Soft Shell Crab Shedding Program Report

Part of the W.K. Kellogg Foundation-funded Go Fish project

Submitted by Amanda J. Hardesty

August 31st, 2007
Summary of Project

In August 2006, marketumbrella.org disbursed funds to sponsor a program intended to put 10 fishers back in the production of soft-shell crabs. Over the last ten months, a total of 40 fiberglass tanks have been made by Pete Gerica and redistributed in ten sets of 4, along with a small water pump for a filter system and a subsidy for the lumber, PVC pipe, and other materials necessary to reinstall a system.

Recipients were identified through referral from other individuals in the field, such as Pete Gerica and Gary Bauer, of Pontchartrain Blue Crabs. They were asked to apply for a system by filling out a form recording contact information, their fishing history, and the design of their previous system.

All ten systems (tanks and pump) have been distributed, seven of which are installed and producing soft shells as of August 31st, 2007. Thus far in the 2007 shedding season, the volume of soft-shell crabs has been very low and producers such as Melissa Lyncker and Lisa Ledet are currently selling their crabs to contacts they had prior to Katrina. Of those individuals not producing softshell crabs, the systems are being installed as their infrastructure is rebuilt. Each system is expected to increase the recipients’ income by more than $14,000 annually and creates a return on the original investment of 82 to 1 over the course of ten years. The recovery of these ten fishing families will eventually result in a $1.7 million impact in the region.

Recipients

- Melissa Lyncker (504-254-4391; 3046 Ridgeway Blvd, New Orleans, 70129) was the first recipient to have the system fully installed and producing soft crabs. Her sons trap crabs in Lake Pontchartrain and she maintains the shedding operation. The storm damaged her home and destroyed her shed, along her previous tanks and most of their equipment. She was shedding crabs by the end of 2006 and was purchasing crabs from other fishermen as well.

- Lisa and Wayne Ledet (504-439-1040; 3413 Hopedale Highway, Hopedale, 70085) run a dock in St. Bernard Parish, purchasing mainly wholesale crabs and busters. Their home was completely washed away, but they have rebuilt the dock, including their shedding system with the help of Legal Sea Foods out of Boston. They began shedding during the spring of 2007.

- Steven Rhoto (985-960-3313; 20859 San Marco, New Orleans, 70129) received his system at the end of March 2007 and was producing soft crabs by the second week of April. Once he found a house to rent near his boat and repaired his boat, he began trapping crabs and selling the busters to Melissa Lyncker. By providing him with his own system, he retains more of the value-added benefits.

- William Thonn (504-628-1432; 2701 Old Spanish Trail, Slidell, 70461) was able to salvage a couple of tanks and his filter system, but needed the water pump and a few more tanks to complete the system. His pre-storm system was an open system (water flowed to/from bayou without
filtering), but he has efficiently adapted to a closed system in his new location. In addition to working out the issues with his new system, he has also helped Craig Doll establish his system, all while dealing with family health concerns.

- Craig Doll (985-503-2975; 29204 Highway 190, LaCombe, 70445) had a small system prior to the storm, but everything was destroyed during the hurricane. With the advice and guidance of William Thonn, Craig has been able to set up his system and continuing producing soft crabs.

- Nicky Alfonzo (504-439-0284; 2306 Gina Street, St. Bernard 70085) stayed during the storm and has since rebuilt his mother-in-law’s home, as well as his own home and both his fishing vessels. Volunteers helped him clear debris, recover fishing equipment, and prep the area for the shed. Nicky fished full time prior to the storm and now that his crabbing boat has a new motor, he plans to start shedding this fall.

- Joey Alfonzo (504-239-4322; 2900 Acorn Drive, St. Bernard 70085) is the brother of Nicky Alfonzo. Prior to the storm, Joey fished and crabbed part-time and worked for the St. Bernard Parish Police part-time, but has been full-time with the police force. After he received his system, he has shared space with another fishermen be more efficient with the tanks.

- Carol Rotolo (504-329-0952; 113 Cypress Lakes, Slidell 70458) works the softshell crabs with the rest of her family. She had the system set up early in the 2007 season, but was forced to move the tanks and is in the process of relocating them.

