

**Final Report for Fishery Resource Grant Program 2007  
Grant No. 07-ST-04**

**Harnessing Consumer Preferences to Create New Markets for  
North Carolina Seafood - Year Two**

**October 27, 2008**

**Submitted by  
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**Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

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**Abstract:**

Commercial fishermen are struggling to stay in business because of factors such as increased foreign competition and higher fuel prices. Along the North Carolina coast, one sees boats and commercial fishing licenses for sale. The livelihoods of seafood processors, local transport businesses and independent seafood retailers also are threatened when the market declines for local seafood. What was once a thriving way of life has now become a challenge with a questionable future. This two year project borrows from political ecology and social marketing, and is designed to increase demand for local seafood to sustain a community’s coastal heritage and way of life through a new marketing arrangement known as Community Supported Fisheries, (CSFs). A CSF is a direct marketing approach connecting fisher families with the public. This approach is modeled after its success in agriculture, that of Community Supported Agriculture (CSAs). This is a pilot project that we hope other coastal fishing community might be able to adopt.

**Introduction**

Fishermen and fish house dealers face a range of challenges that are converging on the industry simultaneously. The interface among the environment, economics, politics and regulations influence the culture of production of wild-caught seafood in ways that are leading to the decline of local commercial fishing economies and loss of commercial fishermen and fish houses. Many North Carolina commercial fishermen and fish house dealers are struggling to stay in business primarily because of foreign competition and increasing fuel prices. The seafood economy is no longer local but global; specifically, local seafood is competing with lower-cost imports.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

Fishermen and fish house dealers who for a century or more have worked together to make seafood available are on their way to becoming an historical artifact, unless an intervention is put in place to provide support for the fishing industry. Since 1998 over 1000 fishermen have stopped working as active commercial fishermen in Carteret County and increasingly more boats are for sale up and down the coastal shores. Where there may have been more than twenty fish houses operating from Beaufort to Cedar Island, today there are less than ten struggling to stay in operation. Fish house owners cannot afford to keep the ice machines running, their freezers chilling and employees on staff if there are not enough local fishermen using fish house facilities when landing their local harvest. In addition, there are also fewer seafood wholesale distributors coming to the fish houses to distribute to restaurants and fish retail establishments.

Given the above conditions it has become more challenging for fishermen to find a fish house that can pay a living rate per pound for their locally landed, wild caught seafood. It also has become more difficult for consumers to locate local North Carolina seafood products in local restaurants. Without an improved outlook for the local industry, retention of the existing infrastructure is not likely. The loss of fishermen, fish houses and fish house owners, in addition to others who support the industry will most likely be the continued pattern for fishing communities unless greater support is provided to maintain the industry as part of the heritage to the region.

This pilot project builds on previous work funded by the NC Fishery Resource Grant Program (FRG 06-ST-02) (See Andreatta Final Report 2006). Research in year one was conducted among commercial fishermen, fish house owners and the public in Carteret County beginning in May 2006. As part of the methods used, we worked cooperatively with *Carteret Catch*, a newly established branding program to identify seafood landed by the commercial fishermen of Carteret County. *Carteret Catch*, an organization comprised of fishermen, restaurant owners, fish house dealers, marine scientists and concerned citizens of Carteret County ([www.carteretcatch.org](http://www.carteretcatch.org)), has administered the program since 2005. Their branding effort has been profiled in newspapers, discussed among the various fishermen’s associations and endorsed by the Carteret County commissioners and the Tourist Development Authority. We continued our working arrangement with Carteret Catch for the second year of this project.

This pilot project, *Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood*, evolved into a two year project. The initial phase of this FRG project determined there was interest on the part of the fishermen, fish house dealers and consumers to support alternative niche markets for accessing local seafood. The first year of the project was designed to identify the salient factors that would contribute to a local, wild caught seafood marketing program. In year one various groups were interviewed, including fisher families<sup>1</sup> and fish house owners, restaurant owners, residents and visitors to the area. Fishermen and their families have ideas for alternative niche markets and were willing to test them. In fact some fishermen were already able to market a percentage of their seafood independent of the fish houses. It was recognized

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<sup>1</sup> Fisher families include people within a household that are involved in the fishing industry. Sometimes it is the husband and wife, sometimes it is the children and a parent and sometimes it is only a male adult. So as not to exclude the role woman, wives, daughters, daughter-in-laws and sisters may play in the family fishing enterprise I have adopted the fisher family term to be more inclusive.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

that fish house owners, restaurant owners and guest accommodation managers (rentals, condos etc.) would be critical to the success of a new marketing campaign

Encouraged by the interest from the fishermen that something needs to be done to assist in marketing local seafood and by the public’s interest in eating local seafood a second grant was submitted to Sea Grant to continue the project for a second year. This final report will concentrate on year two of the report, drawing selectively from the findings from year one.

It is relevant to discuss some of the background to the marketing approach selected for year two of this project. New to fisheries was a concept that Andreatta coined, *Community Supported Fisheries (CSF)*. Although new to fisheries, it is not new to the direct marketing of local agricultural produce, especially among small-scale commercial farmers engaged in organic production. Among those small-scale farmers engaged in alternative agriculture this marketing strategy is known as *Community Supported Agriculture (CSA)*. This approach connects the farmer directly to the consumer.

Community Supported Agriculture is a direct marketing approach initially developed by concerned housewives in Japan for they believed they had lost touch with where their food was coming from and thus created this form of a direct marketing approach in the 1960s. The program was introduced in Europe in the 1970s and then made its way to the USA in the 1980s (Henderson and van En 1998). “In 1985, Robyn Van En, together with a core group of like-minded producers and consumers initiated a project simply named Community Supported Agriculture at her farm in S. Egremont, MA. The CSA concept, which reconnects producers with consumers and empowers members to “vote with their dollars” for ecologically sound, local agriculture, was brought to the States by Jan Vander Tuin, a friend of Robyn’s from Switzerland. The CSA idea was not a new one in Europe; similar cooperatives existed there for decades as well as in Japan” (CSACenter.org). Since 1985 CSAs have expanded across the United States and now number to 1200 (CSACenter.org). There is a vast literature on this marketing strategy.

