LOUISIANA COMMERCIAL OYSTER DEALERS: ANALYZING POINT OF FIRST SALES DATA FOR THE LOUISIANA COMMERICAL OYSTER SECTOR: 2000 - 2009

WITH AN EXAMINATION OF CHANGES IN FIRST RECEIVERS' ACTIVITIES AFTER HURRICANES KATRINA & RITA IN 2005 AND GUSTAV & IKE IN 2008

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Chapter 1.

1.1 Introduction

This report examines the participation and activities of licensed commercial seafood dealers that purchased oysters directly from commercial fishermen between 2000 and 2009. The findings of this report are derived from data obtained in the Louisiana trip ticket program, a mandated recording program in which seafood dealers report to the Louisiana Department of Wildlife and Fisheries (LDWF) the quantity and value of seafood that they buy directly from commercial fishermen.

Data from the trip ticket program are regularly employed to determine the quantity of seafood species harvested commercially in the state. This report uses these data to compile a profile of the dealers who purchased oysters in Louisiana between 2000 and 2009. It also examines changes and trends in the volume and dockside value of oysters with special attention paid to changes experienced after hurricanes Katrina and Rita in 2005 and hurricanes Gustav and Ike in 2008.

This report is part of a series of reports that examines the activities of commercial seafood dealers in Louisiana. Other reports in this series include a general overview of commercial seafood dealers and separate studies of dealers that purchased shrimp, oysters, crabs, and freshwater finfish.

1.2 Purpose of This Study

This study is part of an on-going project by the LDWF to monitor changes in activities among first receivers (or commercial seafood dealers) in the Louisiana commercial oyster sector following hurricanes Hurricane Katrina and Rita in 2005. After the incidence of hurricanes Gustav and Ike in September 2008, the scope of the report was expanded to analyze the commercial seafood dealers' activities following all four hurricanes. Specifically, the objectives of the study are:

1. To better understand the impacts of hurricanes on seafood dealers operating in Louisiana's commercial oyster sector by using the LDWF "trip ticket" data to track purchases by seafood dealers

in the years before and after the hurricanes. The report presents analysis related to the volume and dockside value of oysters purchased by seafood dealers from 2000 to 2009.

2. To analyze the variation in the size of seafood dealers' purchases by dividing dealers into different oyster volume categories defined by the volume of oysters (in pounds) purchased directly from commercial fishermen in a given year. The report observes trends within and across categories from 2000 to 2009. Second, the study also explores the structure of the Louisiana saltwater finfish dealer sector by examining differences in activities among dealers that hold different types of LDWF commercial seafood dealer licenses.
3. Discussion of oyster dealer activity in two separate regions: southeast Louisiana and southwest Louisiana.

The analyses will aid in understanding observable changes in Louisiana commercial seafood dealers' activities before and after the 2005 and 2008 hurricanes.

1.3. Commercial Seafood Dealers

A commercial seafood dealer is defined conceptually by the function it performs in the marketing chain and technically by the type of license it holds that grants it the legal right to perform that function. Functionally, a commercial seafood dealer is defined as any person, business, or other entity that purchases seafood directly from commercial fishermen for later resale. The term "dealer" may be applied to a wide array of diverse individuals and firms including, but not limited to, docks that buy seafood from fishermen and sell it to processors; seafood processors that buy some portion of the raw product directly from fishermen; and roadside peddlers, seafood shops, restaurants, groceries, and other retailers who get some or all of their seafood products directly from fishermen. The common element is buying or obtaining seafood directly from commercial fishermen.

1.3.1. LDWF Licensed Commercial Seafood Dealers

In this report, a licensed commercial seafood dealer is defined as any person, business, or other entity that holds any of several types of commercial seafood retail/wholesale dealer licenses that grant them the legal privilege to buy seafood directly from commercial fishermen in Louisiana for later resale to another person, business, or other entity. The term “dealer” may also be applied to two additional license types, called “fresh products licenses”, for commercial fishermen or their spouses who sell some portion of their seafood harvests at retail or directly to the public.

The Louisiana Department of Wildlife and Fisheries (LDWF) issues several different types of commercial seafood dealer licenses, a selected list of which may be found in Table 1.1. A more comprehensive discussion of the Louisiana seafood dealer licensing system is included in another report in this series: *Commercial Seafood Dealers in Louisiana, 2000-2009: Analyzing Point of First Sales Data from the Louisiana Trip Ticket Program with an Examination of Changes in First Receivers’ Activities after Hurricanes Katrina & Rita in 2005 and Gustav & Ike in 2008*.

The LDWF commercial dealer license database contains a limited amount of basic information about each license holder (type of dealer license type, address, and a unique license number). These were connected, anonymously and confidentially, with LDWF trip ticket data to compile a database about seafood dealers’ location and license types and the types, volume, dockside value of the seafood that they purchased directly from commercial fishermen in the period from 2000 to 2009.

Table 1.1. Selected List of Louisiana Commercial Seafood Dealer Licenses

License Title:	Appropriate for:	Label in This Report:
Resident Seafood Wholesale/Retail Dealer License - Business	Louisiana land-based businesses that buy seafood directly from commercial fishermen for later resale	Resident business seafood dealer
Resident Seafood Wholesale/Retail Dealer License - Vehicle	Louisiana businesses that buy seafood directly from commercial fishermen and sell that seafood to the public out of a vehicle	Resident vehicle seafood dealer
Resident Fresh Products Dealer License	Louisiana resident licensed resident commercial fishermen who wish to sell his or her catch directly to the public	Resident fresh products dealer
Resident Fresh Products Dealer - Spouse License	Spouses of licensed Louisiana resident commercial fishermen who wish to sell a portion of his or her spouse’s catch directly to the public	Resident fresh products spouse dealer
Non-Resident Seafood Wholesale/Retail Dealer License - Business	Out of state land-based businesses that buy seafood directly from commercial fishermen for later resale	Non-resident business seafood dealer

1.4. Louisiana Trip Ticket Program

Since 1999, commercial fishermen and licensed commercial seafood dealers have been required to report the volume and dockside value of commercial seafood landed in Louisiana as part of the Louisiana trip ticket program. Commercial seafood dealers and commercial fishermen must complete a record of the quantity and dockside value of the seafood exchanged at the "point of first sale". Variables included in the trip ticket report of each transaction include the identification of the species, the volume landed, and the amount paid to the commercial fisherman among others. Dealers submit a copy of the report for each transaction to the Louisiana Department of Wildlife and Fisheries. A comprehensive discussion of the Louisiana trip ticket program and the data it collects are included in another report in this series: *Commercial Seafood Dealers in Louisiana, 2000-2009: Analyzing Point of First Sales Data from the Louisiana Trip Ticket Program with an Examination of Changes in First Receivers' Activities after Hurricanes Katrina & Rita in 2005 and Gustav & Ike in 2008*.

The volume of oyster purchases on trip tickets are alternatively reported as 'whole oysters', sacks, or barrels. All units are all converted into pounds.

The data pertaining to the quantity, value, and species of seafood purchased by each dealer were obtained from the trip ticket program and joined, anonymously and confidentially, with corresponding data regarding the location and license type of each dealer by a common variable, the unique commercial seafood dealer license number. Data were analyzed using a variety of statistical packages: SAS, STATA and Microsoft Excel.

1.4.1. Louisiana Trip Ticket Data Considerations

The volume of seafood recorded in trip ticket transactions is an output for commercial fishermen but an input for commercial seafood dealers. The volume of seafood that a dealer reported in the trip ticket program may not represent the total amount of seafood that it purchased, only the quantity that it purchased directly from commercial fishermen in Louisiana. The quantity of seafood that a dealer acquired from other sources, such as processors, distributors, other dealers, or commercial fishermen in other states, is not measured in Louisiana trip ticket transactions.

The value of the seafood traded and recorded in trip ticket transactions is here called “dockside value.” The term “dockside value” represents a source of revenue for commercial fishermen and an expenditure for commercial seafood dealers. The dockside value is a measure of the amount of money each dealer spent in buying seafood directly from commercial fishermen. It may not measure the total amount of money a dealer spent in acquiring seafood because a dealer may have also purchased seafood from additional sources (processors, distributors, other dealers, or commercial fishermen outside Louisiana) that are not recorded in trip ticket transactions.

Only one of many potential expenditures that seafood dealers incur in operating their businesses, dockside value may not reflect a dealer’s total expenses or costs of operation. Further, no inference regarding revenues, profits, or returns can be made from trip ticket data.

1.5. Hurricane Incidents in Louisiana in 2005 and 2008

Louisiana was hit by four hurricanes that had a considerable impact on the state’s residents, coastal and marine resources, and commercial seafood sectors within the 2000-2009 study timeframe. This report will examine changes in select parameters of seafood dealer activity that are measured by trip ticket data.

Hurricane Katrina made landfall as a Category 3 hurricane near Buras, Louisiana, in Plaquemines Parish in the southeastern portion of the state on August 29, 2005. It continued northward and made landfall again near the Louisiana-Mississippi boundary (Knabb, Rhome, and Brown, 2005). Hurricane Rita made landfall on September 24, 2005 in southwestern Louisiana between Johnson’s Bayou and Sabine Pass as a Category 3 hurricane (Knabb, Brown, and Rhome, 2006). This report may refer to hurricanes Katrina and

Rita as "the 2005 hurricanes" or "the 2005 storms". It will also make reference to 2005 as "the hurricane year of 2005."

Hurricane Gustav was a Category 2 hurricane when it made landfall near Cocodrie, Louisiana, on September 1, 2008 (Beven and Kimberlain, 2009). Hurricane Ike made landfall near Galveston Bay, Texas on September 13, 2008 (Berg, 2009). The effects of both storms were felt in Louisiana. Hurricanes Gustav and Ike may be called "the 2008 hurricanes" or "the 2008 storms" in this report. The year 2008 may be called "the hurricane year of 2008".

1.6. Geographic Regions

This report examines the activities of oyster dealers in three different regions of the state based on the location of the commercial seafood dealer license holder. The three regions of Louisiana are defined below (Figure 1.1):

a) Southeast Louisiana which includes the following parishes: Ascension, Jefferson, Orleans, Plaquemines, Lafourche, Livingston, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany, and Tangipahoa.
b) Southwest Louisiana which includes the following parishes: Acadia, Assumption, Avoyelles, Calcasieu, Cameron, Iberia, Iberville, Jefferson Davis, Lafayette, Pointe Coupee, St. Landry, St. Martin, St. Mary, Terrebonne, and Vermilion.
c) Rest of Louisiana which includes all other parishes in the state.

The parishes in southeast Louisiana were affected disproportionately by Hurricane Katrina in 2005. The parishes in southwest Louisiana were disproportionately affected by Hurricane Rita in 2005 and Hurricane Ike in 2008. Hurricane Gustav in 2008 made landfall in south central Louisiana and affected parishes in both southeast Louisiana and southwest Louisiana.

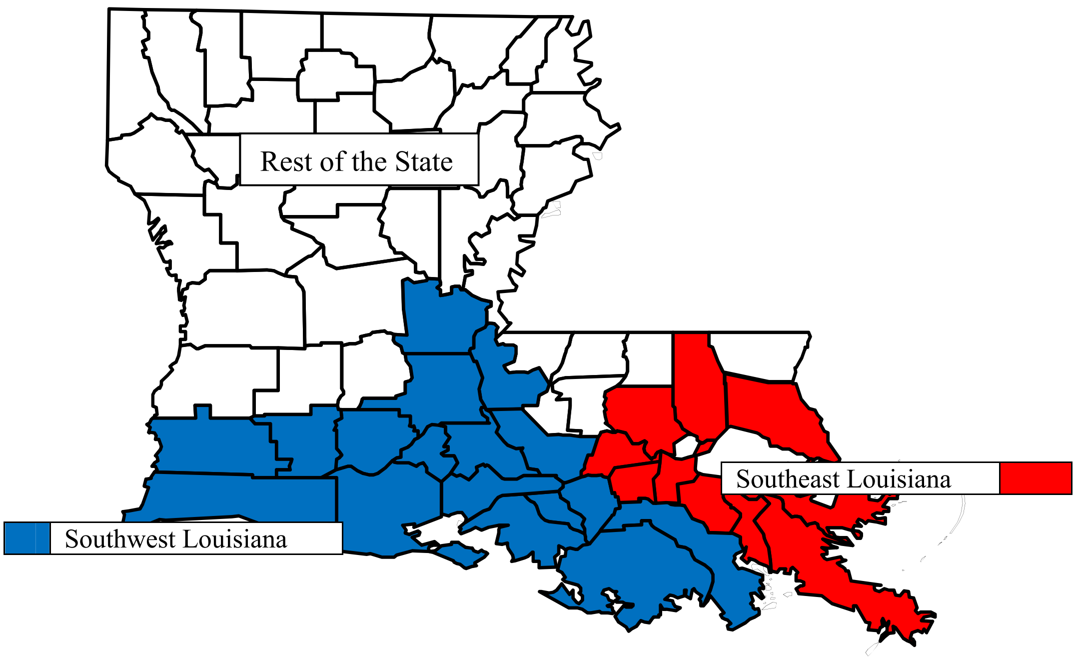

Figure 1.1. Designation of Southeast and Southwest Louisiana

The geographical delineation is based on the location of the commercial seafood dealer and not the place of residence of commercial fishermen or the area in which they harvested their commercial seafood products.

1.6. Organization of the study

This report is divided into six chapters. Chapter one outlined the background and objective of this study. Chapter two provides changes and trends for dealer participation and the volume and dockside value of purchases of commercial oyster landings among all commercial seafood dealers from 2000 to 2009. Chapter three divides all commercial seafood dealers into oyster volume categories based on the volume of oysters that each purchased in a given year. Chapter four examines differences in oyster dealer activity among dealers holding different types of commercial seafood dealer licenses. Chapter five considers differences in the volume and dockside value of oysters harvested from public grounds or private leases. Chapter six examines oyster dealers in southeast Louisiana and southwest Louisiana. Chapter seven includes a summary and conclusions. Appendices contain summary tables of data examined in the report.

Chapter 2.
Commercial Seafood Dealers in Louisiana That Purchased Oysters

2.1. Introduction

Louisiana has been consistently ranked as one of top-two oyster producing states (along with Washington State) in the U.S. This chapter examines the participation and activity of licensed commercial seafood dealers that purchased oysters directly from commercial fishermen in Louisiana between 2000 and 2009.

2.2. Volume and Dockside Value of Oysters

In the five-year period before hurricanes Katrina and Rita, the volume of oysters purchased directly from commercial fishermen by seafood dealers in Louisiana fluctuated from 12.7 million pounds in 2000 to 15.1 million pounds in 2001 to 13.9 million pounds in 2004 (Figure 2.1). The volume of oyster decreased to 12.1 million pounds in the hurricane year of 2005 and to 11.5 million pounds in 2006. Volume rose over the next three years to 12.9 million pounds in 2007, 13.0 million pounds in the hurricane year of 2008, and 14.9 million pounds in 2009.

The dockside value of oysters purchased by seafood dealers in Louisiana followed a generally rising trend from $27.5 million in 2000 to $34.8 million in 2004 (Figure 2.1). Dockside value fell to $33.3 million in the hurricane year of 2005 but thereafter rose to $40.1 million in 2007. Value declined by nearly one million dollars to $39.4 million in the hurricane year of 2008 but then climbed to $50.7 million in 2009.

2.3. Average Nominal Dockside Price Paid for Oysters

The average nominal dockside price per pound for oysters witnessed a sustained increase throughout the study timeframe (Figure 2.2). The average nominal dockside price per pound rose from $2.16 per pound in 2000 to $2.51 in 2004. The dockside price rose to $2.75 per pound in the hurricane year of 2005 and to $3.15 per pound in the following year. The dockside price declined to $3.12 in 2006 and $3.03 in the hurricane year of 2008. In 2009, the average nominal dockside price rose to a period high of $3.40.

