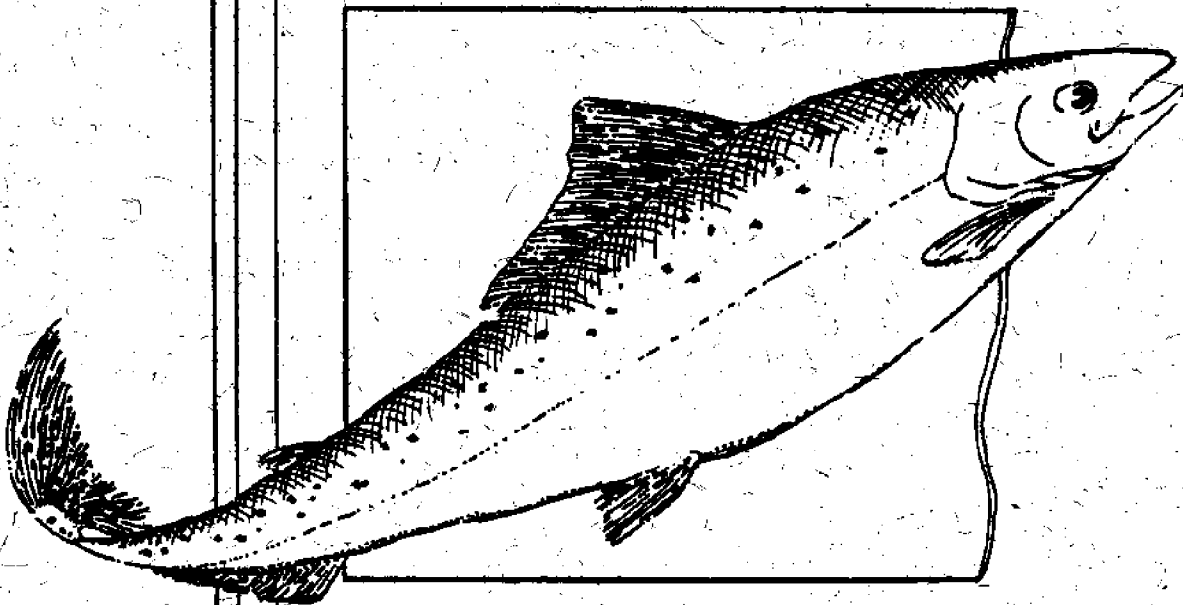


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# Economics of Sport Fishing in Alcona County



Scott W. Jordan and Daniel R. Talhelm

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**THE ECONOMIC IMPACTS OF SPORT FISHING IN ALCONA COUNTY**

**A Study of the Lake Huron Fisheries  
from September 1980 to August 1981**

by

Scott W. Jordan and Daniel R. Talhelm

Department of Fisheries and Wildlife  
Michigan State University  
East Lansing, Michigan

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**Economics of  
Sport Fishing in  
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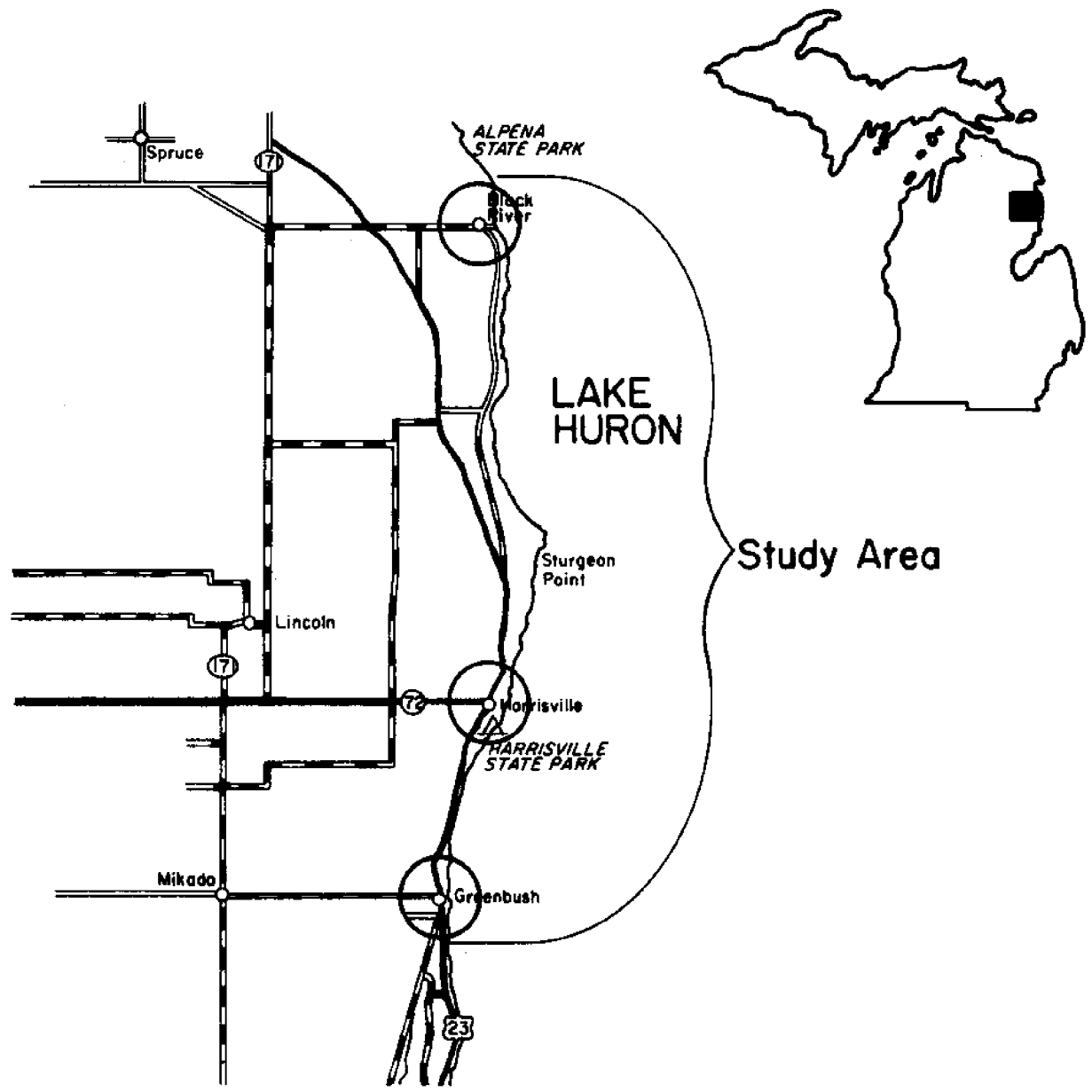


Figure 1. Alcona County study area.

## INTRODUCTION

Great Lakes sport fishing has developed over the past fifteen years into one of Michigan's major recreational pursuits and tourist attractions. Approximately 850,000 Michigan anglers spent 7.5 million days in 1979 angling for Great Lakes fish (Jamsen, 1980). Associated with the growth of the sport fishery has been the development of a significant economic base for many of Michigan's coastal communities. Michigan's Great Lakes sport fishery generates \$200-300 million of annual income in Michigan (Talhelm, 1979). Since many areas of the state where fishing pressure is heaviest are mostly rural, with low populations and predominately agrarian-based economies, the influx of anglers' dollars can have substantial impacts.

The most recent economic impact analysis of sport fishing in a small locality in Michigan for Great Lakes fish was done almost a decade ago on Grand Traverse Bay (Kapetsky and Ryckman, 1973). Estimated annual (May 1971 to May 1972) use and expenditures by visitors to that area (non-residents of the three counties contiguous to the Bay) were 42,878 angler days and \$418,501.00, or \$9.76 per angler day. One purpose of the Alcona study was to look at another area of the State and to document present use and expenditure patterns in that area.

Alcona County is located on the Lake Huron shore of northeast lower Michigan (Figure 1). The county has both a fall salmon fishery and a spring-summer lake trout fishery which attract thousands of anglers. Most retail businesses are tourist-oriented, as the county has long been a summer vacation area. The county's current population is slightly more than 10,000, and its largely agrarian economy is suffering close to a 20% unemployment rate.

We observed the greatest amount of angler use in Alcona County during the two month fall salmon run. We estimated that more than 10,000 anglers visited the county at that time and their expenditures totaled more than \$1 million. Most of that use is concentrated in Harrisville (pop. approximately 1,000), and it is in that community that most of the positive and negative impacts of sport fishing in the county are encountered.

One of the major problems is parking. Residents along the shoreline have constant traffic jams and trespassing to contend with. Littering of private residences along the lakeshore is also a problem. Because of the large numbers of anglers in town, the city of Harrisville incurs added costs for increased law enforcement patrols and garbage collection. From the local perspective the additional municipal services are perceived to be costly, however, we found from talking with city officials that the added services cost no more than \$5,000 in the fall. We found the most significant negative impact to be the ill will fostered in the attitudes of local residents because of the irresponsible behavior of a small percentage of the anglers. Appendix D of this report lists some resident comments which clearly expound the local sentiments towards anglers.

Besides the fall salmon fishery, many anglers came to Alcona County in the spring and summer to fish for lake trout. The lake trout fishery is strictly boat-oriented, as the schools of lake trout are found from one to five miles out on the lake as the season progresses. We estimated that over 3000 anglers came to the county to fish from their own boats during the five month period (April to August), and that close to 800 anglers fished from local charter boats. We estimated that altogether they spent close to \$200,000 in Alcona County. Because of the longer time span and the reduced numbers of anglers, residents perceived no negative impacts during the spring-summer lake trout season.

The project had three major goals. The first goal was to estimate the annual number of resident and non-resident (not residing in Alcona County) angler days spent fishing on Lake Huron in Alcona County. An angler day is one angler fishing any part of one day. The second goal was to estimate the annual expenditures of non-resident anglers. Angler expenditures were separated into as many as eleven different components, and a distinction was made for expenditures being made either in or out of the county. The third goal was to give all parties (anglers, residents, businesses, and government officials) with an interest in the sport fisheries in Alcona County an opportunity to express their thoughts, concerns, plans, and feelings about sport fishing's impact on the individual and the community.