Central to the CSA marketing approach is the consumer support to *their* farmer. Much like a person may develop a trust with their doctor, car mechanic, lawyer, hair dresser, baby sitter and so on, this marketing approach requires the same level of commitment and trust between the consumer and farmer. Participating in a CSA arrangement requires that a consumer pre-pays a farmer for a *share* of the harvest when the produce is ready for market. Generally prepayment occurs between January – March when the farmer is not generating any income. Pre-selling the harvest enables the farmer to purchase seed, soil amendments, and other materials for the various repairs needed during the winter months without having to draw on savings or go into debt, to ensure a successful harvest for the coming season. The concept behind this arrangement is the consumer showing his/her commitment to the farming family with their pre-payment. A fisher family could benefit from a similar arrangement with the early payment going towards boat maintenance, new nets, net repairs or the purchase of other things to facilitate the next season’s landings.

There are any number of permutations in how the farmer and the consumer may establish their relationship and develop an agreement. For example, a farmer may invite the public to purchase

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

shares to his/her farm through brochures or newspaper ads or other means of communicating that s/he has (or will have) product for sale. The brochure is critical – for it serves as an agreement between the farmer and the consumer. The brochure defines the philosophy of the farm and the farming practices shared, it identifies what consumers would be agreeing to pre-buy during the growing season, and what consumers should expect should there be a drought or some other natural disaster that might reduce the harvested. Therefore, the agreement is one that is socially responsible and ecologically sound; the consumer *is* sharing the risks and benefits with the farmer. Its success requires complete understanding on the part of the consumers/investors of the uncertainty that is inherent in every growing season. Should something happen to reduce the harvest the farmer *is not* expected to go to the grocery store to supplement the weekly share with what the farm did not provide.

Small-scale farmers who make up the alternative agriculture community and who rely on organic farming practices tend to grow anywhere from 20 to 30 different commodities during the growing season. Although small – farmers in North Carolina have over 10 acres (a must to have a farm number) those that direct market tend not to have more than what two people can manage on the farm in production. Small farmers are able to direct market because the volume of what they produce at anyone time is not so overwhelming that they need to take their harvest to a wholesaler, economy of scale. Having multiple outlets (farmers markets, restaurants, CSAs, etc.) during the week for their harvested produce is part of their overall marketing strategy. Growing multiple seasonal varieties during the growing season is a way to market March through December.

Some farmers keep their pre-paying consumers (also known as shareholders, subscribers or farm members) number small. Other farmers want to pre-sell their entire harvest so that they do not have to go to farmers markets or find other ways to sell their harvest, and therefore, they may have a larger number of shareholders. Farmers will arrive at the number of shareholders based on what they anticipate they will be able to produce during the growing season.

Likewise farmers will come to a price for their pre-selling of their produce based on the anticipated worth of the fresh produce during the growing season. Farmers arrive at their price based on their experience at selling similar commodities at a farmers market. The farmers have full-shares and half-shares. Full-shares generally cost anywhere from \$400-\$800, varying by what is in the share, the weight, and the number of weeks shares are made available. The farmer does not provide a discount to shareholders for the early payment, however, the shareholders expect a quality product and first choice of items should there be any for their commitment to the farming family. Farmers realize that they are providing quality, fresh, local produce and therefore are able to sell their products at a premium, above grocery store prices. Shareholders are not investing in their farmer for a deal, but rather to receive quality fresh produce during the growing season, barring no natural disasters.

Since CSAs have been in the US they have expanded beyond providing just fresh produce. There are CSAs for fresh cut flowers and for meat and poultry. In some cases these land-based CSAs have been around while others have morphed into buying clubs integrating the harvests from several farms rather than from one farm, giving the consumer a wider selection over the growing

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

season. For example, some buying clubs include produce, flowers, eggs, honey, fresh meats and/or poultry.

Recently the United States Department of Agriculture reported an increase in the number of small farmers and farmers markets. In fact since 1994 the number of farmers markets has increased from 3000 to 4685, an increase of 56%. This statistic is important for it shows continued community support for local agricultural products and consumers depending on their local farming community as a source for their fresh local produce. Although farmers markets are not new to the public the more specialized direct marketing approach that of the CSAs might be less known and be more popular in certain regions of the United States. Around the county the number of CSA arrangements varies. They tend to be more concentrated in the northeast (i.e., Maine, Vermont), the central northern states (Wisconsin, Minnesota) and the west coast (Oregon, Washington, California). There are forty-one CSAs in North Carolina (Growing Small farms 2008).

This description of Community Supported Agriculture serves not only as background to how Community Supported Fisheries emerged, but also serves to illustrate how it could work as a marketing strategy for small-scale commercial fishermen. This FRG project provided an opportunity to design a pilot CSF in Carteret County. A number of lessons are learned from this experience which may provide insight for others who wish to develop a direct marketing approach in the future.

As previously mentioned, both year one and year two of this FRG project benefitted from the branding program known as *Carteret Catch*. The concerned citizens, who volunteered their time to move *Carteret Catch* forward so that one day it could become a household name and food source, were in their second year of activity when this FRG was funded the first time. The branding logo and membership program provided a valuable entre for discussing the possibility of a direct marketing strategy with fisher families, the public, fish house dealers and accommodation management staff (rental and realty managers). The branding logo was instrumental in creating an identity with the product – *local seafood*. “Buying local” and “connecting sea to plate” is an *ideal* marketing strategy for local commercial fishermen and *Carteret Catch*.

The goal set for the second year of this research project was to increase demand for local seafood, borrowing from social marketing. Social marketing is about a social behavior change and the behavior to change for this project was to modify consumers seafood interest to actively seek out and purchase locally landed seafood (Kotler and Zaltman 1971; Kotler, Roberto and Lee 2002; Landers et al 2006). For example, it was of interest to begin to get consumers to ask for local seafood, for restaurants to provide and sell local seafood and for fishermen and fish house dealers to know they can sell local seafood, and develop an advertising and education to facilitate these desired changes.

## Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”

### Project Objects:

The objectives for this project were three-fold. They were to:

1. Recommend direct marketing options to fishermen, fish house dealers and the public to help sustain the local fishery industry;
2. Implement a Community Supported Fisheries (CSF) arrangement with interested fishermen; and
3. Obtain and monitor feedback from fishermen and fish house dealers on sales from the CFS arrangement.

