

IV. TERMINATION REPORTS

A. EDUCATIONAL MATERIALS FOR AQUACULTURISTS AND CONSUMERS

Termination Report
for the period
May 1, 1991 to August 31, 1994

FUNDING LEVEL:

Year 1	\$ 39,642
Year 2	\$ 59,000
Year 3	\$ 34,500
Total	\$133,142

PARTICIPANTS:

Texas Agricultural Extension Service (Lead Institution) - James T. Davis, Guy Fipps, Billy Higginbotham, Katheleen Ladewig, Bruce Lesikar, Joe T. Lock, Senae Schaer, Edna Smith, Greg Clary, Donna Logan

Texas Agricultural Experiment Station - Delbert Gatlin

Louisiana Cooperative Extension Service - Fred E. Baker, Larry de la Bretonne, Michael Moody, David Bankston, Wendell Lorio, Jimmy Avery, Greg Lutz

Oklahoma Cooperative Extension Service - Marley Beem

Mississippi Cooperative Extension Service - Martin Brunson

University of Florida - Charles Cichra, Frank Chapman, Ruth Francis-Floyd, Roger Rottman, Jerome Shireman, P. A. Reed

Kentucky State University - Robert D. Burrow, William W. Urts

Ekk Will Tropical Fish Farm (Florida) - Tim Hennessey

Tennessee Cooperative Extension Service - Thomas K. Hill

North Carolina Cooperative Extension Service - Jeffrey Hinshaw, Tom Losordo

Alabama Cooperative Extension Service - John Jensen, Mike Masser

Georgia Cooperative Extension Service - George Lewis, George A. Schuler, Ronnie Gilbert, Robert Tyson, P. T. Tybor

Virgin Islands Agriculture Experiment Station - James Rakocy

Mississippi Agriculture & Forestry Experiment Station - Craig Tucker, Martine van der Ploeg, David Crosby

South Carolina Cooperative Extension Service - Jack Whetstone

ADMINISTRATIVE ADVISOR:

Milo J. Shult
Vice President for Agriculture
University of Arkansas
Little Rock, Arkansas

PROJECT OBJECTIVES:

1. Prepare and distribute publications needed by production aquaculturists to keep abreast of the latest research and development information available.

2. Prepare and distribute processing and marketing information that will enhance the market for aquacultural commodities.

3. Prepare and distribute information for retailers and consumers which will enhance the sales of fish and shellfish products grown by aquaculturists.

REASON FOR TERMINATION:

Completion of objectives.

ANTICIPATED BENEFITS:

The SRAC fact sheets have become the standard for practical aquaculture publications in the United States. They are also in wide demand throughout the world. This is a direct measure of their acceptability and usefulness to producers and scientists. The numbers that have been distributed exceed 200,000 to date. A sample of County Extension Agents in three states indicates that most producers utilize the materials on a regular basis.

PRINCIPAL ACCOMPLISHMENTS:

Preparing, editing, reproducing and distributing 41 fact sheets and four videos during the period of the project to date.

IMPACTS:

- County Extension agents using SRAC educational materials in their offices can provide definitive answers to most production problems.
- Processors now have another ready reference on how to improve their product safety record. In addition a consumer can secure information about the wholesomeness and safety of a product before purchase.
- Specialists report a marked decrease in their workload as they can now provide written information and spend their time more fruitfully working with actual producers who require immediate attention to specific problems.

- Many individuals request SRAC materials to obtain information relative to beginning some type of aquaculture endeavor. After learning about the challenges and work involved, at least 80 percent of the people requesting information decide not to pursue such an endeavor. Estimated average savings of expenses and lost investments are approximately \$30,000 per inquiry.
- Aquaculture producers looking for an alternate crop have been able to assess the market and the requirements of another species. They can then decide, based on scientific studies, whether their installation would meet the animal's requirements.

RECOMMENDED FOLLOW-UP ACTIONS:

Between this project and a previous one there have been over 100 fact sheets and 15 videos completed. These need to be placed in a readily available computer-integrated library. The format must be of the maximum benefit to both producers and research scientists.

There are still several areas that have not been addressed in the publications to date. These should be carefully considered and those with the widest expected usage should be prepared and distributed.

A better method needs to be established to move research information gathered by other SRAC projects into the public sector. This may involve a single location to be responsible for preparation and distribution of these publications.

PUBLICATIONS:

Beem, Marley. 1991. Aquaculture: Realities and potentials when getting started. (SRAC No. 441)

Brunson, Martin W., C. Greg Lutz and Robert M. Durborow. 1994. Algae blooms in commercial fish production ponds. (SRAC No. 466)

Davis, James T. 1993. Survey of aquaculture effluent permitting and 1993 standards in the South. (SRAC No. 465)

Davis, James T., D. M. Gatlin, III, and Max R. Alleger. 1993. Channel catfish: Dietary effects on body composition and storage quality. (SRAC No. 186)

Davis, James T., D. M. Gatlin, III, and Max R. Alleger. 1993. Channel catfish production: Impacts of diet composition and feeding practices. (SRAC No. 187)

Durborow, Robert M., David M. Crosby and Martin W. Brunson. 1992. Nitrite in fish ponds. (SRAC No. 462)

Durborow, Robert M., David M. Crosby and Martin W. Brunson. 1992. Ammonia in fish ponds. SRAC No. 463)

