

FARMERS ADVOCATING RESOURCE MANAGEMENT



DELTA F.A.R.M.

**2013 Delta F.A.R.M.
Environmental Stewardship
Report**

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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. 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.

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Syngenta
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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 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 : GENERAL STATISTICS

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.

CROP TYPE:	2013 ACRES EVALUATED:
Cotton	141,370
Rice	114,844
Soybeans	514,719
Corn	370,469
Wheat	44,619
Milo	14,841
Catfish	11,610
Other Crops	15,957
Non-Cultivated/Forested	135,464
TOTAL	1,323,369

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.

BEST MANAGEMENT PRACTICE:	2013 PERCENT UTILIZATION:
Soil Conservation Plan	84%
Filter Strips (Grass or Trees)	80%
Grass Waterways	82%
Terraces (when needed)	29%
Conservation Tillage	91%
Water Control Structures	97%
Residue Management	90%
Sub-soiling	86%
Crop Rotation	90%

BEST MANAGEMENT PRACTICE:	2013 PERCENT UTILIZATION:
Containment Levees Around Fields	91%
Double Cropping	52%
Cover Crop	30%
Maintain Natural Riparian Areas	80%
Impound Winter Water on Fields	83%
Maintain Grass on Pond Levees	73%
6/3 Water Management on Catfish Ponds	42%
Extend Catfish Pond Drains Beyond the Toe of Levee	50%
Seining Pads Catfish Ponds	14%
Precision Landform Fields	70%
Straight Levee Production Systems	88%
Zero Grade Production Systems	30%
Side Inlet Irrigation	69%
Irrigation Water Use Flowmeter	47%
Timer on Irrigation Wells	39%
Capture and Use Surface Water	60%
Formal Tail Water Recover System	40%
Formal On Farm Storage Pond	9%
Sprinkler Irrigation Systems	69%
PHAUCET Program	25%
Surge Valves	5%
Soil Moisture Probes	7%
MS or AR Irrigation Scheduling Tool	3%
Filter Strips Around Mixing Facilities	30%
Back Siphon Check Valves	65%
Closed or Semi-Closed Mixing Systems	73%
Precision Application Technologies	82%
Drift Reduction BMPs (wind, droplet size, etc.)	100%
Integrated Pest Management System (IPM)	70%
Select Genetics Packages that Reduce Pesticide Use	94%
Rotate Crops	100%
Manage Crop Residues	90%
Impound Winter Water	82%
Variable Rate Mixed Fertilizer	80%
Spring Burn Down	98%
Resistance Management	100%
Optimize Planting Times	100%
Seed Treatments	97%
Multiple Nitrogen Applications	90%

BEST MANAGEMENT PRACTICE	2013 PERCENT UTILIZATION:
Independent Crop Consultant	87%
Recycle Pesticide Containers	87%
Recycle Used Oil	93%
Recycle Used Batteries	95%
Recycle Used Tires	79%
Recycle Used Polypipe	93%
Wildlife Management Plan	58%
Leave Crops for Wildlife	86%
Maintain Riparian Areas	82%
Plant Supplemental Food for Wildlife	90%
Flood Fields for Waterfowl	80%
Construct or Maintain Wildlife Habitat	86%

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.

BEST MANAGEMENT PRACTICE	2013 ACRES	% OF SURVEYED ACRES*
No-Tillage	106,844	9%
Minimum-Tillage	265,005	22%
Reduced-Tillage	308,984	26%
Conventional Tillage	495,462	43%
Drain thru Filter Strip	256,120	22%
Drain thru Structure	478,202	40%
Land Formed Fields	542,273	46%
Containment Levees	396,045	33%
Winter Water Acres	87,336	7%
Straight Levee Fields	218,577	18%
Tail Water Irrigation	62,842	8%
Surface Water Irrigation	85,531	11%

BEST MANAGEMENT PRACTICE	2013 ACRES	% OF SURVEYED ACRES*
Ground Water Irrigation	600,135	80%
On Farm Storage Service	2,986	0.4%
PHAUCET	85,620	11%
Surge Valve	27,350	4%
Soil Moisture Probes	30,495	4%
Other Irrigation Scheduling Tools	25,475	3%
Timberland Acres	94,824	7%
Wildlife Food Plot Acres	12,130	1%
Recreational Pond or Lake Acres	25,977	2%
Riparian Area Acres	17,952	1%
Wildlife Habitat Acres	84,961	6%
Polypipe Rolls Recycled	13,133 rolls	n/a
Acres Enrolled in CRP	29,742	2%
Acres Enrolled in WRP	16,397	1%
Acres Enrolled in WHIP	5,813	0.4%
Acres Enrolled in CSP	114,522	9%
Acres Treated by EQIP Practices	317,383	24%

**% OF SURVEYED ACRES = % is relevant to the practice. For instance, tillage practices percentages are calculated against cropland acres not including aquaculture and forestland. Another example is irrigation practices percentages are calculated on irrigated acres only.*