



THE BIVALVE BULLETIN

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Risk Management in Clam Farming

INSIDE THIS ISSUE:

Risk Management	1
Clam Crop Insurance	1
2004 Insurance Changes	2
Farm Service Agency	2
Industry Meeting	3
Massachusetts Spotlight	4
Washing Program	5
Veneridae?	5
BMP Display	5
Upcoming Meetings	6

Risk has always been a part of agriculture. But farming in America today has changed dramatically over the past few years. Increasingly, farmers are learning to deal with new risks, such as global competition, changes in the marketing of products, and more volatile weather patterns. To be successful, farmers must now look at a knowledgeable approach to risk management as part of their business plan. A growing interest in agricultural risk management is encouraging the development of new tools and services. For an excellent introduction to this topic, visit the U.S. Department of Agriculture (USDA), Risk Management Agency's (RMA) website at www.rma.usda.gov/pubs/1997/irm_intr.html.

A primary source of risks is production. One management strategy to lower yield risks is through the purchase of crop insurance. This transfers risk from the producer to another for a price – the insurance premium. Government policy makers are placing greater emphasis on insurance programs as opposed to other forms of aid. Federally subsidized crop insurance is currently available for over 76 crops with clam farmers among the first aquaculturists to be eligible. This newsletter issue provides an

update on the pilot clam crop insurance program and other USDA crop assistance programs. Diversification, including different crops, end points or income sources, is another effective way to reduce production risks.

Understanding marketing risks involves information, attitude, and skill. An analysis of supply and demand is important in developing a marketing plan. Commodity markets, such as the clam market, respond decisively to these projections. Both a clam farmer and wholesaler must also be aware of respective break-even prices and market prices received in all growing areas. There are many pricing strategies employed in agriculture, which to date have had little application in shellfish culture. In addition to storage, cash sales and direct sales, there are a variety of contract options that can be used.

To assist farmers in risk management, the USDA RMA invests in educational programs. This year the UF Shellfish Aquaculture Extension Program and the FL Department of Agriculture and Consumer Services have entered into partnerships with RMA to look at several issues affecting the clam farming industry. See Page 3 for details on an upcoming industry meeting in which these topics will be addressed.

Pilot Clam Crop Insurance Program Extended

The cultivated clam crop insurance program has been under evaluation in 4 Florida counties and 3 other states since 2000. During this 4-year pilot phase, over \$8 million in indemnities, or loss payments, have been made to Florida growers. The USDA Risk Management Agency (RMA), the federal agency that develops and maintains these programs, can determine if a particular program is actuarially sound, or economically effective, by looking at loss ratios (determined by dividing loss payments by the program premiums). In Florida, loss ratios for the clam program have been very high, ranging from 2.67 in 2000 to 2.39 in 2002. By comparison, loss ratios for most crops are around 1 to 1.4. One of the risks associated with crop insurance is that of "moral hazard." Many industry members believe that abuse and misuse of this program have affected the market price structure for Florida clams and have suggested the program be discontinued. This year RMA's compliance section took a closer look and recommended suspension of the program in Florida. Instead, the agency's Board of Directors approved on September 2 to continue the program but with significant changes to policy provisions and actuarials. Further, premium rates will be increased, doubling for one of the insured clam sizes. Many growers finding these changes too stringent and rates too high, may decide not to apply for crop year 2004. A recommendation would be to consider applying for the minimal level of coverage. Catastrophic coverage is available for a fee of \$100. Remember a grower is ineligible for other crop assistance programs (see page 2 for a review of the USDA Farm Service Agency's programs), if crop insurance is available in their area. The next page provides a summary of the pilot program changes to be implemented next year. Contact your insurance agent for further information. **Sales closing date is November 30, 2003.**

Pilot Clam Insurance Program Changes for Crop Year 2004

New Clam Stages – In previous years, the policy divided clams into two age or size groups—field nursery and growout. The policy now defines different stages of clams. For example, a Stage 2 clam is from 10 mm in shell length (SL) to less than 7/8" in shell width (SW), and a Stage 3 clam is between 7/8" and 1 1/8" SW. Crop inventory values and loss payments will be based on different stages.

