

industry. If pyramid traps are used, the number of harvest days can be reduced from 5-6 days/week (100-120 days/season) to 3 days/week (50-60 days/season) with no apparent reduction in crawfish yield. Preliminary data indicate that this should reduce crawfish harvesting cost by 30-45%. The Louisiana Cooperative Extension Service is recommending this change in crawfish harvesting strategy to producers for the 1990-91 production season.

WORK PLANNED FOR NEXT YEAR:

The work plan for the next year by the various institutions is essentially the same as that outlined in the original proposal. Harvesting, loading, and grading research trials with channel catfish at Auburn University will concentrate on fingerling channel catfish. Clemson University will finish electrode evaluation and the response of catfish to electrical stimuli in the laboratory in the winter of 1990-91 and evaluation of field-sized electrically equipped catfish harvesting gear will begin in the spring and summer, 1991. Louisiana State University will conduct a crawfish harvesting and grading workshop and demonstration in spring 1991 and will film harvesting of baitfish, carp, gamefish, in Arkansas and Louisiana. Mississippi State University will be provided with production data from the channel catfish and crawfish harvesting components of this project for analysis and interpretation of the comparative economic benefits of alternate harvest methods compared to conventional methods. The University of Southwestern Louisiana will evaluate the following: use of the trawl in vegetated ponds; development of the most effective trawling strategy (location, time of day, pond type, etc.); comparison of the trawl system to conventional trapping strategies; and modification of the trawl configuration for use in different substrates.

PUBLICATIONS:

No publications or manuscripts have been issued. Production of a 20-minute educational video titled "Warmwater Fish: Harvesting, Handling, and Transporting" has begun. One extension publication, "Sorting and Grading Warmwater Fish", by Gary Jensen was prepared as part of the SRAC project "Preparation of Southern Regional Aquaculture Publications", and it is currently in press.

J. Develop a Statistical Data Collection System for Farm-raised Catfish and Other Aquaculture Products in the Southern Region

Annual Progress Report
For The Period
October 1 to September 30, 1990

COOPERATING INSTITUTIONS:

- Mississippi State University - John E. Waldrop
- Louisiana State University - Larry de la Bretonne, Ken J. Roberts and Gary Jensen
- Auburn University - John Jensen
- Arkansas Cooperative Extension Service - D. Leroy Gray
- Texas A&M University - James T. Davis
- University of Georgia - George W. Lewis
- Mt. Horticultural Crops Research Station, Fletcher, North Carolina - Jeffrey M. Hinshaw
- Langston University - Glen Gebhart
- Clemson University - Thomas E. Schwedler
- Florida Cooperative Extension Service - Tom Wellborn
- Tennessee Cooperative Extension Service - Tom Hill

Auburn University - Mike Masser
Virginia Polytech University
USDA/CSRS/ERS/SRS/NASS
Industry Representatives

ADMINISTRATIVE ADVISOR:

Verner G. Hurt, Director
Ms. Agric. & Forestry Exper. Station
Mississippi State, Mississippi

PROGRESS OF THE WORK AND PRINCIPAL ACCOMPLISHMENTS:

A meeting of the Steering Committee for Data Collection Systems met at Delta Processors, Indianola, Mississippi, on August 4, 1989. Those present were Sam Hinote, J. E. Waldrop, Fred Tyner, Larry de la Bretonne, V. G. Hurt, and C. G. Shepherd.

A general discussion was held regarding the need to establish protocol, method of data collection follow-up meetings, and identification of individuals recommended to assist with development of procedures to address objectives outlined in the Problem Statement developed earlier by this Steering Committee and subsequently approved by the SRAC Board of Directors.

Sam Hinote reviewed similar data they currently receive for catfish which includes a monthly processing report from NASS/USDA, Washington, D.C. Information is supplied by different processors and lacks consistency. Processors voluntarily submit information on a monthly basis, therefore, much information is lacking since not all processors participate. There was concern expressed about the degree of accuracy of information reported and whether there was any standardization of the data submitted.

There was a general feeling among the group that a national government agency

should be designated to collect data, primarily because some sources would not be willing to report sales, distribution, and similar data, etc., to private or possibly regional agencies. The need for consistency of data and for good definitions of the information requested by any survey was repeatedly stressed.

Mr. Hinote also indicated that the Office of the Mississippi Commissioner of Agriculture has started collecting some processing data, but this, too, is presently somewhat limited.