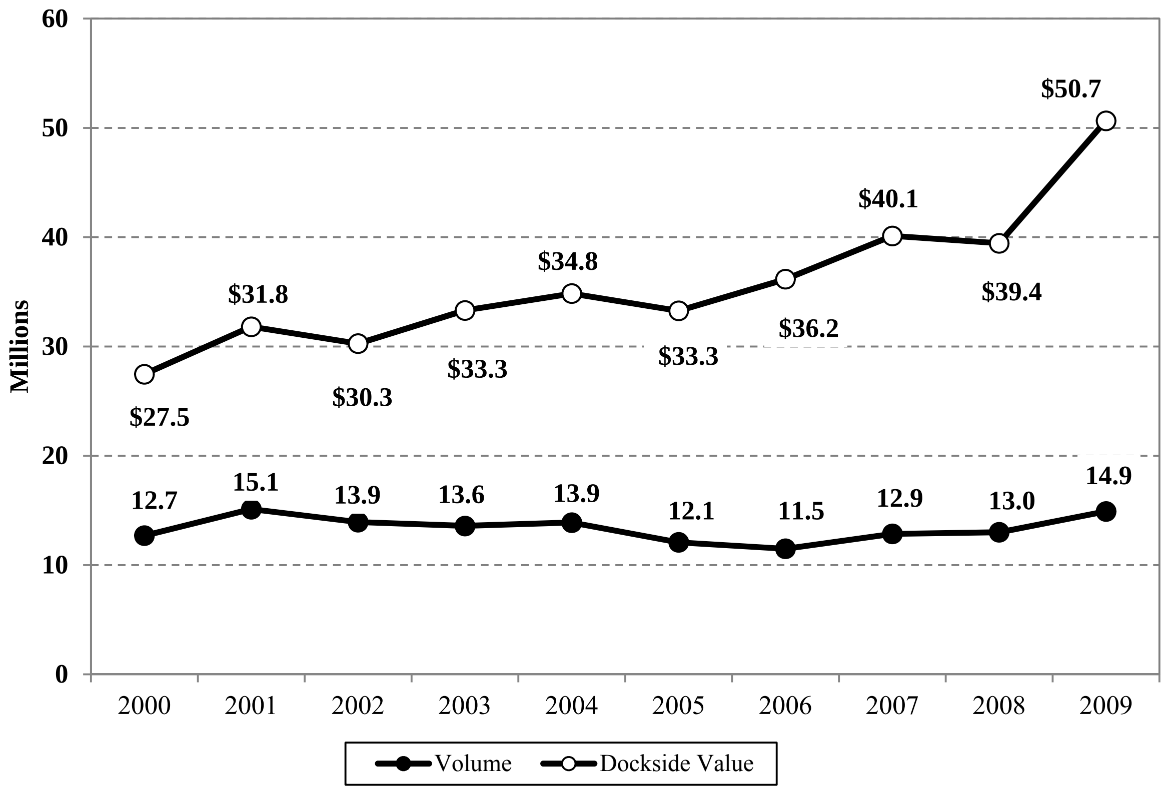

Figure 2.1. **Cumulative Volume and Dockside Value of Oysters Purchased by Louisiana Seafood Dealers Reported in Louisiana Trip Ticket Program, By Year: 2000-2009**

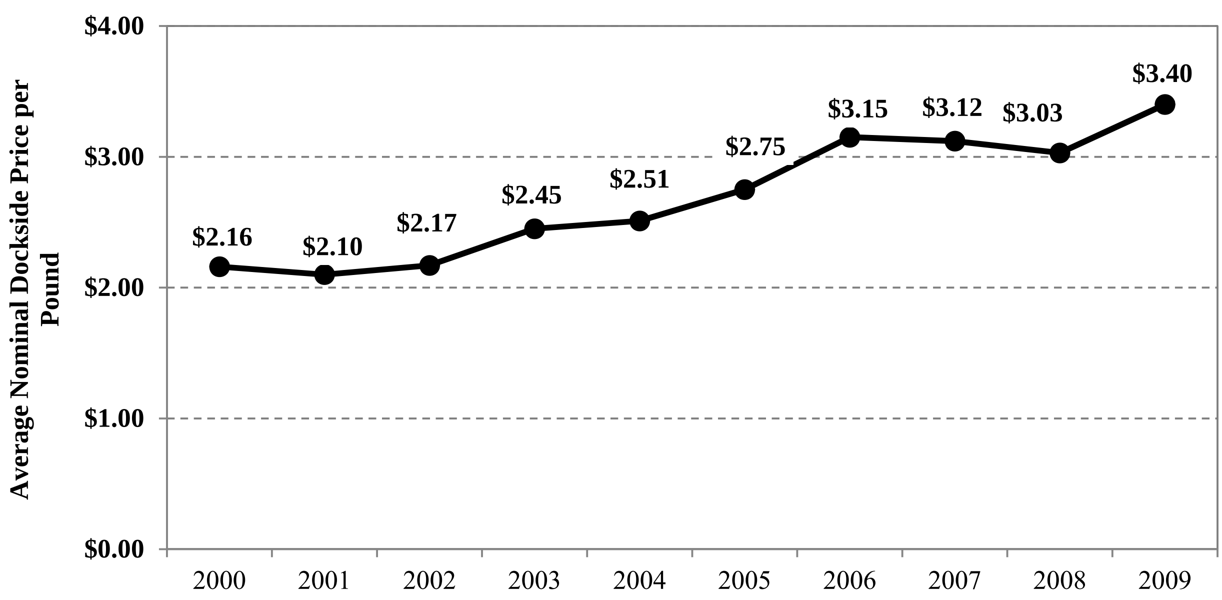

Figure 2.2. **Average Nominal Price per Pound for Oysters Purchased by Seafood Dealers in Louisiana According to the Louisiana Trip Ticket Program, By Year: 2000-2009**

2.4. Number of Active Oyster Dealers

Figure 2.3.displays the number of "active oyster dealers", that is, seafood dealer license holders who reported purchasing at least one pound of oysters directly from commercial fishermen directly from commercial fishermen in any given year from 2000 to 2009 according to data provided to the Louisiana trip ticket program. The number of active oyster dealers rose from 79 in 2001 to a period high of 95 in 2004. In the hurricane year of 2005, the number of active oyster dealers fell to 83 and subsequently dropped to 54 (a period minimum) in the year immediately after hurricanes Katrina and Rita. The number of active oyster dealers then rose to 65 in 2007 and to 77 in the hurricane year of 2008. The number stood at 79 in 2009.

2.5. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value

The tables below (Tables 2.1, Table, 2.2, Table 2.3) show the percentage change of the relevant variable in one year (identified in the column header) relative to the "base year" identified at the start of each column. For example, in Table 2.1, the value in the "2006" row and the "2007" column (+20.4%) means

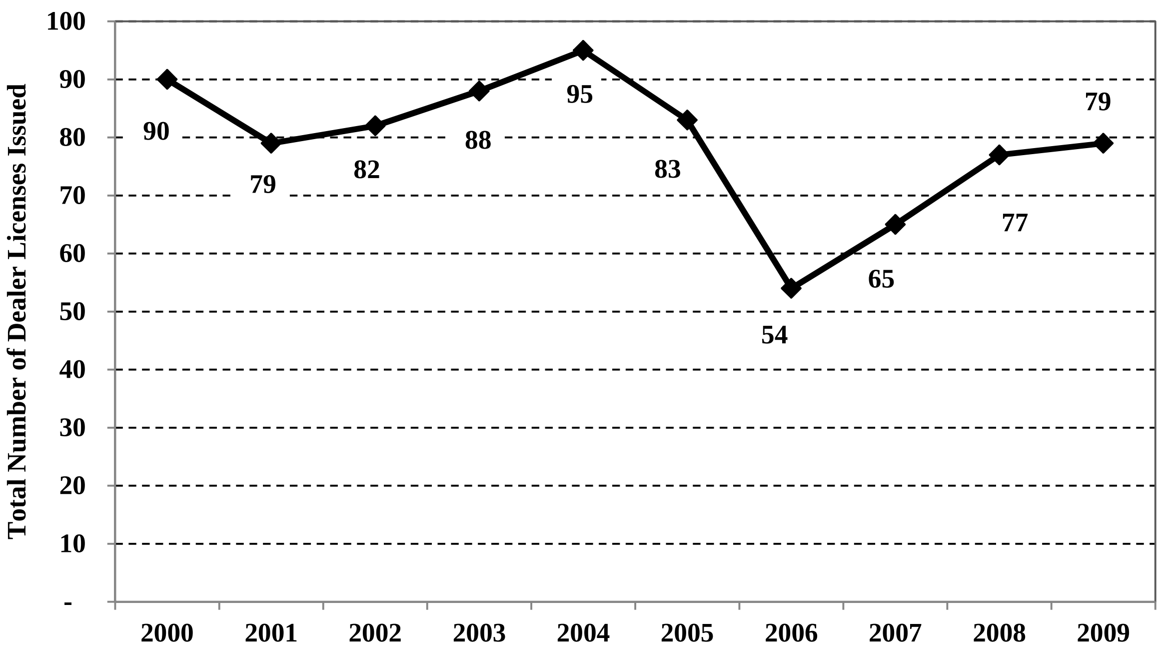

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Figure 2.3. Number of Active Oyster Dealers, By Year: 2000-2009

the number of active oyster dealers in 2007 (65) was 20.4 percent greater than the number in 2006 (54). Similarly, in Table 2.2, the value in the "2004" row and the "2008" column (-6.4%) means the volume of oysters purchased by dealers in 2008 (12,997,470 pounds) was 6.4 percent less than the volume in 2004 (13,880,620 pounds). (The tables also show that the number of active oyster dealers in 2004 was 9.4 percent greater than the 2000-2004 average. Volume and dockside value in 2004 were 0.3 percent and 10.5 percent, respectively, greater than their 2000-2004 averages.)

Table 2.1. Change in the Number of Active Oyster Dealers in Specified Year as a Percentage of Number in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+9.4%	**-4.4%**	**-37.8%**	**-25.1%**	-11.3%	-9.0%
	2004		**-12.6%**	**-43.2%**	**-31.6%**	-18.9%	-16.8%
	2005			-34.9%	-21.7%	-7.2%	-4.8%
	2006				+20.4%	+42.6%	+46.3%
	2007					**+18.5%**	**+21.5%**
	2008						**+2.6%**

Table 2. 2. Change in the Volume of Oysters Purchased by Oyster Dealers in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+0.3%	**-12.7%**	**-17.0%**	**-7.1%**	-6.1%	+7.8%
	2004		**-13.0%**	**-17.3%**	**-7.4%**	-6.4%	+7.4%
	2005			-4.9%	+6.4%	+7.6%	+23.5%
	2006				+11.9%	+13.2%	+29.8%
	2007					**+1.1%**	**+16.0%**
	2008						**+14.7%**

Table 2.3. Change in the Dockside Value of Oysters Purchased by Oyster Dealers in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+10.5%	**+5.5%**	**+14.7%**	**+27.2%**	+25.1%	+60.6%
	2004		**-4.5%**	**+3.8%**	**+15.2%**	+13.2%	+45.4%
	2005			+8.7%	+20.6%	+18.6%	+52.3%
	2006				+11.0%	+9.1%	+40.1%
	2007					**-1.7%**	**+26.2%**
	2008						**+28.4%**

2.5.1. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value Following Hurricanes Katrina and Rita

Changes in oyster dealer participation and activity following hurricanes Katrina and Rita can be examined by observing the percentage changes in volume, dockside value, and the number of active dealers in the hurricane year of 2005 and afterward to the values prior to the storms. The tables present two ways of making such a comparison by expressing the percentage change relative to measure in the single year before the storm (2004) and the percentage relative to the average values in the five-year period before the storm (2000 – 2004 average).

The number of active oyster dealers in 2005 was 12.6 percent less than the number in 2004 and 4.4 percent less than the 2000-2004 average (Table 2.1). The number of active dealers remained below the 2004 count for the next several years. The number of active dealers in 2006 was 43.2 percent less and the number in 2007 was 31.6 percent less than the number active in 2004.

A decrease in the number of active oyster dealers represents a decrease in the number of firms buying oysters in a particular year. It should not be interpreted as a permanent cessation of business. Some dealers may have shut down only temporarily and resumed buying oysters in later years. Other firms may have ceased buying oysters from commercial fishermen but may have bought oysters from alternative sources, such as other dealers or distributors, in transactions that do not require trip ticket reporting. Other firms may have ceased buying oysters but continued buying and trading other species of seafood (such as shrimp or crabs) or any other products from soup to nuts.

The volume purchased by active oyster dealers in the hurricane year of 2005 was 13.0 percent less than the volume purchased in the year before the hurricane (Table 2.2) and 12.7 percent less than the 2000-2004 average volume. The volume was 17.3 percent below 2004 levels in 2006 and 7.4 percent below the 2004 level in 2007. Changes in the volume of oysters may not be a product of hurricane damage alone. Other market and environmental factors may have contributed to the change in oyster production.

The dockside value of oysters purchased by active oyster dealers (Table 2.3) in the hurricane year was 4.5 percent less than the 2004 value (but 5.5 percent greater than the 2000-2004 average dockside value). In 2006 and 2007, even as volume was down relative to 2004, the dockside value of oysters purchased was higher than that from the year before hurricanes Katrina and Rita.

The change in dockside value may not be attributed to hurricane-related elements alone. Dockside value is the product of volume, which may vary due to a variety of natural and market factors, and price, which may also be related to national and international market forces quite separate from the hurricanes or other local conditions. Further, a change in the dockside value of oysters signifies change in the value of the oysters that dealers bought, an expenditure. A change in dockside value does not indicate a change in revenue or profit.

2.5.2. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value Following Hurricanes Gustav and Ike

Changes in oyster dealer participation and activity connected to the 2008 storms may be considered by examining the percentage changes in the number of active dealers and volume and dockside value of oyster purchases in the hurricane year of 2008 and 2009 relative to the values for 2007. The comparison is complicated by a number of factors, including the possibility that dealer variables in 2007 were themselves affected by hurricanes Katrina and Rita in 2005.

The numbers of active oyster dealers in 2008 and 2009 were 18.5 percent and 21.5 percent, respectively, higher than the number active in 2007 (Table 2.1). An increase in the number of active oyster dealers should not be equated with the creation or establishment of new businesses. Some firms may have begun or resumed purchasing oysters on only a temporary basis.

The volume of oysters purchased by active oyster dealers in the hurricane year of 2008 (Table 2.2) was 1.1 percent greater than the volume purchased in 2007 while the dockside value in 2008 (Table 2.3) was

1.7 percent lower. The volume in 2009 was 16.0 percent greater and the dockside value in 2009 was 26.2 percent greater than the corresponding measures for 2007.

Chapter 3.
Active Oyster Dealers' Activities within Defined Oyster Volume Categories

3.1. Delineation of Oyster Volume Categories

There is considerable variation among active oyster dealers in terms of the quantity of oysters purchased in a given year. A relatively large portion of the active oyster dealer population purchases a relatively small share of the total volume of oysters. Conversely, a relatively small percentage of the active oyster dealer population accounts for a large percentage of all the oysters purchased by oyster dealers in Louisiana. To explore this issue, this report divides all active oyster dealers into five "oyster volume" categories defined by the quantity of oysters that dealers reported purchasing in a given year in the Louisiana trip ticket program:

(1) Less than 5,000 Pounds Category – All active oyster dealers that purchased 5,000 pounds or less of oysters directly from commercial fishermen in a particular calendar year

(2) 5,000 – 50,000 Pounds Category– All active oyster dealers that purchased between 5,000 pounds and 50,000 pounds of oysters directly from commercial fishermen in a particular year

(3) 50,000 – 100,000 Pounds Category - All active oyster dealers that purchased between 50,000 pounds and 100,000 pounds of oysters directly from commercial fishermen in a particular year

(4) 100,000 – 500,000 Pounds Category - All active oyster dealers that purchased between 100,000 pounds and 500,000 pounds of oysters directly from commercial fishermen in a particular year

(5) More than 500,000 Pounds Category- All active oyster dealers that purchased more than 500,000 pounds of oysters directly from commercial fishermen in a particular year

The remainder of this section explores the number of active oyster dealers within each oyster volume category, the cumulative volume and nominal dockside value of oysters purchased by dealers within each category, and the average dockside price per pound that they paid for oysters.

3.2. Less than 5,000 Pounds Category

In nine of the ten years within the study timeframe, the number of oyster dealers in the "less than 5,000 pounds" category comprised 25 to 34 percent of the total population of active oyster dealers in any given year (Table 3.1). (In 2005, the number of dealers in this category made up only 21 percent of all active oyster dealers.) The total volume of oysters purchased by oyster dealers in this category across the entire study timeframe was about one-fifth of one percent of the total volume of oysters purchased by all active oyster dealers between 2000 and 2009.

The number of active oyster dealers in the "less than 5,000 pounds category" reached a period high of 30 in 2004, immediately before hurricanes Katrina and Rita, and dropped to 17 in the hurricane year of 2005 (Table 3.1). The count of dealers in this category remained below 20 through 2008 and rose to 24 in 2009. The cumulate volume (Table 3.2) and dockside value (Table 3.3) of oysters purchased by active dealers in this category varied by relatively modest amounts throughout the study timeframe. The difference between the category maximum volume (in 2002) and the category minimum volume (in 2007) was approximately 30 thousand pounds. The difference between the highest dockside value (in 2002) and the lowest dockside value (in 2007) was about $60 thousand.