Nursery Seed Not Covered – Since Florida growers routinely plant nursery bags on their leases, coverage of nursery seed, defined as a clam between 5 and 10 mm SL, was included in the policy from the start. Growers in other participating states never had this option. Unfortunately, in a crop value plan problems related to having differently valued clam sizes on one lease were realized early on in the program. For example, a claim may be approved for dead seed in nursery bags due to an insurable loss but, most likely, a payment would not occur if clams in growout bags on the same lease were not affected by the event. As a result, many growers began to plant their nursery seed on other leases or create fictitious sub-leases, resulting in a change of culture practices. It is not the intent of a crop insurance program to cause growers to alter how they do things. Adding a separate policy for nursery seed in which a loss payment would be made for the cost to replant seed, not the value of the seed, was not approved for 2004. Consequently, nursery seed will not be covered next year. However, this size clam will be eligible for catastrophic coverage through a program (NAP) administered by USDA Farm Service Agency (see below).

Causes of Loss Redefined – Definitions of certain insurable causes of loss have been modified to be more specific to an actual event. For example, both decrease in salinity (note increase in salinity is no longer covered) and storm surge must be associated with a verified weather event.

Lease Division – Many growers with multiple leases or parcels in the same county have been able to insure these separately in the past. So if a loss occurred in one area, and not another, the value of the undamaged plants would not affect the other. Now to have separate coverage, the leases must be located in different high density lease areas or the leases must be considered non-contiguous.

Grower Experience – To be eligible for coverage, growers must now have prior experience. Specifically, a grower must have commercially grown clams in at least 3 out of the 5 previous years. New growers will be eligible for catastrophic coverage through the USDA Farm Service Agency.

Reporting Requirements – Insured growers must now report all clams on their lease, even those belonging to another grower, sub-leaseholder, or authorized user. The insured must also provide a map of their lease detailing where various clam plants are located. This will be turned in to the insurance agent at the first of the crop year with the inventory report. The map must be revised and submitted to

the agent quarterly. In addition, copies of all sales receipts for seed must be provided to the agent within 10 days of the purchase.

Tagging Requirements – Growout bags planted after the sales closing date of November 30, 2003 must be tagged with the owner's name and aquaculture certification (AQ) number. This requirement was encouraged by reinsured companies involved in administering the clam program to help their loss adjusters properly identify the insured's crop. The tag must be able to last with legible information for the duration the bag is on the lease. Tag suggestions include a plastic marker used by the horticultural industry to identify plants. These are cheap (less than a penny per bag) and can be written on with a permanent marker prior to placing inside a bag. Polyurethane cattle ear tags would be more expensive (15 cents per bag) but more durable and could be applied outside the bag. Another option is a stainless steel band used to mark crab traps. The engraved band can be crimped onto the seam of a bag. Impression tags, which can be embossed using a pen or pencil, may work. *For more information on possible tagging methods, contact the Shellfish Aquaculture Extension Office.*

Survival Rates for Stage 2 and 3 clams will be 70%, the same as it has been for clams in growout bags since the program started. If clams are stocked in growout bags at a density greater than 75 per square foot, or 1200 per 16 ft² bag, survival rates will drop to 50%. Growers' production records maintained for at least 3 years may also be used to determine survival. In addition, a 50% survival rate will be applied to clams harvested and then replanted onto the lease.

Prices defined in the actuarial reflect the drop in dockside prices experienced by growers since 2001. The prices are based on the various stages with Stage 2 clams valued at 4.5 cents and Stage 3 clams at 6.37 cents. Prices in eligible counties do not differ.



Noninsured Crop Disaster Assistance Program, or NAP

This program provides financial assistance to eligible growers affected by natural disasters. A grower is not eligible for NAP if crop insurance is offered in their county. An application must be filed annually by the sales closing date. A service fee of \$100 is charged per crop. NAP provides catastrophic coverage for up to 50% of the crop value at 55% of the market value.

Crop Disaster Program, or CDP

This special program, provided for by the Agricultural Assistance Act of 2003, reimburses producers for qualifying losses due to damaging weather or related conditions. CDP is available to clam growers who received loss payments in either the crop insurance or NAP programs during the 2001 and 2002 crop years. CDP sign-up began in June.

