



**2010 Delta F.A.R.M.  
Environmental Stewardship  
Report**

B. F. Smith Foundation  
Delta F.A.R.M.  
433 Stoneville Rd.  
P.O. Box 257  
Stoneville, MS 38776

# **2010 Delta F.A.R.M. Environmental Stewardship Report**

A report of the B. F. Smith Foundation and the Association of Delta  
Farmers Advocating Resource Management.

## **B. F. Smith Foundation Delta F.A.R.M.**

Rob Coker, Chairman  
Dan Branton, Director  
Nolen Canon, Director  
Bobby Carson, Director  
Jimmie Dick Carter, Director  
Mattson Flowers, Director  
W. A. Percy, II, Director  
Reese Pillow, Director  
Travis Satterfield, Director  
Mike Sturdivant, Jr., Director

## **INTRODUCTION**

The Delta F.A.R.M. Program began operation in the summer of 1998. The organization serves the farmers and landowners of the Mississippi Delta by providing technical information on conservation practices and promoting their current conservation efforts.

Membership to Delta F.A.R.M. is free, as are the services Delta F.A.R.M. provides its members. However, members are asked to submit an annual evaluation provided by the Delta F.A.R.M. staff. The staff will also provide assistance to the membership in completing the evaluation.

The Delta F.A.R.M. evaluation serves two general purposes. First, the evaluation is used by the Delta F.A.R.M. staff to document the current non-regulatory conservation efforts of its members and give farmers credit for their efforts. Second, the evaluation identifies those areas on members' lands, which may be improved through the implementation of additional conservation measures.

## **ACKNOWLEDGEMENTS**

Delta F.A.R.M. wishes to acknowledge the sponsors of this program. Without their support, this program or the data presented in this report would not be available.

Syngenta  
Monsanto  
Farmers Grain Terminal  
U.S. Environmental Protection Agency  
Mississippi Department of Environmental Quality

## METHODS

### Development.

With the guidance and support of the Delta F.A.R.M. Executive Committee, numerous State, Federal and private resource agencies helped to develop the Delta F.A.R.M. Program and its subsequent Evaluation. This group of farmers and resource agency personnel identified a list of recognized BMPs (Best Management Practices) for all types of agricultural production systems found in the Mississippi Delta. This list was utilized to establish the Delta F.A.R.M. Program Manual and the Evaluation.

The Program Manual provides detailed information on recognized BMPs advocated by Delta F.A.R.M. The Evaluation portion of the program serves to document all BMPs that are currently implemented on Delta F.A.R.M. member properties.

### Design.

The Evaluation takes place annually, following a cropping season. Each Delta F.A.R.M. member submits to an Evaluation through a questionnaire. The staff also makes field visits to a number of the member's farms each year to ensure the evaluations are done properly and are consistent from farm to farm. Data is collected through the questionnaire and is analyzed to develop this document, the annual Delta F.A.R.M. Environmental Stewardship Report.

### Analysis.

Each evaluation is entered into a database to form a composite data set for all Delta F.A.R.M. lands. The data yields percent utilization statistics for each recorded BMP. These statistics represent the percentage of farmers in the program that utilize a particular BMP. This statistic does not identify to what extent the BMP is being implemented, only that the BMP is being implemented at some level. Treatment area (acres) is also recorded on some BMPs to more thoroughly document the extent of BMP usage and also to track trends in conservation.

Although each farm's data is entered into a composite data set, farms are scored individually in order to recognize those producers and/or landowners who are exceptional stewards of the Delta's natural resources. Each farm is scored using a weighted system developed by cooperating natural resource agencies. Weight is given to the most important BMPs with consideration given to each BMP's economic feasibility.

## RESULTS

### 2010 General Statistics:

Total Acres Evaluated: 1,328,178

### Acres Enrolled:

Acres enrolled represent all acres enrolled into Delta F.A.R.M. since inception. All acres reported have been evaluated and are broken down by crop types.