## SURVEYS

Anglers were interviewed during the fall salmon run at Harrisville and Black River and during the spring-summer lake trout season at Harrisville. Anglers were questioned about their expenditures, their length of stay, their fishing success, where they were from, where they were staying, their impressions of fishing in Alcona County, whether they had reasons other than fishing for their trip, and personal information. Anglers were separated into three groups depending on the type of fishery; those fishing from shore, those fishing from their own boats, and those fishing from charter boats.

Several techniques were used to estimate angler use. Shore angler use was estimated using a roving survey (Hayne, 1966, 1972; Malvestuto, Davies and Shelton, 1978 and Talhelm, 1972). A roving survey consists of systematic traverses of sections of shoreline by an interviewer. Traverses were made during the fall salmon season at Harrisville and Black River. Shore anglers were asked how long they planned to fish that day, and based on (1) the probability of an interviewer encountering an angler on a traverse of the shoreline, (2) the number of anglers counted on a traverse, and (3) the number of traverses of shoreline done on that day, the total number of anglers fishing that day could be estimated. Six weekdays and six weekend days were randomly selected for sampling during the two month salmon season, from which an average level of daily use was estimated and extrapolated for the entire season. Boaters were interviewed on the same shore sampling days, and an average number of anglers per boat was estimated. This was multiplied by daily counts made by Michigan Department of Natural Resources personnel of boats entering the Harrisville launch facility

during the fall salmon season. Spring-summer angler use (all boaters) was estimated in a similar manner, the only difference being that daily launchings were estimated from early morning trailer counts at the Harrisville boat ramp by a local businessman and random full day counts of launched boats by an interviewer. Charter client use was obtained from charter captains' logbooks.

Mail surveys of local residents and businesses were sent out during the winter and spring. Approximately 50% of the questionnaires were returned after a second copy of the questionnaire was sent to all initial nonrespondants. Residents and businesses were asked to rank their impressions of sport fishing's impact both on the county's economy and the people that live, work, and conduct business in its communities. They were also asked to rank their impressions of the activities of various government and civic groups in promoting sport fishing in Alcona County. Finally, they were given the opportunity to express their thoughts and feelings about sport fishing in Alcona County in whatever manner and to any length in writing.

Interviews were conducted with officials and representatives of various divisions of Michigan's Department of Natural Resources, the Harrisville Harbor Commission, and the Harrisville city government. The purpose of the government interviews was to clearly explain what past actions and future plans, if any, each government entity had within the confines of its own jurisdiction for the development, enhancement, and solving of problems associated with Lake Huron sport fishing in Alcona County.

Questionnaires used for anglers, residents, and businesses are found in Appendix A.

## FALL SALMON FISHERY

### Angler Usage and Expenditures

Sport fishing activity on Lake Huron in Alcona County for the fall salmon season (September 1, 1980 to November 1, 1980) was estimated at 44,215 angler days (Table 1). Because fishing trips to Alcona County normally encompass a few days, and because local residents make repeat trips, the actual number of individuals who fished in Alcona County is considerably less than the fishing activity expressed in angler days. Estimates of non-resident fishing use were based on the proportion of visitors encountered during interviews with sample fishermen.

**Table 1. Summary of angler use on Lake Huron in Alcona County during the fall salmon run, September 1, 1980 - November 1, 1980.**

Category of fishing activity	Total angler days	Percentage of total angler days	Non-resident angler days	Percentage from non-residents
Harrisville shore	14,327	32	13,502	94
Black River shore	2,381	6	2,403	97
Harrisville boat	27,407	62	27,407*	100*
Totals	44,215	100	43,312	98

\*One may seriously question the finding that no residents of Alcona County fished from boats during the fall salmon run. We originally had our doubts, as our sample size (47) was small, but we found through conversations with local anglers fishing in the spring and summer for lake trout, that very few of them fished during the fall because of the crowded conditions. Their contention was they could get all the fish they wanted during the spring and summer. Therefore, we feel the Harrisville boat estimates may be more credible in their non-resident component than what we had first thought.

An estimated 98% of all angler use was accounted for by non-residents during the fall season (43,312 angler days). Since expenditures by local fishermen provide no new source of income to the county, only non-resident expenditures will be analyzed. Table 2 lists the expenditures of non-resident anglers for various categories of goods and services. Their expenditures are apportioned between what they spent at home, en route to and from Alcona County, and in the county. Non-resident anglers' average daily expenditures in Alcona County were \$26.33.

Several perceptions of local residents about anglers' expenditures were dispelled by the findings in Table 2. One notion was that non-resident anglers buy everything they need for a fishing trip at home, and that very little money is spent in the county. The second notion was that only the local bait and tackle shops realize any benefit from angler expenditures. We found that more than one-half of anglers' trip expenditures were made in the county, and that close to 75% of anglers' expenditures were made in retail establishments other than tackle stores.

**Table 2. Eleven categories of non-resident angler average daily expenditures made at home, en route, and in Alcona County during the fall salmon season.**

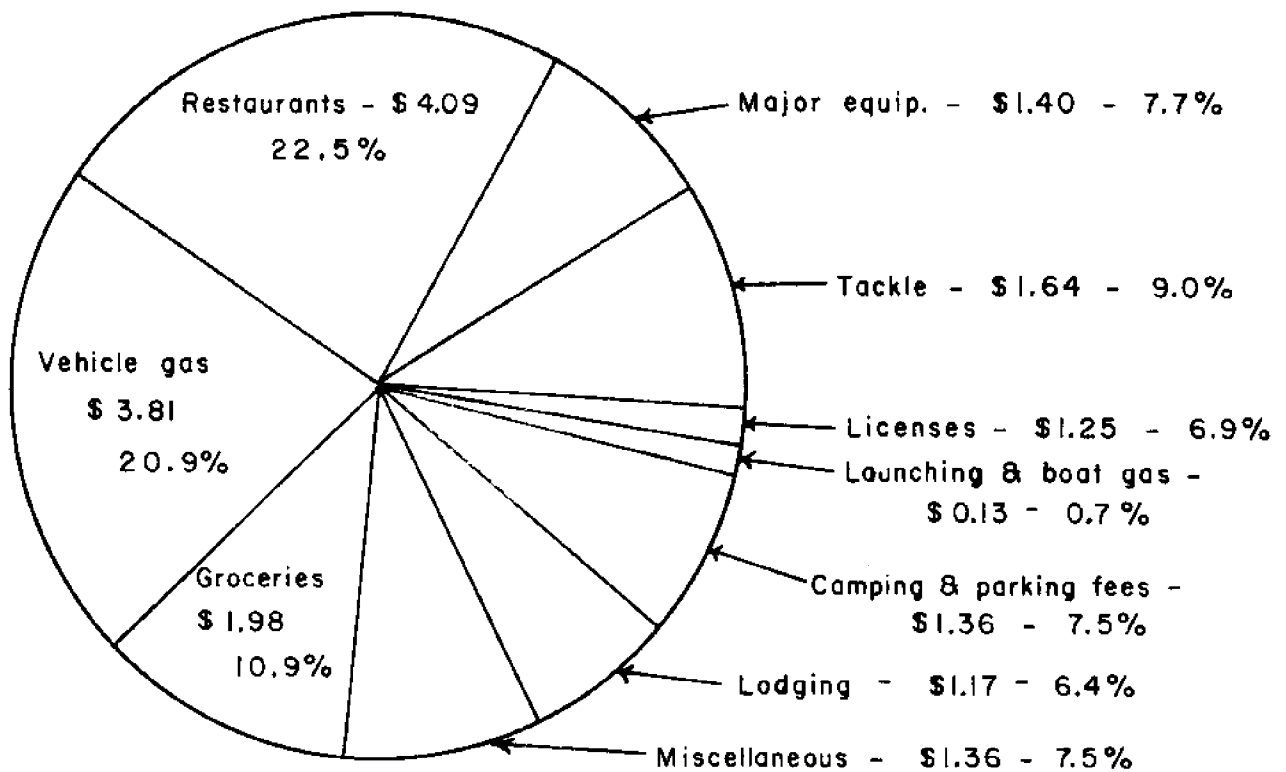
<u>Type of expenditure</u>	<u>Home</u>		<u>En route</u>		<u>Alcona Co.</u>	
	<u>Ave.</u>	<u>%</u>	<u>Ave.</u>	<u>%</u>	<u>Ave.</u>	<u>%</u>
1. Major fishing equip.	3.43	23.6	.68	6.1	.92	3.5
2. Tackle - small gear						
bait	1.28	8.8	.67	6.0	2.47	9.4
3. Licenses	3.81	26.2	.60	5.3	.98	3.7
4. Launch fees	--	--	--	--	.93	3.5
5. Boat gas and oil	.50	3.5	.20	1.8	.94	3.6
6. Camping and parking						
fees	--	--	.06	0.5	1.38	5.2
7. Lodging	--	--	.07	0.6	3.05	11.6
8. Restaurants	--	--	1.35	12.1	4.40	16.7
9. Grocery food	1.34	9.3	.81	7.2	3.53	13.4
10. Vehicle gas and oil	4.05	27.8	6.48	57.9	4.05	15.4
11. Miscellaneous (spirits, cigarettes, clothing, etc.)	.10	0.8	.28	2.5	3.68	14.0
<b>Total</b>	<b>\$14.56</b>		<b>\$11.20</b>		<b>\$26.33</b>	

Anglers' expenditures were adjusted proportionately in those instances when the angler had reasons other than fishing for his/her trip to Alcona County. Figures 2, 3, and 4 are visual breakdowns of the Alcona County expenditures between the three groups of anglers interviewed. Harrisville shore anglers averaged \$18.19 per day, Black River shore anglers averaged \$11.50 per day, and Harrisville boat anglers averaged \$31.64 per day. The total gross income to Alcona County from non-resident anglers was \$1,140,405.00 with more than 75% of that amount attributable to boat anglers at Harrisville (Table 3). A statistical summary of the expenditure data is in Appendix B.