Contact your local FAS office to obtain more information on these programs or to apply. Call the Shellfish Aquaculture Extension Office to find out where your FAS office is located.

ANNOUNCING

Annual Hard Clam Culture Industry Meeting

**Wednesday
November 5,
2003**

**Ramada Inn
Conference
Center,
Ocala**

Details on back

SPONSORS

**USDA
Risk Management Agency**

**University of Florida
Shellfish Aquaculture
Extension Program**

Florida Sea Grant Program

**FL Department of Agriculture
and Consumer Services,
Bureau of Seafood and
Aquaculture Marketing**

The following sessions present information and educational materials developed in partnership with the USDA Risk Management Agency under their Targeted Commodity Partnerships for Risk Management Education Program.

Organizational Structures and Strategies

Session Moderator: Leslie Sturmer, UF Shellfish Extension Program

Survey results of successful agricultural and aquacultural organizations
Amanda Ruth, UF Agricultural Education and Communication Dept.

How to organize, create revenue and provide services for your industry
Panel discussion with Alan Pierce, FL Fruit and Vegetable Association;
Chuck Smith, FL Poultry Federation; and others (TBA)

Marketing Training for FL Clam Farmers

Session Moderator: Barbera Turnbull, Department of Agriculture and Consumer Services (DACS), Bureau of Seafood and Aquaculture Marketing

Clam market research on potential buyer preferences:

Focus group results and recommendations

Dr. Phillip Downs, Kerr & Downs Research, FSU School of Business

10 secrets to increasing business profitability

Dr. Jerome Osteryoung, Jim Moran Institute for Global Entrepreneurship,
FSU School of Business

How to reach the restaurant markets

Charles Riley, VP & Purchasing Director, Hooters Management Corp.

Industry Updates

2002-3 DACS Clam Marketing Campaign, John Easley

2003 Interstate Shellfish Sanitation Conference, Dan Leonard

2004 USDA RMA Pilot Clam Crop Insurance Program, Paul Waldon

And More....



Clam Industry Meeting Details

Meeting schedule

9:30 AM Coffee & Registration
 10:00 AM Session 1
 Noon Lunch
 1:00 PM Session 2
 4:00 PM Adjourn

Registration

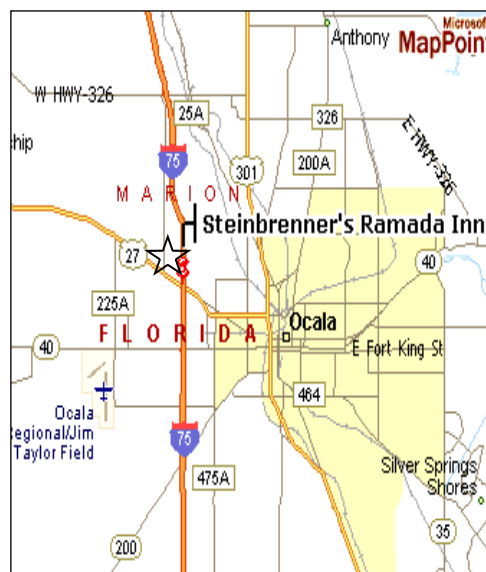
FREE! To assure space and enough handout materials, please pre-register by **October 30** with Leslie Sturmer at (352) 543-5057.

Location

Yankees Ramada Inn
 and Conference Center
 3810 NW Blitchton Road
 Ocala, Florida
 Phone: (352) 732-3131

Directions

From Interstate 75, take exit 354 onto US 27, go west and Ramada is on immediate left.



STATE SPOTLIGHT: Massachusetts Shellfish Growers Take Action

This article is the first of a series in *The Bivalve Bulletin* highlighting activities in other clam-producing states. Massachusetts is featured in this issue because of recent actions taken by Cape Cod shellfish growers to improve marketing opportunities for their industry through the state's aquaculture association.