It is very important that the charge be made to the agencies designated to collect aquaculture data to adequately identify the specifics of the data needed by different segments of industry.

This Steering Committee needs to identify and summarize the types of information now available, the frequency of reporting, and the types of information needed. This summary should be distributed to committee members and others who will attend the next meeting.

The reports previously prepared by the Mississippi Cooperative Extension Service need to be reinstated. This information was submitted three times a year and included estimates of the number and size of (1) ponds in production, (2) ponds under construction, and (3) ponds being renovated at each of the reporting intervals, and an estimate of the number of acres involved in fingerlings and food fish. The group suggested it would be best to get this information from county agents and send it to one person in each state, perhaps the Extension Fishery Specialist. Thus, information from the states could come from the grassroots level, be compiled by each state CES, and then possibly be coordinated by a central reporting agency. It was mentioned that Marty Brunson (MCES) is presently trying

to reinstate this reporting system for Mississippi.

Following is a summary of sources now available:

1. Catfish Report--Mississippi only. Distributed by the Mississippi Agricultural Statistics Service (Dick Knight), Jackson, Mississippi.
2. Mississippi Weekly Processors' Report--distributed by Commissioner Jim Buck Ross' office.
3. Monthly Farm-Raised Processed Catfish Report--distributed by the Economics Research Service/National Agriculture Statistics Service, Rockville, Maryland.¹
4. The report already mentioned which was previously distributed by Dr. Wellborn three times a year.
5. Aquaculture Outlook--Situation and Outlook Report--distributed in October and updated in March. These were prepared by the USDA/Economic Research Service. It is uncertain as to whether this is a continuing effort.

Mr. Hinote identified the types of information needed by the industry at this time. These are:

1. Acreage and production statistics--what is happening in each state at the current time.

¹In May, 1988, a group from USDA/NASS/ERS visited the Mississippi catfish industry with Dick Knight and Harold Ishee of the Mississippi Agricultural Statistics Service. These were Bill Pratt, Doyle Fox, Ron Sitzman and Fred Hoff. When visiting with Dr. Shepherd, they expressed sincere interest in assisting with data collection for aquaculture.

These reports are needed in July and December of each year. They could be submitted to contact individuals in each state (Cooperative Extension Service) and then possibly coordinated, compiled and distributed on a regional level by an organization similar to Dick Knight's (NASS) and his counterparts in Mississippi. Information included in this category needs to be broken out by fingerlings, food fish, renovations, construction and hatcheries. Recreational and fee fishing acreages also need to be identified.

2. Catfish feed report--feed manufacturing information could be correlated with the fish production and processing reports needed to serve the industry. It was felt that this may need to be developed by the State Departments of Agriculture for effective, reliable and official reporting. Information is needed on the amount and types of feed being manufactured and distributed in the different states.

3. A state-by-state breakdown on the amount of fish processed and sold is needed. At the present time there is no true supply and demand picture. This information is urgently needed by the industry. The National Marine Fisheries Report was discussed. Catfish as a commodity is not identified in this report.

4. It was suggested that the poultry database model could possibly be modified and used as guidelines to develop a format for aquaculture. There is certainly a need to get a 300 million pound commodity such as catfish properly identified in any aquaculture statistical report.

The group felt it would be appropriate for Drs. Waldrop and de la Bretonne to check with sources distributing the information previously discussed and get a current update on exactly what presently is available. They should contact the state Statistical Reporting

Services, state Departments of Agriculture and Commerce, National Agriculture Statistical Service and USDA/ERS. They should also contact key Extension representatives in major states producing finfish (catfish, etc.) and crustaceans (crawfish, etc.). A meeting was scheduled for October 10, 1989, in Jackson, Mississippi, to discuss how the current data are collected and to identify additional types of information needed and recommend procedures to collect these data.

It was agreed that this Committee should develop a "model" data collection system for farm-raised catfish. Following model development, modifications, adaptations, and other improvements would be solicited from all interested parties. This "catfish" model should serve as a "suggested" approach for other aquacultural species.