The average nominal dockside price paid for oysters by dealers in the "less than 5,000 pounds" category (Table 3.4) has consistently been higher than the overall average dockside price (Figure 2.2). The average nominal dockside price per pound among dealers in this volume category rose from $2.20 per pound in 2000 to $2.88 per pound in the hurricane year of 2005 to $3.65 in the hurricane year of 2008 to $4.19 per pound in 2009.

3.3. 5,000 to 50,000 Pounds Category

The number of oyster dealers in the "5,000 – 50,000 pounds was less than three dozen in every year during the study timeframe. The total volume of oysters purchased by dealers in this category from 2000 to 2009 was 3.6 percent of the total volume of oysters purchased by all active oyster dealers across the study period.

The number of active dealers in the “5,000-50,000 pounds” category dipped from 24 in 2000 to 19 in 2002 before rising to a period category high of 31 in 200 (Table 3.1). The number of dealers in this category decreased to 30 in the hurricane year of 2005 and dropped to a period category low of 10 in the following year. The count of dealers in this oyster volume category rose to 24 in the hurricane year of 2008 and 19 in 2009.

The volume of oysters purchased directly from commercial fishermen by dealers in the “5,000-50,000 pounds” oyster volume category was less than half a million pounds per year from 2000 to 2004 (Table 3.2). The category volume rose to over 700 thousand pounds in 2003 and 2004 but declined to 631.7 thousand pounds in the hurricane year of 2005 and to a period low of 269.0 thousand pounds in 2006. The volume subsequently rose to 513.9 thousand pound in the hurricane year of 2008 and 496.0 thousand pounds in 2009.

The dockside value of oysters purchased by dealers in the “5,000-50,000 pounds” category dropped from about $1.01 million in 2000 to about $780 thousand in 2001 and 2002 (Table 3.3). The dockside value rose to approximately $1.8 million per year from 2003 to 2005 but then dropped to $889.9 thousand in 2006. The dockside value of oysters purchased by dealers in this oyster volume category rose to $1.07 million in 2007 and approximately $1.6 million per year in 2008 and 2009.

For six of the ten years in the study timeframe (2001, 2002, 2005, 2006, 2007, and 2008), the average nominal dockside price paid by dealers in the “5,000 to 50,000 pounds” category (Table 3.4) was at least $0.10 greater than the overall average dockside price (Figure 2.2). In 2000, 2003, and 2004, the average nominal dockside price among dealers in this category was within $0.03 of the overall average for those years. In 2009, the average nominal dockside price among dealers in this volume category was $0.24 less than the overall average dockside price in 2009.

Table 3.1. Number of Active Oyster Dealers in Oyster Volume Categories, By Year: 2000 - 2009

	Less than 5,000 lb.	5,000 – 50,000 lb.	50,000 – 100,000 lb.	100,000 – 500,000 lb.	More than 500,00 lb.
2000	31	24	11	17	7
2001	24	20	8	17	10
2002	28	19	11	14	10
2003	23	33	7	16	9
2004	30	31	7	19	8
2005	17	30	12	16	8
2006	16	10	6	13	9
2007	17	18	7	14	9
2008	19	24	7	17	10
2009	24	19	10	16	10

Table 3.2. Cumulative Volume of Oysters Purchased by Active Oyster Dealers in Oyster Volume Categories, By Year: 2000 - 2009

	Less than 5,000 lb.	5,000 – 50,000 lb.	50,000 – 100,000 lb.	100,000 – 500,000 lb.	More than 500,00 lb.
	Thousands of Pounds				
2000	38.6	461.0	847.0	3,730.3	7,616.6
2001	41.3	317.9	574.3	3,613.3	10,564.0
2002	45.1	341.8	782.2	3,579.7	9,186.2
2003	29.7	754.3	568.7	3,821.8	8,406.3
2004	23.9	715.9	529.9	4,419.1	8,191.8
2005	20.3	631.7	830.0	3,667.3	6,927.4
2006	27.3	269.0	432.5	2,832.2	7,924.8
2007	15.4	306.5	454.6	3,422.4	8,654.0
2008	20.5	513.9	558.3	4,086.8	7,817.9
2009	19.8	496.9	726.1	3,620.8	10,050.0

Table 3.3. Cumulative Nominal Dockside Value of Oysters Purchased by Active Oyster Dealers in Oyster Volume Categories, By Year: 2000 - 2009

	Less than 5,000 lb.	5,000 – 50,000 lb.	50,000 – 100,000 lb.	100,000 – 500,000 lb.	More than 500,00 lb.
	Thousands of Nominal Dollars				
2000	$85.0	$1,009.5	$1,681.9	$8,390.2	$16,294.2
2001	$97.7	$785.0	$1,173.8	$7,435.2	$22,315.2
2002	$114.1	$780.9	$1,481.5	$7,817.8	$20,068.5
2003	$75.8	$1,830.8	$1,459.1	$8,940.2	$21.000.0
2004	$61.1	$1,795.0	$1,206.9	$10,918.6	$20,856.3
2005	$62.1	$1,820.7	$2,152.2	$10,179.0	$19,046.4
2006	$94.8	$889.9	$1,088.8	$8,931.0	$25,157.1
2007	$54.0	$1,073.8	$1,325.2	$10,925.3	$26,745.1
2008	$74.9	$1,654.8	$1,642.4	$12,766.8	$23,299.3
2009	$83.0	$1,569.8	$2,585.8	$11,915.1	$34,495.9

Table 3.4. Average Nominal Dockside Price per Pound of Oysters Purchased by Active Oyster Dealers in Oyster Volume Categories, By Year: 2000 - 2009

	Less than 5,000 lb.	5,000 – 50,000 lb.	50,000 – 100,000 lb.	100,000 – 500,000 lb.	More than 500,00 lb.
2000	$2.20	$2.19	$1.99	$2.25	$2.14
2001	$2.37	$2.47	$2.04	$2.06	$2.11
2002	$2.53	$2.28	$1.89	$2.18	$2.18
2003	$2.55	$2.43	$2.57	$2.34	$2.50
2004	$2.56	$2.51	$2.28	$2.47	$2.55
2005	$3.06	$2.88	$2.59	$2.78	$2.75
2006	$3.47	$3.31	$2.52	$3.15	$3.17
2007	$3.51	$3.50	$2.92	$3.19	$3.09
2008	$3.65	$3.22	$2.94	$3.12	$2.98
2009	$4.19	$3.16	$3.56	$3.29	$3.43

3.4. 50,000 to 100,000 Pounds Category

The number of active oyster dealers in the "50,000 – 100,000 pounds" category has been 12 or less in every year throughout the study period. The cumulative volume of oysters purchased by dealers in this category across the ten-year study period was 4.7 percent of the total volume of oysters purchased by all dealers between 2000 and 2009.

The number of dealers in the "50,000 to 100,000 pounds" category reached a period maximum of 12 in the hurricane year of 2005 and dropped to six in 2006 (Table 3.1). The volume (Table 3.2) and dockside value (Table 3.3) of oysters purchased by dealers in this category also dropped from 830.0 thousand pounds and $2.2 million in 2005 to 432.5 thousand pounds and $1.1 million in 2006. The volume of oysters purchased by dealers in this category rose over each of the following three years. Dockside value also rose, reaching a period maximum of $2.6 million in 2009.

The average nominal dockside price per pound paid by dealers in the "50,000 to 100,000 pounds" volume category (Table 3.4) was less than the overall average nominal dockside price (Figure 2.2) for all but two years (2003 and 2009) within the timeframe.

3.5. 100,000 to 500,000 Pounds Category

From 2000 to 2009, the number of active oyster dealers in the "100,000 to 500,000 pounds" category (Table 3.1) has been low (19 or fewer). The total volume of oysters purchased by dealers in this volume category represented 27.6 percent of the total volume of oysters purchased by all oyster dealers from 2000 to 2009.

The volume (Table 3.2) and dockside value (Table 3.3) among dealers in the "100,000-500,000 pounds" category rose from 3.7 million pounds and $8.4 million in 2000 to 4.4 million pounds and $10.9 million in 2004. In the hurricane year of 2005 volume fell to 3.7 million pounds and dockside value to $10.2 million.) Both parameters dropped to 2.8 million pounds and $8.9 million in 2006. Volume and dockside value rose in each of the successive two years to reach 4.1 million pounds and $12.8 million in the hurricane year of 2008. In 2009, the volume and dockside value of oysters purchased by dealers in this category fell to 3.6 million pounds and $11.9 million.

The average nominal dockside price paid by dealers in the "100,000 – 500,000 pounds" category (Table 3.4) has generally been within $0.05 of the overall average dockside price. The average dockside price among dealers was $0.07 greater than the overall average in 2007, $0.09 greater than the overall average in 2000 and 2008, and $0.11 less than the overall average in 2003 and 2009.

3.6. More than 500,000 Pounds Category

The number of oyster dealers in the "more than 500,000 pounds" category (Table 3.1) accounted for a relatively small portion of the number of all active oyster dealers (ten or fewer per year). Nevertheless, the total volume of oysters purchased by dealers in this category accounted for 63.9 percent of the total volume of oysters purchased by all oyster dealers throughout the ten-year study timeframe.

The number of active dealers in the "more than 500,000 pounds" category has varied narrowly between seven and 10 between 2000 and 2009. The volume (Table 3.2) and dockside value (Table 3.4) of oysters purchased by dealers in this category fell from 8.2 million pounds and $20.9 million in 2004 to 6.9 million pounds and $19.0 million in the hurricane year of 2005. Volume and dockside value subsequently rose to 7.9 million pounds and $25.2 million in 2006 and 8.7 million pounds and $26.7 million in 2007. In the hurricane year of 2008, volume fell to 7.8 million pounds and dockside value fell to $23.3 million. In 2009, the volume of oysters purchased by dealers in this category rose to 10.1 million pounds (the second highest in the study timeframe) and dockside value rose to $34.5 million (a study timeframe maximum).

The average nominal dockside price paid by dealers in the "more than 500,000 pounds" category (Table 3.4) has consistently been within $0.05 of the overall average dockside price.

3.7. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value in Selected Finfish Volume Categories

To gain an appreciation of changes in oyster dealer activity following hurricanes Katrina and Rita and hurricanes Gustav and Ike among dealers of different sizes, this section examines changes in the volume and dockside value among dealers in the two largest oyster volume categories: dealers in the "100,000 – 500,000 pounds" category and the "more than 500,000" pounds category. The percentage changes in the number of dealers are not presented because the number of dealers was relatively small. As a result, relatively modest changes in the absolute number of dealers could produce relatively large percentage changes in the number of active dealers.

Other oyster volume categories are excluded because they account for relatively small portions of total dealer purchases. Changes observed among these categories may not be representative of the broader oyster dealer sector.

3.7.1. Percentage Changes in Volume and Dockside Value among Select Volume Categories Following Hurricanes Katrina and Rita

Among oyster dealers in the “100,000-500,000 pounds” category, the volume of oysters purchased by dealers in the “100,000-500,000 pound” category (Table 3.5) in the hurricane year of 2005 was 17.0 percent less than the volume in 2004. The volume in 2006 and 2007 were 35.9 percent and 22.6 percent below that of 2004. The dockside value of oysters they purchased (Table 3.6) in 2005 and 2006 were, respectively, 6.8 percent and 18.2 percent less than that of 2004. The dockside value in 2007 was roughly equal to the dockside value of 2004.

For oyster dealers in the “more than 500,000 pounds” oyster volume category, volume in the hurricane year of 2005 (Table 3.7) was 15.4 percent less than that of 2004 and dockside value (Table 3.8) was 8.7 percent less than the value in 2004. The volume in 2006 was 3.3 percent less than the 2004 volume while dockside value in 2006 was 20.6 percent more than the 2004 dockside value. In 2007 for dealers in this category, volume and dockside value were, respectively, 5.6 percent and 28.2 percent greater than their corresponding 2004 measures.

Table 3.5.. Change in Volume of Oysters Purchased by Active Oyster Dealers in the 100,000-500,000 Pounds Volume Category in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+15.3%	**-4.3%**	**-26.1%**	**-10.7%**	+6.6%	-5.5%
	2004		**-17.0%**	**-35.9%**	**-22.6%**	-7.5%	-18.1%
	2005			-22.8%	-6.7%	+11.4%	-1.3%
	2006				+20.8%	+44.3%	+27.8%
	2007					**+19.4%**	**+5.8%**
	2008						**-11.4%**

Table 3.6. Change in the Dockside Value of Oysters Purchased by Active Oyster Dealers in the 100,000-500,000 Pounds Volume Category in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+25.5%	**+17.0%**	**+2.7%**	**+25.6%**	+46.7%	+36.9%
	2004		**-6.8%**	**-18.2%**	**+0.1%**	+16.9%	+9.1%
	2005			-12.3%	+7.3%	+25.4%	+17.1%
	2006				+22.3%	+42.9%	+33.4%
	2007					**+16.9%**	**+9.1%**
	2008						**-6.7%**

Table 3.7. Change in the Volume of Oysters Purchased by Active Oyster Dealers in the More than 500,000 Pounds Volume Category in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	-6.8%	**-21.2%**	**-9.9%**	**-1.6%**	-11.1%	+14.3%
	2004		**-15.4%**	**-3.3%**	**+5.6%**	-4.6%	+22.7%
	2005			+14.4%	+24.9%	+12.9%	+45.1%
	2006				+9.2%	-1.3%	+26.8%
	2007					**-9.7%**	**+16.1%**
	2008						**+28.6%**

Table 3.8. Change in the Dockside Value of Oysters Purchased by Active Oyster Dealers in the More than 500,000 Pounds Volume Category in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+3.7%	**-5.3%**	**+25.1%**	**+33.0%**	+15.9%	+71.6%
	2004		**-8.7%**	**+20.6%**	**+28.2%**	+11.7%	+65.4%
	2005			+32.1%	+40.4%	+22.3%	+81.1%
	2006				+6.3%	-7.4%	+37.1%
	2007					**-12.9%**	**+29.0%**
	2008						**+48.1%**

3.7.2. Percentage Changes in Volume and Dockside Value among Select Volume Categories Following Hurricanes Gustav and Ike

In the hurricane year of 2008, the volume and dockside value of oysters purchased by dealers in the "100,000 – 500,000 pounds" category were, respectively, 19.4 percent and 16.9 percent greater than the corresponding measures in 2007, the year before hurricanes Gustav and Ike. Volume (Table 3.5) and dockside value (Table 3.6) in 2009 were 5.8 percent and 9.1 percent greater, respectively, than the measures for 2007.

In the hurricane year of 2008, the volume (Table 3.7) and dockside value (Table 3.8) of oyster purchased by dealers in the "more than 500,000 pounds" oyster volume category were a respective 9.7 percent and 12.9 percent less than volume and dockside value in 2007. In 2009, volume and dockside value were, respectively, 16.1 percent and 29.0 percent greater than the corresponding measures in 2007.

Chapter 4.
Active Oyster Dealers by Commercial Seafood Dealer License Category

4.1. Introduction

This chapter will examine the participation and activity of active oyster dealers within specific seafood dealer license categories, using the aforementioned definition of an "active oyster dealer" as a business or individual with a commercial seafood license that reported purchasing at least one pound of oysters directly from commercial fishermen in a given year to the LDWF trip ticket program. This section will examine the number of active oyster dealers holding resident wholesale/retail dealer business licenses ("active resident oyster business dealers") and resident fresh products product licenses ("active fresh products dealers") and the volume and dockside value of the oysters they purchased from commercial fishermen in Louisiana from 2000 to 2009. This will not report a detailed analysis of the economic activity of individuals and businesses that held other types of commercial seafood dealer licenses because the number of such license holders frequently fell beneath five (the minimum number required to maintain the confidentiality standards selected by the authors) for specific years even though they at times collectively accounted for hundreds of thousands of pounds and millions of dollars of dockside values of oyster purchases.

4.2. Active Resident Business Oyster Dealers

Active resident business oyster dealers were the most numerous license dealer type throughout the study timeframe. The total volume of oysters purchased by active resident business oyster dealers accounted for about 84 percent of the total volume of oysters purchased by all active oyster dealers between 2000 and 2009.

The number of active resident business oyster dealers (Figure 4.1) dropped from 67 in 2000 to 57 in 2002 and then climbed to 68 (a period maximum) in 2004, the year before hurricanes Katrina and Rita. The number of active resident business dealers declined to 63 in the hurricane year of 2005 and then dropped to 40 (a period minimum) in 2006. The number rose to 53 in the hurricane year of 2008 and 55 in 2009.

