



DELTA F.A.R.M.
FARMERS ADVOCATING RESOURCE MANAGEMENT

**2006 Delta F.A.R.M.
Environmental Stewardship
Report**

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2006 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.

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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. provide 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 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.

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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 the Delta's natural resources. All farms that score 90% or higher receive an annual Environmental Stewardship Award. 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. The weighted system is listed below.

Best Management Practice	Weighted Score
Soil Conservation Plan	10
Filter Strips (Grass or Trees)	50
Grass Waterways	25
Terraces (when needed)	10
Conservation Tillage	50
Water Control Structures	20
Residue Management	10
Sub-soiling	20
Crop Rotation	10
Containment Levees Around Fields	10
Double Cropping	10
Cover Crop	10
Maintain Natural Riparian Areas	10
Impound Winter Water on Fields	20
6/3 Water Management on Catfish Ponds	20
Straight Levee Rice/Bean Production	20
Water Testing for Drinking Wells	10
Tail Water Recovery System (irrigation)	20
Conversion from Ground to Surface Water Irrigation	20
Land Forming	20
Back Siphon Check Valves	25
Closed or Semi-Closed Mixing System	25
Precision Ag	20
Drift Reduction (Hooded Sprayers, etc.)	20
Integrated Pest Management	20
Recycle Pesticide Containers	10
Recycle Used Oil	10
Dispose of Used Batteries through Retailer	10
Dispose of Used Tires through Retailer	10
Recycle Polypipe	10
Wildlife Management Plan	10
Leave Crops for Wildlife	10
Food Plots	10

RESULTS

2006 General Statistics:

Total Acres Evaluated:	888,245
Total Farmland in Region:	approximately 2.6 million
Percent of Total Region:	approximately 34%

Acres Enrolled:

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

CROP TYPE:	2006 ACRES:
Cotton	337,983
Rice	69,807
Soybeans	218,516
Corn	87,963
Wheat	22,329
Milo	14,205
Catfish	15,119
Other Crops	6,647
Non-Cultivated	77,479
TOTAL	888,245

Percent Utilization:

46 Best Management Practices have been recognized by Delta F.A.R.M. and are accounted for through the Evaluation. 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.

BEST MANAGEMENT PRACTICE:	2006 PERCENT UTILIZATION:
Soil Conservation Plans	94.8%
Grass Filter Strips (Soil)	93.0%
Grass Waterways (Soil)	90.1%
Terracing	15.1%
Conservation Tillage	99.4%
Water Control Structures (Soil)	97.1%
Maintain Crop Residues	97.1%
Sub-Soil	91.9%
Rotate Crops	97.1%
Containment Levees Around Field	39.3%
Double Crop	51.2%
Cover Crop	49.1%
Maintain Riparian Zones (WQL)	87.0%
Hold Winter Water (WQT)	92.5%
Grass on Exterior of Catfish Ponds	94.0%
6/3 Water Management on Catfish Ponds	86.7%
Extend Drains Past the Toe of Ponds	53.3%
Seining Pads for Catfish Ponds	46.7%
Straight Levees	92.9%
Water Control Structures (WQL)	98.9%
Test Water at Wells	11.8%
Tail Water Recovery System	34.7%
Conversion from Ground to Surface Water Irrigation	24.1%
Grass Filter Strips (WQL)	90.8%
Grass Waterways (WQL)	87.8%
Water Control Structures (WQT)	93.7%
Land Form	97.7%
Pads on the Lower End of Fields	94.0%

Filter Strips Around Mixing Facilities	23.9%
Back Siphon Check Valves	54.9%
Close Mixing Systems	86.1%
Precision Applications Technologies	88.4%
Drift Reduction Technologies	98.8%
IPM	83.0%
Store Chemicals in the Proper Location	100%
Store Pond Additives in Proper Location	100%
Genetically Modified Crops	98.8%
Recycle Pesticide Containers	95.4%
Recycle Oil	96.5%
Recycle Batteries	97.1%
Recycle Tires	95.4%
Recycle Polypipe	94.0%
Wildlife Management Plan	65.9%
Leave Crops for Wildlife	91.9%
Manage or Maintain Riparian Areas	91.1%
Food Plots	93.0%
Flood for Winter Waterfowl	94.2%
Manage Wildlife Habitat	90.2%

(Soil) references practices which are associated with soil conservation.

(WQL) references practices which are associated with water quality.

(WQT) references practices which are associated with water quantity.

(Mixing) references practices which are associated with chemical mixing.

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.

BEST MANAGEMENT PRACTICE	2006 ACRES	% OF TOTAL ACREAGE*
No-Tillage	122,243	13.7%
Minimum-Tillage	264,537	29.8%
Reduced-Tillage	212,156	23.8%
Conventional Tillage	289,309	32.5%
Land Formed Fields	355,029	39.9%
Containment Levees	201,080	22.6%
Winter Water Acres	63,097	7.1%
Straight Levee Fields	127,872	14.4%
Tail Water Irrigation	45,369	5.1%
Surface Water Irrigation	35,712	4.0%
Ground Water Irrigation	420,970	47.4%
Wildlife Food Plots	8,637	0.9%
Timberland	57,058	6.4%
Riparian Zones	4,288	0.4%
Drainage through Grass Filters	188,279	21.2%
Drainage through WCS	286,245	32.2%

*% OF TOTAL ACREAGE = % of all evaluated acres (888,245).

2006 Overall Stewardship Level.

The annual Overall Stewardship Level of Delta F.A.R.M. reached **79.72%** in 2006. This statistic is calculated by averaging the percent utilization of all recognized BMP from all farms evaluated.

CONCLUSION

The 2006 Membership of Delta F.A.R.M., with an overall stewardship level of 79.72%, has demonstrated their efforts to conserve, restore, and enhance the environment of this region as documented in this report. And by documenting the conservation efforts of approximately 34% of all the cropland in the region, Delta F.A.R.M. feels confident that its data is representative of the conservation efforts of the entire Yazoo-Mississippi Delta.

Through this evaluation, we can now identify areas that need to be focused on in the future. Ultimately, Delta F.A.R.M. would like to reach a stewardship level of 100%, and by focusing on those weak areas, we can reach this goal. But, as additional conservation practices are implemented and the overall stewardship level increases, Delta F.A.R.M. must also work to improve and expand existing conservation practices.

