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FISHERIES

Economic Contribution of the Marine Charter Boat Fleet in Oregon and Washington

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Project Overview

- What is the objective of the project?
 - Develop a for-hire fishing sector for inclusion in impact models
 - Estimate economic contribution of sector in WA and OR
 - Gain insights into the structure, perceptions, and economic conditions
 - Vessel characteristics
 - Years participating
 - Share of household income
 - Concerns for future
 - Vessel characteristics

Project Overview

- Study details – methods, data, locations, dates, etc
 - 217 Washington and Oregon marine vessels in 2006 with \$15.4 million in direct revenue.
 - Mail survey to all charter fishing license holders (marine or not).
 - Completed surveys were received from 95 ocean going vessels (41% response rate).

Project Overview

- What type of modeling is being used?
- Descriptive statistics
- Modified IMPLAN model as presented in Steinback and Thunberg (2006)



Why is this project needed?

- List management needs that are being addressed with this project
 - Contribution estimates of for-hire sector important for allocation decisions.
 - Insights on structure and economic conditions could also be important for allocation decisions.

Reason for a special study

- Default IMPLAN sector (Other amusement and recreation) probably not representative of for-hire fishing.
- Gap in license frame for WA of for-hire anglers, which may affect marine expenditure estimates
- Very little information available for for-hire sector

Description of the Data

- Is the data being collected or analyzed special, and if so, how?
 - Only census of entire charter fleet in WA and OR.
 - Detailed revenue data that includes revenue not earned from for-hire fishing.
 - Only opinion data of operators on current economic conditions and economic outlook.



Table 5. Mean Revenue by Source in Washington and Oregon (\$2006)

Revenue Source	N	Mean	Standard Deviation
Vessel Related Revenue			
Salmon Fishing	64	24,897	30,849
Groundfish Fishing	64	13,982	27,110
Halibut Fishing	64	7,432	18,822
Albacore Fishing	64	3,650	9,958
Other Large Pelagic Fishing	64	168	813
Shellfish Fishing	64	252	1,248
Freelance Fishing	64	107	855
Other Recreational Fishing	64	4,552	21,179
Commercial Fishing	64	5,748	26,008
Nature Watching	64	150	825
Non-Fishing Scuba Diving	64	117	595
Burial at Sea	64	89	199
Other Purpose 1	64	3,524	10,967
Other Purpose 2	64	2,621	13,098
Other Revenue			
Booking Revenue	64	2,367	13,777
Souvenir Sales	64	162	767
Food/Beverage Sales	64	144	1,010
Hotel Owned by Vessel Owner	64	469	2,403
Renting of Vessel	64	119	547
Other Sales	64	26	171
Total Revenue	64	70,575	95,945



Table 6. Mean Expenditures by Type in Washington and Oregon (\$2006)

Expenditure Type	N	Mean	Standard Deviation
Vessel Related Expenditures			
Captain's Payments	70	5,693	12,501
Other Crew Payments	70	2,319	4,154
Office Labor and Other Labor	70	690	2,506
Engine Overhaul	70	2,512	10,291
All Other Vessel Maintenance	70	2,624	3,004
Electronics Maintenance	70	537	1,093
Haulout	70	965	2,429
Moorage	70	1,356	1,299
Purchase of New Gear	70	1,276	2,611
Vessel Insurance	70	3,569	3,605
Vessel Professional Services	70	413	644
Vessel Advertising	70	1,345	2,240
Fuel	70	7,685	8,910
Fishing Supplies	70	2,050	3,468
Bait Expenses	70	807	1,589
Food and Drink	70	88	257
Taxes and Government Fees Domestic	70	4,172	9,251
Taxes and Government Fees Foreign	70	32	171
Commissions for Booking Agents	70	3,906	7,730
Telephone and Other Communications	70	718	981
Other Vessel Related	70	5,434	14,699
Total Expenditures	70	50,547	63,228



Outlay Categories	Pct.	IMPLAN Sector
Vessel Related		
Proprietary Income	27.20%	Proprietary Income
Captain's Payments	8.60%	Employee Compensation
Other Crew Payments	3.20%	Employee Compensation
Office Labor and Other Labor	1.10%	Employee Compensation
Engine Overhaul	3.70%	Ship building and repairing
All Other Vessel Maintenance	3.80%	Ship building and repairing
Electronics Maintenance	0.80%	Electronic equipment repair and maintenance
Haulout	1.40%	Ship building and repairing
Moorage	2.00%	Other amusement, gambling, and recreation
Purchase of New Gear	1.50%	Sporting goods, hobby, book stores (M)
Vessel Insurance	5.00%	Insurance carriers
Vessel Professional Services	0.60%	Other miscellaneous prof. and tech. services
Vessel Advertising	2.10%	Advertising and related services
Fuel	10.80%	Gasoline stations (M)
Fishing Supplies	3.00%	Sporting goods, hobby, book stores (Margined)
Bait Expenses	1.20%	Animal prod., except cattle, poultry (M)
Food and Drink	0.10%	Food and beverage stores (M)
Taxes and Govt. Fees Domestic	6.60%	Indirect Business Taxes
Taxes and Govt. Fees Foreign	0.00%	Indirect Business Taxes
Commissions for Booking	5.70%	Travel arrangement and reservation services
Telephone and Other Comm.	1.10%	Telecommunications
Other Vessel Related	8.40%	Monetary authorities and depository credit

Outlay Categories	Pct.	IMPLAN Sector
Booking Operation Related		
Labor for Shorebased Personnel	0.10%	Employee Compensation
Advertising	0.40%	Advertising and related services
Insurance	0.40%	Insurance carriers
Professional Service	0.10%	All other miscellaneous prof. and tech.
Association Fees	0.00%	Civic, social, professional organizations
Telephones	0.40%	Telecommunications
Other Office Expenses	0.70%	Miscellaneous store retailers (Margined)

Results

WA and OR	Contribution			Total
	Direct	Indirect	Induced	
Industry Output	\$15,314,853	\$5,839,016	\$7,956,041	\$29,109,910
Income	\$2,802,449	\$1,323,484	\$1,968,847	\$13,479,785
Employment	345	43	76	465
 "Economic Contribution of Marine Angler Expenditures"				
Industry Output	\$12,318,000			\$20,722,000
Income	\$4,012,000			\$6,752,000
Employment	185			260



Future studies of this type

- Will this study be repeated?
 - Yes, but with new questionnaire
 - In Person Interviews
- When and where?
 - Sometime in next two years

Economic Outlook Over Next Five Years

Variable	Favorable		Unfavorable	
	Mean	Std. Dev.	Mean	Std. Dev.
Years Owned Charter Operation	9.6*	8.4	16.1	12.1
Years Involved in Industry	14.5**	10.9	21.6	13.8
Vessel Length	30.7**	9.5	35.9	10.5
Vessel Main Engine Horsepower	263.6*	120.9	375.7	244.6
Total Vessel Expenditures	29,239*	20,683	57,065	63,999
Fuel	5,683**	4,835	9,704	10,951
Commissions for Booking Agents	1,500*	4,107	6,809	14,182
Captain's Payments	1,151**	2,402	3,025	4,785
Other Crew Payments	1,361*	2,584	5,767	12,748
Other Vessel Related Expenses	302*	617	5,939	9,413
Total Vessel Revenue	64,946	76,725	71,109	90,811

*Different from mean of "Unfavorable" at a 0.05 level of significance.

**Different from mean of "Unfavorable" at a 0.1 level of significance.

Figure 3. Years of Ownership by Mean Length of Vessel