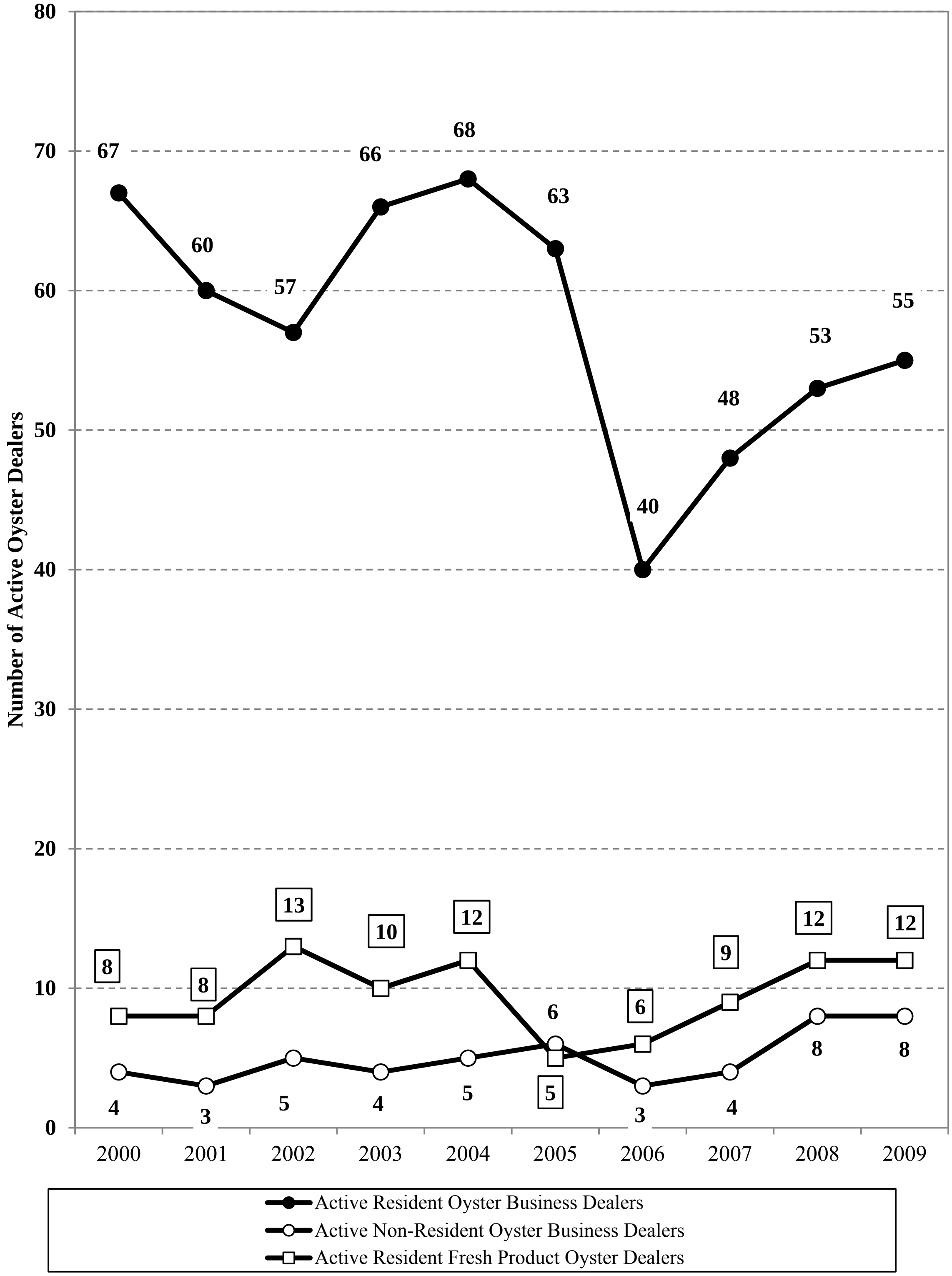

Figure 4.1. Number of Active Resident Oyster Dealers by Seafood Dealer License Type, By Year: 2000-2009

The volume of oyster purchased by resident business oyster dealers rose from 11.1 million pounds in 2000 to a period category maximum of 13.1 million in 2001 and then varied between 11.2 million pounds and 11.9 million between 2002 and 2004 (Figure 4.2). The volume of oysters purchased by active resident oyster business dealers fell to 10.3 million pounds in the hurricane year of 2005. In 2006 the volume declined further to 9.6 million pounds. The volume of oysters rose to approximately 10.6 million pounds in 2007, 10.3 million pounds in the hurricane year of 2008 and then to 12.5 million pounds in 2009.

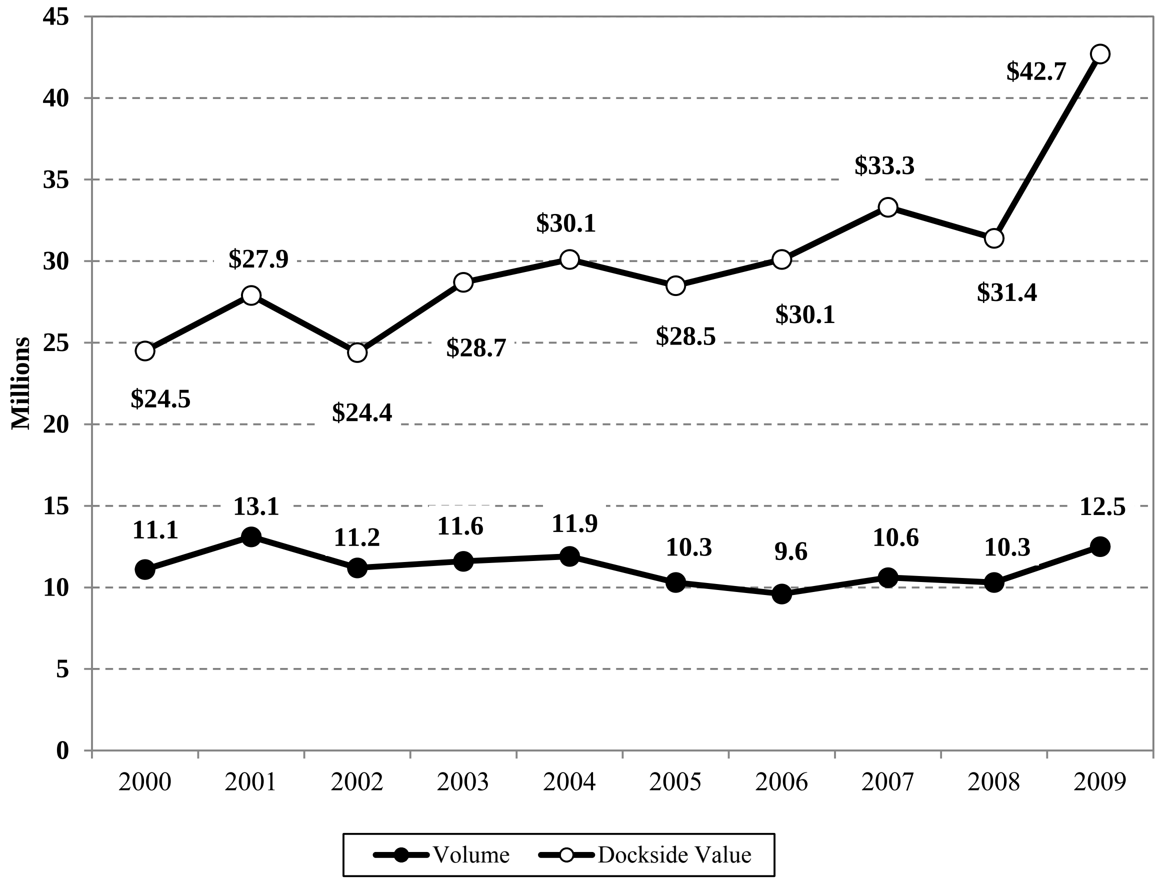

Figure 4.2. Cumulative Volume and Dockside Value of Oysters Purchased by Active Resident Business Oyster Dealers, By Year: 2000 - 2009

The dockside value of oysters purchased directly from commercial fishermen by resident business oyster dealers rose from $24.5 million in 2000 to $30.1 million in 2004. Dockside value fell to $28.5 million in the hurricane year of 2005. In the two years after the storms, the dockside value of oysters purchased by active oyster dealers in this category rose to $30.1 million in 2006 and $33.3 million in 2007. In the hurricane year of 2008, dockside value fell to $31.4 million, a value that nevertheless was greater than the value in any of the five years before hurricanes Katrina and Rita. In 2009, the dockside value of oysters purchased by resident oyster business dealers climbed to $42.7 million, a period category maximum.

4.2.1. Average Volume and Dockside Value per Active Resident Business Oyster Dealer

The average volume per active resident business oyster dealer (Figure 4.3) increased 166.0 thousand pounds per dealer in 2000 to 217.6 thousand pounds per dealer in 2001 and then decreased to 175.6 thousand pounds in 2004 and 164.3 thousand pounds per dealer in the hurricane year of 2005. The estimate rose to 240.3 thousand per dealer in 2006 and then declined to 195.2 thousand per resident business oyster dealer in the hurricane year of 2008.

Average dockside value per active resident business oyster dealer (Figure 4.3) rose from $365.0 thousand per dealer in 2000 to $465.0 thousand in 2001. Average dockside value per active resident business oyster dealer then declined somewhat and remained in the range of $429 thousand to $453 thousand per dealer from 2002 through 2005. In 2006, the year following hurricanes Katrina and Rita, dockside value per dealer jumped to $751.8 thousand per dealer but then declined over the next two years to $593.0 thousand per dealer in the hurricane year of 2008. Dockside value per active resident business oyster dealer climbed to a period category maximum of $775.9 thousand in 2009.

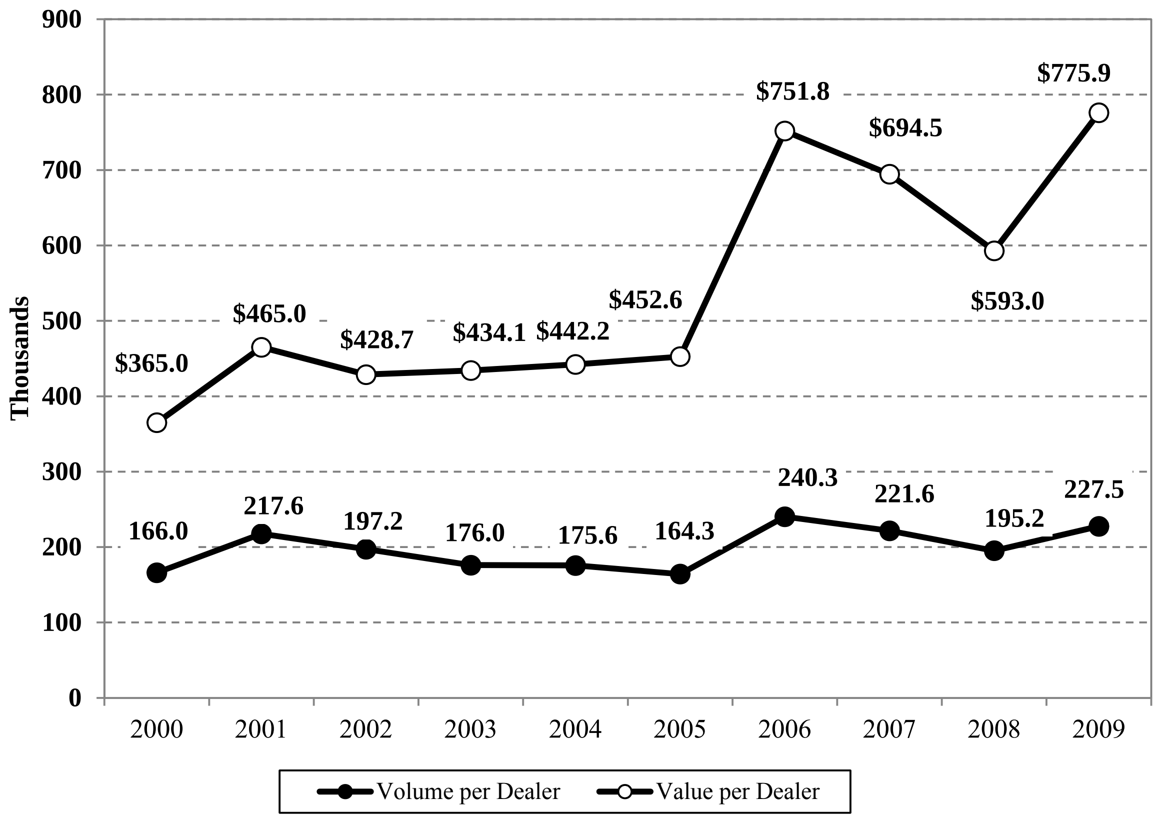

Figure 4.3. **Average Volume and Nominal Dockside Value per Active Resident Oyster Business Dealer as Reported in Louisiana Trip Ticket Program, By Year: 2000 - 2009**

4.3. Active Non-Resident Business Oyster Dealers

Active non-resident oyster dealers collectively purchased a considerable quantity of oysters across the study timeframe. The total volume of oysters purchased by all active non-resident oyster dealers across the entire ten years from 2000 to 2009 was about 11 percent of the total volume of oyster purchased by all oyster dealers across the same period.

The number of active non-resident oyster business dealers varied from three to eight throughout the study timeframe (Figure.4.1). This report will not include an examination of year-to-year trends for active non-resident oyster business dealers, however, because in five individual years the number of such firms was less than five, the minimum number of firms for public disclosure in this report.

4.4. Active Resident Fresh Products Oyster Dealers

The number of active fresh products oyster dealers, fairly low throughout the study timeframe, was 13 in 2004 and 12 in 2005 (Figure 4.1). The number declined to five in the hurricane year of 2005 and six in 2006. The count rose to nine in 2007 and returned to 12 in 2008 and 2009.

The total volume of oysters among active resident fresh products dealers across the study timeframe was about 0.08 percent of the total volume of oysters purchased by all active oyster dealers between 2000 and 2009. (In other words, the combined purchases of all oysters bought by all fresh products dealers together over this entire ten-year span was less than the minimum average volume per active resident business oyster dealer in one single year (164 thousand pounds per dealer in 2005)).

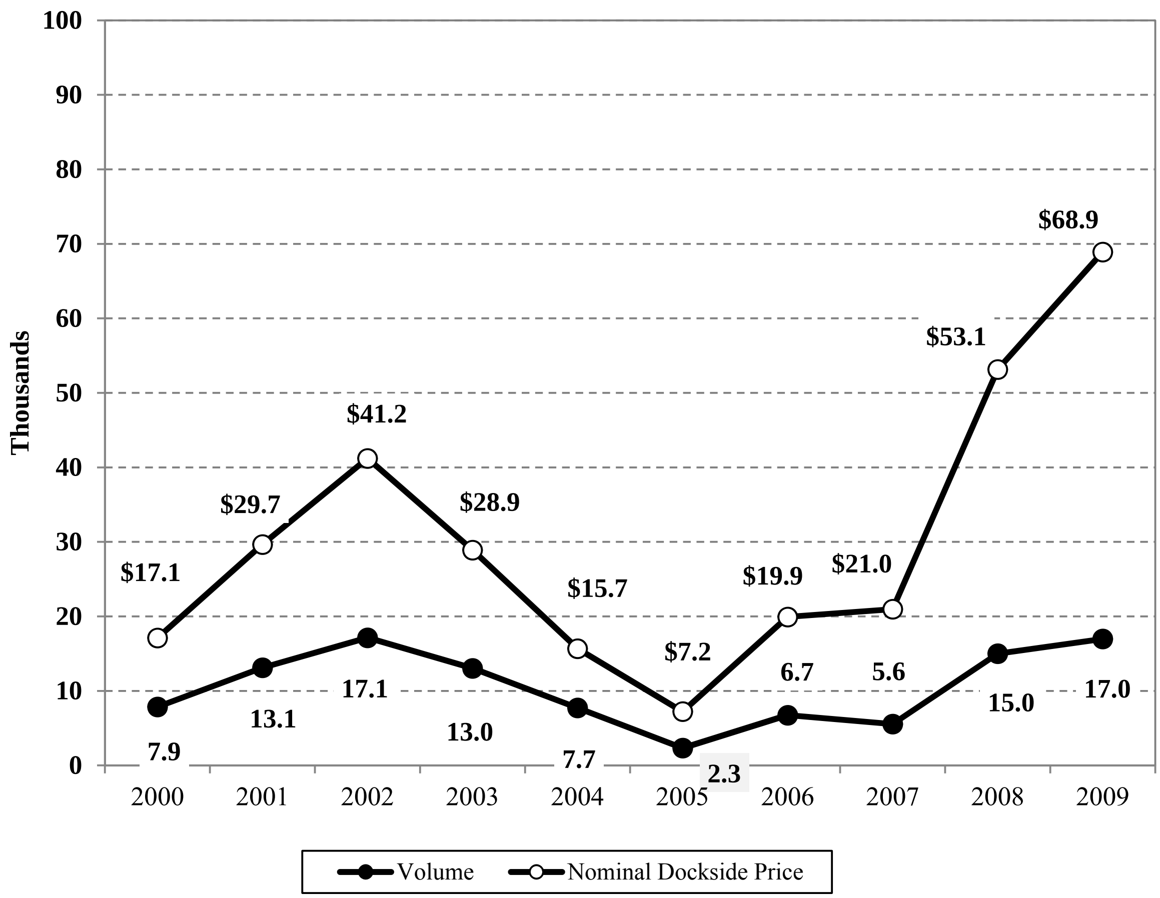

Figure 4.4. Cumulative Volume and Dockside Value of Oysters Purchased by Active Resident Oyster Fresh Products Dealers as Reported in Louisiana Trip Ticket Program, By Year: 2000 – 2009

4.4. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value in the Resident Business Oyster Dealer Category

This section presents tables for considering the possible changes in dealer participation and activity only among resident business oyster dealers. Changes in the number of active oyster dealers (Table 4.1) and for the volume (Table 4.2) and dockside value (Table 4.3) of the oysters they purchased were similar to changes seen among all active oyster dealers. (See Chapter 2, §2.5.)

