## SOUTHERN REGIONAL AOUACULTURE CENTER

# PUBLICATIONS, VIDEOS AND COMPUTER SOFTWARE

# **Reporting Period**

March 1, 1995 - August 31, 2013

# **Funding Level**

Year 1	\$ 50,000
Year 2	60,948
Year 3	45,900
Year 4	60,500
Year 5	67,000
Year 6	77,358
Year 7	82,205
Year 8	77,384
Year 9	60,466
Year 10	50,896
Year 11	45,723
Year 12	63,764
Year 13	80,106
Year 14	
Year 15	73,982
Year 16	62,124
Year 17	74,922
Year 18	68,664
Total	\$ 1,180,014

**Participants** Texas A&M University System serves as Lead Institution, with Dr. Mike Masser as Project Leader. Participants in this project include authors and co-authors from all states in the region as shown in the listing of publications.

## PROJECT OBJECTIVES

- 1. Review and revise, as necessary, SRAC Extension fact sheets, videos, or computer software.
- 2. Prepare new Extension fact sheets, species profiles, videos, or computer software.
- 3. Prepare Extension materials for regional or national distribution generated as part of SRAC research projects.

4. Prepare Final Project Summaries of completed SRAC research projects at such time as all data and conclusions are available and all publications resulting from the project have been published.

### **ANTICIPATED BENEFITS**

The direct benefit from this project to the aquaculture industry is the widespread and ready availability of detailed information on production and marketing of aquacultural products, and production of informational and educational resources to prepare current students and future generations to enter the aquaculture industries. SRAC fact sheets, videos, and other publications are distributed worldwide to a diverse clientele. All SRAC publications are based on research conducted within the Southern Region or in immediately surrounding areas with immediate potential impact to the industry within the region.

**Extension Specialists.** When this project was initiated, fewer than half the states had educational materials covering the major aquacultural species in their state. The concept of using the SRAC program to produce timely, high-quality educational materials is based upon the benefits of centralizing the production process while using a region-wide pool of expertise to develop materials. Distribution is then decentralized through the nationwide network of Extension Specialists and County Agents including the National eXtension Innitiative. This process assures an efficient publication process that makes use of the best available talent in specific subject areas. The result is widespread availability of high-quality educational materials for scientists, educators, producers, students, and the general public.

**Educators.** Many high schools, colleges, and universities in the United States and around the world, use SRAC technical fact sheets as reference materials in aquaculture and fisheries courses. Educational institutions use SRAC extension materials in the classroom to make students aware of aquaculture production and associated trades as a possible vocation.

**Consumers.** Information is readily available for consumers who are seeking background information on aquaculture, the nutritional benefits of seafood, and the nutritional value of aquacultured products.

**Producers.** Information on the use of therapeutants, pesticides, methods of calculating treatment rates, and possible alternative crops and marketing strategies is in constant demand by aquaculturists.

Videos and on-line presentations that demonstrate such techniques are a ready source of "how-to" information.

**Potential investors.** Detailed information on production and marketing constraints and ways to alleviate or manage those constraints are particularly helpful to people making decisions about entering the aquaculture business. Economic information is used by lending agencies and potential investors, as well as established producers who use the information to help make day-to-day decisions on farm management.

**Internet access.** Availability of SRAC publications via the Internet makes access faster and easier, facilitates searching for needed information, and reduces storage space requirements for printed documents.

### PROGRESS AND PRINCIPAL ACCOMPLISHMENTS

During this current project year, 12 new fact sheets, one DVD, and one mass media presentation were completed. The AquaPlant web site was also updated. All publications have been distributed electronically throughout the Southern Region and to interested Extension Specialists in other regions. Nineteen fact sheets and three mass media presentations are in some stage of writing, production, or revision. Three fact sheets and two mass media presentations currently do not have drafts submitted; all others have been received. Research funding from universities within the region, as well as funding from private sources, has been used to support the work on which the fact sheets are based.

#### WORK PLANNED

The next project year is currently in development and specific publications have been established. The SRAC Publications Steering Committee meets during the annual IAC/TC meeting to develop the following year's project. Subjects and titles identified by the Publications Steering Committee for publications in the next project year are:

SRAC Publication Number 475 – Proliferative Gill Disease (Hamburger Gill) (Revision)

SRAC Publication Number 477 – ESC – Enteric Septicemia of Catfish (Revision)

SRAC Publication Number 474 – The Role of Stress in Fish Disease (Revision)

SRAC Publication Number 472 – Submitting a Sample for Fish Kill Investigation (Revision)

SRAC Publication Number 0230 - Alligator Production: An Introduction (Revision)

Principles of Small Scale Aquaponics

Feeds and Feeding of Hybrid Striped Bass

**Economics of Commercial Aquaponics** 

Aquatic Herbicide Mode of Action

Consumer Information Series, Oysters

Consumer Information Series, Clams

#### **IMPACTS**

This is a highly productive project with significant regional, national, and international impact. Fact sheets and videos are requested and used by clientele in all 50 states on a regular basis. Fact sheets generated within the Southern Region are also widely distributed by RACs and extension personnel in other regions. In addition to direct requests for printed material, fact sheets and other informational materials are accessed daily from the SRAC web site by people searching for technical information. In the period from September 2012 through August 2013, 26,021visitors with 18,089 unique visitors (9% increases from previous year) came to the SRAC Publications web site and accessed 106,042 pages. These visitors came from 164 countries/territories.

