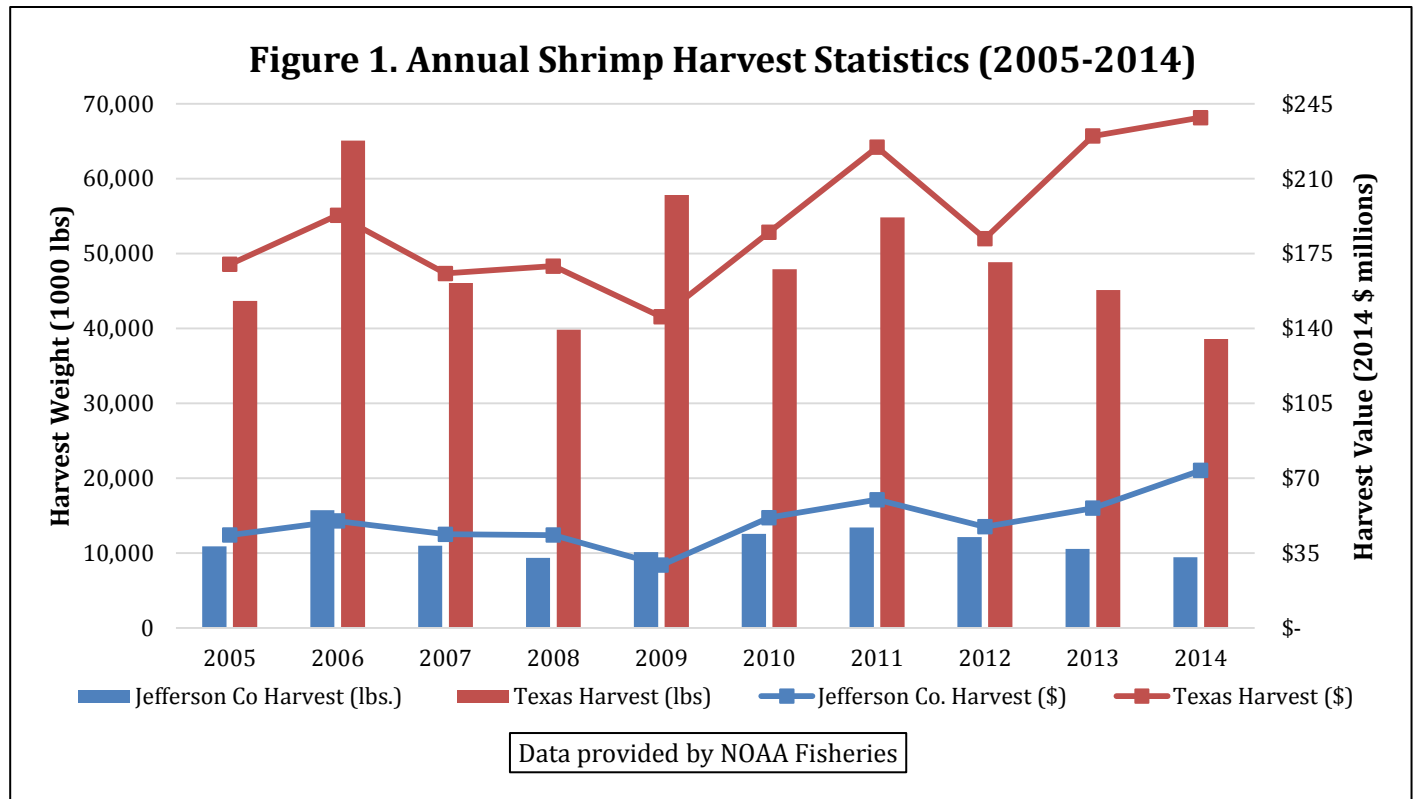


Economic Impacts of the Jefferson County Shrimp Fishery

Andrew Ropicki¹, Rebekka Dudensing², and Terrie Looney³

The Jefferson County shrimp industry is a vital part of both the Jefferson County economy and the Texas shrimp industry. Between 2005 and 2014, Jefferson County’s shrimp harvest accounted for 24% of the total Texas shrimp harvest by weight and 26% of the total Texas shrimp harvest by value (Figure 1).



