## PUBLICATIONS, VIDEOS AND COMPUTER SOFTWARE

# **Reporting Period**

March 1, 1995 - August 31, 2014

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| 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 | 78,072       |
| Year 15 | 73,982       |
| Year 16 | 62,124       |
| Year 17 | 52,190       |
| Year 18 | 45,774       |
| Total   | \$ 1,134,392 |
|         |              |

**Participants** Texas A&M University System serves as Lead Institution, with Dr. Todd Sink 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

- Objective 1. Review and revise, as necessary, SRAC Extension fact sheets, videos, or computer software.
- Objective 2. Prepare new Extension fact sheets, species profiles, videos, or computer software.
- Objective 3. Prepare Extension materials for regional or national distribution generated as part of SRAC research projects.
- Objective 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 and videos 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, 16 new fact sheets and 2 web presentations 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. All publications and videos for the project year have been completed. 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 230 – Introduction to Alligator Production (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)

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, web presentations, 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. Fact sheets, web presentations, and other informational materials are accessed daily from the SRAC website by people searching for technical information.

In the period from September 2013 through August 2014,

- 148,493 unique visitors accessed the SRAC Publications website
- SRAC Publications website visitors viewed or downloaded SRAC Fact Sheets or Presentations 498,415 times
- SRAC Publications website visitors came from 168 countries/territories
- Because the fact sheets are also accessible through numerous other university research and Extension websites, the total usage and impact is undoubtedly several times greater
- SRAC videos from several sources were viewed on YouTube 330,211 times
- The AquaPlant website, created with partial SRAC funding, had 285,122 visitors
- AquaPlant visitors accessed 1,224,410 pages

• AquaPlant website visitors came from 209 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 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 impact is difficult to measure but feedback from personnel in two states indicates that the fact sheets are recommended reading for all new employees dealing with aquaculture water quality, exotic species, and other permitting duties. 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 (9/1/13 - 8/31/2014)

Avery, J. and C. Mischke. 2013. Farm-Raised Channel Catfish. SRAC Publication No. 7304. 2 pages.

Beem, M. 2014. Aquaculture: Realities and Potentials When Getting Started. SRAC Publication No. 441 (R), 10 pages.

Caporelli, A. and A.M. Lazur. 2014. Small-Scale, On-Farm Fish Processing. SRAC Publication No. 442 (R), 5 pages.

Dasgupta, S. and K.R. Thompson. 2013. Comparison of Costs of Different Hybrid Striped Bass Production Systems in Ponds. SRAC Publication No. 3000 (R), 9 pages.

Engle, C.R. and N. Stone. 2014. Costs of Small-Scale Catfish Production for Direct Sales. SRAC Publication No. 1800 (R), 7 pages.

Gettys, L.A. 2014. Aquatic Weed Management: Control Methods. SRAC Publication No. 360, 9 pages.

Green, C. 2013. Intensive (Non-pond) Culture of Gulf Killifish. SRAC Publication No. 1202, 8 pages.

Kelly, A. and B. Baumhoer. 2014. Species Profile: Hybrid Crappie. SRAC Publication No. 7212, 5 pages.

Malone, R. 2013. Recirculating Aquaculture Tank Production Systems: A Review of Current Design Practice. SRAC Publication No. 453 (R), 12 pages.

Mischke, C. and J. Avery. 2013. Toxicities of Agricultural Pesticides to Selected Aquatic Organisms. SRAC Publication No. 4600 (R), 9 pages.

Stone, N. 2014. An Indoor Hatching and Intensive Rearing Method for Fathead Minnows. SRAC Publication No. 1203, 8 pages.

Supan, J. 2014. High-Density Rearing of Oyster Larvae in Flow-Through Systems. SRAC Publication No. 4311, 6 pages.

Veal, M.W., K.R. Caffrey, M.S. Chinn, and A.M. Grunden. 2013. Algae for Biofuels – Economic and Environmental Costs. SRAC Publication No. 4310, 8 pages.

Veal, M.W., M.S. Chinn, A.M. Grunden, and K.R. Caffrey. 2013. Algae for Biofuels – Production and Conversion. SRAC Publication No. 4309, 9 pages.

Walton, W.C., J.E. Davis, and J.E. Supan. 2013. Off-Bottom Culture of Oysters in the Gulf of Mexico. SRAC Publication No. 4308, 6 pages.

Yanong, R.P.E. 2013. Biosecurity in Aquaculture, Part 3: Ponds. SRAC Publication No. 4712, 11 pages.

# Web Presentations Completed (9/1/13 - 8/31/2014)

Cline, D. 2014. Aquaculture in the Classroom. SRAC Presentation No. 006, 15 minutes 10 seconds.

Cline, D. 2014. Advanced Aquaculture Systems – Split Ponds. SRAC Presentation No. 007, 8 minutes 41 seconds.

## **RESULTS AT A GLANCE**

During this current project year, the PVCS project completed 16 new fact sheets and 2 web presentations. Additionally, SRAC Fact Sheet, Presentation, and Video utilization increased dramatically with 148,493 visitors who viewed or downloaded 498,415 SRAC Fact Sheets from the SRAC Publications website. SRAC Publications website visitors came from 168 countries or territories. SRAC videos from several sources were viewed on YouTube 330,211 times during

the current reporting period. The AquaPlant website had 285,122 visitors from 209 countries or territories that accessed 1,224,410 pages.