Since we started using Google analytics on the SRAC website on May 27, 2009, we have had 554,116 page views. During that same time we have had 1,760,638 downloads that were never reported. Since the SRAC.tamu.edu website went live in 2005, we have had a total of 2,169,282 downloads. Since the fact sheets are also accessible through numerous other university research and extension web sites, the total usage and impact is undoubtedly several times greater. The AQUAPLANT web site from September 2012 through August 2013 had 300,763 visitors with 248,756 unique visitors that accessed 1,035,786 pages. These visitors came from 191 countries/territories.

Publications and videos produced by SRAC are increasingly used in educating high school and college students about aquaculture. In recent years there has been a rapid expansion of aquaculture curricula in high schools. These programs heavily utilize our publications and videos for educational purposes but usage is impossible to measure because many people access the information from many other Internet sites. Aquaculture and fisheries courses taught at many colleges and universities also use SRAC technical fact sheets as part of their course reference material. Another important impact is the education of local, state, and federal regulators about the aquaculture industry. This should be a positive influence toward making aquaculturists better understood and the development of more enlightened regulations.

The impact on consumers of aquaculture products is also likely significant, although it has not been quantified. Consumers are primarily interested in a wholesome, safe, and inexpensive product, and it has been reported that the consumer-oriented fact sheets and videos developed within SRAC have generated more interest than the producer-directed materials. The fact sheets are in demand in both the English and Spanish versions and, as more information becomes available, extension materials on food safety will be in increased demand by health conscious consumers.

### PUBLICATIONS, MANUSCRIPTS OR PAPERS PRESENTED

### Fact Sheets Completed (9/1/12 - 8/31/2013)

- Consumer Information Series Freshwater Prawns, by James H. Tidwell, SRAC Publication Number 7303
- Consumer Information Series Hybrid Striped Bass, by Adriane O. Gill and Harry V. Daniels, SRAC Publication Number 7302
- Aquatic Weed Management, by Michael P. Masser, SRAC Publication Number 361 (Revision) Piping Systems, by J. David Bankston Jr. and Eugene Baker, SRAC Publication Number 373 (Revision)
- Nutritional Aspects of Seafood, by Elizabeth Reames, SRAC Publication Number 7300 Prebiotics and Probiotics: Definitions and Applications, by Delbert M. Gatlin, III and Anjelica Peredo, SRAC Publication Number 4711
- Sorting and Grading Warm Water Fish, by Anita Kelly and David Heikes, SRAC Publication Number 391 (Revision)
- A Spreadsheet Tool for the Economic Analysis of a Recirculation Tank System, by Matthew Parker, Dennis DeLong, Rebbecca D. Dunning, Thomas M. Losordo and Alex O. Hobbs, SRAC Publication Number 456 (Revision)

- Biofloc Production Systems for Aquaculture, by John A. Hargreaves, SRAC Publication Number 4503
- Feed Ingredients and Feeds for Channel Catfish, by Menghe H. Li and Edwin H. Robinson, SRAC Publication Number 1806
- *Interpretation of Water Analysis Reports for Fish Culture*, by Nathan Stone, Jay L. Shelton, Brian E. Haggard, and Hugh Thomforde, SRAC Publication Number 4606
- Liming Ponds for Aquaculture, by William A. Wurts and Michael P. Masser, SRAC Publication Number 4100 (revision)

## **DVDs Completed (9/1/12 - 8/31/2013)**

Safety for Fish Farm Workers, by Nathan Stone

# Mass Media Presentations Completed (9/1/12 - 8/31/2013)

Introduction to Aquaculture, by David Cline

## **Manuscripts in Review**

- Algae for Biofuels Production and Conversion, by Matthew W. Veal, Amy M. Grunden, Mari S. Chinn and Kevin R. Caffrey, SRAC Publication Number 4309
- Algae for Biofuels Economic and Environmental Costs, by Matthew W. Veal, Kevin R. Caffrey, Mari S. Chinn and Amy M. Grunden, SRAC Publication Number 4310
- Medicated Feed for Food Fish, by Anita M. Kelly, SRAC Publication Number 473 (Revision)
- Recirculation Aquaculture Tank Production Systems A Review of Current Design Practice, by Ronald Malone, SRAC Publication Number 453 (Revision)
- Comparison of Costs of Different Hybrid Striped Bass Production Systems in Ponds, by Siddhartha Dasgupta and Kenneth R. Thompson, SRAC Publication Number 3000 (Revision)
- Toxicities of Agricultural Pesticides to Selected Aquatic Organisms, by Chuck Mischke and Jimmy Avery, SRAC 4000 (Revision)
- Off-Bottom Culture of Oysters in the Gulf of Mexico, by William C. Walton, Julie E. Davis, and John E. Supan, SRAC Publication Number 4308
- Intensive (Non-Pond) Culture of gulf Killifish, by Chris Green, SRAC Publication Number 1202 Biosecurity in Aquaculture, Part 3: Ponds, by Roy P.E. Yanong, SRAC Publication Number XXXX
- Consumer Information Series Farm-Raised Channel Catfish, by Jimmy Avery and Chuck Mischke, SRAC Publication Number 7304
- Species Profile Sea Urchins, by Hugh Hammer, SRAC Publication Number XXXX
- Aquatic Weed Management, by Lyn Gettys, SRAC Publication Number 360 (Revision)
- Aquaculture Realities and Potentials When Getting Started, by Marley Beem, SRAC Publication Number 441 (Revision)
- Small-Scale, On-Farm Processing, by Angela Caporelli, SRAC Publication Number 442 (Revision)
- Costs of Small Scale Catfish Production, by Carole Engle and Nathan Stone, SRAC Publication Number 1800 (Revision)

An Indoor Hatchery Method for Fathead Minnows, by Nathan Stone.

**On-going project:** Updating of the AQUAPLANT web site on aquatic weed management – Todd Sink