### Methods Used to Create a Community Supported Fishery (CSF)

*Creating A Direct Marketing Approach* Direct marketing strategies, newly defined as **Community Supported Fisheries** (CSFs) was designed for the 2007 harvest season. A number of consumers, dealers and fishermen offered suggestions for how CSFs would best suit them. From the previous year, consumers provided us with information on their favorite seafood, length of stay in Carteret County, willingness to cook seafood, frequency of seafood consumption and the names of restaurants they frequent during their stay. This information was critical to how one might establishing CSF arrangements. In addition, combining the *Carteret Catch* branding program with CSF helped the public to identify which fishermen were selling local seafood and where, as well as which the fish houses, seafood retailers and restaurants were serving local seafood. The public plays an important role in sustaining local fisheries by the seafood they purchase.

**Step 1.** Beginning at the end of May (2007) Andreatta<sup>2</sup>, along with an undergraduate student assistant, visited fishermen in Carteret County, predominantly those residing or having their boats located Down East. Kenny Rustick served as a co-PI for this project and was instrumental in identifying potential fishermen that would serve as a core group and potential leaders in this pilot Community Supported Fisheries marketing arrangement. From the previous year’s study it was determined that *shrimp* was the favorite seafood among the seafood eating public, therefore, shrimp were the targeted fisheries for this project.

Andreatta met with fisher families, fish house dealers, rental property owners and managers for the first three weeks of the project. The purpose was to identify barriers that would make connecting fishermen to the consumer difficult or impossible.

**Fishermen** – There were seven fishermen that agreed to be part of this FRG project. They each had multi species fishing licenses as well as for selling shrimping. In addition, they all registered to be members of Carteret Catch. Their names were listed on the Carteret Catch website as well as the Project Green Leaf website as another means of advertising on their behalf (See list of useful websites).

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<sup>2</sup> Andreatta traveled Monday through Thursday from May – August 2007 to help shepherd this project. Andreatta resides in Greensboro, which is a 4.5 hour drive from the location where this pilot project took place. In future designs of a CSF that includes multiple fisher families, a family member or coordinator from the area needs to help with the advertising the CSF arrangement.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

To be part of this project fishermen agreed to keep weekly records on data sheets provided, recording the quantity of shrimp and other fish obtained, the time it took to process the fish, and how much they sold, and how people would have found out about them (See Attachment 1. Record Sheet). In return for recording this data, the fishermen would receive \$1000 stipend paid over a four month period. Surprisingly, these data sheets were not always turned in monthly and in one case they were not turned in at all and in this case payment was stopped.

The fishermen agreeing to participate in this pilot project were from Atlantic, Beaufort, Bettie, Harkers Island, Marshallberg, and Mill Creek. The fishermen varied in where they fished, with some preferring the sounds while other preferring the ocean. Collectively they landed shrimp, clams, crab, flounder, oysters and finfish. They also used the same fish house dealers for where they landed different fish. (There are not many fish house dealers remaining in the area, posing another problem for the fishermen and fish house dealers in the future).

Fisher families had good ideas as to how CSF *could* work. Most of the concerns had to do with time – time to market the program and time to deliver the shrimp to the visitor – wherever they may be staying. Most nights that fishermen who are out shrimping leave the docks around 5:00 pm and return around 5:00 am (or later). By the time the shrimp are prepared, taken to a shrimp house or shrimp stand, and more ice and fuel are loaded on board for the evening’s work, it is after 10:00 am before the fisherman gets to bed. Should the boat need any maintenance it is done after a few hours of sleep and before they go out for that evening. Having someone other than the fishermen market the product, distribute brochures and deliver the shrimp is critical to health and well-being of the fisherman. Given these time constraints the fishermen preferred the consumer come to the fisherman and make arrangements for pick-up at designated locations.

Fishermen were concerned about the quality of their product. They wanted to ensure the consumer maintained the quality of the shrimp when they picked it up. It was recommended that cooler be provided along with ice and this cost added to the overall cost of the CSF.

One of the fishermen’s daughter in-law offered to be the driver for all of the participating fishermen to drive to Emerald Isle – a forty minute drive from the east side of Beaufort - should the CSF project prove to be successful enough to take a large volume of shrimp, ice and coolers and distribute them among those who ordered freshly landed shrimp. A driver was budgeted (hourly wage, miles paid for driving, coolers and ice) for deliveries in the FRG, but in the future this would have to be a cost added into the service provided, especially with fuel prices on the rise. Emerald Isle Realty received over 10,000 guests annually. However, only one delivery was made by a fisherman the whole summer.

Fishermen were concerned about the size of the shrimp and their value related to the size of shrimp landed. Some of the fishermen fished in the ocean for the bigger shrimp while other fishermen stayed in the sounds where the shrimp remain some what smaller. Educating the public on shrimp size and value was important to the fishermen, for the difference in size influenced price. The fishermen suggested listing their contact numbers for the consumer to tract down the availability, quantity and size of what they wanted to purchase. As they pointed out



## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

some people wanted smaller shrimp for a shrimp cocktail or shrimp salad, while others want larger shrimp to grill. The fishermen agreed to help each other out passing on the information of which fishermen had which size shrimp to consumers who were looking for specific size shrimp.

**Rental Managers’ Perspectives:** Interviewing managers who were responsible for rental property provided interesting insights for the CSF arrangement. In general they offered to be helpful by bringing the concept of CSF to their guests’ attention. However, they did not want to be responsible for the product, for delivering it or storing it. One manager thought it would be a great idea if the preordered was already in the refrigerator when the guest arrived. This manager believed that no matter when the guest arrived they could enjoy fresh, local seafood on their first night. However, another manager said there is nothing worse smelling than a shrimp boil. He claimed he would rather have a smoker use his facilities rather than someone who wanted to boil up some shrimp.

Some of the managers saw the seafood delivery service or knowledge of where to go as a perk for those staying at their rental properties. They commented that some families want to meet “a real” fisherman, see the boat or possibly go out on a boat to shrimp and hear the fishermen’s stories. If this arrangement – that of “meeting the fisherman” could be made into a destination spot it might draw more people. Some fishermen thought this could be a good idea and were wondering what they needed to do to carry people on their boats for a shrimping experience. Getting liability insurance to carry others seemed to be the main limitation. Again, both property managers and fishermen were thinking outside of the box trying to figure out ways to make connections and new ways of creating memorable experiences visitors to the area.