<b>CROP TYPE:</b>	<b>2010 ACRES:</b>
Cotton	186,932
Rice	132,597
Soybeans	517,323
Corn	327,543
Wheat	41,673
Milo	10,401
Catfish	13,085
Other Crops	10,062
Non-Cultivated	118,037
<b>TOTAL</b>	<b>1,328,178</b>

## RESULTS

### Percent Utilization:

Delta F.A.R.M. recognizes certain Best Management Practices used in Northwest Mississippi. Each evaluated data set recognizes the utilization or non-utilization of any particular BMP. As a composite, the data is then used to calculate the percentage of Delta F.A.R.M. members' who utilize a specific BMP.

<b>BEST MANAGEMENT PRACTICE:</b>	<b>2010 PERCENT UTILIZATION:</b>
Soil Conservation Plan	85
Filter Strips (Grass or Trees)	78
Grass Waterways	82
Terraces (when needed)	34
Conservation Tillage	93
Water Control Structures	94
Residue Management	80
Sub-soiling	88
Crop Rotation	90
Containment Levees Around Fields	89
Double Cropping	54
Cover Crop	30
Maintain Natural Riparian Areas	80
Impound Winter Water on Fields	82
Maintain Grass on Pond Levees	61
6/3 Water Management on Catfish Ponds	39
Extend Catfish Pond Drains Beyond the Toe of Levee	34
Seining Pads Catfish Ponds	18
Precision Landform Fields	70
Straight Levee Production Systems	83
Zero Grade Production Systems	25
Side Inlet Irrigation	52
Irrigation Water Use Flowmeter	20
Timer on Irrigation Wells	28
Tail Water Recovery System	43
Capture and Use Surface Water for Irrigation	50
Sprinkler Irrigation Systems	66
PHAUCET Program	23

<b>BEST MANAGEMENT PRACTICE: CONTINUED</b>	<b>2010 PERCENT UTILIZATION:</b>
Filter Strips Around Mixing Facilities	31
Back Siphon Check Valves	60
Closed or Semi-Closed Mixing Systems	71
Precision Application Technologies	75
Drift Reduction BMPs (wind, droplet size, etc.)	90
Integrated Pest Management System (IPM)	70
Select Genetics Packages that Reduce Pesticide Use	94
Rotate Crops	90
Manage Crop Residues	80
Impound Winter Water	81
Variable Rate Mixed Fertilizer	70
Spring Burn Down	91
Resistance Management	90
Optimize Planting Times	90
Seed Treatments	93
Multiple Nitrogen Applications	83
Independent Crop Consultant	85
Recycle Pesticide Containers	87
Recycle Used Oil	93
Recycle Used Batteries	93
Recycle Used Tires	76
Recycle Used Polypipe	91
Wildlife Management Plan	60
Leave Crops for Wildlife	87
Maintain Riparian Areas	82
Plant Supplemental Food for Wildlife	88
Flood Fields for Waterfowl	80
Construct or Maintain Wildlife Habitat	85

## RESULTS

### Acres Treated:

Selected BMPs can be measured in acres affected by the practice. This can be in the form of protection, prevention, or area treated. The following represents data collected, which can be accounted for by acreage.

<b>BEST MANAGEMENT PRACTICE</b>	<b>2010 ACRES</b>	<b>% OF TOTAL ACREAGE*</b>
No-Tillage	112,994	8.5%
Minimum-Tillage	277,978	20.9%
Reduced-Tillage	292,658	22%
Conventional Tillage	644,548	48.5%
Land Formed Fields	493,533	37%
Containment Levees	334,918	25%
Winter Water Acres	93,695	7%
Straight Levee Fields	205,760	15.5%
Tail Water Irrigation	57,799	4%
Surface Water Irrigation	90,453	6.8%
Ground Water Irrigation	573,642	43%
Timberland Acres	87,723	6.6%
Wildlife Food Plot Acres	10,888	.8%
Recreational Pond or Lake Acres	26,850	2%
Riparian Area Acres	13,705	1%
Wildlife Habitat Acres	62,828	4.7 %

\*% OF TOTAL ACREAGE = % of all evaluated acres (1,328,178).