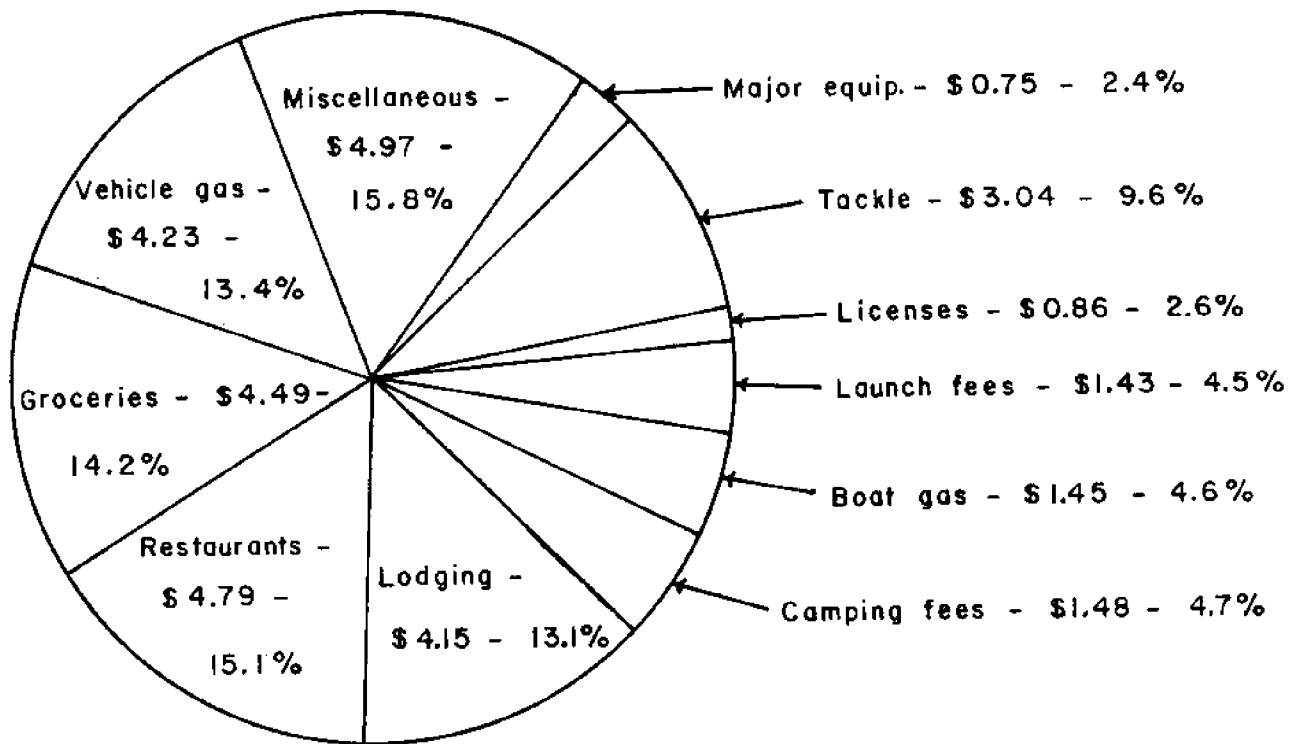
**Table 3. Non-resident sport fishing revenue in Alcona County apportioned among the three fall angler groups interviewed.**

Angler group	Total angler days	Ave. daily expenditures	Total expenditures	%
Harrisville shore	13,502	18.19	245,601	22
Black River shore	2,403	11.50	27,635	2
Harrisville boat	27,407	31.64	867,157	76
<b>Total</b>	<b>43,312</b>	<b>\$26.33</b>	<b>\$1,140,405</b>	<b>100</b>

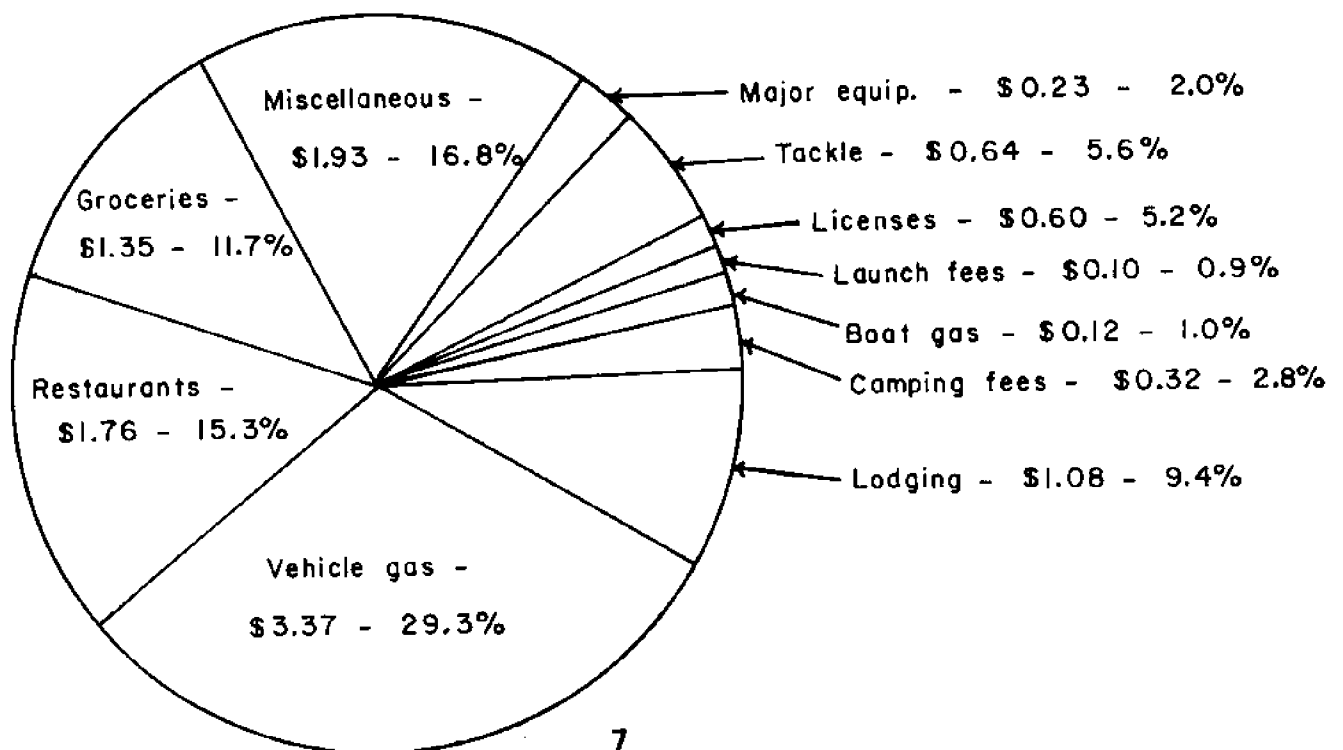
**Figure 2: Average daily expenditures of non-resident Harrisville shore anglers in the fall in Alcona County.**



**Figure 3: Average daily expenditures of non-resident Harrisville boat anglers in the fall in Alcona County.**



**Figure 4: Average daily expenditures of non-resident Black River shore anglers in the fall in Alcona County.**





## Angler Origins and Fishing Success

Of all anglers interviewed during the fall season, 24% were from out-of-state. Table 4 lists the states and Michigan counties anglers were from, and the percentage each comprised of all anglers interviewed in the fall.

**Table 4. Fall angler origins.**

State	% of anglers	State	% of anglers
Ohio	16.6	Florida	0.5
New York	1.8	Tennessee	0.5
Pennsylvania	1.8	Indiana	0.5
Illinois	0.9	Iowa	0.5
Kentucky	0.5	Ontario	0.5

County	% of anglers	County	% of anglers
Oakland	14.3	Monroe	1.4
Wayne	8.8	Shiawassee	1.4
Genesee	8.3	St. Clair	1.4
Macomb	6.9	Livingston	0.9
Saginaw	6.5	Iosco	0.9
Bay	5.5	Ogemaw	0.9
Washtenaw	5.1	Midland	0.9
Alcona	4.1	Lenawee	0.5
Tuscola	1.8	Gladwin	0.5
Crawford	1.8	Chippewa	0.5
Alpena	1.4	Arenac	0.5
Jackson	1.4	Osceola	0.5