**Fish House Owners** – Fish house Owners need to part of the picture. They are the ones with the facilities (ice machines, pier space, coolers, freezers, and parking) to help with maintaining the quality of the product. An ideal arrangement would be to have the fish houses be one the drop off locations for the public to come pick up their coolers of shrimp. The fish houses could store in bulk and provide the ice upon arrival. Also, if the fish houses wanted to teach how to head the shrimp or allow the customer to head the shrimp on site, they could pitch the heads back into the sea for the carnivorous fish to devour. Some fish houses might be in a position to sell other seafood retail to encourage new markets for themselves. Fish houses could also become a destination for residents and visitors to the area.

**The Public** – Listening to the seafood eating public was helpful during year one and two of this project. Some of the visitors to the area would be interested in taking shrimp back to their homes when they are ready to leave. So many of the visitors had been coming to the area for years that they would prefer taking shrimp back for themselves, family and friends over t-shirts or taffy. Taking fresh shrimp home in an ice slurry posed no problem for people driving within a 5-6 hour radius to the coast it seemed. Others wanted to help the fishermen anyway they could and they were surprised to learn that local shrimp were not always served in the area’s restaurants. Recall the average visitor travels 241 miles to the area to stay one week. They have been coming to the area on average for 20 years and have a family size of 3. During that week’s stay 90% stated

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

they would have at least one seafood meal during their visit and 86% had a kitchen where they were staying.

**Step 2.** With the assistance of several board members of Carteret Catch a brochure was created advertising the CSF marketing arrangement. A photo was used from one of the fishermen, personalizing the brochure. Fishermen, CC board members and others helped with the text for the brochure (See Attachment 2. trifold brochure). Participating fisher families and fish house dealers (wholesalers and retailers) who were members of Carteret Catch were listed on the brochure with their contact information. The brochure served as both an educational and advertising piece.

The brochures were printed by a local printer, Coastal Printing in Morehead City. The initial 1000 were ready by mid June and all distributed within the first week. A second printing was set up and by then another fisherman was added. By the third printing all seven fishermen were on board. The various printings occurred when more fishermen and fish house dealers agreed to participate and when more were needed. By the end of the season a total of 6 printings were made producing 10,000 brochures. Brochures are still available and Coastal Printing still holds the file should more desired.

It is critical to a future project of this nature that brochures or some sort of advertisement is available to help promote Community Supported Fisheries arrangements.

**Step 3.** The next phase of the project was to set up a distribution system for the brochures. Realty operations were contacted in person about displaying the brochures (See Appendix 3). In the process of contacting these realty locations it was learned that some locations put together gift baskets or folders that contain information to the area, including restaurants and other attractive things to the area and were given out to each renter when they came to pick up their keys.

A number of other locations that attracted a number of visitors to the area as well as local and seasonal residents agreed to display the brochure. These locations included the Aquarium at Pine Knoll Shores, Beaufort Maritime Museum, Core Sound Waterfowl Museum, and the Crystal Coast Tourist Information Bureau. There were also a number of public events which brochures were made available – local to Carteret County as well as through North Carolina, the United States, Canada, and England.

For the rest of the summer Andreatta went to each of the locations restocked displays with the brochures, updated them with the newer versions, and kept track of how things were going with the fishermen. Likewise, Rustick kept in touch with Andreatta as to the how things were going with the fishermen, the shrimp season and the project. The participating fishermen were involved in promoting their local catch through flying the Carteret Catch flag, distributing CSF brochures, and speaking to others about the local seafood industry.

Andreatta was successful at bi-weekly contact, in person or by phone, with all but one of the fishermen. Having functioning cell phones is critical to the success of any commercial

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

operation. Fishermen when working with the public, let alone on a project for which they are being paid, need to be reachable for sales/orders, inquiries or other such matters. In most cases the participating fishermen responded in a timely fashion. It would also have been helpful if there was an answering system that let the public know that the fisher family was at sea fishing when it took more than 24 hours to return a call.

Fishermen reported informally on the calls they had from people inquiring about shrimp. Most calls fishermen recounted were people looking for large shrimp. This was not the summer season for big shrimp. Fishermen were commenting that it was the lack of rain in the area that affected the size of the shrimp. In fact, during mid-summer the fishermen commented the shrimp were not growing. Two fishermen with roadside stands in place spent the summer selling their fresh local shrimp between \$1.50 and \$3.00 a pound. Others that fished the ocean or followed the bigger shrimp were able to command a higher price for their shrimp. To the visiting public that is accustomed to paying \$10-\$15 per pound for 25-30 shrimp, seeing a sign for \$2.50 a pound for that size raised questions. Was it old shrimp or bait shrimp? Why is it so inexpensive? Andreatta suggested fishermen put the size of the shrimp on their signage to help customers put size shrimp to cost per pound, and not confuse the low price for bait shrimp.

Combining the *Carteret Catch* branding program with Community Supported Fisheries will help the public to identify which roadside stands, fish houses and restaurants serve local seafood. Those supporting local fishing industries will be flying the *Carteret Catch* flag or displaying a window sticker that supports *Carteret Catch* or North Carolina fisheries. “Buying local” and “connecting sea to plate” is a way the public can have an active role in sustaining the 400 year old fishing heritage of coastal communities, fishermen and fish house dealers. We anticipate that the methods outlined here will be transferable to other coastal areas where communities have an interest in connecting fishermen with the public to sustain their local fishery industry and unique coastal heritage.

Strengthening the partnership between the commercial fishing industry as well as increasing the membership for CC are several long-term goals for CSF activities. Investing in local advertising placing local ads in papers, fliers, and the developing other promotional items to educate the public on the local fishing industry and the local heritage is critical to maintaining the coastal water communities.

**Step 4.** A focus group was held with the participating fisher families to get their input on how they perceived the project went for them. Five of the seven fisher families participated in the focus group offering suggestions as to what could be done to improve the project. Although there was a delivery system built into this particular pilot program few calls came from where the majority of the brochures were given out. It was suggested that maybe not targeting visitors was the best approach for this project. The participants suggested that contacting those residents in the area, such as those that may be no longer go shrimping, sold their boats or who were used to getting local shrimp, may be a better angle than visitors who come for a limited time. Recall visitors coming to Carteret County for their summer vacation, on average had been coming twenty years and the majority anticipated eating local seafood at least once during the week of their stay. It was agreed that short-term visitors should not be omitted altogether, but that the

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

circle should be drawn narrower to include local residents, which in the end would actually be a wider circle by including visitors and residents.