Changes for dealers in other dealer license categories are not presented because they accounted for relatively small shares of the oyster dealer sector. Changes observed for these categories may not be representative of broader changes reflecting the oyster dealer sector in general.

Table 4.2. Change in the Number of Dealers in the Resident Business Dealer Category in Specified Year as a Percentage of Number in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+6.9%	**-0.9%**	**-37.1%**	**-24.5%**	-16.7%	-13.5%
	2004		**-7.4%**	**-41.2%**	**-29.4%**	-22.1%	-19.1%
	2005			-36.5%	-23.8%	-15.9%	-12.7%
	2006				+20.0%	+32.5%	+37.5%
	2007					**+10.4%**	**+14.6%**
	2008						**+3.8%**

Table 4.3. Change in the Volume of Oysters Purchased by Active Oyster Dealers in the Resident Business Dealer Category in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+1.2%	**-12.3%**	**-18.5%**	**-9.8%**	-12.3%	+6.1%
	2004		**-13.3%**	**-19.5%**	**-10.9%**	-13.4%	+4.8%
	2005			-7.1%	+2.8%	+0.0%	+20.9%
	2006				+10.7%	+7.6%	+30.2%
	2007					**-2.7%**	**+17.7%**
	2008						**+21.0%**

Table 4.4. Change in the Dockside Value of Oysters Purchased by Active Oyster Dealers in the Resident Business Dealer Volume Category in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+10.9%	**+5.2%**	**+11.0%**	**+23.0%**	+16.0%	+57.5%
	2004		**-5.2%**	**0.0%**	**1+0.9%**	+4.5%	+41.9%
	2005			+5.5%	+16.9%	+10.2%	+49.7%
	2006				+10.9%	+4.5%	+41.9%
	2007					**-5.7%**	**+28.0%**
	2008						**+35.8%**

Chapter 5.
Purchases of Oysters Harvested from Public Grounds or Private Leases

5.1. Introduction

In Louisiana, oysters are harvested from both public grounds and private leases. The origin of oysters from either of these resources is identified on the forms completed in the Louisiana trip ticket program.

This chapter examines the participation and activity of active oyster dealers that purchased market oysters that had been harvested from public grounds or private reefs. The designations of "a dealer that buys oysters from public grounds" and "a dealer that buys oysters from private leases" are not mutually exclusive. Many dealers trade in oysters from both sources. The origin of oysters may not necessarily be an important consideration to dealers in their purchasing decisions, but rather an incidental decision made by commercial oyster harvesters. Further, changes in dealers' purchases of oysters are likely to be related to a variety of environmental factors that affect the availability and productivity of oysters.

5.2. Oyster Dealers That Purchased Oysters Harvested from Public Grounds or Private Leases

Since 2003, the number of dealers that purchased oysters harvested from public grounds was consistently less than the number purchasing oysters harvested from private leases (Figure 5.1). In the five years before hurricanes Katrina and Rita, the number of dealers that purchased oysters that had been harvested from public fluctuated from 71 in 2000 to 60 in 2001 to a period maximum of 70 in 2003. The number of dealers that purchased oysters harvested from public reefs dropped to 62 in the hurricane year of 2005 and then to 44 in 2006 and 2007. The number of dealers purchasing oysters harvested from public reefs thereafter climbed to 56 in 2008 and 55 in 2009.

The trend for the number of dealers purchasing oysters harvested from private leases (Figure 5.1) exhibits considerable fluctuation, varying from a high of 77 dealers in 2004 and 75 in the hurricane year of 2005 to a low of 48 dealers in 2006 and 49 in 2007. The number of dealers purchasing oysters harvested from private leases increased to 65 in the hurricane year of 2008 and 63 in 2009.

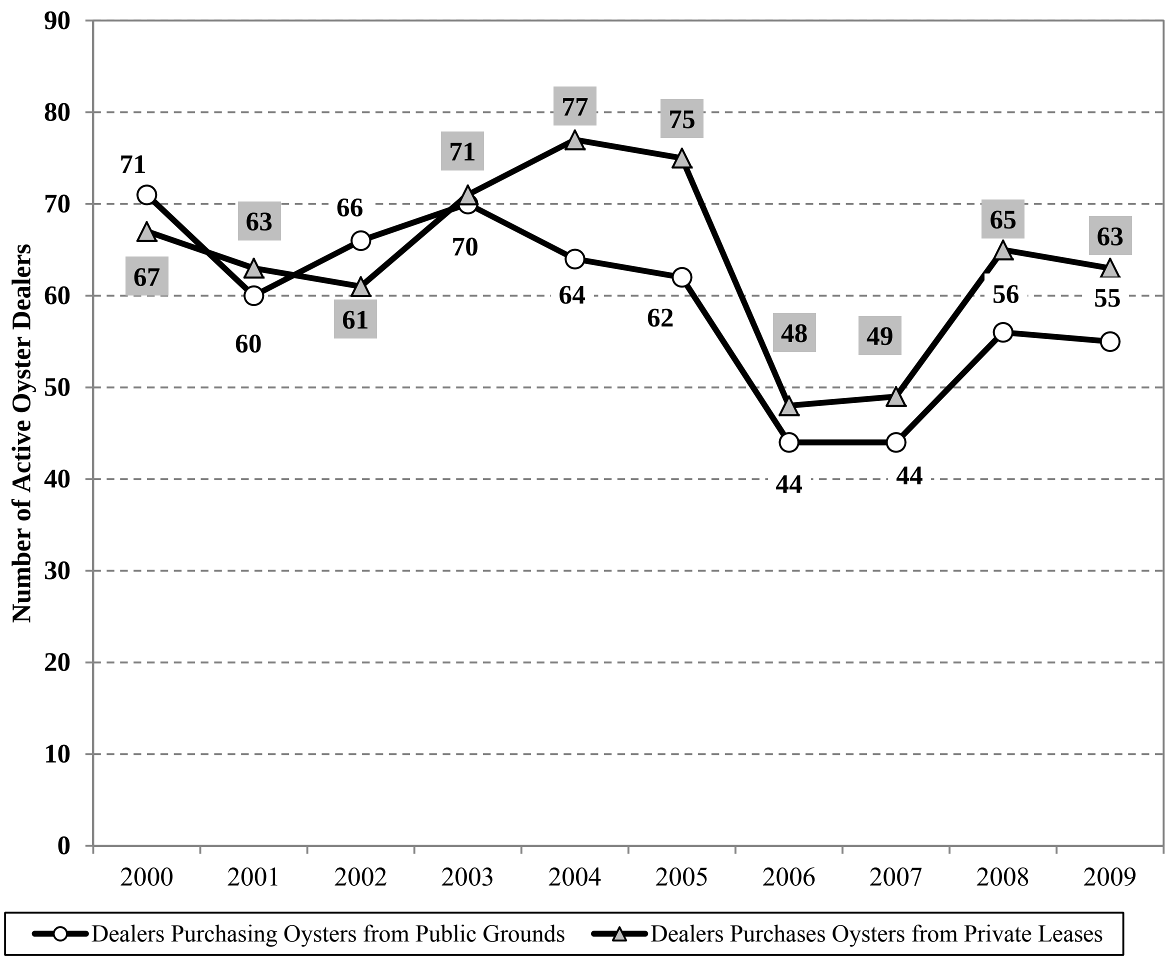

Figure 5.1. Number of Active Oyster Dealers Purchasing Oysters Harvested from Public Grounds and Private Leases, By Year: 2000 to 2009

5.3. Volume and Dockside Value of Oysters Harvested from Public Grounds or Private Leases

The volume and dockside value of oysters harvested from public grounds started to decline beginning in 2002, about three years before hurricanes Katrina and Rita. The volume and dockside value of oysters harvested from public grounds dropped from 7.8 million pounds and $17.3 million in 2002 to 3.7 million pounds and $11.2 million in the hurricane year of 2005 to reach period minima of 3.1 million pounds and $10.0 million in 2006. Both measures rose to 6.1 million pounds and $18.5 million in the hurricane year of 2008. In the following year, the volume and dockside value of oysters harvested from public grounds declined to 3.5 million pounds and $12.0 million.

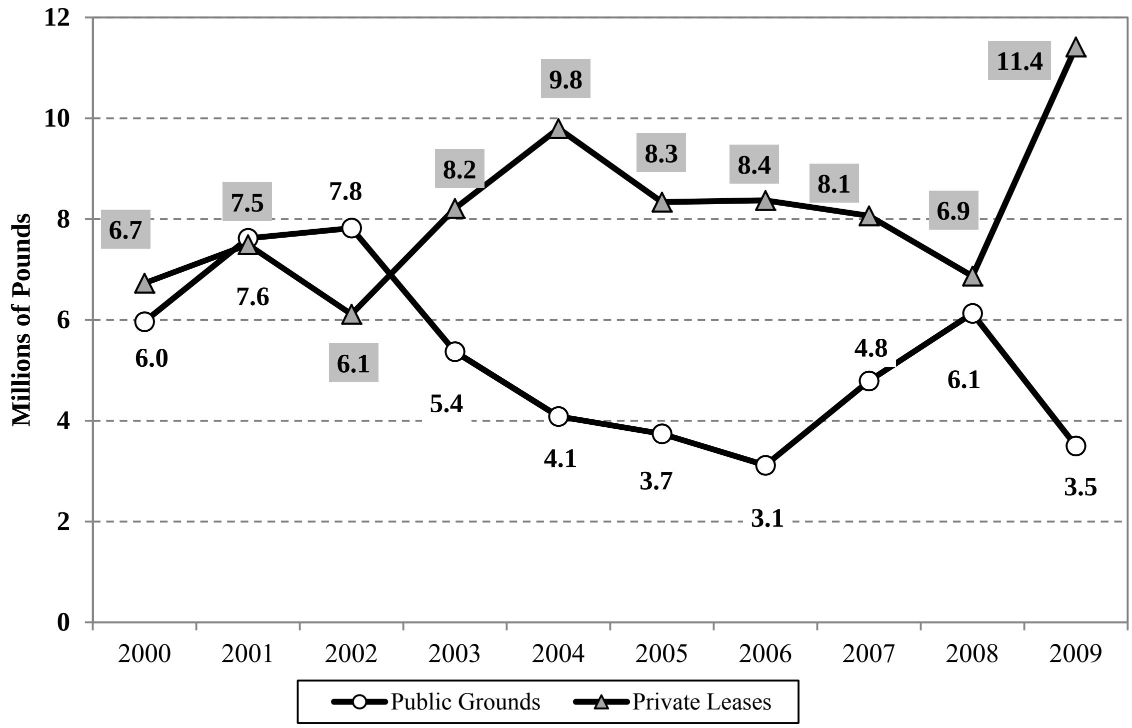

Figure 5.2. Cumulative Volume of Oysters Harvested from Private Leases and Public Grounds Purchased by Active Dealers as Reported in Louisiana Trip Ticket Program, By Year: 2000 - 2009

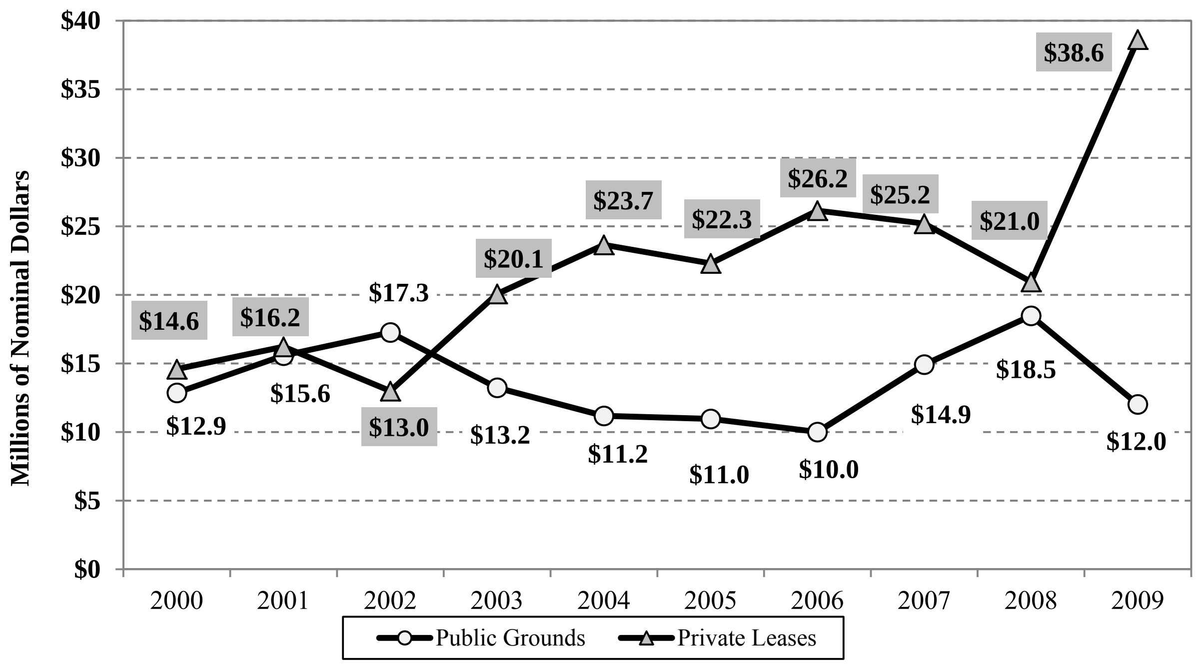

Figure.5.3. Cumulative Dockside Value of Oysters Harvested from Private Leases and Public Grounds Purchased by Active Dealers as Reported in Louisiana Trip Ticket Program, By Year: 2000 – 2009

In 2003, when the volume of oysters harvested from public grounds was at a period high, the volume and dockside value of oysters harvested from private leases were at period lows of 6.1 million pounds (Figure 5.2) and $13.0 million (Figure 5.3). Volume and value climbed over the next two years to 9.8 million pounds and $23.7 million. In the hurricane year of 2005, volume declined to 8.3 million pounds and dockside value declined to $22.3 million. Following the hurricanes, value and dockside value increased moderately to 8.4 million pounds and $26.2 million in 2006. Both measures declined over the next two years to 6.9 million pounds and 21.0 million in the hurricane year of 2008. In 2009, the volume and dockside value of oysters harvested from private leases climbed period maxima of 11.4 million pounds and $38.6 million.

5.4. Percentage Changes in the Volume of Oysters Harvested from Public Grounds and Private Leases

The tables below present percentage changes in the volume of oysters harvested from public grounds (Table 5.1) and private reefs (Table 5.2) that were purchased by active oyster dealers in 2005 to 2009 relative to the volumes purchased in earlier years .

The number of active dealers buying from each source is not shown because these are not necessarily distinct or clearly defined categories. (Indeed, in most years about half of the dealers purchased oysters harvested from both sources.) Tables for dockside value are also not presented. This variable may be of less relevance from a management perspective than changes in the volume of oysters harvested by commercial fishermen and purchased by dealers.

5.4.1. Percentage Changes in the Volume of Oysters Harvested from Public Grounds and Private Leases Following Hurricanes Katrina and Rita

In the hurricane year of 2005, purchases of oyster harvested from both sources were down relative to the corresponding values of 2004. The volume of oysters harvested from public grounds in 2005 (Table 5.1) was down 8.4 percent and the volume from private leases (Table 5.2) was down 5.7 percent relative to their corresponding measures in the previous year. The volume of dealers' purchases of public ground oysters were down by 23.7 percent in 2006 compared to the 2004 volume. A year later, in 2007, the volume of oysters from this source was 17.2 percent greater than that of 2004. Meanwhile, the volumes of purchases from private reef oysters were up by 10.6 percent in 2006 and 6.5 percent in 2007 compared to the private lease volume of 2004.

