### **RUTGERS COOPERATIVE EXTENSION**

NEW JERSEY AGRICULTURAL EXPERIMENT STATION

CIRCULATING COPY

LOAN COPY ONLY

## Restaurant Markets for South Jersey Soft-Shelled Blue Crabs

Nona R. Henderson<sup>1</sup>

Seafood Marketing Extension Specialist
Rutgers Cooperative Extension
Department of Extension Specialists and
Department of Agricultural Economics and Marketing

and

#### Dan B. Strombom<sup>2</sup>

Agricultural Resource Management Agent Rutgers Cooperative Extension of Cape May County Department of Agricultural and Resource Management Agents



Cook College Rutgers, The State University of New Jersey



FISHERIES
AND
AQUACULTURE
TECHNOLOGY
EXTENSION
CENTER

June 1994

### Acknowledgements

This publication resulted from research funded in part by: the Salem County Office of Economic Development; Rutgers Cooperative Extension of Cape May County; the Fisheries & Aquaculture Technology Extension Center under its University/ Industry Partnership Program through a grant from the New Jersey Commission on Science and Technology; and NOAA, Office of Sea Grant, Department of Commerce, under grant number NA89AA-D-SG057 (Project # A/A-1). Cooperating agencies are: Rutgers Cooperative Extension; New Jersey Agricultural Experiment Station; Rutgers, the State University of New Jersey; United States Department of Commerce; NOAA Sea Grant College Program; United States Department of Agriculture; New Jersey Marine Sciences Consortium; Salem County Board of Chosen Freeholders; Cape May County Board of Chosen Freeholders; and Public Service Electric and Gas (PSE&G). The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its subagencies, or those of the other funding agencies.

The U.S. government is authorized to produce and distribute reprints for governmental purpose not-withstanding any copyright notation that may appear herein: New Jersey Sea Grant Publication No. NJSG-94-297.

The authors gratefully acknowledge the cooperation of Pat Knobloch, Director, Salem County Office of Economic Development in the implementation of this project. Manuscript review by: Stewart Tweed, Marine Agent, New Jersey Sea Grant Marine Advisory Service; Walter Canzonier, President, New Jersey Aquaculture Society; John Kraeuter, Associate Director, Fisheries & Aquaculture Technology Extension Center; and Joseph Dubarro, New Jersey Department of Environmental Protection and Energy, was invaluable. Shyam Upadhyaya, graduate student in the Department of Agricultural Economics and Marketing, Cook College assisted in computer entry of the survey data, and Phil Wisneski, Office of Communications & Public Affairs, Cook College/NJAES, prepared the manuscript for publication.

RUTGERS COOPERATIVE EXTENSION
N.J. AGRICULTURAL EXPERIMENT STATION
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
NEW BRUNSWICK

<sup>&</sup>lt;sup>1</sup> Blake Hall, Cook College, Rutgers University, New Brunswick, NJ 08903-0231

<sup>&</sup>lt;sup>2</sup> 4 Moore Road, Cape May Court House, NJ 08210-1601

# Restaurant Markets for South Jersey Soft-Shelled Blue Crabs

### Introduction

This study identifies restaurant marketing opportunities for soft-shell blue crab in southern New Jersey. It contributes to an evaluation of the economic feasibility of establishing a blue crab shedding facility in Salem County.

Blue crabs shed their hard exoskeleton in order to grow. The new shell is soft but hardens after a few hours. If the crab is removed from water immediately after shedding, the new shell remains soft and is edible. Soft-shell blue crab command a higher wholesale price than does hard crab and, therefore, offers crabbers a value-added product alternative.

The John T. Handy Company of Crisfield, Maryland established a shedding facility in Cumberland County, New Jersey in 1989. Numerous south Jersey commercial crabbers leased tanks at the Handy facility to shed their crabs. Crabbers living and working in Salem County, however, reportedly found that commuting to the Handy Company facility was a hardship in that their tanks required tending four times each day. Having a local facility rather than shedding at the Handy facility appealed to Salem County fishermen.