### **Results:**

Fishermen did not keep the best of records for this project. One of the key items needed to have recorded was the number of calls received because of the brochure. Also, when people dropped by the shrimp stands, knowing if the public located them from the brochure would have been helpful information for future marketing efforts. Lastly, not having access to the fishermen’s records from the previous year’s landings and sales there is no way of knowing for those fishermen who operate shrimp stands if their sales improved because of these brochures, or because they had more shrimp to sell or something else altogether. One fisherman commented that they have been putting advertisements in the local paper for their shrimp and that seemed to work well for them.

### **Discussion:**

Unfortunately for the 2007 season there was no pre-sale shrimp order taken by any of the fisher families as was originally conceived by the CSF arrangement. Any number of reasons can be identified for why this project never really got off the ground like it was first conceptualized mirroring that of the Community Supported Agriculture arrangements found elsewhere in the state and the US. First, there is not a traditional tail gate or state sponsored farmers market in the area near to where the visitors reside nor near where the participating fishermen are located for this project. Not having the culture or practice of going to a farmers market operated by small-scale producers for their fresh produce most visitors were not looking for farmers for their fresh produce and likewise they were not looking for a fisherman for their fresh seafood. Not knowing where to go to locate a fisherman, or establish a relationship, most visitors shop at a local seafood retail stores. Some visitors do not know local seafood species or their seasonality evidence by those selecting salmon and halibut as a seafood preference for when eating seafood at a local restaurant. And increasingly much of the seafood in the area is imported.

Second, it was the first year for establishing the concept of CSF. It could have been that more advertising and time was needed to help shepherd it along. Carteret Catch has benefited from five years of activity, it is conceivable with more CSF could work as part of a direct marketing strategy for small-scale commercial fishing families.

The fisher families already involved in direct marketing of their shrimp increased their sales to residents in their area and to those who regularly passed by their shrimp stands. The fisher families continued to sell to their neighbors, spouse’s co-workers who had land jobs on a regular basis.

Many of the brochures were left where there was a high concentration of rental properties, such as Emerald Isle Realty, the Pine Knoll Aquarium and the Crystal Coast Visitors Bureau. Fisher families got calls from people looking for large shrimp. Several calls were made to fishermen for directions to their shrimp stands, one for a delivery to their home. Three of the

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

fishermen received a call from the same restaurant owner expressing an interest in their shrimp for his restaurant in New Jersey; however, nothing came from these phone calls. However, the advanced selling of seafood did not occur during the 2007 season. It is possible the distance from these rental facilities, visitors’ lodging and where the fishermen were located may have been too far for the visitors to consider as an option. There was never a need to employ a driver to carry down coolers, ice and shrimp for a multiple customer delivery/pick-up.

Andreatta participated in a teleconference with 25 of Maine’s fishermen and several fisheries specialists in September 2007 to discuss Community Supported Fisheries. The outcome of this call led to the one of the fishermen’s wives arranging a CSF. Shrimp were pre-sold to employees at Island Institute, a non-profit group organized to help Maine’s fishermen. Every two weeks 100 pounds of shrimp were taken to the Institute. Andreatta later participated in Maine’s Fisheries Forum (February 2008) where she learned of two young men in their mid -20s pre-selling their lobster harvest. They had seven boats in their fleet each with 50 lobster cages. Each caged was leased to someone in the United States for \$3000. Each recipient would be sent four lobsters ten times a year a long with a DVD of Maine and lobstermen at work.

So although the pre-selling of a local catch was not altogether successful in Carteret County where this project was piloted, others are beginning to experiment with direct marketing elsewhere in the United States.

### **Recommendations**

If one were attempting to a start a Community Supported Fisheries arrangement in their area the following activities might be considered to involve fishermen and to attract the public’s support.

1. Determine what the state and local laws have to say about this type of direct marketing strategy. We know from experience inside the city’s boundaries certain laws exist, but outside the city’s limits others exist and they are not identical.
2. Develop a significant marketing campaign to introduce the CFS to the community. Put notices of the CSF in locations visible to the public to rapidly increase their awareness to this new marketing strategy.
3. Link up with nearby fish house owners and seafood retailers for processing large landings. They have experience in working with large orders. Moreover, they have the cooling system and storage facilities most small-scale fishermen do not have to help protect the product quality while waiting for the CSF shareholder to pick up their share.
4. Keep things simple. Some fishermen may chose to keep things simple by only choosing to work with one fishery such as shrimp for their CSF. They may also sell their shrimp with the heads on to guarantee freshness and charge a fee (i.e., so much a pound) for heading for those not wanting or in the position to head the shrimp.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

5. Initial sales will be small and require the fishermen to manage all the processing, handling and delivering themselves. In most cases farmers that have CSAs bring their shares with them to the farmers market and their shareholder pick up the one location or they deliver to one of the shareholders homes and everyone picks up their share at the one location. The fishermen or the farmer need not spend their time delivering, especially as their CSF arrangement begins to expand.

6. The potential market is much bigger than one might think, especially as there are fewer small-scale fishermen remaining on the coastal waters. The place to begin building a potential customer base might be with the people the fisher family knows and have regular contact with such as those no longer fishing, people at church, people from the local school, where one obtains other services as in doctors’ offices, garages or other mechanic locations, banks, hardware store owners and staff, and other locations where there are a group of people that might be interested in maintaining the local fishing economy. Many local residents may have grown up on local seafood, either getting it themselves or having a relative that once did. Therefore, having a way to connect to this population with a descriptive brochure may be a start for a local program.

7. Expand slowly. A rule of thumb is never take on too much that it keeps you awake at night. Grow at a pace that is comfortable and accomplishes what you need it to do for your business.

8. Keep communication lines open with shareholders. Answer their phone calls in a timely fashion. Figure out how to let them know how the shrimp or other fishery is doing. If shrimp are small or large in size let them know so they will know what recipe they may use. If you have another kind of seafood to offer in addition to the shrimp for a particular week, let them know. Sometimes this can be accomplished through a telephone call if the numbers are small while for others may be email will work. Educate the shareholder of the seasonality of the product as well as to the overlapping seasons. The fisher is going to become some folks’ personal fisher, and part of what the individual wants to buy and support is that relationship with the fisher. They must trust the fishermen’s expertise and character and the fisherman/woman must respect and value theirs in turn.