5.4.2. Percentage Changes in the Volume of Oysters Harvested from Public Grounds and Private Leases Following Hurricanes Gustav and Ike

Changes following hurricanes Gustav and Ike were contrary to the changes observed after hurricanes Katrina and Rita. Compared to 2007 levels, purchases of public reef oysters were up by 28.0 percent in 2008 and down by 26.9 percent in 2009. The volume of purchases of private lease oysters in 2008 was 16.8 percent less than 2007 volumes. In 2009 the volume of oysters purchased from private leases was 53.3 percent greater than the volume of oysters from these sources in 2007.

Table 5.1. Change in the Volume of Oysters Harvested from Public Grounds in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	-33.8%	**-39.4%**	**-49.5%**	**-22.4%**	-0.7%	-43.3%
	2004		**-8.4%**	**-23.7%**	**+17.2%**	+50.0%	-14.4%
	2005			-16.7%	+28.0%	+63.9%	-6.5%
	2006				+53.7%	+96.7%	+12.3%
	2007					**+28.0%**	**-26.9%**
	2008						**-42.9%**

Table 5.2. Change in the Volume of Oysters Harvested from Private Leases in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+35.1%	**+27.4%**	**+49.4%**	**+43.9%**	+19.7%	+120.6%
	2004		**-5.7%**	**+10.6%**	**+6.5%**	-11.4%	+63.3%
	2005			+17.3%	+13.0%	-6.0%	+73.2%
	2006				-3.6%	-19.9%	+47.7%
	2007					**-16.8%**	**+53.3%**
	2008						**+84.3%**

Though there is some evidence of shifts in the shares of oysters purchased from these alternative harvest sources, it is difficult to discern to what extent that possible shift was related to hurricanes and to what extent such possible shifts are long-lived.

Chapter 6.
Active Oyster Dealers by Geographic Region of Louisiana

6.1 Introduction

This chapter examines differences in the levels of participation and activity of active oyster dealers based on the region in which each dealer's license was issued. These findings should not be interpreted to apply to the location from which oysters are harvested because oysters may be harvested from waters in one region and transported and sold to a dealer in another.

The geographic divisions examined in this section are identical to the regions defined as southeast Louisiana and southwest Louisiana in Chapter 1 of this report (Figure 1.1). Southeast Louisiana roughly consists of 12 (primarily coastal) parishes from Lafourche Parish eastward to Mississippi state boundary. Southwest Louisiana is made up of 15 parishes, primarily coastal parishes from Terrebonne Parish westward to the Texas state boundary plus several parishes in the vicinity of the Atchafalaya Basin.

6.2. Active Oyster Dealer Activities by Region

For the first six years of the study timeframe, there were more active oyster dealers in southeast Louisiana than in southwest Louisiana (Figure 6.1). (In each year, there were a few dealers for whom the parish and thus the region could not be identified.) Following the hurricane year of 2005, the number of active oyster dealers in southeast Louisiana dropped from 45 in 2005 to 24 in 2006. The number of active dealers in southeast Louisiana rose to 29 in 2007, 30 in 2008, and 33 in 2009. From 2006 to the end of the study timeframe, the number of active oyster dealers in southeast Louisiana has been less than the number active in southwest Louisiana.

The number of active oyster dealers in southwest Louisiana varied between 35 and 40 from in the five-year period before the 2005 storms (Figure 6.1). The number of active dealers fell from 40 in 2004 to 28 in 2005. The number of active dealers in the region grew slightly to 27 in 2006 and 31 in 2007. The number of active oyster dealers then climbed to 42 in 2008 and 2009.

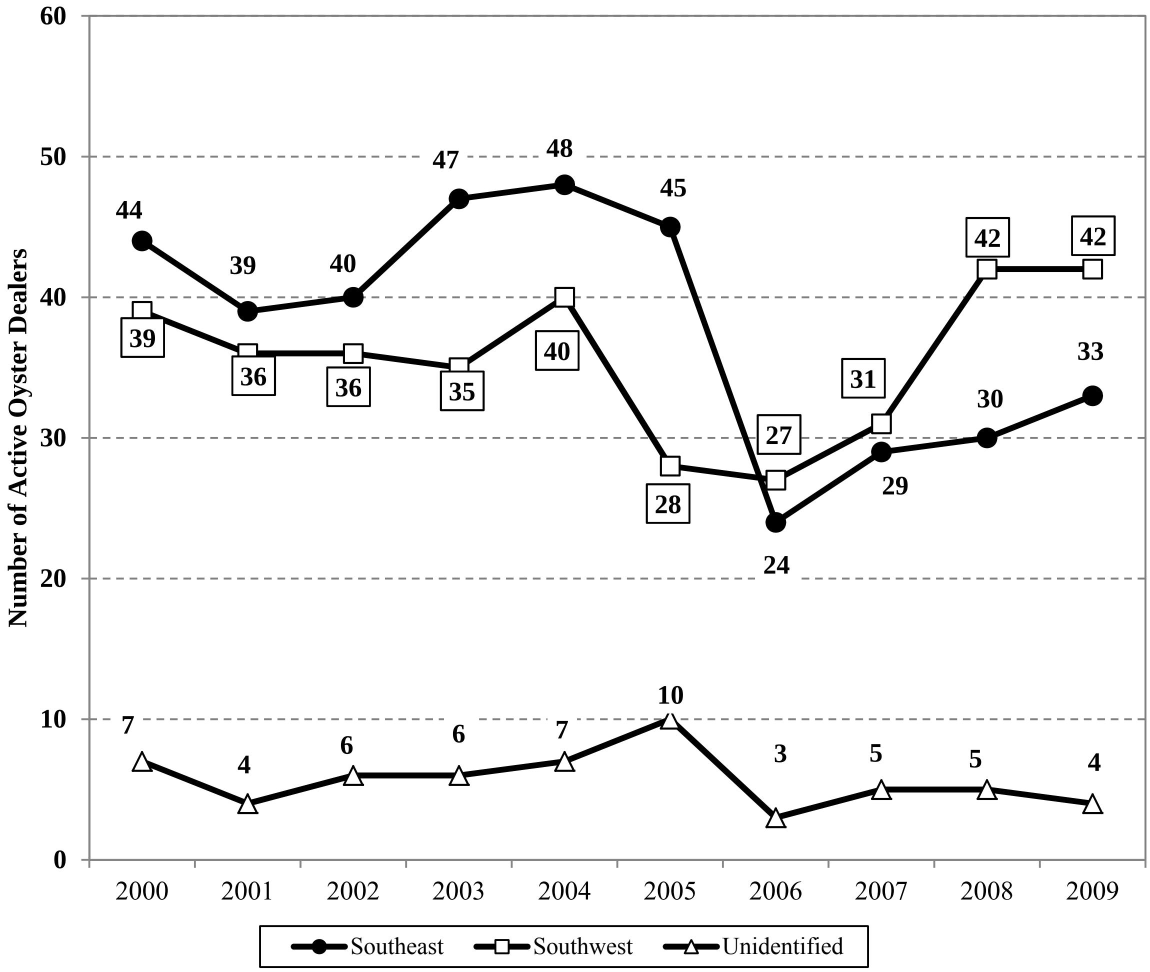

Figure 6.1. **Number of Active Oyster Dealers in Southeast and Southwest Louisiana, By Year: 2000 to 2009**

The volume (Figure 6.2) and dockside value (Figure 6.3) of oysters purchased by oyster dealers in southeast Louisiana have consistently been greater than the volume and value purchased by those in southwest Louisiana throughout the study timeframe. The volume and dockside value of oysters purchased by southeast Louisiana dealers reached 9.8 million pounds and $26.1 million in 2004. In the hurricane year of 2005, volume fell to 7.4 million pounds and dockside value fell to $22.0 million. Volume fell further to 6.2 million pounds in 2006 while dockside value remained fairly stable at $21.8 million. Volume and dockside value varied little over the next two year but increased to 9.3 million pounds and $34.3 million in 2009.

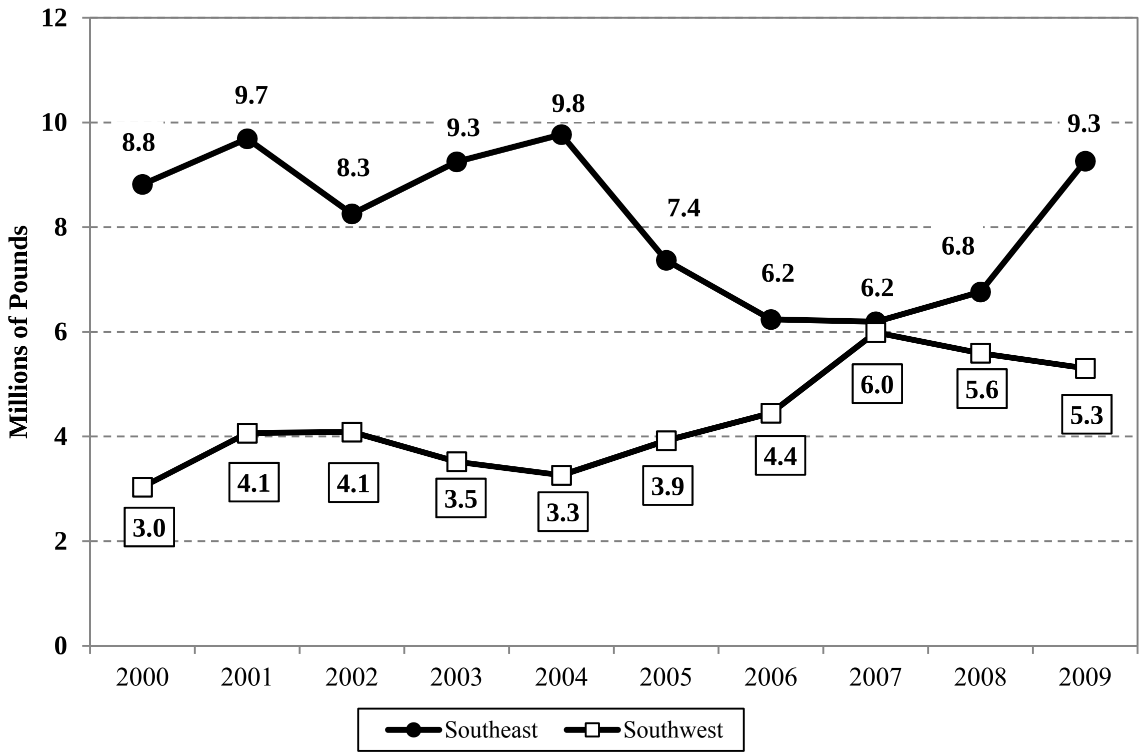

Figure 6.2. Volume of Oysters Purchased by Active Oyster Dealers in Southeast Louisiana and Southwest Louisiana as Reported in Louisiana Trip Ticket Program, By Year: 2000 - 2009

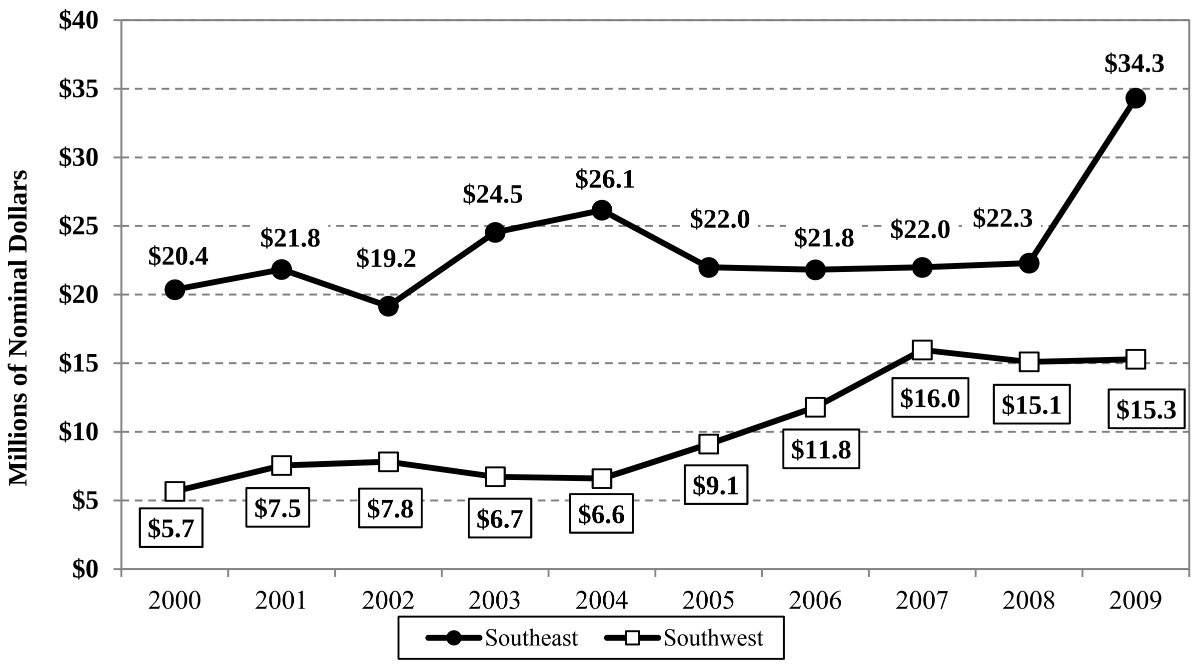

Figure 6.3. Dockside Value of Oysters Purchased by Active Oyster Dealers in Southeast Louisiana and Southwest Louisiana as Reported in Louisiana Trip Ticket Program, By Year: 2000 - 2009

The volume (Figure 6.2) and dockside value (Figure 6.3) of oysters purchased by dealers in southwest Louisiana were 3.3 million pounds and $6.6 million in 2004. In 2005, as oyster purchases by southeastern Louisiana dealers declined, the volume and dockside value of oysters purchased by dealers in southwest Louisiana rose to 3.9 million pounds and $9.1 million. The volume and dockside value of oysters purchased by dealers in this region continued to rise over the succeeding two years to reach study timeframe maxima of 6.0 million pounds and $16.0 million in 2007. Volume declined to 5.6 million pounds in the hurricane year of 2008 and 5.3 million pounds in 2009. Dockside values decreased to $15.1 million in 2007 and $15.3 million in 2009.

The dockside prices of oysters paid by dealers purchasing oysters in southeast Louisiana has consistently been higher than the prices paid for oysters by dealers in southwest Louisiana (Figure 6.4). The dockside prices paid for oysters by southeastern Louisiana dealers rose throughout the study timeframe from $2.31 per pound in 2000 to $3.70 in 2009. Dockside prices in southwest Louisiana climbed from $1.87 in 2000 to $2.88 in 2009.

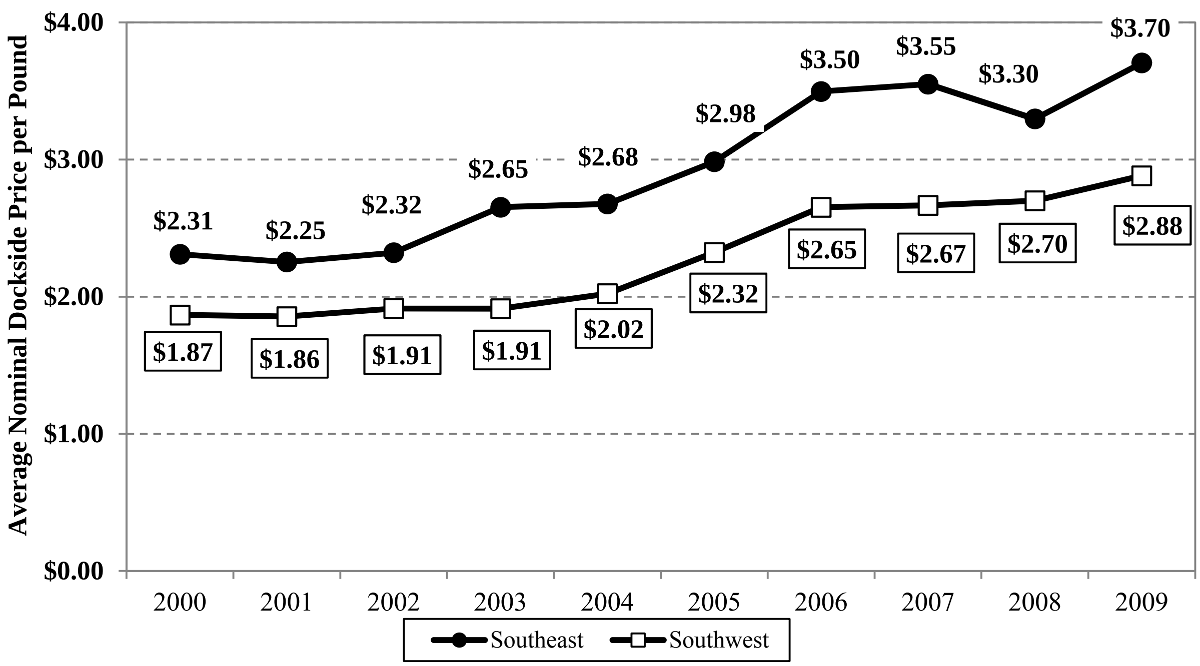

Figure 6.4. Average Nominal Dockside Price per Pound of Oysters Purchased by Active Oyster Dealers in Southeast Louisiana and Southwest Louisiana as Reported in Louisiana Trip Ticket Program, By Year: 2000 - 2009

6.3. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value Following Hurricanes Katrina and Rita

Following hurricanes Katrina and Rita in 2005, the number of active oyster dealers was down in both southeast Louisiana (Table 6.1) and southwest Louisiana (Table 6.4) in the hurricane year of 2005 as well as for 2006 and 2007.