**Figure 5: Fall in-state angler origins.**

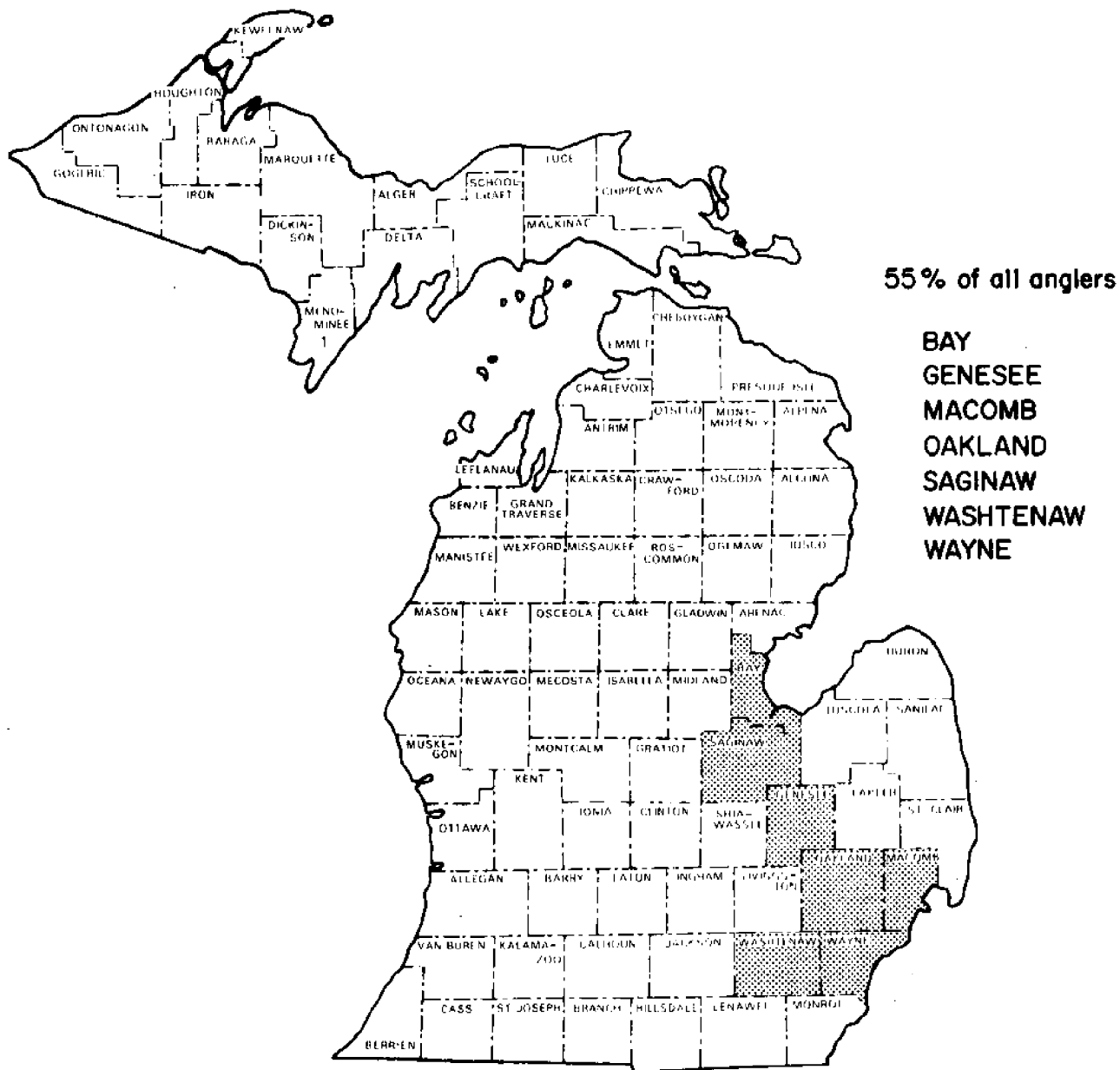


Figure 5 gives a visual pattern of where more than 55% of all anglers interviewed came from. Of all anglers interviewed, 93.1% were specifically interested in fishing for salmon. Those interested in steelhead comprised 5.7%, and those interested in lake trout represented 1.8%. Of all anglers interviewed, 26.3% had caught fish on the day questioned, and the aggregate catch for all species on days anglers were interviewed was 0.47 fish per day with salmon comprising 97% of the catch.

### Parking and Accommodations

Two areas of concern to the Harrisville community were: 1) where are anglers parking for the day and: 2) where are they staying overnight. Table 5 summarizes anglers' responses to questions about those concerns.

**Table 5. Parking and accommodations of fall anglers fishing in Harrisville.**

Daily parking area	% of anglers	Accommodation	% of anglers
North harbor lot	45.9	State park	23.8
City street	24.3	Motel	18.4
South harbor lot	17.8	Friend's home	10.3
VFW lot	5.4	North harbor lot	8.6
State park	3.8	City street	5.9
Private	2.2	D & M station lot	4.3
		Own home	3.2
		Rented home	1.6

### Angler Comments and Socioeconomic Profiles

Another concern of the local communities was anglers' perceptions of: 1) the services the community provides: 2) the adequacy of present facilities, and: 3) the fishing opportunities available. Table 6 lists anglers' comments about the local communities and the government agencies involved with the sport fisheries in Alcona County and other general comments. Table 7 summarizes the socioeconomic profiles of the anglers interviewed. We want to stress that all angler comments were completely volitional: the interviewers did nothing to solicit any particular response. Therefore, all comments were of immediate concern to the anglers interviewed.

**Table 6. Fall angler comments.**

---

I. Responses about the local communities:

<u>Responses</u>	<u>% of interviewed anglers</u>
Prices are too high; items cost more than at home.	5.5
Harrisville needs a 24-hour restaurant	5.1
Harrisville needs a better restaurant closer to the harbor.	3.2
Harrisville needs a 24-hour tackle store.	2.3
Harrisville needs boat rentals.	1.4
Harrisville needs a 24-hour gas station.	1.4
Sees conflict of interest with the local magistrate selling gear designed for snagging.	1.4

Eighty percent of all anglers interviewed felt the local communities provided adequate services and facilities.

---

II. Responses about government agencies:

<u>Responses</u>	<u>% of interviewed anglers</u>
Harrisville needs more parking	12.0
DNR's enforcement of snagging is excessive in Harrisville.	9.7
DNR needs to enforce snagging regulations more stringently in Harrisville.	7.4
DNR should plant more salmon in Harrisville.	4.1
Would like to see snagging legal in Harrisville.	4.1
Restrooms at south harbor parking lot need more frequent cleaning.	3.7
Law enforcement should be more consistent; either arrest all snaggers or leave everyone alone.	3.6
Post pertinent fishing regulations and descriptions of legal fishing techniques in conspicuous places around the harbor.	3.2

(Responses about government agencies, continued)

<u>Responses</u>	<u>% of interviewed anglers</u>
Need more launching ramps at Harrisville.	2.8
Non-resident license fees are too high.	2.3
DNR conservation officers should not work undercover.	2.3
Need more restrooms at Black River access.	1.8
Need a fishing pier in the Harrisville harbor.	1.8
Dredge Black River for better fishing; not for a harbor.	1.8
Develop overnight parking near the Harrisville harbor.	1.8
Make outer Harrisville harbor breakwall accessible from shore.	1.4

Forty-six percent of all anglers interviewed felt the government agencies involved provided adequate services and facilities.

---

III. General responses:

<u>Responses</u>	<u>% of interviewed anglers</u>
Likes Harrisville area.	10.5
The fishing is good.	10.1
Feels there is nothing wrong with snagging.	6.5
Harrisville townspeople are friendly.	6.5
Prefers fishing at Black River to fishing at Harrisville.	6.0
Opposed to snagging or at least wouldn't snag themselves.	4.6
Would not like a harbor at Black River.	1.8
Designate a specific snagging area within Harrisville harbor.	1.8

---

**Table 7. Fall angler socioeconomic information.**

---

Average age of anglers	43 years
% of male anglers	95.0%
% of female anglers	5.0%
% of anglers currently employed	74%
<u>Levels of income</u>	<u>% of anglers</u>
under \$10,000	13.0
\$10,000 - \$14,999	12.0
\$15,000 - \$19,999	14.0
\$20,000 - \$24,999	15.0
\$25,000 - \$29,999	15.0
\$30,000 - \$34,999	16.0
\$35,000 - \$39,999	6.0
over \$40,000	5.0

---

## SPRING-SUMMER FISHERY

### Angler Usage and Expenditures

Sport fishing activity on Lake Huron during the spring-summer season (April 1981 to August 1981) was estimated at 11,048 angler days (Table 8). Of that amount of use, close to 75% was attributable to non-resident anglers. The spring and summer fishery is exclusively a boat fishery. This section will summarize private boat use findings and the next section charter boat use findings.

All interviews of private boaters fishing on Lake Huron were conducted at the Harrisville boat launching facility. Four hundred-fifty-one anglers were interviewed. To calculate total use for the season, a count of boat trailers at the Harrisville boat ramp was made at 8:00 A.M. on ninety-two days by a local businessman. It was assumed that each trailer represented a boat fishing on Lake Huron that day. On randomly selected days an interviewer would spend an entire day counting fishing boats actually launched at Harrisville. The all-day counts were then correlated with the trailer counts for those days, and the resulting relationship (a ratio of 1.59 boats launched per 8:00 A.M. trailer) was used to expand the trailer counts into an estimate of fishing boat launchings on those days. From that relationship we estimated that an average of 26.75 boats were launched per day during the season. Average party size per boat was 2.7 anglers. We used the following calculations to arrive at total use:

153 days in the season	4,092 boat launchings
<u>X 26.75 launchings/day</u>	<u>X 2.7 anglers/boat</u>
4,092 boat launchings	11,048 angler days

Non-resident angler use was based on the proportion of visitors encountered during interviews with sample anglers.

**Table 8. Summary of angler use on Lake Huron in Alcona County during the spring-summer lake trout fishery.**

Angler group	Angler days	% of total angler days
Resident	2,817	25.5
Non-resident	8,231	74.5
<b>Total</b>	<b>11,048</b>	<b>100</b>

Table 9 lists the expenditures of non-resident anglers. As in the fall analysis, their expenditures are apportioned between what they spend at home, en route to and from Alcona County, and in the county. Also, their expenditures were adjusted proportionately in those instances when the angler had reasons other than fishing for his/her trip to Alcona County. As an example, if an interviewed angler indicated he/she had also come to Alcona County to visit relatives, the interviewer would ask the angler to assign to the activity of angling in Lake Huron a percentage of the purpose for their trip to Alcona County. That angler's expenditures which were not specifically associated with angling (groceries, gas, restaurants, etc.) were then adjusted accordingly. Again, non-resident anglers spent more than one-half (66%) of their trip dollar in Alcona County, with the average daily expenditure being \$16.15. Therefore, the total gross income to Alcona County from non-resident anglers was:

$$8,231 \text{ angler days} \times \$16.25/\text{angler day} = \$132,931.00$$

**Table 9. Ten categories of non-resident angler average daily expenditures made at home, en route, and in Alcona County during the spring-summer lake trout season.**