9. How much to charge – you can ask for all of the money up front for the season or for the week’s catch. You can ask for 25 to 50 percent in advance the rest upon delivery. With the increase in fuel prices there is no more scrapping. A fishermen needs to know that they can afford the fuel to be on the water in order to land the seafood.

10. All details of the CSF arrangement, including landings, processing (if any) and delivery (if any) should be written out and fully understood by all parties well in advance of any financial transaction taking place. The fisherman must be sure the shareholder knows what to expect – for example, not a shrimp are the same size and they may vary week to week.

In agriculture, direct marketing can be one of the most lucrative of all the marketing outlets available to family farmers and perhaps the one in which they have the greatest level of control.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

The same could be true for fisher families. It is not for everyone, for it requires an investment of time, some salesmanship and the means for maintaining a quality product.

### **Impacts and Benefits**

In the past year there has been a lot of attention paid to fisheries in US. In a recent ACRES USA publication there was a letter to the editor promoting their organic market that only carries environmentally sustainable seafood in Maryland. The seafood initiative was launched by Fishwise, an organization that helps retailers with seafood sourcing and consumer education. This is the same role that Carteret Catch strives to achieve reaching out to local independent restaurants in the county. Customers supporting these local restaurants again will strengthen the linkage between local fishermen, fish house dealers and the area’s restaurants. It is about increasing demand for a local product.

It was anticipated that increased awareness of the local *Carteret Catch* branding program would increase support for local seafood. From increased support and public awareness it was anticipated that fishermen, fish house dealers and restaurant owners would note an increase in interest for local/wild caught seafood. A second desired benefit was that should *Community Supported Fisheries* (CSF) expand in Carteret County then local fishermen and dealers could become more entrepreneurial at selling their seafood. It was thought these collective efforts would contribute towards sustaining small-scale commercial fishing industry and serve as a model for other communities to follow.

For those fisher families that already direct market the advantage of the CSFs might be to sell more shrimp (seafood) faster. In principal, this would mean less time spent selling on the roadsides and give the impression of a higher hourly wage rate. Generating an income during the off season through the advance sale of shrimp to make boat repairs, mend nets, purchase new equipment would enable the fishing family to not have to rely on savings or credit to make these investments.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

### **Extension of Results**

A tremendous amount of work and time has been invested in bringing about awareness to Community Supported Fisheries, issues related to small-scale commercial fishermen and Carteret Catch. The most recent talk to UNCG – social entrepreneurship group in the Bryan School of Business has prompted a faculty member to use his students in his class to develop business plans for fishermen and to develop a business plan for a seafood delivery program from Carteret County to Guildford County.

### **Non-refereed Journal Publications**

Andreatta, Susan

2007 “Net Gains.” *Our State*. January Pp. 86-90.

### **Manuscripts in preparation**

“Participatory Action Research Among the Fishing Community of Carteret County, NC.”  
For Human Organization – a peer reviewed journal for applied social science.

### **National Conference Presentations**

Andreatta, Susan

Wood, Patrick and **Andreatta, Susan**

2008 “Carteret County Shrimp Fishermen: Responding to Economic Change.” Paper presented at the Society for Applied Anthropology annual meetings. Memphis, Tennessee.

Andreatta, Susan

2008 “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood”  
FRG - 06-ST-02, FRG – 07 ST -04. Presented at the Annual North Carolina Sea Grant Meeting. New Bern, North Carolina March 18, 2008.

Andreatta, Susan

“More Bang for Your Buck From Boat to Plate” Paper presented at the 33<sup>rd</sup> Annual Maine Fisheries Forum, Rockport, Maine. February 29, 2008

Andreatta, Susan

2008 “Changes in Consumer Expectations and What This Means for Producers” Presentation made at the North Carolina Seafood Marketing Workshop Wilmington, NC January 29

Andreatta, Susan

2008 “Changes in Consumer Expectations and What This Means for Producers”. Presented at the North Carolina Aquaculture Conference. January 19.

Andreatta, Susan

2007 “Community Supported Fisheries” Presented at the Harvest to Home Summit. Morehead City, Carteret County. November.

Andreatta, Susan

2007 “Consumer Preferences in Local Seafood: Case Study of Carteret Catch.” Mid-Atlantic Sea Grant annual meeting. April 17-19. Chincoteague, VA.

Andreatta, Susan

2007 Session Abstract: Coastal fisheries in the United States: Developments and Challenges. Organized for the Society for Applied Anthropology Andreatta and Paolisso are co-chairs of a PESO sponsored panel. Tampa, Florida. March 27 – April 1.



## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

Andreatta, Susan and Anne Parlier

2007 “Developing Alternative Markets for Traditional Small-Scale Commercial Fishermen.”  
Paper presented at the Society for Applied Anthropology. Tampa, Florida.  
March 27–April 1.

Parlier, Anne and **Susan Andreatta**

2007 Endangered Fishermen: How Long will Shrimping Last in Carteret County, North Carolina? Paper presented at the Society for Applied Anthropology. Tampa, Florida. March 27–April 1.

Andreatta, Susan

2007 Panel abstract: “The Political Ecology of Carteret Catch: An Applied Anthropological Perspective of Fishermen’s Efforts to Sustain their Industry in North Carolina.” Presenters: Susan Andreatta and students from the UNCG’s Anthropology Department: Michael Parris, Patrick Wood and Anne Parlier Organized for the Southern Anthropological Society Annual Meeting. Oxford, Mississippi. February 15-19.

Andreatta, Susan and Anne Parlier

2007 “Participatory Action Research Among the Fishing Community of Carteret County, North Carolina”. Presented at the Southern Anthropological Society Annual Meeting. Oxford, Mississippi. February 15-19.

Parlier, Anne and **Susan Andreatta**

2007 “How Far did this fish travel?: A Political Ecology Perspective on Local Fish Consumption in Carteret County” Organized for the Southern Anthropological Society Annual Meeting. Oxford, Mississippi. February 15-19.

Parris, Michael

2007 “The History and culture of Carteret County Shrimpers.” Presented at the Southern Anthropological Society Annual Meeting. Oxford, Mississippi. February 15-19, 2007.