In southeast Louisiana, the volumes of oysters purchased in 2005, 2006, and 2007 were 24 to 36 percent below the volume in 2004 (Table 6.2) and the dockside value in each of these years (Table 6.3) was about 16 percent below the 2004 dockside value. In contrast, in southwest Louisiana the volume (Table 6.5) and dockside values (Table 6.6) of oysters purchased by dealers in the region were above 2004 levels.

Table 6.1. Change in the Number of Active Oyster Dealers in the Southeast Louisiana in Specified Year as a Percentage of Number in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+10.1%	**+3.2%**	**-45.0%**	**-33.5%**	-31.2%	-24.3%
	2004		**-6.3%**	**-50.0%**	**-39.6%**	-37.5%	-31.3%
	2005			-46.7%	-35.6%	-33.3%	-26.7%
	2006				+20.8%	+25.0%	+37.5%
	2007					**+3.4%**	**+13.8%**
	2008						**+10.0%**

Table 6.2. Change in the Volume of Oysters Purchased by Dealers in Southeast Louisiana in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+6.7%	**-19.5%**	**-31.9%**	**-32.4%**	-26.1%	+1.2%
	2004		**-24.6%**	**-36.2%**	**-36.6%**	-30.8%	-5.2%
	2005			-15.3%	-15.9%	-8.2%	+25.7%
	2006				-0.7%	8.4%	+48.5%
	2007					**+9.2%**	**+49.6%**
	2008						**+37.0%**

Table 6.3. Change in the Dockside Value of Oysters Purchased by Dealers in Southeast Louisiana in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+16.7%	**-1.9%**	**-2.7%**	**-1.9%**	-0.5%	+52.2%
	2004		**-15.9%**	**-16.6%**	**-15.9%**	-14.7%	+30.5%
	2005			-0.8%	0.0%	+1.4%	+55.2%
	2006				+0.8%	+2.2%	+56.4%
	2007					**+1.4%**	**+55.2%**
	2008						**+53.0%**

Table 6.4. Change in the Number of Active Oyster Dealers in the Southwest Louisiana in Specified Year as a Percentage of Number in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	+7.5%	**-24.7%**	**-27.4%**	**-16.7%**	+12.9%	+12.9%
	2004		**-30.0%**	**-32.5%**	**-22.5%**	+5.0%	+5.0%
	2005			-3.6%	+10.7%	+50.0%	+50.0%
	2006				+14.8%	+55.6%	+55.6%
	2007					**+35.5%**	**+35.5%**
	2008						**0.0%**

Table 6.5. Change in the Volume of Oysters Purchased by Active Oyster Dealers in Southwest Louisiana in Specified Year as a Percentage of Volume in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	-9.3%	**+9.1%**	**+23.8%**	**+66.7%**	+55.7%	+47.6%
	2004		**+20.3%**	**+36.4%**	**+83.7%**	+71.6%	+62.7%
	2005			+13.4%	+52.7%	+42.6%	+35.3%
	2006				+34.7%	+25.8%	+19.3%
	2007					**-6.6%**	**-11.4%**
	2008						**-5.2%**

Table 6.6. Change in the Dockside Value of Oysters Purchased by Active Oyster Dealers in Southwest Louisiana in Specified Year as a Percentage of Dockside Value in Various Base Years

		2004	2005	2006	2007	2008	2009
Base Years	2000-2004 Average	-4.8%	**+32.8%**	**+72.0%**	**+132.8%**	+120.2%	+122.9%
	2004		**+39.5%**	**+80.6%**	**+144.5%**	+131.2%	+134.1%
	2005			+29.5%	+75.3%	+65.8%	+67.8%
	2006				+35.4%	+28.0%	+29.6%
	2007					**-5.4%**	**-4.3%**
	2008						**+1.2%**

Though Hurricane Katrina in 2005 made a disproportionate impact on southeast Louisiana, it is difficult to discern from these data to what extent the storm contributed to differences in activity observed between dealers in southeast Louisiana and southwest Louisiana.

6.4. Percentage Changes in Active Dealer Numbers, Volume, and Dockside Value Following Hurricanes Gustav and Ike

Following hurricanes Gustav and Ike in 2008, the volume and value of oysters purchased by dealers in southeast Louisiana in 2008 and 2009 were higher than the corresponding measures in 2007. The volume and dockside value among dealers in southwest Louisiana in 2008 and 2009 were down relative to the 2007 measures. Though Hurricane Ike landed in southwest Louisiana and Hurricane Gustav made landfall in the eastern portion of that region in 2008, it is once again difficult to discern to what extent these storms contributed to regional variations in the period.

6.5. Dealer Activity by Resident Business Oyster Dealers by Region

Previous sections of this chapter examined various measures of dealer activity among all active oyster dealers in southeast Louisiana and southwest Louisiana. This section presents parameters for one category of commercial seafood dealer license holders, resident business dealers, that purchased oysters in each region.

Resident business oyster dealers were the most numerous of all types of commercial seafood dealer license holders in both southeast Louisiana and southwest Louisiana throughout the study timeframe. Depending on the year, resident business oyster dealers comprised 69.7 percent to 88.9 percent of all active oyster dealers in southeast Louisiana and 69.4 percent and 83.3 percent of all active oyster dealers in southwest Louisiana.

The total volume of oysters purchased by resident oyster business dealers in southeast Louisiana across the study timeframe represented 95.3 percent of the total volume of oysters purchased by all active oyster dealers in the region between 2000 and 2009. The total dockside value among resident business oysters was equal to 95.5 percent of the total dockside value among all active oyster dealers in southeast Louisiana.

In southwest Louisiana, the total volume and dockside value of all oysters purchased by resident business dealers across the study timeframe represented 81.5 percent of the total volume and 77.8 percent of the total dockside value of oysters purchased by all oyster dealers between 2000 and 2009.

In southeast Louisiana, the trends for the number of active oyster dealers, volume, and dockside value within this category of license holders (Table 6.7) were similar to the corresponding trends for all active oyster dealers in the region (§6.2). The correlation between the number of active resident business oyster dealers in southeast Louisiana (Table 6.7) and the number of all active oysters dealers in southeast Louisiana (Figure 6.1) was fairly high: $\rho = 0.985$. The correlation between the volume of oysters purchased by resident business dealers (Table 6.7) and the volume purchased by all dealers in southeast Louisiana (Figure 6.2) was 0.985. The correlation between the dockside value among resident business oyster dealers in southeast Louisiana (Table 6.7) and the dockside value among all dealers in the region (Figure 6.3) was 0.998.

Strong correlations of these sorts were also apparent in southwest Louisiana. The correlation between the number of active resident business oyster dealers (Table 6.7) and all active oyster dealers in southwest Louisiana (Figure 6.1) was 0.880. The correlation between the volume of oysters among resident business oyster dealers (Table 6.7) and the volume of oysters among all active oyster dealers (Figure 6.2) in the region was 0.861. The correlation between the dockside value of oyster purchased by active resident business oyster dealers (Table 6.7) and the dockside value among all active oyster dealers in the region was 0.965.

Table 6.7. Number of Active Resident Business Oyster Dealers and the Volume and Dockside Value of Oysters Purchased by Resident Business Oyster Dealers in Southeast Louisiana and Southwest Louisiana, By Year: 2000 - 2009

	Southeast Louisiana			Southwest Louisiana		
Year	Number of Active Resident Business Dealers	Volume (Millions of Pounds)	Dockside Value (Millions of Nominal Dollars)	Number of Active Resident Business Dealers	Volume (Millions of Pounds)	Dockside Value (Millions of Nominal Dollars)
2000	36	8.19	$18.97	32	2.95	$5.50
2001	31	9.10	$20.57	30	3.97	$7.36
2002	33	7.66	$17.81	25	3.60	$6.66
2003	41	8.71	$23.16	25	2.90	$5.48
2004	42	9.27	$24.85	28	2.72	$5.30
2005	40	7.02	$20.94	22	3.30	$7.48
2006	19	6.01	$21.02	22	3.60	$9.05
2007	22	5.98	$21.24	25	4.65	$12.09
2008	23	6.49	$21.44	30	3.85	$9.99
2009	23	8.83	$32.59	32	3.68	$10.09

6.5.1. Average Volume and Average Dockside Value per Active Resident Business Oyster Dealer in Southeast Louisiana

The estimates for average volume and average dockside value per active resident business oyster dealers for each year in the study timeframe were calculated by dividing the volume and dockside value of oysters purchased resident business dealers by the number of active resident business oyster dealers in the southeast Louisiana. In the five-year span before hurricanes Katrina and Rita, average volume per active resident business oyster dealer in southeast Louisiana (Figure 6.5) fluctuated from 227.4 thousand pounds per dealer in 2000 to 293.5 thousand pounds per dealer in 2001 and 220.6 thousand pounds per dealer in 2004. Volume per active resident business oyster dealers in southeast Louisiana dropped to 175.5 thousand pounds per dealer in the hurricane year of 2005. Estimated volume per dealer thereafter rose to 316.1 thousand pounds per dealer in 2006, 283.3 thousand pounds per dealer in 2008, and 383.9 thousand pounds per dealer in 2009.

Average dockside value per active resident business oyster dealer in southeast Louisiana (Figure 6.6) varied from \$527.1 thousand per dealer in 2000 to \$663.5 thousand per dealer in 2001 to \$591.8 thousand per dealer in 2004. Estimates dropped to \$523.5 per dealers in the hurricane year of 2005 but then doubled to \$1.11 million per dealer in 2006. Average dockside value per active resident business dealer declined to \$932.1 thousand per dealer in the hurricane year of 2008 but then rose to a period category maximum of \$1.42 million per dealer in 2009.

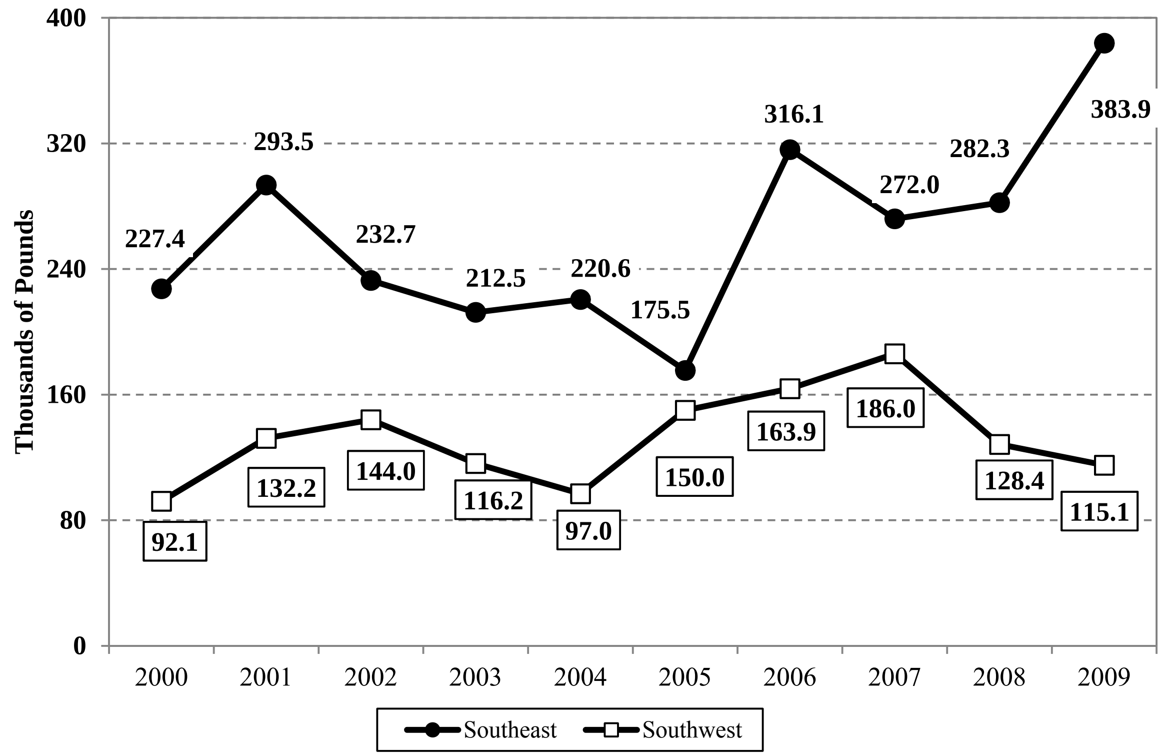

Figure 6.5. **Average Volume per Active Resident Business Oyster Dealer in Southeast Louisiana and Southwest Louisiana as Reported in Louisiana Trip Ticket Program, By Year: 2000 – 2009**

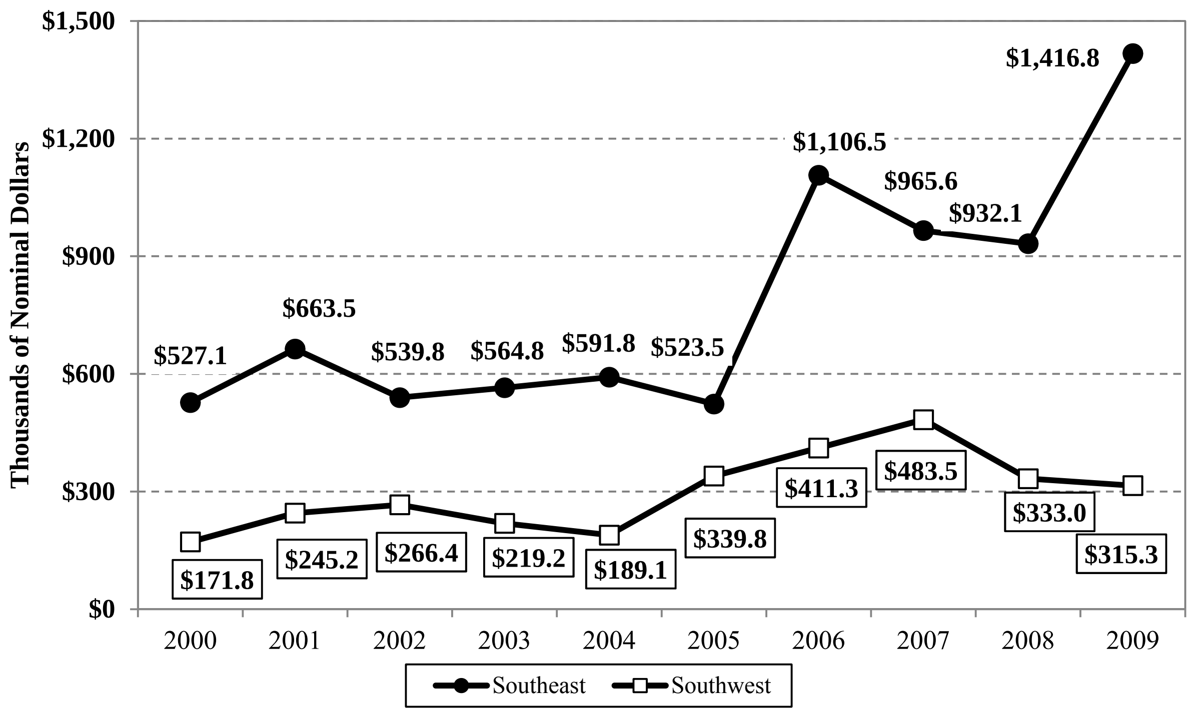

Figure 6.6. **Average Dockside Value per Active Resident Business Oyster Dealer in Southeast Louisiana and Southwest Louisiana as Reported in Louisiana Trip Ticket Program, By Year: 2000 – 2009**

6.5.2. Average Volume and Average Dockside Value per Active Resident Business Oyster Dealer in Southwest Louisiana

The average volume and average dockside value per active resident business oyster dealer in southwest Louisiana were consistently less than the average values per dealer in southeast Louisiana throughout the study timeframe. Average volume per active resident business oyster dealer in southwest Louisiana rose from 92.1 thousand pounds per dealer in 2000 to 144.0 thousand pounds per dealer in 2002 and declined to 97.0 thousand pounds per dealer in 2004, the year before hurricanes Katrina and Rita (Figure 6.5). In the hurricane year of 2005, average volume in southwest Louisiana dealer rose to 150.0 thousand pounds per dealer. The value rose to 186.0 thousand pounds per active resident business oyster dealer in 2007, the year before hurricanes Gustav and Ike. Average volume per active resident business oyster dealer declined to 128.4 thousand pounds per dealer in the hurricane year of 2008 and 115.1 thousand pounds per dealer in 2009.

