Service Providers included people from FDACS, South Florida Water Management District, and the Soil and Water Conservation Service, Certified Crop Advisors, as well as professional consultants.
- All participants rated the training program either good or excellent.



# Training Sessions

Location	Date	Instructor Affiliation				Attendance	Knowledge Gain
		IFAS	NRCS	FDACS	FDEP		
Okeechobee	6/2002	7	4		1	19	+26%
Live Oak	11/2002	8	4	1	1	35	+28%
Okeechobee	5/2003	8	5		1	34	+26%
Live Oak	12/2003	9	5	1	1	15	+20%
<b>Overall</b>						<b>103</b>	<b>+25%</b>

# Impetus for Program

- Lake Okeechobee Restoration Program
- Suwannee River Basin Partnership
- Everglades Restoration Project





# Topics Presented

- National & State Policies
- Florida Laws and Regulations
- Soils of Florida, Landscape Features and Characteristics
- Soil and Plant Tissue Diagnostic Testing
- Lake Okeechobee Protection Program
- Suwannee River Management Work Group



# Topics Presented

- Conservation Planning Process and Quality Criteria
- Core 4 and Conservation Practices
- Nutrient Management Plan Development
- Nutrient Budgets
- Comprehensive Nutrient Management Plans - Essential Components



# Topics Presented

- Nutrient Sources, Movement, & Losses in Soils
- Nutrient Management Plan & Land Treatment Practice - Essential Components
- Phosphorus Index & Nutrient Management Planning
- P Index Example
- Principles of Nutrient Management



# Topics Presented

- Animal Manures & Wastewaters
- Manure Analysis and the Livestock Waste Testing Lab
- Understanding the Dairy Operation as Part of the Planning Process
- Municipal Waste & Heavy Metals



# Presentations at Farm Site

- Case Farm and Waste Management System
- Bio-Security
- Manure Sampling and Testing
- Phosphorous Index Assessments & Calculations
- Cropping Systems/Core 4
- Forages/Grazing Management



# Topics Presented

- CNMP Development
- Pest Management Policies
- Pest Management Planning Considerations
- Windows/Pesticide Screening Tool WIN/PST
- Pest Management Plan Development



# Materials Delivered

- CD-ROM
  - The CD contains the presentations from each speaker, electronic files for reference materials, electronic worksheets, and additional info web sites
- Student Notebook
  - Notes for each presentation, hard copy of most reference material, sample worksheets
- Student Workbook
  - Sample problems, examples of soils tests, maps of farm studied



# Certification

- Participants successfully completing this course with an 80% or higher on the post-test must submit two Nutrient Management Plans to NRCS for approval. At this time they will be certified for Nutrient Management Planning.
- No students passed the pretest. Pretest grades ranged from 38% to 76%. The post-test had a 78% passing rate (with a score of 80% required to pass). Post-test grades ranged from 60% to 96%.
- The Nutrient Management Plan developed during the course was accepted as the first submitted plan.



# Future Sessions

- Continuing Education Sessions
- Maintain certification
- Focus on a particular topic for in-depth study
- Project duration – 5 years
- Target other groups
- In-service training is provided to IFAS extension faculty