Type of expenditure	Home		En route		Alcona Co.	
	Ave.	%	Ave.	%	Ave.	%
1. Major fishing equip.	.28	4.8	.05	2.0	1.07	6.6
2. Tackle - small gear and bait	.32	5.5	.16	6.5	1.38	8.5
3. Licenses	.16	2.7	.03	1.2	.21	1.3
4. Boat gas and oil	.77	13.1	.15	6.1	2.58	16.0
5. Camping fees	--	--	.01	0.4	.61	3.8
6. Lodging	--	--	--	--	.61	3.8
7. Restaurants	--	--	.29	11.9	2.16	13.4
8. Grocery food	.92	15.7	.19	7.8	3.80	23.5
9. Vehicle gas and oil	3.36	57.3	1.35	55.7	2.49	15.4
10. Miscellaneous (spirits cigarettes, clothing etc.)	.05	0.9	.21	8.7	1.24	7.7
<b>Total</b>	<b>\$5.86</b>		<b>\$2.44</b>		<b>\$16.15</b>	



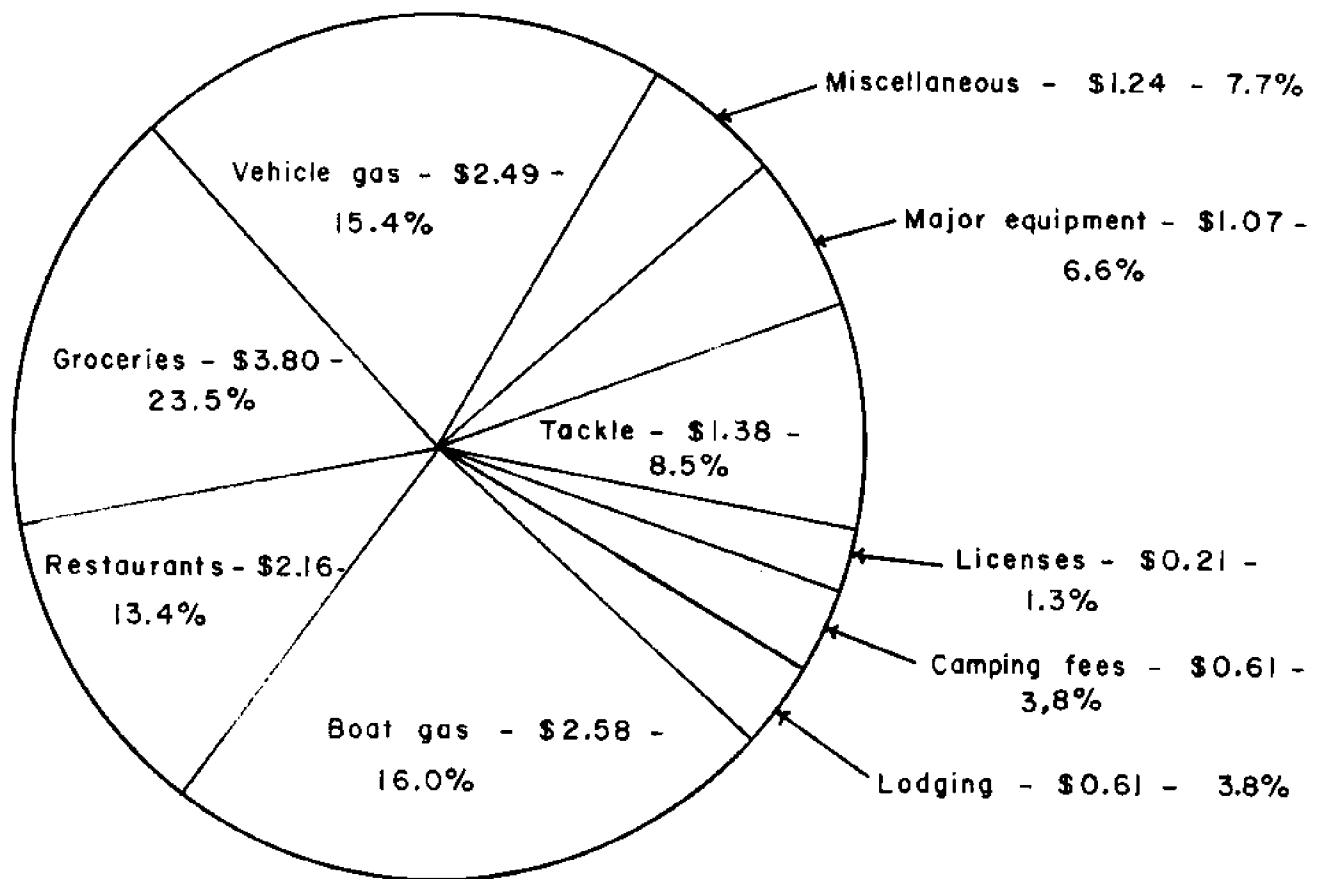


Figure 6 depicts non-resident expenditures in Alcona County during the spring-summer lake trout fishery. A statistical summary of the expenditure data is in Appendix B.

## Angler Origins and Fishing Success

Table 10 lists the percentage of anglers originating in Michigan counties as a percentage of all anglers interviewed in the spring-summer season. Of the 451 anglers interviewed, only 1.0% were from out-of-state. They came from Pennsylvania. Figure 7 illustrates the origins of more than 75% of all spring-summer anglers interviewed.

**Table 10. Spring-summer angler origins.**

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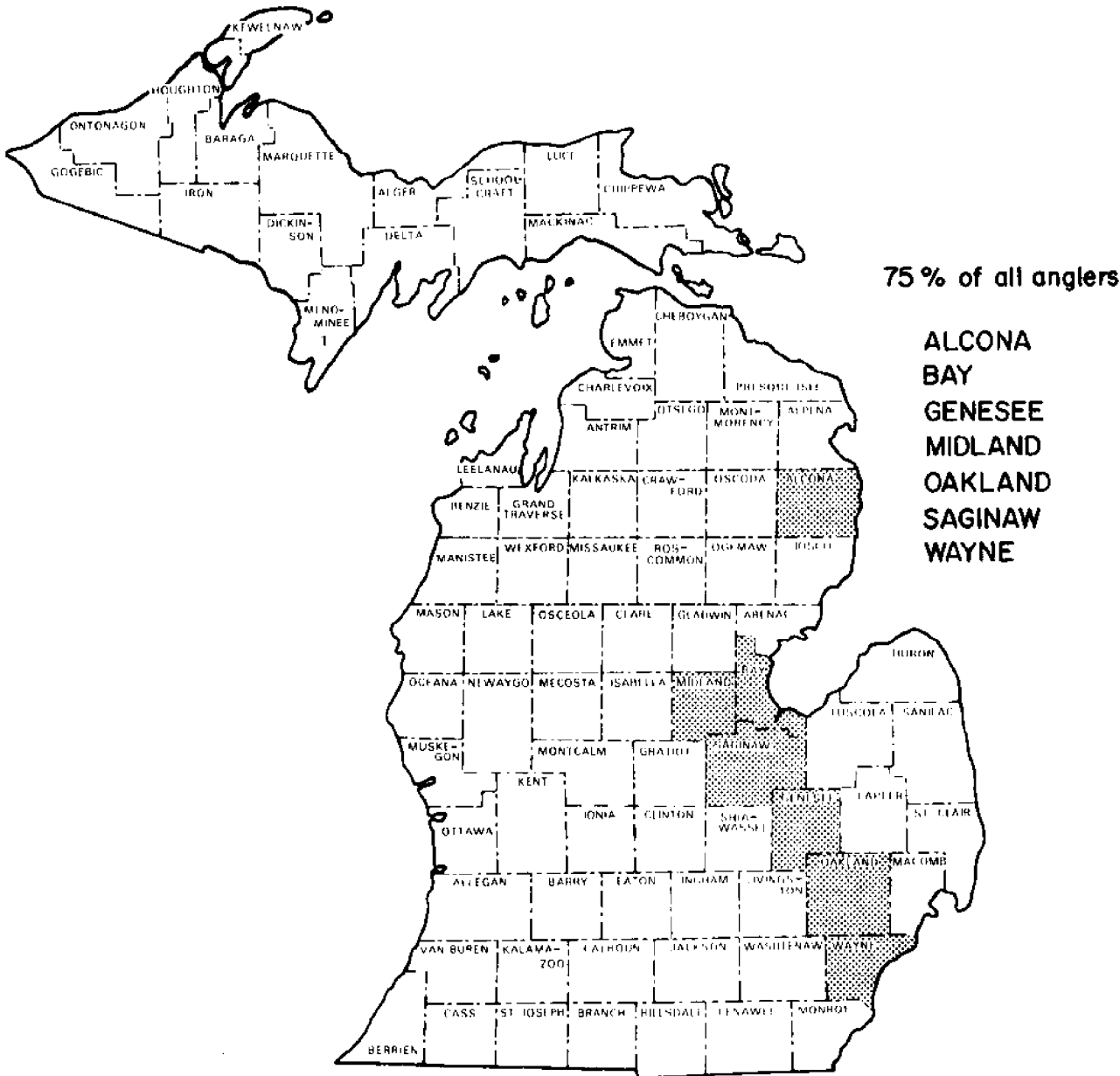
<u>County</u>	<u>% of anglers</u>	<u>County</u>	<u>% of anglers</u>
Alcona	25.5	Oscoda	1.3
Genesee	15.3	Ingham	1.1
Oakland	11.5	Arenac	0.9
Bay	8.9	Lapeer	0.7
Saginaw	5.5	Gladwin	0.7
Midland	4.7	Ogemaw	0.7
Wayne	4.0	St. Clair	0.7
Alpena	3.3	Cheboygan	0.4
Macomb	2.9	Isabella	0.4
Iosco	2.7	Kent	0.4
Shiawassee	2.4	Roscommon	0.4
Monroe	2.0	Washtenaw	0.2
Tuscola	1.8	Kalamazoo	0.2
		Livingston	0.2

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Of all anglers interviewed, 98.2% were specifically interested in fishing for lake trout, and 70% said they would not have traveled to Alcona County if the lake trout were not there. The other 1.8% of anglers interviewed were primarily interested in catching salmon.