Wood, Patrick

2007 “Policy, Issues and Concerns of Carteret County Shrimp Harvesters.” Presented at the Southern Anthropological Society Annual Meeting. Oxford, Mississippi. February 15-19, 2007.

Andreatta, Susan

2007 Commercial Fishing in Carteret County, NC: What the Public Needs to Know. Presentation given at the First Presbyterian Adult Issues Class. January 21.

### **Community Presentations**

- October 23, 2008 UNCG – BELL “Approaches to Social Entrepreneurship: A Case Study: Community Supported Fisheries” Presented to UNCG BELL Committee
- October 22, 2008 “Sustaining Human System - Community Based Environmental Management: From An Applied Anthropological Perspective” Presented to UNCG students – Human Environment Systems Class
- November 2007 “Community Supported Fisheries.” Presented at the Harvest to Home Summit. Morehead City, Carteret County.
- November 2006 Talk on Community Supported Fisheries given to Adult Sunday school class at First Presbyterian Church, Greensboro, NC.

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

### **Awards and Honors**

- **Bruce Springsteen** – Recognized Project Green Leaf at Local Concert – April 2008
- **Honorable Mention** - WAPA Praxis Award for Developing Alternative Markets for Small-Scale Commercial Fishermen (Awarded at NAPA Business meeting at AAA – Washington, DC November 2007)

### **Medias Interest**

- New York Times – Eric Nash October 1, 2008
- Contacted by Food and Wine for information on Community Supported Fisheries for August 2008 issue.
- The Christian Science Monitor “Small fishermen borrow a page from small farmers. Community –supported fisheries, like community –supported farms, sell ‘shares’ in a catch directly to consumers.” March 10, 2008.
- Coastwatch Early Summer 2008 – “Keeping Local Seafood Afloat: Workshop Explores Consumer Trends and Marketing Strategies.”
- UNCG Alumni Magazine – Community Supported Fisheries story reported in Spring 2007

### **Contacted by Fishermen**

Fisherman from Nova Scotia

Fishermen from Maine

Fisherman from Pamlico Sound

### **Undergraduate Student Assistants:**

Anne Parlier – UNCG undergraduate anthropology student. Received an UNCG undergraduate student research scholarship from the office of Undergraduate Research ( for two semesters to work on this project with Dr. Andreatta 2006-2007.

Patrick Wood – UNCG undergraduate anthropology student. Received an UNCG undergraduate student research stipend from the office of Undergraduate Research for one semester to work on this project with Dr. Andreatta 2007.

Michael Parris - UNCG undergraduate anthropology student. Completed course work in applied anthropology

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

### **Helpful References**

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Andreatta, Susan

2000. “Marketing Strategies and Challenges of Small-Scale Organic Producers in Central North Carolina.” Culture and Agriculture. 22(3):40-50.

Andreatta, Susan and William Wickliffe II

2002. “Managing Farmer and Consumer Expectations: A Study of a North Carolina Farmers Market.” Human Organization. 60(2):167-176.

Henderson, Elizabeth and Robyn van En

1998. Sharing the Harvest. A Guide to Community-Supported Agriculture. White River Junction: Chelsea Green Publishing Company.

Kotler, Philip and Gerald Zaltman

1971 Social Marketing: An Approach to Planned Social Change. Journal of Marketing. (35)3-12.

Kotler, Philip, Ned Roberto and Nancy Lee

2002 Social Marketing: Improving the Quality of Life. Second Edition. Thousand Oaks, California: Sage Publications

Landers, Judy, Peter Mitchell, Bill Smith, Thomas Lehman, and Christopher Conner

2006 “Save the Crabs, then Eat ‘Em”: A Culinary Approach to Saving the Chesapeake Bay. Social Marketing Quarterly. 12(1):15-28.

van Willigen, John

2002 Applied Anthropology. An Introduction. 3<sup>rd</sup> edition. Westport, Connecticut. Bergin and Garvey Publishers.

West, Susan and Barbara J. Garrity-Blake

2003 Fish House Opera. Mystic, Connecticut: Mystic Seaport.

### **A Few Helpful Websites**

Carteret Catch - <http://www.carteretcatch.org>

Growing Small Farms - <http://chatham.ces.ncsu.edu/growingsmallfarms/csafarms.html>.

Island Institute - <http://www.islandinstitute.org/>

Local Harvest - <http://www.localharvest.org>

North Carolina Department of Agriculture <http://www.ncagr.gov/markets/seafood>

Robyn Van En - <http://www.wilson.edu/wilson/asp/content.asp?id=804>

UNCG Project Green Leaf – <http://greenleaf.uncg.edu>

**Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

**Attachment 1. Record Sheet for Fishermen**

Date	Hours Fishing	Processing Time	Travel Time to Market	How did they hear about us	Number of Mrkts (Places)	Number of Units sold by Price per Pound
<b>Mon</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /
<b>Tues</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /
<b>Wed</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /
<b>Thurs</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /
<b>Fri</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /
<b>Sat</b>					<input type="checkbox"/> Condo <input type="checkbox"/> Hotel <input type="checkbox"/> Designated location <input type="checkbox"/> Roadside Stand <input type="checkbox"/> At my home <input type="checkbox"/> Special Delivery	<i>Example: (3) 500 lbs shrimp/\$3.00</i> ( ) / ( ) / ( ) / ( ) /

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

### **Attachment 2. Text from the Tri-fold Community Supported Fisheries Brochure**

#### **Community Supported Fisheries**

Community Supported Fisheries (CSFs) is a new direct marketing approach that will link consumers directly to the commercial fishing community. Though Community Supported Fisheries is a new approach to the marketing of seafood, this program is based upon the success of Community Supported Agriculture (CSA) arrangements which originated in Japan (1960s), in Europe (1970s), and in the United States (1980s). CSF is a direct marketing campaign to promote consumption of local seafood. A goal for this arrangement is to “know your fisherman; and put a face on a fish”.