Shellfish consumption was the topic of a survey conducted by the Massachusetts Aquaculture Association this summer. Results of the survey, entitled "*Marketing Opportunities in the Shellfish Industry Based on Perceptions, Preferences, and Practices of Consumers in New England*," are being used to determine the best way to approach increasing sales of farm-raised clams. Telephone interviews concentrated on residents in eight New England states. The following is an excerpt from this survey. (*Editor's Note: It may be of interest to compare this information with results recently obtained in a similar study conducted by our Department of Agriculture and Consumer Services. Research results on buyer preferences for Florida clams will be presented at the 2003 Industry Meeting.*)

This study's results indicated that 78% of consumers in the Northeast ate seafood and 55% reported eating clams. The favorite clam of the respondents was littlenecks (72%), followed by consumers who preferred chowders (49%) as a favorite, cherrystones (40%), soft shell clams (28%) and mahogany clams (18%). Most clams were consumed in restaurants (65%), not at home (31%). Seventy-nine percent wanted labels on clams and on restaurant menus indicating the method of production. The main reason for not eating clams was the taste.

Consumers bought clams for home consumption predominately at supermarkets (42%) and fish markets (35%). The characteristics most important were freshness (97%), visual appeal (67%), price (65%), health benefits (63%), where the clams came from and size (58%). The most important characteristic was that clams were produced in clean water (91%). Of the consumers surveyed, 44%

vacationed on the coast at least once a year. About 1/3 of those tended to prepare clams themselves while on vacation, while 2/3 ate clams at restaurants. Freshness was the main reason for consuming clams while on vacation. About 30% considered brand name important.

These findings have important implications for market segmentation, consumer education and promotion. An examination of clam consumption and consumer demographic information revealed a strong correlation between age and likelihood of preparing and ordering clams. Younger consumers, those 18-25, were least likely to consume clams (34%). The number jumped to 64% for consumers aged 46-55. It appears both of these age groups are viable target markets. In the case of Generation Y consumers, the goal would be to stimulate demand through portrayal of aquaculture produced clams as new, different and unusual. Emphasis on visual appeal, trendy clam bars and the technology of aquaculture would have appeal. For Baby Boomers, the task would be to increase consumption both at home and restaurants. Both groups responded well to freshness and appeal of clean water practices.

The Massachusetts Aquaculture Association has also embarked on a marketing promotion to help improve public awareness and demand for locally grown product versus out-of-state. Product being purchased at a cheaper rate is considered to be one of their biggest threats. Items being made available include 1) brochures educating consumers about aquaculture and the benefits of eating shellfish, 2) window stickers with their logo and the words "*Proudly Served Here*" for use at participating restaurants and markets and 3) tear-off recipe cards for participating markets.

Source: Massachusetts Aquaculture Association Newsletter, June 2003, website: www.massqua.org



Land-based Washing Program Moves Forward

The need to legitimately recognize land-based washing, or tumbling, facilities was voiced by industry about a year ago to the Department of Agriculture and Consumer Services (DACS) Division of Aquaculture, the agency who regulates shellfish harvesting activities (see the October 2003 issue of the *Shellfish Aquaculture Newsletter* for details). Specifically, in some areas of the state, harvesting of clams is limited to a narrow time frame due to tides or other constraints, creating a "bottleneck" at the processing plant. A proposal to license a washing facility through the Division's aquaculture certification program met with favor. The certified facility, in turn, would be sited and operated under specific best management practices. Implementation of the washing program was delayed when a request for verification of the process was made. This summer a study was conducted in which the microbiological consequences of washing clams on a lease and at a shellfish wholesaler's processing plant were compared with a land-based washing facility. Study results showed no differences and ensured this process would provide a safe shellfish product.

The Division is now ready to move forward with the washing program on an interim basis during which prescribed sanitation practices will be evaluated. If the program evaluation is favorable, DACS will develop sanitation rules for harvesting and washing clams to be included in the Comprehensive Shellfish Control Code (Chapter 5L-1, FAC). In order to participate, facility operators must possess or obtain an aquaculture certificate, or AQ Card, for the washing facility. Certification will be based upon pre-inspection of the facility by the Division. Further, the operator must agree to comply with guidelines for washing clams. These include: 1) adherence to local zoning and construction regulations, 2) prohibition of siting on docks or over submerged lands, 3) shading of the area and clams at all times, 4) a hard surface floor that can be cleaned, 5) equipment constructed of materials that can be cleaned, 6) routine microbiological monitoring of the source water for washing, 7) specific requirements for water discharges, and 8) proper disposal of shells and other materials. The operator must also comply with existing public health rules, such as proper tagging of harvested product and operating within the harvesting time-temperature matrix. *To obtain information on this program or to schedule a pre-inspection, contact David Heil or Mark Berrigan at (850) 488-4033.*



"What is Veneridae and why is it on my AQ card?"