Of all anglers interviewed, 89.1% had caught fish on the day questioned, and the aggregate catch rate for all species was 0.92 fish per day. Lake trout comprised 96% of the catch.

Figure 7: Spring - summer in-state angler origins.



Forty-one percent of all anglers interviewed were on one-day fishing trips. The average length of stay was approximately 2.5 days. Table 11 summarizes where the other 59% of anglers stayed in Alcona County. Table 12 lists anglers responses.

**Table 11. Accommodations of spring-summer anglers.**

<u>Accommodations</u>	<u>% of interviewed anglers</u>
State Park	26.8
Own home or cottage	17.3
Friends home or cottage	10.6
Motel	4.0
Rented home or cottage	0.4

**Table 12. Spring-summer angler comments.**

I. Responses about local communities

<u>Responses</u>	<u>% of interviewed anglers</u>
Gas stations need to be open longer hours.	1.8
Prices are too high.	0.9
The area needs better restaurants.	0.7

Ninety-five percent of all anglers interviewed felt the local communities provided adequate services and facilities.

II. Responses about government agencies.

<u>Responses</u>	<u>% of interviewed anglers</u>
The harbor around the boat launching area needs dredging.	8.6
DNR needs to stock more fish.	4.4
More launching docks and ramps are needed. (These responses were all made before the new ramps were in.)	4.4
More parking is needed.	4.0
Stand off docks are needed.	3.1
The harbor breakwalls should be extended to prevent storm seas from entering the harbor.	3.1
The harbor needs a beacon or fog horn.	2.2
Launch fees shouldn't be charged.	2.2
The harbor needs more boat slips.	1.1

Seventy-two percent of all anglers interviewed felt the government agencies involved provided adequate services and facilities.

### III. General responses

<u>Responses</u>	<u>% of interviewed anglers</u>
The fishing is great and they like the area.	18.2
Like the new launch facilities (new ramps were in use by 8-1-81)	7.5
Local restaurants and services are great.	4.2
The local people are friendly.	3.5

#### Angler profiles

Average age of angler	39 years
% of male anglers	87.1%
% of female anglers	12.9%

## CHARTER FISHING

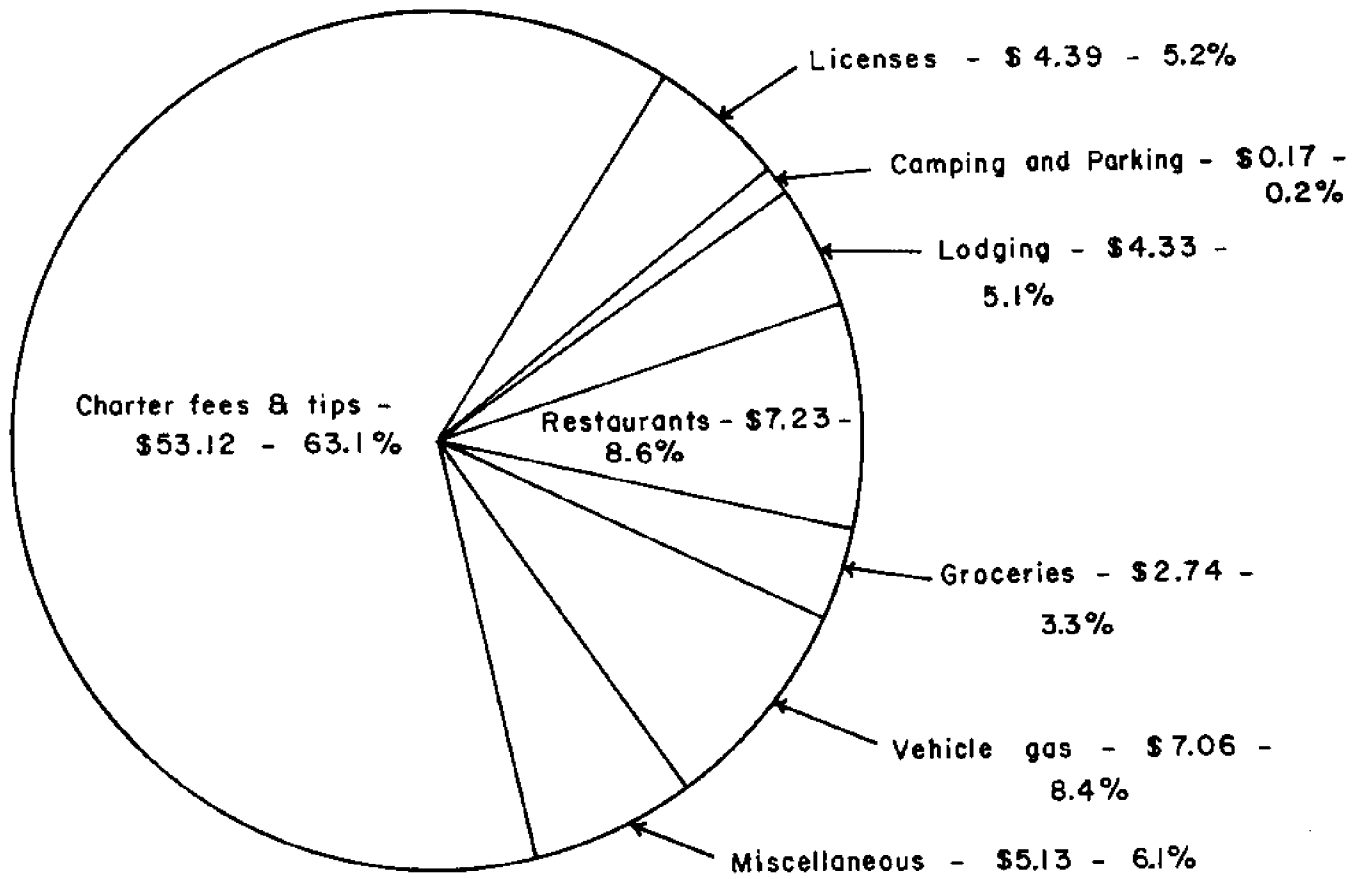
### Angler Usage and Expenditures

From May 23, 1981 to August 26, 1981 a total of 148 charter boat clients were interviewed. Six charter boats ran out of Harrisville harbor on a regular basis during the summer. Between them it was estimated they booked 800 clients during the summer lake trout and fall salmon seasons, of which 91% (based on our sample) were non-residents. Non-resident clients' expenditures are summarized in Figure 8. Charter clients were questioned only about their Alcona County expenditures. Total gross expenditures in Alcona County by non-resident clients was estimated as follows:

$$773 \text{ client-trips} \times \frac{\$84.17}{\text{day}} \times \frac{1.3 \text{ days}}{\text{client-trip}} = \$84,582.00$$

A statistical summary of the expenditure data is Appendix B.

Figure 8. Average daily expenditures of non-resident charter anglers in Alcona County.



## Angler Origins and Fishing Success

Of all charter anglers interviewed, only 2.0% were from out-of-state. They were equally divided between Indiana, Illinois, and Ohio. Table 13 lists the in-state anglers' counties of origin.

**Table 13. Charter angler origins.**

<u>County</u>	<u>% of interviewed anglers</u>	<u>County</u>	<u>% of interviewed anglers</u>
Bay	34.9	St. Clair	2.0
Wayne	14.8	Clare	2.0
Oakland	12.1	Monroe	1.3
Genesee	6.7	Jackson	1.3
Washtenaw	5.4	Livingston	0.7
Alcona	3.4	Alpena	0.7
Lapeer	3.4	Macomb	0.7
Kent	2.0	Roscommon	0.7
Saginaw	2.0	Iosco	0.7
Cass	2.0	Shiawassee	0.7