Attending the October 10, 1989, meeting in Jackson, Mississippi were:

Verner Hurt - Director of MAFES and
Administrative Advisor of this task
force
C. G. Shepherd - Director of Southern
Regional Aquaculture Center
Larry de la Bretonne - Aquaculture
Specialist with the Louisiana
Cooperative Extension Service
John Waldrop - Agricultural Economics
Professor at MSU and Chairman of the
task force
Harold Ishee - Mississippi Agriculture
Statistics Service
Robbin O. Roark - National Aquacultural
Statistics Service--Livestock Branch
and in charge of aquaculture program
for NASS, Washington, D.C.
Don Bay - Director of the Estimates
Division of NASS, Washington, D.C.
Fred Tyner - Assistant Director of MAFES
Dick Knight - State Statistician for NASS in
Mississippi

Following a review of the history of the task force and a discussion of currently available information, the group agreed to proceed as a work group that would use the catfish industry as a model to determine data needs, identify agencies or individuals best qualified to collect it, estimate funding requirements and develop a plan to secure support for an expanded effort.

The representatives of the work group should include Research, Extension, National Agricultural Statistical Service, Mississippi Agricultural Statistical Service, Cooperative State Research Service, Southern Regional Aquaculture Center, the Feed Mills, Producers (fingerling and foodfish), Catfish Bargaining Association, Processors, and Economic Research Service.

It was agreed that should the effort need to be expanded to other centers, then the appropriate contact would be Meryl Broussard, Cooperative State Research Service.

Representatives of the Mississippi Agriculture Statistics Service and the National Agriculture Statistics Service were most cooperative and supportive of this effort and indicated their willingness to work with the task force to develop specific plans for both data collection and funding effort. The committee generally agreed that there was a need for development of a plan that would be national in scope that would provide consistent data across all political and other special interest subdivisions.

The Steering Committee reviewed the data currently collected and developed recommendations in three categories:

- (1) Catfish Production and Processing Data
- (2) Catfish Feed Data
- (3) Catfish Price-Quantity Data

The type of data needed, the source of this data, the appropriate agencies to collect the data have been identified along with the form and timeliness of publication. At this time the agency (NASS) is assessing the changes necessary and the new resources required to collect, analyze, and publish the needed data in a timely manner. This activity is expected to result in budget requirements for the data system.

After establishing a preliminary budget, the catfish model data collection system will be presented to the industry work group for refinement. At this point it should be available to other segments of aquaculture for their modifications, where needed, to meet any industry specific needs.

K. Preparation of Extension Publications on Avian Predator Control in Aquaculture Facilities

Annual Progress Report
For The Period
May 1, 1990 to September 30, 1990

COOPERATING INSTITUTIONS:

- James T. Davis - Texas Agricultural Extension Service
- Martin Brunson - Mississippi Cooperative Extension Service
- George Lewis - Georgia Cooperative Extension Service
- Frank Boyd - Mississippi APHIS/ADC/USDA
- Michael Hoy - Arkansas APHIS/ADC/USDA
- W. F. Stevens - Louisiana APHIS/ADC/USDA
- Gary Littauer - Mississippi APHIS/ADC/USDA
- Alvin Stickley - S&T Field Station APHIS/ADC/USDA

ADMINISTRATIVE ADVISOR:

Milo J. Shult, Associate Director
Texas Cooperative Extension Service
College Station, Texas

PROGRESS OF THE WORK AND PRINCIPAL ACCOMPLISHMENTS:

Production of the educational video has progressed very well under direction of Frank Boyd, Gary Littauer, and Martin Brunson. A shooting script is under review and a major portion of the camera footage has been completed. Because funding of the project was later than expected, the major emphasis has been on predators active during the summer months. The large flocks of cormorants that plague the aquaculturists during the fall and winter months will be photographed during the fall and winter months. At the present rate of accomplishments the video should be finished by the summer of 1991.

The Steering Committee and Work Group agreed that five fact sheets would be prepared. The fact sheet on identification and damage assessment by Alvin Stickley has been reviewed and is at the editor awaiting the necessary art work. The fact sheet on frightening devices by Gary Littauer has been reviewed, edited and is awaiting pictures before going out for final review. The fact sheet on strategies and cost estimates by Gary Littauer is in the initial review process. W. F. Stevens is preparing a fact sheet on regulations and assistance available. This is awaiting decision in Washington, D.C., on implementation of certain agreements and memoranda of understanding. Finally, a fact sheet on use of barriers and other passive devices by James T. Davis has been prepared and is undergoing peer review prior to going out to cooperators for their initial review. Barring unforeseen circumstances, our editor indicates all of these publications should be available early in 1991.