

IV. PROGRESS REPORTS

A. DELINEATION AND EVALUATION OF CATFISH AND BAITFISH POND CULTURE PRACTICES

Progress Report
For the Period
April 1, 1994 to August 31, 1998

FUNDING LEVEL:

Year 1	\$118,789
Year 2	\$113,406
Year 3	\$100,798
Total	\$332,993

PARTICIPANTS:

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PROJECT OBJECTIVES:

1. Develop catfish and baitfish standardized production and financial performance analysis

(SPFPA-CC and SPFPA-BF) guidelines which include measures for evaluating the performance of commercial catfish and baitfish production systems.

2. Delineate and evaluate current commercial catfish and baitfish production practices (i.e., stocking, feeding, aeration, water exchange, pond size and configuration, harvesting, etc.) utilizing SPFPA-CC and SPFPA-BF guidelines.

3. Identify relationships between measures of production and financial performance as calculated according to SPFPA-CC and SPFPA-BF guidelines.

4. Develop management tools to assist commercial catfish and baitfish producers, lenders, aquaculture specialists and others in determining the efficacy of selected production practices.

ANTICIPATED BENEFITS:

Narrow margins between production costs and revenues result in challenges for managers of commercial catfish and baitfish production systems. Decisions must be made regarding resource allocation, optimal production alternatives, reinvestment, marketing strategies, use of credit and many other issues. A standardized system to measure production and financial performance is necessary to monitor the impact that decisions have on the productivity, financial performance of entire farms, and more specifically on commercial catfish and baitfish enterprises. Standardization lends itself to comparing performance of farms with different locations, management levels, production strategies, sizes and other characteristics.

This project proposes to delineate and evaluate current commercial practices by developing a standardized system of production and financial performance measures for catfish and baitfish operations independent of size, production methods, or marketing strategies. This standardized system will then be used to make an integrated evaluation of biological

and financial risk, and the consequences of management decisions on productivity and profitability with a group of cooperating producers in five southeastern states. The results will only be indicative of the cooperators and not necessarily the entire industry but should begin to elucidate best management practices. At the conclusion of the project the standardized system that has been developed will be available for producers to utilize throughout the nation.

PROGRESS AND PRINCIPAL ACCOMPLISHMENTS:

Objective 1: *Develop catfish and baitfish standardized production and financial performance analysis (SPFPA-CC and SPFPA-BF) guidelines which include measures for evaluating the performance of commercial catfish and baitfish production systems.*

Catfish - The Performance Evaluation Standards for Commercial Catfish Operations (PESCAT) is complete and is available for use by anyone interested in implementing the analysis.

Baitfish - Guidelines for the standardized production and financial performance analysis is complete for golden shiners, goldfish, and fathead minnows. This is available for use by anyone interested in implementing the analysis.

Objective 2: *Delineate and evaluate current commercial catfish and baitfish production practices (i.e., stocking, feeding, aeration, water exchange, pond size and configuration, harvesting, etc.) utilizing SPFPA-CC and SPFPA-BF guidelines.*

Catfish - Software and hard copies are available for use in collecting data. These analysis tools request the necessary data to describe commercial catfish production practices and farm characteristics for comparisons.

Baitfish - Software and hard copies are available

for use in collecting data. These analysis tools require the necessary data to describe commercial baitfish production practices and farm characteristics for comparisons.

Objective 3: *Identify relationships between measures of production and financial performance as calculated according to SPFPA-CC and SPFPA-BF guidelines.*

Catfish - Relationships between production practices and measures of productivity and financial performance was evaluated on an aggregate basis but data were insufficient for developing regional standards or averages.

Baitfish - Relationships between production practices and measures of productivity and financial performance were evaluated on four golden shiner, seven goldfish, and four fathead minnow operations.

Objective 4: *Develop management tools to assist commercial catfish and baitfish producers, lenders, aquaculture specialists and others in determining the efficacy of selected production practices.*

Catfish - The PESCAT Handbook is available for fingerling and food fish operations. It contains 15 fact sheets which are detailed explanations on topics that needed further discussion beyond that contained in the Guidelines. It also contains sample reports, input forms for collecting necessary data, inventory maintenance forms and software to facilitate calculating performance measures with a computer. Handbooks have been distributed to all participating faculty. An abbreviated version of the Handbook, called the PESCAT Toolkit, is available that contains the vital fact sheets, input forms, sample reports and software necessary to allow producers to collect their own data.

