

Issue: Improve Quality of Shrimp Landed (Risk Management- Shrimp Industry)

(See Sea Grant Action Plans)

Work Group Names: Tillman

Region: South Circle which primary base program it addresses - ANR

Section 1. Relevance

Where did this issue surface?

Sources where issue surfaced:

Commodity / Industry / Special Interest Groups

What is the issue/problem?

The US imports 88% of the shrimp. We still produce the same amount; the expenses to produce shrimp have increased. Can we obtain a higher price for a “better” product. Texas produces \$5 - 600 m/yr (*Note: need to check \$'s, \$500 million = economic impact*)

Problem size and scope? (How many people does it affect? How wide spread?)

Gulf and South East US— producers and consumers, and processors.

Problem severity? (How serious is this issue?) *High*

Description: Producers are being forced out of business for economic reasons; going broke

Target Audience? (Who does the problem impact and how many?)

Shrimp Harvesters, Boat Owners, Aquaculturists

What are some general characteristics of the audience this program targets?

Low to high education levels; Not much time at home 180-240 days at sea. Large Hispanics and Asian populations.

Section 2. Response

Response refers to how Extension intends to address the issue by developing an educational program.

State the goal of the program.

Develop a market for local/wild caught shrimp which commands and higher price for a superior product

State the outcome objectives. These are the objectives that describe the intended results of a program (e.g. attitudes, knowledge, skills, adoption of practice/technology, change of behavior).

Client Change	At the end of this program, will....
<i>Knowledge</i>	increase knowledge on.... Shrimp marketing channels and quality standards
<i>Skills</i>	develop skills.... To handle shrimp on board with techniques to double shelf-life
<i>Attitude</i>	change their attitudes pertaining to... Their old methods need to be modified
<i>Behavior Change</i>	adopt.... Work together for overall benefit.
<i>New Technology</i>	adopt.... Implement /Develop product tracking technology. Improved on board handling technology.
<i>Best Practice</i>	adopt
	BMP techniques for handling shrimp on-board

Program Design. In the space below, provide an explanation of the program design. Try to list the topics that could be addressed under this issue. For example, if this was an educational program for new ranch landowners, topics could include: pond management, introduction to beef cattle production, introduction to wildlife management, and general landscaping. Also, try and list resources that could be used to help develop or provide existing curriculum to address the issue.

Topic (Subject Matter)	Existing Resource(s)	Contact Person(s)
Use of Sodium Bi-sulfate to prevent Black Spot	MAS Video	Russ Miget, Gary Graham, Mike Haby
Freezing Shrimp at Sea	MAS Video	Gary Graham, Russ Miget, Mike Haby
Effect of Tow-time on Shrimp Quality	None	Graham
TED and BRD installation in net	National Marine Fisheries Service Fact Sheets and Videos	Gary Graham John Watson (NMFS)
On Vessel product freezing containers (Bags v. Trays)	Result demonstration records	Russ Miget, Mike Haby Tony Reisinger
Travel design and material	Result demonstration records	Gary Graham Tony Reisinger
Product Tracking From Sea to Plate	Private Providers	Mike Haby Russ Miget
Appropriate Quality Standards	Department of Commerce and Materials NGO Standards Industry Standards	Mike Haby Russ Miget Gary Graham
Industry/Interest group cooperation	Summit/Workshop results or on-going actions	Russ Miget Mike Haby Raph Rayburn

Section 3. Results

The last section deals with evaluation of this program. The evaluation content should mirror the objectives that are outlined in section two. Please try and list some specific questions that should be asked to the target audience to determine if the intended change took place. List as many potential questions as possible. The goal here is to create a question bank for each client change level so that the educator can review these questions to see if any of them are relevant to their program. If they are, then they can use them to measure change in their program. Remember, not all evaluation strategies have to be written questionnaires. They may also be interviews, direct observation, or focus groups. Please describe your method in this section where appropriate.

Client Change Level	Sample Questions (Review the objectives section to help place questions or statements in the space below)
<i>Knowledge</i>	<ol style="list-style-type: none">1. What opportunity exists within the shrimp marketing channels to enhance value of domestic harvested shrimp?2. What quality standards are required to support the identified marketing channels?3. What assets are available in the marketing channel to enhance value of domestic harvested shrimp?
<i>Skills</i>	<ol style="list-style-type: none">1. What additives, concentration, and temperature are required for adequately conducting on board freezing of harvested products?2. What maximum travel times should be used based on catch rates, water temperature and air temperature?3. What procedures maximize holding quality on ice boats?4. What pre-preserving handling procedure will maximize product shelf life/quality?

Client Change Level	Sample Questions (Review the objectives section to help place questions or statements in the space below)
<i>Attitude</i>	<ol style="list-style-type: none"><li data-bbox="457 185 1451 215">1. What benefits are realized through delivery of a quality shrimp product?<li data-bbox="457 253 1934 318">2. What impacts occur as a result of extended product deck time, travel period and inadequate freezing or icing capabilities?<li data-bbox="457 358 1409 389">3. Who is responsible for delivering a quality domestic shrimp product?
<i>Behavior Change</i>	<ol style="list-style-type: none"><li data-bbox="457 797 1822 828">1. What advantage can be achieved through integrating efforts of the various elements of the industry?<li data-bbox="457 865 1902 930">2. What advantages can be gained in the long term sustainability of the industry fo fleet size, targeted shrimp size, industry quality standards?

Client Change Level	Sample Questions (Review the objectives section to help place questions or statements in the space below)
<i>New Technology</i>	<ol style="list-style-type: none">1. What technology can be employed to assist in monitoring critical points in handling process?2. What technology is available for product tracking?3. What technology can be employed to expedite separation and handling of shrimp on deck?4. What additions to preserving technology can be made to provide standard and replicated results?
<i>Best Practice</i>	<ol style="list-style-type: none">1. What are the key elements (HACCP) for on board handling of harvested shrimp?2. What are the standards of quality required to meet the targeted market niche to enhance domestic product value?3. What traceability standards are required to enhance seafood safety and quality standards verification?

Economic Indicators. Are there economic indicators that can be measured concerning this issue?

YES

Please list them below.

Value of domestic harvested shrimp.

Interpretation. The last step in the process is interpreting the results to our stakeholders. List internal and external stakeholders that would be interested in the results of this educational program. Do not forget to think about other state agencies and groups that would be interested in these outcomes.

Internal to Extension Stakeholders	External Stakeholders

Additional Resources. What additional resources are needed to address this issue? In other words, what is needed to design innovative programs that will impact our audiences? Use the space below or the back if needed.