- Jeanette Gray (504-494-4533; 2208 Robin, St. Bernard, 70085) had her house completed washed away in the storm and has been living with some relatives. She is working to get her parents into a home before she rebuilds her own home. Volunteers went to her property near Shell Beach to clear storm debris from around the home and give her a place to install the system.

- Peter Gerica (504-669-4390; 19761 Chef Menteur, New Orleans, 70129) was contracted to build the fiberglass tanks and make arrangements for the appropriate water pumps. He and his family endured the hurricane in a house that was completely destroyed and has been in FEMA trailers ever since. Peter is very active in organizations and advocacy groups that promote the recovery of the industry. Over the last year, several groups of volunteers, including one from NOAA and the Gulf Councils, have pitched in to clean the property and help install the crab shedding system.
Pictures

Bill Hogarth, NOAA, gluing pipe into tanks during the Gerica installation

Closed system in Slidell, LA

‘Busters’ in a shedding tank

Mr. Thonn inspects the tanks for fresh soft-shells, dirt build-up, and debris

Overview of Ledet 4-tank, open system

Close view. Crate holds crabs ready to shed within a couple hours
Two of Rhoto’s tanks installed on dock in Venetian Isles

Water is piped in from bayou, added to tanks for aeration/quality, then flows back to bayou

Fully utilized tank in Lyncker shed system

Alternative method of circulating water into tanks (compare to other systems)

Lyncker checks the tanks for empty shells, dead crabs, and debris

Soft shell crabs being harvested and stored in a crate
**Expenditures**

Grant money has been spent on tanks, supplies, and pumps in the following manner:

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Income (Expense)</th>
<th>Balance</th>
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<tbody>
<tr>
<td>marketumbrella.org - Initial Deposit</td>
<td>8/11/2006</td>
<td>15,000.00</td>
<td>15,000.00</td>
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<tr>
<td>Lowes - Lumber and PVC supplies for installation of Gerica system</td>
<td>8/14/2006</td>
<td>(525.14)</td>
<td>14,474.86</td>
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<td>Matt Strasser - Reimbursement for expenses incurred, including travel</td>
<td>8/15/2006</td>
<td>(55.29)</td>
<td>14,419.57</td>
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<td>Peter Gerica - Payment to begin fiberglass tanks</td>
<td>9/14/2006</td>
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<td>12,855.86</td>
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<td>Melissa Lyncker - Reimbursement for lumber and PVC supplies</td>
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<td>12,215.31</td>
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<tr>
<td>Peter Gerica - Payment for remaining fiberglass tanks and 3 pumps</td>
<td>11/9/2006</td>
<td>(8,615.04)</td>
<td>3,600.27</td>
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<td>True Value - Tools for Ledet system installation</td>
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<td>(17.53)</td>
<td>3,582.74</td>
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<td>Wayne Ledet - Reimbursement for lumber and PVC supplies</td>
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<td>William Thonn - Reimbursement for lumber and PVC supplies</td>
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Total Expenses on Project: $17,699.82  
Cost per system: $1769.98

**Economic Impact**

The financial implication of each system varies with the individual recipient, but on average, each system produces $82 over 10 years for the soft crab producer per $1 invested by the Kellogg Foundation. There is no standard or minimum price for soft crabs, as it is dependent on the size and quality of the crab, the quantity able to be supplied, and the market in which the crab is being sold. Furthermore, the number of soft crabs one individual can produce depends heavily on obtaining crabs that are ready to shed, the biological condition of the tanks, and environmental circumstances such as hot weather.
In general, most soft crab producers shed between the end of April and the end of October, with peak shedding activity during mid-May and again in late September. Based on information from conversations with recipients, one set of tanks will generally yield about 600 dozen soft crabs in a season, using a baseline production of 10 to 12 dozen per week with peaks as high as 36 dozen per week. Some individuals have reported shedding as many as 30 dozen in a single night during past seasons.