**Figure 9. In-state charter angler origins.**

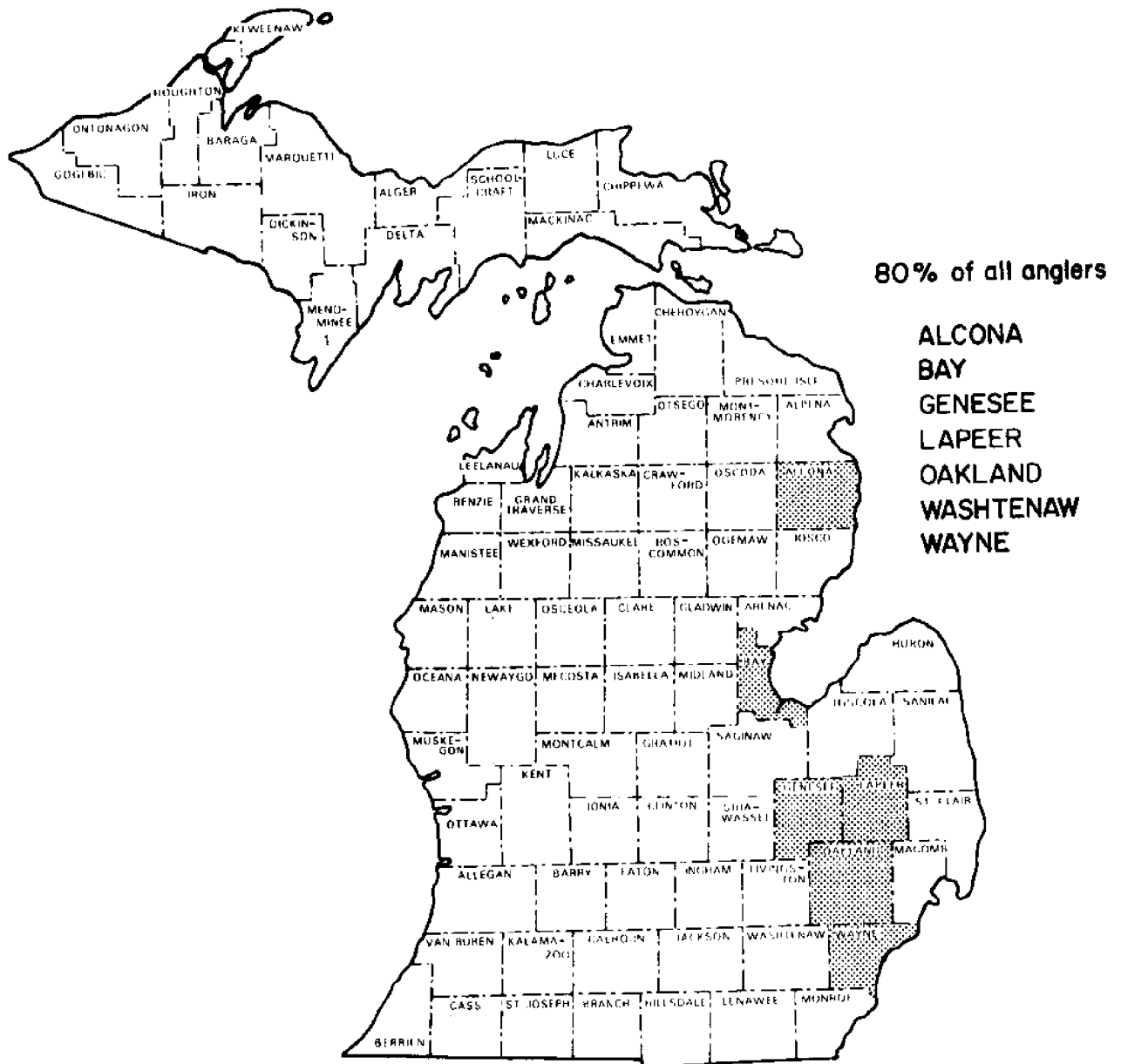


Figure 9 illustrates the origins of more than 80% of all charter clients interviewed. Clients were interested in catching either lake trout or salmon, and they enjoyed an average catch rate of 3.5 fish per day. Most clients interviewed were in Alcona County for the day, with the average length of stay approximately 1.3 days.



## BUSINESS SURVEY

Questionnaires were sent to 83 businesses within the study area. A total of 36 businesses responded to the survey. Twenty-three of those businesses gave information about their gross receipts for their last fiscal year, and about what percentage of those gross receipts they would attribute to anglers' expenditures. The purpose was to see if what the businessperson could tell us would corroborate what the anglers had told us about their expenditures.

The gross receipts those 23 businesses attributed to angler's expenditures totaled \$395,100.00. Since those 23 businesses (28% of those surveyed) comprised a representative cross-section of the business community, we saw justification in expanding by the appropriate factor their cumulative sales experience with anglers, in this case 3.609 ( $3.609 \times 28\% = 100\%$ ), to the total business community.

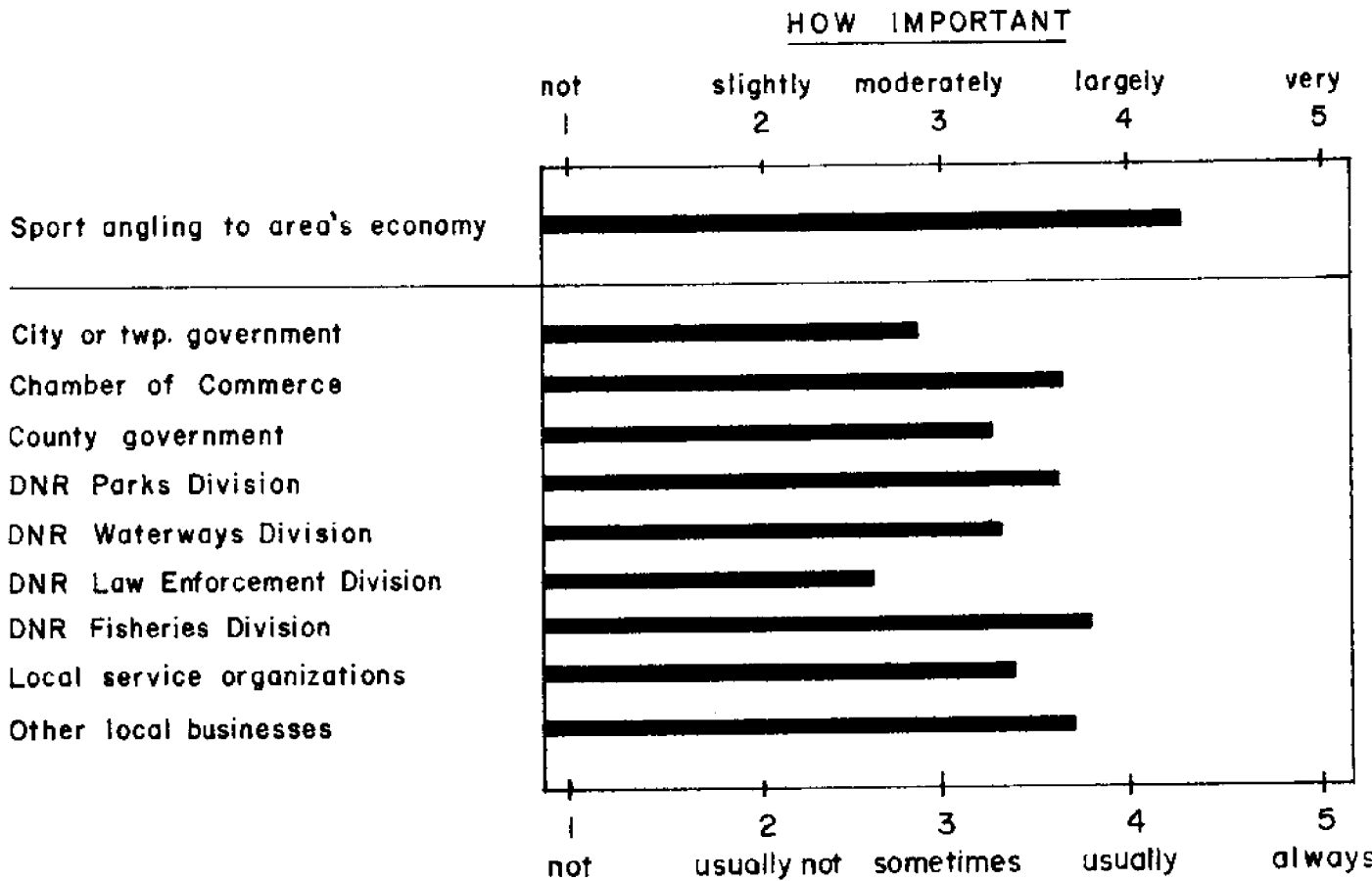
Therefore, based on the business community's response, anglers' expenditures in Alcona County can be calculated as:

$$\$395,110 \quad \times \quad 3.609 \quad = \quad \$1,425,952$$

For comparison the sum of non-resident angler gross expenditures for the fall, spring-summer, and charter fisheries, based on non-resident anglers' responses, totals \$1,357,918. It should also be emphasized that the business estimate includes resident anglers' expenditures, therefore, it would be expected to be larger than our estimate from non-resident angler interviews.

Figure 10 depicts business responses to three questions. The first was how important do they feel Lake Huron sport angling is to Alcona County's economy. The second was how helpful do they think each of nine various government, civic, and private entities are to the businesses in helping them exploit the economic potential of Lake Huron sport angling in Alcona County. The third question was which government, civic, and private entities did they think could be more helpful. The bar graph addresses the first two questions, and the list of percentages of businesses addresses the third question.

Figure 10. Business opinion scores.



HOW HELPFUL

Could Be More Helpful

City or twp. government	35.1%
Chamber of Commerce	18.9%
County government	16.2%
DNR Parks Division	18.9%
DNR Waterways Division	13.5%
DNR Law Enforcement Division	27.0%
DNR Fisheries Division	13.5%
Local service organizations	13.5%
Other local businesses	16.2%

## RESIDENT SURVEY

Questionnaires were sent to 75 residents within the study area. A total of 44 responded to the survey.

Forty-two percent of the respondents indicated that at least one person in their household was a Great Lakes angler. Within those households the average number of Great Lakes anglers was 2.47, and each angler spent an average of 16.4 days fishing last year on the Great Lakes. Most of that use is presumed to have been on Lake Huron.

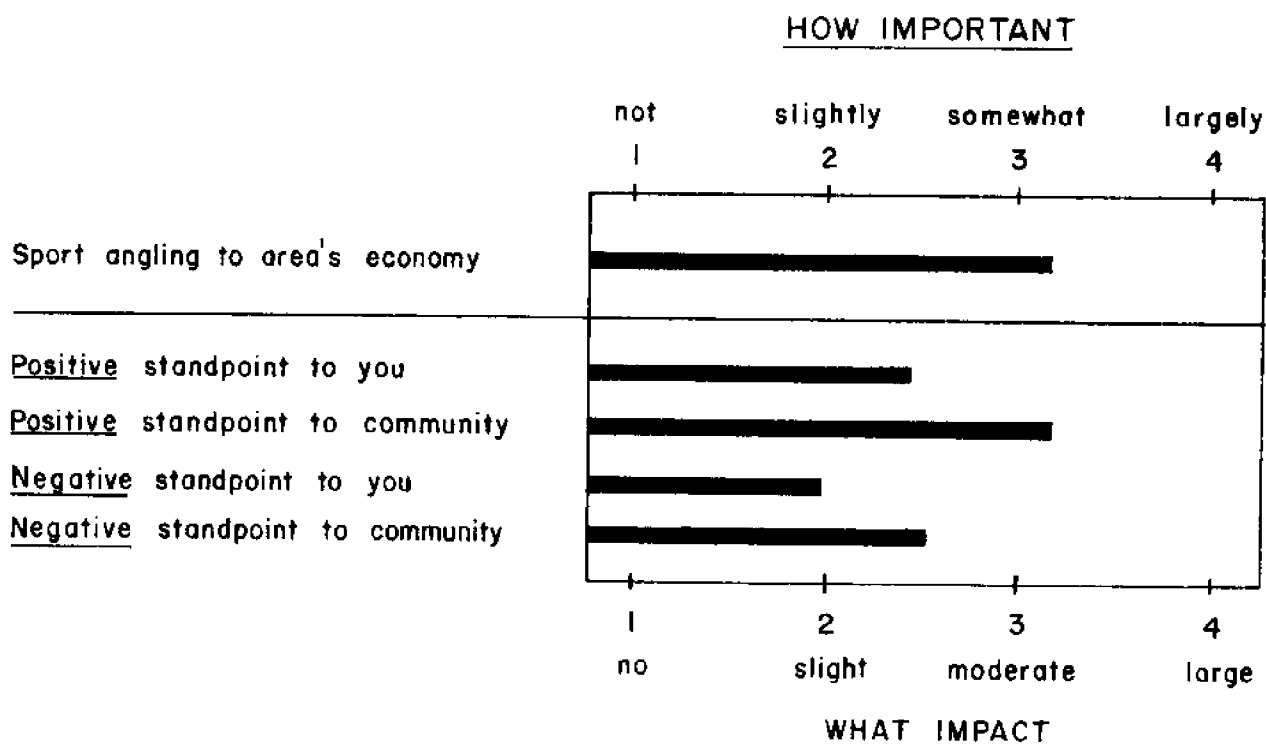


Figure 11 depicts residents' responses to the following questions:

- 1) How important do you feel Lake Huron sport fishing is to Alcona County's economy?
- 2) From a positive standpoint, what impact has Lake Huron sport fishing had on a) you, b) your community?
- 3) From a negative standpoint, what impact has Lake Huron sport fishing had on a) you, b) your community?