The proposed Salem County crab shedding facility would provide centralized production through the leasing of shedding tanks to independent crabbers. It is expected that only fresh, live soft-crab will be produced during the first phase of operation because the investment in freezing and cold storage equipment is outside the start-up investment envisioned by the County.

Salem County crabbers sell most of their catch to wholesalers supplying large markets from Philadelphia to New York City. It is expected that these buyers will receive the bulk of the production from the proposed activity. However, the crabbers also are interested in developing direct sales to restaurants in areas where they would not compete with their wholesalers. Therefore, this market study does not examine all potential markets but rather focuses on restaurant sales in southern New Jersey.

### **Methods**

A telephone survey was designed to identify specific restaurants which purchase soft-shelled blue crab and to which crab produced at the proposed shedding facility in Salem County could be sold. The market area was defined by a limit of one hour's driving time from the proposed facility. The two hour round-trip driving time to market was assumed to be the maximum available to crabbers who must also tend their crab pots and shedding tanks. By this reasoning, the market area included restaurants in six southern New Jersey counties: Atlantic, Camden, Cape May, Cumberland, Gloucester and Salem.

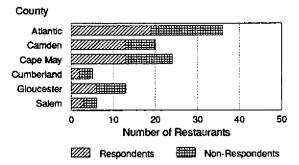
Restaurant names, locations, and telephone numbers were obtained from the yellow pages of area telephone books. Restaurants selected met at least one of the following criteria: 1) business name contained a seafood-related term (i.e., Captain Wally's, The Wharf, etc.), 2) "seafood" featured in its advertisement, and/or 3) restaurant listed under "seafood" in the restaurant guide. Large seafood chain restaurants, such as Red Lobster and Long John Silver, were excluded because they have centralized sourc-

ing and do not buy direct from fishermen. All relevant restaurants in the market area were contacted by telephone and seafood buyers for each of the restaurants were interviewed. The target response rate was at least 50 percent of relevant restaurants.

### **Results and Discussion**

The total number of relevant restaurants identified was 104. As shown in Figure 1, 35 percent were found in Atlantic County. Eight of the 36 restaurants in Atlantic City. Cape May, Camden, and Gloucester Counties contained 23, 19, and 12 percent respectively of total relevant restaurants. Salem and Cumberland Counties contained many fewer restaurants; together these counties contributed only 11 percent to the total.

Figure 1: Survey Response Rate



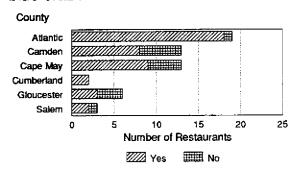
N=104, n=56

A total of 56 surveys was completed for an overall response rate of 54 percent. By county, response rates varied from 40 percent in Cumberland County to 65 percent in Camden County. There were few outright refusals to participate in the survey. Non-responses were due primarily to inability to find a convenient time within the busy schedules of the seafood buyers to conduct the interview.

Forty-two of the 56 restaurants surveyed (75%) served soft-shell crab (Figure 2). However, these positive responses were not distributed uniformly within the market area. Restaurants serving soft-shell crab were concentrated along the coast in

Atlantic and Cape May Counties and in Camden County. The very few seafood restaurants in Salem and Cumberland Counties do not present significant opportunities for sales.

Figure 2: Do you serve soft-shell blue crab?

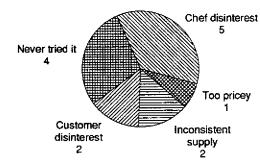


n≈56

Fourteen seafood restaurants (25%) did not serve soft-shell crab (Figure 2). Five of these were found in Camden County, four in Cape May County, three in Gloucester County, and one each in Atlantic and Salem Counties. The reasons reported by restaurants in Camden County for not serving soft-shell crabs were "never tried it" and "customer disinterest" (Figure 3). In coastal counties, restaurants not serving soft-crab reported that "chef's not interested." Only three restaurants reported that price and inconsistency of supply kept them from serving soft-shelled crab. None reported that poor product quality was a reason.