Baitfish - Standard production and financial performance analysis for baitfish (BAITSPECS) has been prepared and is under review.

WORK PLANNED:

The project is complete except for final data analysis and completion of final report.

IMPACTS:

It is hoped that as participants analyze their individual farm production and financial information from year to year, that a more direct determination of increased profits, decreased costs, and improved productivity will be available. PESCAT programs are designed to document production and financial relationships in commercial catfish operations, which is consistent with tracking the economic impact of the project. Those reviewing project products to this point agree that completing a PESCAT analysis should provide extremely valuable information to managers as they make decisions about their operations. In fact, as the word has spread about the program, more farmers have indicated an interest in having their catfish production evaluated. The PESCAT program has been adopted by the Central Alabama Farm Analysis Association and became part of their comparative analysis efforts starting this year and as such will continue in Alabama for the foreseeable future. Some of the on-going work will be presented at a state-wide catfish producers conference in November. Producer response should give direction in terms of the scope and intensity of PESCAT in the future.

PUBLICATIONS, MANUSCRIPTS, OR PAPERS PRESENTED:

The following three products are available from state faculty or from Greg Clary, P.O. Box 38, Overton, TX 75684; (903) 834-6191; fax 834-7140; g-clary@tamu.edu

1. PESCAT Handbook (Fingerlings, Food Fish or Combination) containing the following fact sheets:

- What PESCAT Is and Is Not (Clary)

- What You Need to Get Started and Who Can Help (Clary and Hnatt)
- Errors in Estimating Fingerling Numbers and Value: The Black Hole Begins on Paper (Lutz and Hymel)
- Inventory and Other Data Worksheets for Financial Statement Accrual Adjustments (Clary)
- Depreciation of Broodfish for Tax Reporting-When and When Not to Depreciate (Hnatt and Clary)
- Developing, Reviewing and Using the Depreciation Schedule (McGrann, Lovell and Ewing)
- Performance Based Borrowing (Klinefelter)
- Change in Owner's Equity (McGrann)
- Doing the Right Thing: Decision Making for Agricultural Families (Doye)
- A Performance Evaluation Standards for Commercial Catfish Operations-Summary Analysis Worksheets (Foodfish/Fingerlings) (Hnatt and Clary)
- Suggested Methods for Allocating Overhead Costs (Clary)
- Chart of Accounts for Managers of Commercial Catfish Operations (Clary)
- Inventory Assessment Methods for Catfish Ponds (Van Wyk, Masser, Heikes, and Killian)
- Financing Commercial Aquaculture Operations (Klinefelter and Clary)
- Construction, Operating Costs and Cash Flow Templates for Catfish (Food Fish) Production Systems (Clary)

2. PESCAT Toolkits contain all selected fact sheets, input forms, sample reports, and a brochure describing the program and ordering additional resources.

3. PESCAT software is a program written in Access and compiled so anyone with at least Windows 3.1 can run it. It contains user friendly forms for inputting data and reporting results. Considerable help is included within the program so the user can find information about PESCAT guidelines without referring to the Handbook. All data sheets and summary analysis forms are also available on Lotus™ spreadsheets.

The following products are available from the University of Arkansas at Pine Bluff Extension faculty at 1200 N. University Drive (or P.O. Box 4912), Pine Bluff, AR 71611; (501) 543-8537.

1. Brown, D.W., C.R. Engle, N.M. Stone, L.W. Dorman, and E.D. Park. 1995. Guidelines for production and financial performance analysis of commercial golden shiner production systems.

Cooperative Extension Program, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas.

2. Brown, D.W., C.R. Engle, N.M. Stone, L.W. Dorman, and E.D. Park. 1995. Guidelines for production and financial performance analysis of commercial goldfish production systems. Cooperative Extension Program, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas.

3. Brown, D.W., C.R. Engle, N.M. Stone, L.W. Dorman, and E.D. Park. 1995. Guidelines for production and financial performance analysis of commercial fathead minnow production systems. Cooperative Extension Program, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas.

4. Engle, C.R., N. Stone, L. Dorman, E. Park, and D. Brown. Under review. Standard production and financial performance analysis for baitfish (BAITSPECS): a test of its usefulness on Arkansas baitfish farms. Cooperative Extension Program, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas.