The economic impacts of the shrimp fishery on Jefferson County are presented in Table 1 (estimates are in 2014 dollars). Based on data from 2005 to 2014, impacts were estimated for three different cases based on dockside revenues for 1) the best year (2014), 2) an average year (average of all years), and 3) the worst year (2009); different scenarios were analyzed to account for the wide variability in annual harvest revenues (see Figure 1). In addition to effects directly attributed to the shrimp harvesting sector (direct effects), estimates of indirect and induced impacts are also included. Indirect effects are economic impacts due to purchases of goods and services by the shrimp harvesting sector from other local industries, and induced effects are due to

¹ Assistant Professor and Extension Economist, Texas A&M AgriLife Extension Service/Texas Sea Grant, Corpus Christi, TX

² Assistant Professor and Extension Economist, Texas A&M AgriLife Extension Service, College Station, TX

³ Jefferson and Chambers Counties Coastal and Marine Resources Agent, Texas Sea Grant, Beaumont, TX

expenditures by those benefiting from the increases in local business activity (individuals employed due to the shrimp industry, such as shrimp vessel deckhands). Four different types of impacts are estimated: employment (number of jobs due to the shrimp harvesting sector), labor income (combined income of those employed as a result of the shrimp harvesting sector), value added (the shrimp harvesting sector's contribution to GDP), and output (the effect of direct spending on overall economic activity). As the estimates show, in an average year the Jefferson County shrimp fishery contributes approximately \$34 million dollars to the Jefferson County economy.

Table 1. Shrimp Harvesting Economic Impacts on Jefferson County

Best Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,577	\$24,964,735	\$34,429,299	\$73,621,912
Indirect Effect	56	\$3,403,810	\$6,881,562	\$21,052,529
Induced Effect	137	\$5,171,895	\$9,131,665	\$15,851,379
Total Effect	1,770	\$33,540,440	\$50,442,525	\$110,525,821
Average Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,067	\$16,892,863	\$23,297,241	\$49,817,669
Indirect Effect	38	\$2,303,253	\$4,656,540	\$14,245,595
Induced Effect	93	\$3,499,661	\$6,179,115	\$10,726,138
Total Effect	1,198	\$22,695,778	\$34,132,896	\$74,789,402
Poorest Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	628	\$9,933,811	\$13,699,890	\$29,295,169
Indirect Effect	22	\$1,354,423	\$2,738,268	\$8,377,090
Induced Effect	54	\$2,057,968	\$3,633,615	\$6,307,481
Total Effect	704	\$13,346,201	\$20,071,773	\$43,979,741
*Economic impact values are additive across impact types (direct, indirect, and induced), but not across measures (employment, labor income, value added, and output).				

Analysis Notes

- Annual shrimp landings data (amount and value) were provided by NOAA Fisheries; landings (weight) are measured in headless pounds.
- Economic impacts were calculated using IMPLAN (IMPact analysis for PLANning), a software program that calculates economic impacts using classic input-output analysis.
- Fishing impacts were calculated using 2013 IMPLAN sector 17 multipliers.

References

Adams, C., D. Mulkey, and A. Hodges. 2002. Economic importance of the San Carlos Island shrimp processing industry to the Lee County economy. In D. Letson, and J.W. Milon (Editors), *Florida coastal environmental resources: a guide to economic valuation and impact analysis*, p. 131-144. Florida Sea Grant Rep. SGR-124.

MIG. 2015. *IMPLAN Professional Version 3.0*. Stillwater, Oklahoma.

Publication supported in part by an Institutional Grant (NA14OAR4170102) to the Texas Sea Grant College Program from the National Sea Grant Office, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. TAMU-SG-15-516 October 2015