Restaurants were asked whether they served softshelled crab seasonally or year-round. Of the 42

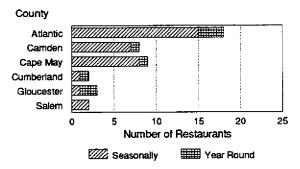
Figure 3: Why don't you serve softshelled blue crab?



n=14

restaurants which served soft-shell crabs, all serve it during the summer season (Figure 4). Only 8 (19%) offered soft-shell crab year-round by using frozen product in the off season. Those which served soft-crab year-round were evenly distributed throughout the region and tended to be larger seafood restaurants with year-round clientele. The reason that there were not more restaurants in Cape May and Atlantic Counties which served soft-crab year-round was that most restaurants in Cape May and Atlantic Counties rely heavily on summer tourist clientele and many close during winter months.

Figure 4: What part of the year do you serve soft-shell blue crab?



n=42

Thirty-four restaurants reported their weekly demand for fresh soft-shell crab during the summer season. The total weekly demand for fresh soft-shell crab by these respondents amounted to 663 dozen (see Table 1). Eighty-six percent of this total weekly demand for fresh soft-shelled blue crab came from restaurants in Atlantic and Cape May Counties.

The average weekly demand for fresh soft-shelled crab during the summer season was 20 dozen per week. Average weekly demand for fresh soft crab was highest in four casino restaurants located in Atlantic County (35 dozen/week) and 11 Atlantic County restaurants (24 doz./week). It was lowest in five restaurants located in Camden County (4 doz./week).

The restaurants differed markedly in the quantity of fresh soft-shell crab purchased, ranging from a few dozen to as much as 90 dozen per week. As shown in Figure 5, most restaurants purchase less than 10 dozen per week of either fish or frozen form. Large quantity (20+ doz./week) buyers were concentrated

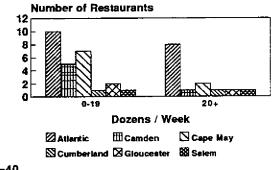
Table 1: Reported Summer Weekly Demand of Fresh Soft-Shelled Crab by County (Dozens)

County	Number of Respondents	Total Fresh Demand	Average Fresh Demand	
Atlantic				
Casinos	4	142	35	
Other	11	269	24	
Camden	5	20	4	
Cape May	9	157	17	
Cumberland	2	28	14	
Gloucester	2	30	15	
Salem	1	19	19	
Total	34	663	20	

in Atlantic County. Only one or two restaurants in the other five counties reported placing large weekly soft-crab orders.

Twenty-seven restaurants reported that they served fresh soft-shell crab (Table 2). In contrast, only six restaurants surveyed used frozen soft-shell crab

Figure 5: Weekly Orders for Fresh & Frozen Soft-Shell Crab



n=40

product exclusively. Nine additional restaurants used frozen soft-shell crabs as well as fresh. The total weekly demand for frozen soft-shell crab reported by 14 restaurants was 274 dozen.

Twenty-nine percent of the 42 restaurants which served soft-crab were buying directly from fishermen (Table 3). Five of these purchased soft-crab

Table 2: Product Forms of Soft-Shelled Crab Used by South Jersey Restaurants (Number of Restaurants)

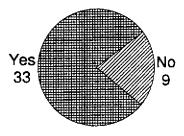
County	Fresh Only	Frozen Only	Both	Total
Atlantic	13	3	2	18
Camden	6	1	1	8
Cape May	5	0	4	9
Cumberland	1	0	1	2
Gloucester	1	1	1	3
Salem	1	1	0	2
Total	27	6	9	42

from wholesalers as well. The restaurants which bought directly from fishermen were concentrated in Atlantic and Cape May Counties. None of the restaurants surveyed in Camden and Gloucester Counties bought direct. Several indicated that they had never been contacted by a crabber. However, 79 percent of all restaurants which served soft-shelled crab expressed an interest in buying soft crab from local producers (Figure 6). This included two of the Atlantic City casino restaurants. It should be noted that a special license is required to supply Atlantic City casinos. If Salem County fishermen want to sell to casinos, they will have to obtain a license from the Casino Control Commission.