The average dockside value per active resident business oyster dealer in southwest Louisiana followed a similar pattern (Figure 6.6). Dockside value per active resident business oyster dealer moved from $171.8 thousand per dealer in 2000 to $266.4 thousand per dealer in 2002 to $189.1 thousand pounds per dealer in 2004. Average dockside value rose to $339.8 thousand per dealer in the hurricane year of 2005 and continued to increase over the next few years, reaching a study timeframe maximum of $483.5 thousand per active resident business oyster dealer in southwest Louisiana in 2007. The average dockside value per active resident business oyster dealer in southwest Louisiana was down to $333.0 thousand per dealer in the hurricane year of 2008 and $315.3 thousand per dealer in 2009.

Chapter 7.
Summary and Conclusion

7.1. Introduction

This report has presented estimates and trends for various parameters related to the participation and activities of commercial seafood dealers that purchased oysters in Louisiana during the 2000-2009 timeframe using data from the LDWF trip ticket program and associated LDWF commercial dealer license datasets. It examined changes in the number of active dealers purchasing oysters and the volume and dockside value of oysters that they purchased directly from commercial fishermen. It included analyses of relative changes in dealer activities following two hurricanes in 2005 (hurricanes Katrina and Rita) and two hurricanes in 2008 (hurricanes Gustav and Ike).

The number of active oyster dealers is a count of the number of commercial seafood dealer license holders that reported purchasing oysters directly from commercial fishermen in a particular year. The number of active crab dealers dropped 12.6 percent in the hurricane year of 2005 compared to 2004 and was 31.6 percent below the 2004 level in 2007, the year before hurricanes Gustav and Ike. In the hurricane year of 2008, the number of active crab dealers was 18.5 percent above the number in 2007. In 2009, the number of dealers purchasing oysters directly from commercial fishermen was 21.5 percent above the number in 2007 but 16.8 percent below the number active in 2004.

The volume of oysters purchased directly from commercial fishermen by seafood dealers in Louisiana in 2005 was 13.0 percent below the volume in 2004. In 2007, the volume of oysters was 7.4 percent below the volume of 2004. The volume in the hurricane year of 2008 was 1.1 percent above the volume of 2007. In 2009, the volume of oysters purchased directly from commercial fishermen was 16.0 percent above the volume of 2007 and 7.4 percent above the volume of 2004.

The dockside value of oysters purchased by seafood dealers according to trip ticket data in the hurricane year of 2005 was 4.5 percent below the dockside value of 2004. In 2007, oysters' dockside value was

15.2 percent above the value of 2004. In the hurricane year of 2008, dockside value was 1.7 percent below the dockside value of 2007 and in 2009 dockside value was 26.2 percent above the 2007 dockside value and 45.4 percent above the 2004 dockside value.

Oyster dealers are a diverse group of individuals and firms that display great variety in the quantity of oysters that they purchase. Oyster dealers that purchase less than 5,000 pounds in a year usually made up about one third of the total number of active oyster dealers in a year. Their total purchases across the 2000-2009 study timeframe represented about 0.2 percent of the combined total volume of all active oyster dealers in that time period. In contrast, the oyster dealers that purchased above 500 thousand pounds of oysters in a year at no time numbered as high as 12 during the study timeframe but their purchases accounted for 63.9 percent of the combined total volume of all oysters purchased by all active oyster dealers from 2000 to 2009.

Resident business dealers bought about 84.2 percent of the combined total volume of oysters purchased by resident oyster dealers during the study timeframe. Resident vehicle dealers purchased about 11.4 percent and fresh products dealers purchased about 0.1 percent of the volume of oysters purchased by seafood dealers from 2000 to 2009.

7.2. Data Limitations and Topics for Further Study

This report used the extensive data derived from the LDWF trip ticket program and the LDWF commercial dealer license dataset to illustrate changes in the number of seafood dealers buying oysters and the volume and dockside value of the oysters they purchased directly from commercial fishermen in every year during the 2000 to 2009 study timeframe. This report was unable to discern to what extent any observed fluctuations in any of the examined parameters were attributable to hurricanes Katrina and Rita or hurricanes Gustav and Ike.

This report also presented the number of oyster dealers purchasing a volume of oysters within defined oyster volume categories in every year within the study timeframe. The placement of a dealer within a particular volume category was not a permanent assignment. A dealer might be in one volume category in one year and in a different volume category in subsequent years as its volume fluctuated. This report did not examine the extent of inter-category mobility of the sort described above.

This report employed a fairly broad definition of "active oyster dealer", any individual or business that purchased at least one pound of oysters directly from commercial fishermen in a year. It was unable to distinguish those firms for which buying and selling oysters was the business' primary function from those for which buying oysters was one perhaps relatively minor function among many different business activities.

This report did not examine the diversity of oyster dealers' seafood operations. It did not look at the variety, volume, and dockside value of other sorts of seafood that these firms may have purchased directly from commercial fishermen. Further. It was unable to determine the total expenditures these businesses incurred in buying oysters (and other types of seafood) from sources other than commercial fishermen, such as processors, distributors, and other dealers.

Further, this report examined the volume and dockside value of oysters, one of many expenditures incurred by the dealers that participated in the trip ticket program. It contains no information regarding total expenditures or revenues and thus implies nothing regarding the profitability or economic viability of these firms.

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Appendix A

Landings and Dockside Value for Active Oyster Dealers in Louisiana

Table A.1. **Volume, Dockside Value, and Price per Pound of Oysters Purchased by Commercial Seafood Dealers in Louisiana, By Year: 2000-2009**

Table A1. Volume, Dockside Value, and Price per Pound of Oysters Purchased by Commercial Seafood Dealers in Louisiana, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	12,693,580	15,110,777	13,934,986	13,580,830	13,880,620	12,076,792	11,485,816	12,852,917	12,997,470	14,913,678
Dockside Value (Nominal dollars)	$27,460,783	$31,806,925	$30,262,810	$33,305,841	$34,837,929	$33,260,522	$36,161,531	$40,123,301	$39,438,121	$50,649,676
Price per pound (Nominal dollars)	$2.16	$2.10	$2.17	$2.45	$2.51	$2.75	$3.15	$3.12	$3.03	$3.40

Appendix B

Table B.1. Number of Dealers Buying Oysters in Different Oyster Volume Categories, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(Number of active oyster dealers)									
Less than 5,000 Pounds	31	24	28	23	30	17	16	17	19	24
5,000-50,000 Pounds	24	20	19	33	31	30	10	18	24	19
50,000-100,000 Pounds	11	8	11	7	7	12	6	7	7	10
100,000-500,000 Pounds	17	17	14	16	19	16	13	14	17	16
More than 500,000 Pounds	7	10	10	9	8	8	9	9	10	10

Table B.2. Cumulative Volume of Oysters Purchased by Dealers in Different Oyster Volume Categories, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(Pounds)									
Less than 5,000 Pounds	38,639	41,322	45,131	29,703	23,913	20,277	27,307	15,421	20,526	19,813
5,000-50,000 Pounds	461,013	317,855	341,759	754,298	715,873	631,741	268,987	306,526	513,912	496,924
50,000-100,000 Pounds	847,023	574,290	782,233	568,697	529,919	830,046	432,503	454,621	558,342	726,148
100,000-500,000 Pounds	3,730,279	3,613,314	3,579,680	3,821,842	4,419,071	3,667,306	2,832,249	3,422,387	4,086,821	3,620,764
More than 500,000 Pounds	7,616,626	10,563,996	9,186,184	8,406,290	8,191,844	6,927,423	7,924,770	8,653,961	7,817,869	10,050,029

Table B.3.. Cumulative Dockside Value of Oysters Purchased by Dealers in Different Oyster Volume Categories, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(Nominal dollars)									
Less than 5,000 Pounds	$84,953	$97,681	$114,142	$75,768	$61,115	$62,134	$94,776	$53,955	$74,924	$83,004
5,000-50,000 Pounds	$1,009,525	$785,027	$780,930	$1,830,798	$1,795,024	$1,820,731	$889,850	$1,073,818	$1,654,764	$1,569,813
50,000-100,000 Pounds	$1,681,899	$1,173,777	$1,481,486	$1,459,119	$1,206,867	$2,152,201	$1,088,797	$1,325,187	$1,642,374	$2,585,804
100,000-500,000 Pounds	$8,390,206	$7,435,231	$7,817,792	$8,940,163	$10,918,580	$10,179,020	$8,930,979	$10,925,287	$12,766,797	$11,915,144
More than 500,000 Pounds	$16,294,199	$22,315,210	$20,068,460	$20,999,994	$20,856,343	$19,046,436	$25,157,129	$26,745,054	$23,299,261	$34,495,911

Appendix C

Table C.1: Number of Active Oyster Dealers in Different License Categories, By Year: 2000-2009

License Type	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
						(Number of Active Dealers)				
Resident Business Dealers (Resident Wholesale/Retail-Business License)	67	60	57	66	68	63	40	48	53	55
Non-Resident Business Dealers (Non-Resident Wholesale/Retail-Business License)	4	3	5	4	5	6	3	4	8	8
Resident Fresh Product Dealers (Resident Fresh Products License)	8	8	13	10	12	5	6	9	12	12

Table C.2. Volume of Oysters Purchased by Dealers in Different License Categories, By Year: 2000-2009

License Type	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
						(Pounds)				
Resident Business Dealer s	11,123,304	13,053,523	11,241,222	11,618,812	11,938,663	10,348,048	9,610,186	10,635,683	10,343,311	12,513,277
Non-Resident Business Dealers	*	*	1,975,750	*	1,047,474	1,048,359	*	*	2,364,542	2,041,317
Resident Fresh Products Dealers	7,851	13,108	17,137	13,036	7,718	2,333	6,744	5,555	15,000	16,974

Table C.3. Nominal Dockside Value of Oysters Purchased by Dealers in Different License Categories, By Year: 2000-2009

License Type	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
					(Nominal Dollars)					
Resident Business Dealer s	$24,454,229	$27,901,374	$24,436,169	$28,651,010	$30,068,283	$28,512,121	$30,070,699	$33,337,103	$31,426,919	$42,675,729
Non-Resident Business Dealers	*	*	$4,239,089	*	$2,662,619	$2,980,309	*	*	$7,096,087	$6,660,372
Resident Fresh Products Dealers	$17,109	$29,659	$41,215	$28,910	$15,676	$7,233	$19,930	$20,970	$53,146	$68,917

Table C.4: Average Volume and Dockside Value per Active Resident Business Oyster Dealer, By Year: 2000 to 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume per Dealer	166,019	217,559	197,214	176,043	175,569	164,255	240,255	221,577	195,157	227,514
Dockside Value per Dealer	$364,988	$465,023	$428,705	$434,106	$442,181	$452,573	$751,767	$694,523	$592,961	$775,922

Table C.5. Number of Dealers Purchasing Oysters Harvested from Public Grounds and Volume and Dockside Value of Oysters Harvested from Public Grounds, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Dealers	71	60	66	70	64	62	44	44	56	55
Volume (Pounds)	5,965,097	7,618,080	7,822,586	5,369,274	4,084,721	3,740,430	3,116,373	4,788,703	6,128,730	3,498,200
Dockside Value (Nominal Dollars)	$12,867,082	$15,583,821	$17,267,174	$13,231,965	$11,183,361	$10,959,525	$10,010,736	$14,925,631	$18,481,485	$12,025,296

Table C.6. Number of Dealers Purchasing Oysters Harvested from Private Leases and Volume and Dockside Value of Oysters Harvested from Private Leases, By Year: 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Dealers	67	63	61	71	77	75	48	49	64	63
Volume (Pounds)	6,728,483	7,492,697	6,112,400	8,211,556	9,795,899	8,336,362	8,369,443	8,064,214	6,868,740	11,415,478
Dockside Value (Nominal Dollars)	$14,593,701	$16,223,104	$12,995,636	$20,073,876	$23,654,569	$22,300,997	$26,150,795	$25,197,670	$20,956,636	$38,624,381

Appendix D

Table D.1. Number of Active Dealers Purchasing Oysters and Volume and Dockside Value of Oyster Purchases in Southeast Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Active Dealers	44	39	40	47	48	45	24	29	30	33
Volume (Pounds)	8,816,685	9,689,899	8,254,332	9,250,451	9,770,644	7,366,778	6,237,411	6,191,834	6,762,641	9,262,802
Dockside Value (Nominal Dollars)	20,362,955	21,832,441	19,156,780	24,536,737	26,147,855	21,981,604	21,807,838	21,982,037	22,292,491	34,112,912

Table D.2 Number of Active Oyster Dealers by License Type in Southeast Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Active Resident Business Dealers	36	31	33	41	42	40	19	22	23	23
Other Dealer License Categories	8	8	7	6	6	5	5	7	7	10

Others dealer license categories include Fresh Product license, Resident Wholesale/retail Vehicle license and Nonresident wholesale/retail business license

Table D.3. Volume and Dockside Value of Oysters Purchased by Resident Business Dealers in Southeast Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	8,186,572	9,098,082	7,658,025	8,710,626	9,266,314	7,019,517	6,005,671	5,982,773	6,492,444	8,829,723
Dockside Value (Nominal Dollars)	$18,973,955	$20,567,341	$17,811,954	$23,155,227	$24,854,992	$20,938,373	$21,023,061	$21,243,056	$21,437,956	$32,587,545

Table D.4. Volume and Dockside Value of Oysters Purchased by Dealers in Other Dealer License Categories in Southeast Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	630,113	591,817	596,307	539,825	504,330	347,261	231,740	209,061	270,197	433,079
Dockside Value (Nominal Dollars)	$1,389,000	$1,265,100	$1,344,826	$1,381,510	$1,292,863	$1,043,231	$784,777	$738,981	$854,535	$1,525,367

Others dealer license categories include Fresh Product license, Resident Wholesale/retail Vehicle license and Nonresident wholesale/retail business license

Table D.5. Number of Active Dealers Purchasing Oysters and Volume and Dockside Value of Oyster Purchases in Southwest Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Active Dealers	39	36	36	35	40	28	27	31	42	42
Volume (Pounds)	3,034,595	4,065,089	4,085,734	3,518,330	3,259,762	3,921,328	4,447,038	5,989,444	5,592,940	5,304,083
Dockside Value (Nominal Dollars)	$5,663,785	$7,541,549	$7,819,033	$6,728,813	$6,529,596	$9,107,726	$11,794,926	$15,965,111	$15,099,533	$15,285,863

Table D.6. Number of Active Oyster Dealers by License Type in Southwest Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Active Resident Business Dealers	32	30	25	25	28	22	22	25	30	32
Fresh Products Dealers	5	5	9	7	8	4	3	4	7	7
Others	2	1	2	3	4	2	2	2	5	3

Others include dealers with Resident Wholesale/retail Vehicle License and Nonresident Wholesale/retail Business License

Table D.7. Volume and Dockside Value of Oysters Purchased by Resident Business Dealers in Southwest Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	2,946,820	3,967,457	3,599,979	2,904,172	2,715,123	3,300,221	3,604,715	4,651,212	3,850,870	3,683,555
Dockside Value (Nominal dollars)	$5,499,097	$7,356,855	$6,660,397	$5,480,045	$5,295,835	$7,475,123	$9,048,304	$12,088,172	$9,988,965	$10,088,183

Table D.8. Volume and Dockside Value of Oysters Purchased by Resident Fresh Products Dealers in Southwest Louisiana, By Year: 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	5,813	8,275	15,250	10,675	6,619	1,592	5,331	3,869	10,656	11,698
Dockside Value (Nominal dollars)	$12,141	$18,881	$36,369	$22,600	$13,174	$4,522	$14,770	$11,795	$31,698	$43,037

In the regional analysis, there were some observations with missing parishes. The table below shows volume and dockside value of oyster purchases and the number of dealers from the observations with missing parish variables from 2000 to 2009.

Table D.9. Volume and Value by Dealers 'with No Specified Parish'

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume (Pounds)	842,300	*	1,594,919	812,049	850,216	788,687	*	671,638	641,888	*
Dockside Value (Nominal dollars)	$1,434,042	*	$3,286,997	$2,040,292	$2,160,479	$2,171,194	*	$2,176,154	$2,046,097	*
Number of Dealers	7	4	6	6	7	10	3	5	5	4