Were you surprised when you received your 2003-4 aquaculture certificate, or AQ card, to see you were growing Veneridae? The DACS Division of Aquaculture, the agency overseeing this registration program, has revised how cultured species are to be reported. The new method uses scientific classifications in place of common names. The taxonomic approach includes Classes, Orders, and Families.

The hard clam is a mollusk (Phylum Mollusca) in the Class Bivalvia, because the shell has two valves. Another molluscan class is Gastropoda in which snails and conchs, animals with one shell or valve, are placed. Veneridae, the Latin word for "heart" or "love," is the family name for the hard clam. This group of bivalves was given the name due to the heart shape created when the shell is held hinge up. By the way, Veneridae is one of the largest bivalve families, containing over 400 species of clams, such as sunray venus, disk clam and southern quahog. Oysters, scallops and mussels are found in other families. *Mercenaria mercenaria* (pronounced "mer-sin-area") is the genus and species, or scientific name of the clam, which is farm-raised here in Florida and along the entire eastern seaboard. The word *mercenaria* means "money" in Latin. The taxonomist Linnaeus gave this name to the hard clam in 1758, after its use by native Indians in the colonial period as a currency called wampum. So now you know what you are growing!

BMP Display at Shellfish Center

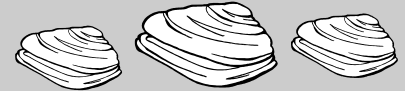
On-farm use of best management practices, or BMPs, for marine facilities, such as hatcheries and nurseries, will be displayed and demonstrated at the Shellfish Aquaculture Research and Education Center in Cedar Key. Colorful signs providing information on site selection, placement of pipes, discharge, erosion control, seed shipment, health management, and more were recently installed. The DACS Division of Aquaculture headed up the project with funding through the Clean Water Act and the Department of Environmental Protection.

Completed this year, the Shellfish Center will be used by university faculty and students as a remote field station. Research efforts underway are evaluation of genetic diversity in clam strains and development of alternative molluscan shellfish species for culture. The Center will also serve as an educational and demonstration facility.

Adam Trott, a new extension program assistant, stands in front of the Shellfish Center in Cedar Key.



UPCOMING MEETINGS



Marine Bivalve Facilities BMPs Field Demonstration

Wednesday, October 8 1-3:00 PM
UF Shellfish Extension Office/FWCC Marine Lab
Cedar Key

An introductory tour for on-site discussions and Q&A regarding BMPs will be held for hatchery and nursery operators and interested parties. See Page 5 for more information.

Sustainable Marine Fish Culture Conference and Workshops

October 9-10, 2003
Harbor Branch Oceanographic Institution
Fort Pierce

Industry and research leaders will share current knowledge on the culture of brackish water and offshore marine fish species and production systems. Conference registration is \$100. Contact Ken Riley, Harbor Branch Aquaculture at (772) 465-2400 or the website: www.aquaculture-online.org/conference.

Training in C.L.A.M Software

Thursday, October 2 6:30 PM
FSU Marine Lab, Carrabelle
Tuesday, October 21 4:00 PM
North IRC Library, Sebastian

Wednesday, October 22 4:00 & 6:30 PM
Brevard County Ag Center, Cocoa

These training sessions will introduce clam growers to a user-friendly software program based on Microsoft Excel for IBM-compatible PC systems. The *Computer Logbook And Management* software package was developed as a business



tool to enhance record keeping and inventory management of a clam farm. A FREE copy of the software program and a companion User's Guide will be provided at these sessions. Contact Leslie Sturmer at (352) 543-5057 to sign-up.

Clam Industry Meeting set for November 5, 2003

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