Higginbotham, Billy J. and Greg M. Clary. 1993. Development and management of fishing leases. (SRAC No. 481)

Jensen, Gary L. and Martin W. Brunson. 1992. Harvesting warmwater fish. (SRAC No. 394)

Kouka, Pierre-Justin and Carole R. Engle. 1994. Cost of alternative effluent treatments for catfish production. (SRAC No. 467)

Ladewig, Katherine F. and Donna W. Logan. 1993. You can do catfish (SRAC No. 501)

Losordo, Thomas M., Michael P. Masser and James E. Rakocy. 1992. Recirculating aquaculture tank production systems - An overview of critical considerations. (SRAC No. 451)

Losordo, Thomas M., James E. Rakocy and Michael P. Masser. 1992. Recirculating aquaculture tank production systems: Component options. (SRAC No. 453)

Masser, Michael P., Charles Cichra and Ronnie Gilbert. 1993. Fee-fishing ponds: Management of fish and water quality. (SRAC No. 480)

Masser, Michael P. and John W. Jensen. 1991. Calculating treatments for ponds and tanks. (SRAC No. 410)

Masser, Michael P., James E. Rakocy and Thomas M. Losordo. 1992. Recirculating aquaculture tank production systems: Management of recirculating systems. (SRAC No. 452)

Rakocy, James E., Thomas M. Losordo and Michael P. Masser. 1992. Recirculating aquaculture tank production systems: Integrating fish and plant cultures. (SRAC No. 454)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Introduction to hormone-induced spawning of fish. (SRAC No. 421)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Capturing, handling, transporting, injecting, and holding brood fish for induced spawning. (SRAC No. 422)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Determining sexual maturity of broodstock for induced spawning of fish. (SRAC No. 423)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Hormonal control of reproduction in fish for induced spawning. (SRAC No. 424)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Hormone preparation, dosage calculation, and injection techniques for induced spawning of fish. (SRAC No. 425)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Techniques for taking and fertilizing the spawn of fish. (SRAC No. 426)

Rottman, R. W., J. V. Shireman and F. A. Chapman. 1991. Induction and verification of triploidy in fish. (SRAC No. 427)

Rottman, R. W., Ruth Francis-Floyd, P. A. Reed and R. Durborow. 1992. Submitting a sample for fish kill investigation. (SRAC No. 472)

Rottman, R. W., Ruth Francis-Floyd, P. A. Reed and R. Durborow. 1992. Use of medicated feed in food fish. (SRAC No. 473)

Rottman, R. W., Ruth Francis-Floyd, P. A. Reed and R. Durborow. 1992. The role of stress in fish disease. (SRAC No. 474)

Schuler, George A. and P. T. Tybor. 1993. Developing a HACCP program for the catfish industry. (SRAC No. 490)

Tucker, Craig S. 1991. Water quantity and quality requirements for channel catfish hatcheries. (SRAC No. 461)

van der Ploeg, Martine. 1991. Testing flavor quality of preharvest channel catfish. (SRAC No. 431)

Wurts, William A. and Robert M. Durborow. 1992. Interactions of hardness, alkalinity, pH and carbon dioxide. (SRAC No. 464)

VIDEOS:

Davis, James T. Channel catfish spawning and hatchery management.

Ladewig, Katheleen. Can do catfish.

Ladewig, Katheleen. Crawfish: Always in great taste!

Ladewig, Katheleen. Rainbow trout.

Moody, Michael. Aquaculture processing safety and quality.

MANUSCRIPTS BEING REVIEWED:

Bankston, J. David, Jr. and Fred Eugene Baker. Open channel flow in aquaculture.

Bankston, J. David, Jr. and Fred Eugene Baker. Selecting the proper pump.

Bankston, J. David, Jr. and Fred Eugene Baker. Power for aquaculture.

Bankston, J. David, Jr. and Fred Eugene Baker. Piping systems.

Cichra, Charles E., Michael P. Masser and Ronnie J. Gilbert. Fee Fishing: An introduction (SRAC No. 479)

Cichra, C. E., M. P. Masser and Ronnie J. Gilbert. Fee-fishing: Location, site development and other considerations. (SRAC No. 482)

Ladewig, Katheleen F. Rainbow trout.

Lorio, Wendell J. and Sandra Malone. Hard clam culture (*Mercenaria mercenaria*)

Lorio, Wendell J. and Sandra Malone. The cultivation of American oyster (*Crassostrea virginica*)

OTHER SOURCES OF SUPPORT:

Alabama Cooperative Extension Service
 University of Arkansas
 University of Florida
 University of Georgia
 Kentucky State University
 Louisiana Cooperative Extension Service
 Mississippi Agricultural & Forestry Experiment Station
 Mississippi Cooperative Extension Service
 North Carolina Cooperative Extension Service
 Oklahoma Cooperative Extension Service
 South Carolina Cooperative Extension Service
 Tennessee Cooperative Extension Service
 Texas Agricultural Extension Service
 Virgin Islands Agricultural Experiment Station

SUPPORT:

YEAR	SRAC FUNDING	OTHER SUPPORT				TOTAL OTHER SUPPORT	TOTAL SRAC+ OTHER SUPPORT
		UNIVERSITY	INDUSTRY	OTHER FEDERAL	OTHER		
1	39,642	75,631				75,631	115,273
2	59,000	63,169				69,169	122,169
3	34,500	32,250				32,250	66,750
Total	133,142	171,050				171,050	304,192