#### **How It Works**

CSF arrangements are based on a contractual agreement between a fisherman and a consumer. CSF arrangements are tailored to the fishermen’s fishing practices and the concerns of those who join a particular CSF. The concept is that the consumer orders in advance for their seafood prior to the catch, or fishing season. This advanced order provides the fisherman a guaranteed market for their products allowing them to be able to fish the season. Different fish are available for commercial fishing at different times of year so the seafood options will change with the season. Consumers may contact a local fisherman listed on the website to purchase seafood when they are visiting the region. As participants in a CSF arrangement they are committing to preordering and meeting with the participant delivery person, fish peddler or fishermen at a designated time and place to pick up their seafood. In this way the consumer can obtain high quality, fresh, wild caught seafood at a reasonable price, and the fisher men can expand their market. It is important that consumers show up within a designated window of time to pay for and receive there orders, otherwise the fishermen retains the right to sell unclaimed seafood items. This is necessary because they are dealing with a perishable product which must be brought to market in a limited time period to maximize the quality and safety of the product.

#### **Information For consumers**

##### **Is it for you?**

Becoming a participant of a CSF arrangement may not be practical for everyone. There are some things to consider before deciding to join one.

Being a participant may mean reorienting one’s household food habits and routines. Seafood orders are seasonal; variety is limited to what is in season or plentiful in legally fishable waters. Participants will learn to eat seafood in season. (See the seafood availability chart, [greenleaf@uncg.edu](mailto:greenleaf@uncg.edu), look in the side bar under Wild caught fishing project). Another option is to ask the fisherman what items are available for purchase.

It may also be important to learn different cooking, storing, and preservation techniques. Seafood is best when it is freshest. There are a variety of ways to preserve freshness until one is ready to prepare the seafood product for their meal. It highly recommended that seafood be kept on ice or below 40 degrees Fahrenheit to prevent spoilage. Consumers should ask their sea food

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

provider about the safe handling or freezing of the products they choose to purchase. Participants must be prepared to handle the seafood properly once they receive so that it does not spoil (See recipe page, [greenleaf@uncg.edu](mailto:greenleaf@uncg.edu)).

Participants should find out how the food will be distributed and whether a cooler will be prepared or if one should bring their own cooler.

If a CSF arrangement works for you, the benefits are great. Besides enjoying, fresh, local seafood, you become directly connected to your seafood provider and to the waters from which your seafood was caught. You will be supporting a small fishery and contributing to the local economy. There may also be an opportunity to meet the fishermen who catch the seafood you eat. In this way there is a great opportunity to build community between fishermen, CSF participants, friends and families.

For seasonal recipes for local seafood see our [recipe page](#), at [Greenleaf@uncg.edu](mailto:Greenleaf@uncg.edu)

More information about CSF programs in Carteret County will be available at <http://greenleaf.uncg.edu/>

### **Information for Fishermen**

#### **Advantages**

A CSF arrangement can be a valuable part of your fishing operation. This method of direct marketing provides

- Capital at a time when it is needed most
- Shared risk among participants and fishermen
- A guaranteed market for a portion of what you catch before you catch it
- A vital link to consumers and community

Like other direct marketing methods, CSF arrangements provide fishermen an opportunity to sell their products locally and to have direct contact with consumers.

#### **Challenges**

Operating a CSF arrangement presents certain challenges to many fishermen. There are several things to consider before starting a CSF arrangement

- Management skills
- People and public relations
- The number of participants in relation to production capacity

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

- Seafood demand
- Time needed for processing and packing orders
- Method and location of distribution
- Updating product prices and availability

### **Starting a CSF in Your Area**

Find out if there is a demand, interest, or potential in your area for a CSF arrangement. Close proximity to the fishery is a must. Talk with people in the community or conduct informal surveys to determine their interest. If the interest is there, then the next step is getting the word out. Develop a brochure or flyer describing your CSF arrangement and offer details about your particular operation. Provide a list of products you plan to catch throughout the fishing season. Advertise in local newspapers or distribute brochures or flyers at local health food stores, community centers, farmers markets, etc. Emphasize to consumers that CSF arrangements:

- Build community
- Link consumers to their food providers
- Encourage social responsibility and stewardship of the waters
- Provide a source for fresh, local seafood products
- Support local fisheries, fishermen, and fish house dealers

Maintain a close connection with your participants throughout the season. Encourage feedback from them to help you plan for the following year. You may consider publishing a monthly newsletter containing fishery news, recipes, or tips on preserving seafood.

An excellent resource for those interested in starting a CSF, CSA or any other community supported direct marketing group, is the book, *Sharing the Harvest: A Guide to Community Supported Agriculture* by Elizabeth Henderson with Robin Van En.

For more specific information about how to start a CSF arrangement or information about potential participants, contact Project Greenleaf at: [s\\_andrea@uncg.edu](mailto:s_andrea@uncg.edu)

## **Final Report: FRG - 07-ST-04 Andreatta “Harnessing Consumer Preferences to Create New Markets for North Carolina Seafood - Year Two”**

### **Attachment 3. Locations where CFS Brochures were distributed**

Atlantic Beach Realty - Atlantic  
Cannon and Gruber Realtors – Atlantic  
Coldwell Bankers - Atlantic  
ERA Tetterton Management Group – Atlantic  
Alan Shelor Real estate - Atlantic  
Realty World – Atlantic  
Blue Water GMAC - Atlantic  
Century 21 – Atlantic  
Rains - Atlantic  
Emerald Isle Realty – Emerald Isle  
Mitch and JoAnne – Harkers Island  
Atlantis Lodge  
Beaufort Realty

#### **Area Attractions**

Taylor's Big Mug – Beaufort  
Beaufort Maritime Museum  
Aquarium Pine Knoll Shores  
Crystal Coast Tourist Information  
Core Sound Waterfowl Museum

#### **Fish Houses and Seafood Retail**

Fishtowne – Beaufort – Bill Rice  
Luther Smith and Sons – Atlantic Dean Smith  
Quality Seafood – Cedar Island Bradley Styron

#### **Fisher Families**

Sandy and Elbert Gaskill  
Anita and Randy Gray  
Larry and Sandra Kellam  
Kenny and Ida Rustick  
Gina, Allan and Thomas Smith  
Jesse Taylor

#### **Other locations**

Annual Maine Fisheries Forum, Rockport, Maine.  
North Carolina Seafood Marketing Workshop Wilmington  
Harvest to Home Summit – Morehead City  
Society for Applied Anthropology (SfAA) annual conferences  
Annual North Carolina Sea Grant Meeting. New Bern, North Carolina