

Ag Econ

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7. Title Marketing, Trade, and Management of Aquaculture and Fishery Resources (from W1004)					
12. Investigator Name(s) (Last Name and Initials) Kazmierczak, R. F.; Caffey, R. H.					
20. Termination Date 09/30/2014			40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011		
Outputs: The information generated by this project was disseminated in three refereed publications and four presentations at state (Louisiana, Hawaii), national and international (Canada, Mexico) meetings. The significance and impact of the research was discussed with peer researchers, government personnel, and the lay public at the state, national and international meetings. As a result of this research, both governmental and non-governmental organizations have requested follow-up research in the objective areas with the goal of using the results to guide regulatory rule-making.					
Outcomes/Impacts: Using insurance as an indicator, the general economic health of the recreational for-hire industry in 2009 appeared to be relatively good, with 84 to 100 percent of vessels being insured (depending on operation type and state). Furthermore, the average coverage was 94 percent or more across all types, states, and regions. The percent of part-time operators was lowest for head boats and highest for guide boats in each state and region, with the exception of Texas charter operators whose value was unexpectedly high. In contrast to previous studies, head boat operations can no longer be identified primarily by examining trip fee payment structure. Previous survey results may have unintentionally missed a large portion of the recreational for hire industry when they focused primarily on the federal offshore fleet. Using an IAIDS (inverse almost ideal demand system) modeling framework, this project examined the influence of mandatory warning labels and associated media coverage (Vibrio event) tied to the raw Gulf of Mexico oyster products. The demand for the Gulf and Chesapeake products fell sharply as a result of the event, while the demand for the Pacific and imported products sharply increased. Regulations and media coverage attached to the Gulf product negatively influenced the Chesapeake price. These issues also suggest a possible market failure in the form of imperfect information being transmitted through the market system. A mixed logit discrete choice model analyzed the monetary and non-monetary factors that influence location choice behavior of Gulf of Mexico shrimpers. Expected revenues played an important role in site selection. Harvester behavior toward risk in the form of variations in expected revenues, however, was not consistent across groups considered in the analysis and was also not consistent between time periods. Because of the exhibited inertia on the part of shrimpers in changing sites due to either site loyalty or risk aversion, the use of economic incentives as a means of influencing location-choice behavior appears to be a significant challenge, especially under unfavorable economic conditions. An age-structured bioeconomic model for king mackerel in the Gulf of Mexico and South Atlantic Ocean was developed to examine if shifting fishing pressure to smaller, younger fish can lead to reductions in mercury reaching consumers while, at the same time, preserving the public and private benefits associated with the fishing industry. The simulations show the possibility of reducing the amount of mercury that reaches consumers by altering the age composition of the catch. It may also be possible for this to occur without seriously impacting the long-run stability of the biomass stock, but there are tradeoffs in terms of the economic position of the fishery. The optimization of the model under various objectives provides the optimal catch composition for achieving different management goals.					
Publications: Dedah, C., W.R. Keithly, Jr. and R.F. Kazmierczak, Jr. 2011. An Analysis of U.S. Oyster Demand and the Influences of Labeling Requirements. Marine Resource Economics 26(1):17-33. Ran, T., W.R. Keithly, Jr. and R.F. Kazmierczak, Jr. 2011. Location Choice Behavior of Gulf of Mexico Shrimpers under Dynamic Economic Conditions. J. Agricultural & Applied Economics 43(1):29-42.					

Savolainen, M.A., R.H. Caffey and R.F. Kazmierczak, Jr. 2011. The Recreational For-Hire Sector in the U.S. Gulf of Mexico: Structural and Economic Observations from the Third Decadal Survey. In Proceedings of the 64th Gulf and Caribbean Fisheries Institute Meeting, ed. R.L. Creswell. Puerto Morelos, Mexico: Gulf and Caribbean Fisheries Institute.

Participants:

Kazmierczak, Richard F., Jr. (PI), Caffey, Rex H., Keithly, Walter R., Jr., Dedah, Cheikhna O., Boen, Caroline, Wang, Huabo, Savolainen, Michelle, LSU AgCenter.

Target Audiences:

Target audiences for the results of this project include personnel in governmental and non-governmental organizations involved in the management and regulation of aquaculture and capture fisheries, particularly in the southeastern United States and U.S. associated Caribbean islands.

Project Modifications:

Nothing significant to report during this reporting period.

Approved (Signature)	Title	Date
		