Table 3: Source of Soft-Shelled Crab for South Jersey Restaurants (Number of Restaurants)

County	Wholesaler Only	Fishermen Only	Both	Total
Atlantic	13	4	1	18
Camden	8	0	0	8
Cape May	4	1	4	9
Cumberland	1	1	0	2
Gloucester	3	0	0	3
Salem	1	1	0	2
Total	30	7	5	42

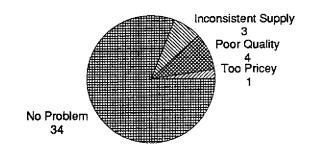
Figure 6: Are you interested in buying locally produced fresh soft-shell crab?



n=42

The majority (81 percent) of the restaurants said they had no problems with their existing soft-shell crab supply (Figure 7). Although four complained of poor product quality and three of inconsistent supply, only one had a problem with high price.

Figure 7: What problems do you have with your soft-shell crab supply?



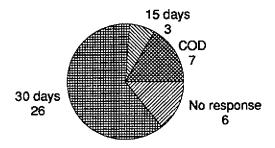
n=42

Most restaurants surveyed had a 30-day payment policy (Figure 8). These terms may not be acceptable to most fishermen. Restaurants which had bought soft-crab directly from fishermen reported that they pay on delivery. A number of restaurants who had not previously purchased from fishermen volunteered that more rapid payment could be negotiated.

### **Summary and Conclusions**

This market survey describes the existing demand for soft-shell blue crabs at South Jersey seafood restaurants. Assuming that the study's 56 survey

Figure 8: What are your payment terms?



n=42

respondents were representative, the total estimated summer weekly demand for fresh soft-crab by a projected 78 restaurants serving on average 20 dozen weekly would be 1,560 dozen. The highest demand and largest restaurant buyers for fresh soft-shell blue crab in southern New Jersey are found in ocean resort towns in Atlantic and Cape May Counties. Current demand in other parts of this region is considerably less.

Twenty-eight percent of restaurants in Atlantic County and fifty-six percent of restaurants in Cape May County which served soft crab already buy direct from fisherman. This direct market is likely to be highly competitive, however. The survey found general satisfaction with traditional suppliers; only a minority of restaurants reported any complaints. The market is dominated by wholesalers. Particular attention, therefore, must be paid to consistency in deliveries. Size grading and dependable shipments will be the minimum expectations of these restaurants. The one area of dissatisfaction which might provide a competitive opening is product quality.

The standard payment terms of 30 days could be a cash flow problem for fishermen. Most restaurants indicated, however, a willingness to negotiate shorter payment terms.

Opportunities to increase the demand for fresh softshelled crabs within the market area appear to be most promising in Camden County. The study found as many restaurants serving soft crab in Camden County as in Cape May County, but the quantities purchased were either small or dominated by frozen crab. The proximity of this market and the existing acceptance of the product favor the potential success of promotional efforts.

Efforts in support of establishing the proposed facility should include promotional funding to increase consumer interest in and restaurant demand for locally-produced soft-shelled crab. The relative merits of joint versus individual promotional programs need to be explored.

Desktop publishing by the Cook College/NJAES Office of Communications and Public Affairs **RUTGERS COOPERATIVE EXTENSION** N.J. AGRICULTURAL EXPERIMENT STATION RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

NEW BRUNSWICK

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress of May 8 and June 30, 1914. Cooperative Extension work in agriculture, home economics, and 4-H. Zane R. Helsel, director of Extension. Rutgers Cooperative Extension provides information and educational services to all people without regard to sex, race, color, national origin, disability or handicap, or age. Rutgers Cooperative Extension is an Equal Opportunity Employer.