While some producers will use ‘green’ crabs they trap during their regular crabbing season, others purchase the busters off of fishers for about $1 per crab. The soft crabs then sell for about $30 per dozen in wholesale markets and upwards of $36 per dozen in a retail, direct-to-consumer market. Taking into consideration the production expenses incurred, such as electricity, fuel, infrastructure maintenance, and purchasing the crabs to shed, net income is estimated at approximately $20 to $25 per dozen. Over the course of a single season, one system will result in $13,500 in net annual income for the producer.

With proper upkeep, the system should operate for 7 to 10 years without needing replacement parts, such as PVC or pumping equipment, and the fiberglass tanks may need minor repair, but otherwise have an indefinite life. Recipients of the systems also expect their average yield to increase each year as the new tanks become established and survivorship increases. They expressed the need for time to become accustomed to any changes from previous experiences and their interest in investing the returns in upgrades or new technology. Accounting for a small increase in yield efficiency of 10% within 2 years, the system would realistically provide nearly $147,000 directly to the individual producer by the end of the tenth season.

With an original outlay of $1780 per system, the rate of return with respect to net income alone is $82 per dollar invested! Using an economic activity estimate of $16,000 per system during the first season (this includes the trapping or purchasing of crabs to shed and the purchase of any other equipment needing for production) and accounting for annual growth, the soft crab system recovery program will provide, altogether, a 10-year impact to the crab industry of more than 1.7 million dollars.

**Future of the Project**

While the installation of some of these systems appears to be very slow, there are logical explanations for the time needed. First, the pouring of the fiberglass tanks requires a significant amount of time. Mr. Gerica spent anywhere from 2 to 3 hours per day trying to process the tanks and each tank takes upwards of two days of labor, plus cure time, all of which is dependent on the weather. Two molds were used, but at most, only 2 or 3 tanks per week were produced. This project also demanded time to identify recipients. Through a series of phone calls and field visits, each potential recipient was the result of a referral and a personal interview to discuss the project and the systems. Once these tasks were completed, the majority of systems were being distributed starting in November, a time at which crabbing was declining, individuals interest was shifting towards repairing homes and boats, and away from investing time and money in a system they would be unable to use for another 5 months. Work on the systems picked up in
March 2007, and several days since then has been spent helping install systems, visiting with recipients, and trying to wrap up each individual grant.

This project is worthy of being repeated, either in another round of grants in the New Orleans area, or elsewhere. It is recommended that future programs of this nature use a more realistic timeline of expectations, allowing enough tanks to be made up to 4 weeks before the peak of the shedding season. Also, it is more efficient to provide a reimbursed subsidy once the system is installed than to provide the materials themselves. An amount of $500 is an appropriate amount, but the most important elements of the system are the tanks and the pumps itself. Finally, word of mouth about the project has spread from those who have received systems to other individuals looking to rebuild their own operations. Those individuals have been notified that the original ten systems had been assigned, but a list of about 7 or 8 interested parties would like to be informed of any future opportunities.

Map of Systems’ Location

![Map of Systems’ Location](image)
Ledet, Gray, J. Alfonzo, and N. Alfonzo in St. Bernard Parish

Lyncker, Gerica, Rotolo, and Rhoto in Orleans Parish (Orleans East)
Doll and Thonn in St. Tammany Parish (NorthShore)
Appendix: Application Form

LSU Crab Shedding Recovery Program
LSU AgCenter and Sea Grant, in conjunction with MarketUmbrella.org of Loyola University

A limited number of grants are being made available to help rebuild soft-shell crab-shedding operations in the Greater New Orleans area. Individual operations are being identified and funded on a case-by-case basis. Assistance may include up to 4 fiberglass tanks (3’ by 8’), lumber and hardware for tank support, PVC piping, and a pump/filter system.

Name
Address
Phone Number
Email
Primary Occupation

Describe extent of your crab-shedding system prior to storm. (i.e., location of shedding tanks—different than residence, number and size of tanks, type of pump and filter, number of seasons in operation).

When do you plan to restart soft-shell crab shedding?

Fall 2006       Spring 2007       Fall 2007

What materials have you already collected to rebuild your system?


If offered 4 fiberglass tanks (3" x 8"), what materials do you need to finish your system? Be specific. Please sketch the basic layout of the finished system below.