Figure 12 depicts resident's responses to the following questions:

- 1) How helpful have each of nine government, civic, and private entities been to you and your community in dealing with the problems and opportunities presented by Lake Huron sport fishing in Alcona County?
- 2) Which government, civic, and private entities could be more helpful?

Appendix D contains the verbatim comments of those residents who had particular views to express.

## GOVERNMENT OFFICIAL INTERVIEWS

### MDNR Fisheries Division

Plants of lake trout and chinook salmon will remain approximately the same for the next five years. Current levels of stocking for each species is as follows:

Lake trout	-	Black River Island	- 90,000
		Sturgeon Point	- 50,000
		Greenbush	<u>-100,000</u>
			240,000
Chinook salmon	-	Mill Creek	-300,000

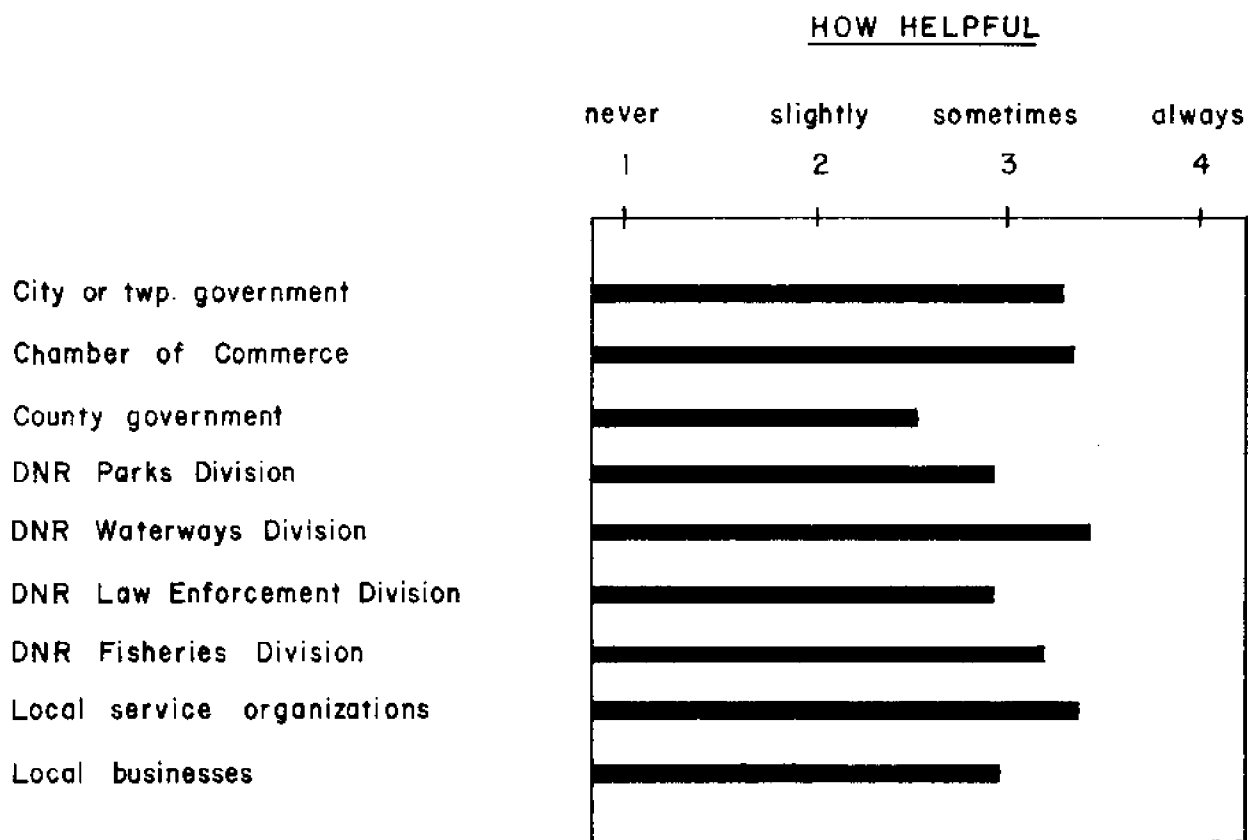
Plants of 10,000 to 20,000 brown trout and 20,000 steelhead are planned for the future, contingent upon levels of hatchery production. There are no plans to stock either steelhead or chinook salmon in the Black River.

Although the number of planted salmon has increased steadily through the 1970's, the area has not enjoyed the peak runs of 1975-76. As yet, there are no explanations for the reduced returns over the past few years, but the phenomenon is being studied to determine either what could have caused a high survivorship in the early 70's year classes, or what is causing a low survivorship in the mid and late 70's year classes.

Capital funds needed to provide shore access to the outer breakwall and to cap the breakwall will not be forthcoming under the current federal administration. The goal is, however, to make the wall accessible and to cap it within the next 10 years.

The current policy from Lansing in regards to the fall salmon season is to "legitimatize" the fishery. They want to maintain the atmosphere of a quality fishing experience, as opposed to the fishing experience one can have at Foote Dam. In their opinion that means no snagging or attempting to snag. As of yet they have no reports of excessive numbers of dead salmon in or around the harbor, and believe the salmon can be adequately harvested without resorting to snagging.

**Figure 12. Additional resident opinion scores.**



Could Be More Helpful

City or twp. government	13.3%
Chamber of Commerce	2.2%
County government	11.1%
DNR Parks Division	2.2%
DNR Waterways Division	11.1%
DNR Law Enforcement Division	17.8%
DNR Fisheries Division	11.1%
Local service organizations	2.2%
Local businesses	11.1%

### MDNR Waterways Division

The new boat launching facility has six ramps, 110 vehicle-trailer parking spaces, and 20 vehicle-only parking spaces. At present there are no plans for additional holding or stand-off docks, but they could be considered based upon proven need and future regional funding. The number of parking places was limited to 110 for two reasons: 1) the physical limitations of the topography of the site and 2) limitations by design based upon the perceived boat capacity of the harbor to provide a quality fishing experience in the fall. Any parking problems the expanded facilities cannot handle will have to be the city of Harrisville's responsibility.

At present there are no plans to buy the remaining three private parcels between the DNR site on the north and the city parking lot on the south. There are future plans, again based upon federal funding which makes prediction futile, to continue with two more phases of expanding the harbor mooring facilities. Of course they will not proceed until the currently promised work on the breakwall expansions is completed, so that any additional facilities will provide safe refuge.

### MDNR Law Enforcement Division

Conservation officers rotate through the Harrisville area according to a planned, though random, schedule. The conservation officers will maintain their current forceful approach in order to have compliance with MDNR policy about maintaining a quality fishery, and because they are unable to have a 24-hour presence in the area. They will also, for the above reasons, continue their plain-clothes operations to achieve compliance.

Attempting-to-snag enforcement will continue as long as the courts which have jurisdiction over the study area continue to uphold the citations. It does not matter that attempting-to-snag is not defined within the current fishing regulations; the Law Enforcement Division will continue to function in a manner supported by court actions.

## Harrisville Harbor Enforcement Division

The commission reported that the harbor is overcrowded in the summer, and that work on the breakwall and mooring facilities are desperately needed to assure both safety and convenience to the burgeoning numbers of boaters utilizing the harbor. At present they have a waiting list of 20 boats desiring seasonal slippage; and that is after discouraging people from applying. They also believe more and larger charter boats would operate out of Harrisville if adequate facilities and slippage were available.

At present the Commission has an \$800 grant to install an informational sign at the harbor for both boaters and fishermen. The commission will also, in the near future, implement putting speed signs in the harbor. They have been assured by Keith Wilson of the Waterways Division that there will be no problem in doing so.

By the time of this report the commission hopes to have shore dredging around the south end of the docks, landscaping, and stream channelization work completed at the harbor. The commission also reported that their net costs associated with anglers' use of the harbor facilities is \$1,000 per year.

## City of Harrisville

City officials were questioned solely in regard to the costs and revenues to the city associated with angler use in the area. Those costs and revenues are as follows:

### Costs

wages to hire someone to clean restroom in fall	\$ 150
general repair	400
increased law enforcement time in fall	2,500
increased garbage collection in fall	<u>1,000</u>
Total Costs	<u>\$4,050</u>

### Revenues

Parking citations to fall anglers	<u>\$1,200</u>
Net Costs	<u>\$2,850</u>

## CONCLUSIONS AND RECOMMENDATIONS

Total non-resident angler use for the year (September 1980 to September 1981) was estimated to be 52,316 angler days, or 93.3% of total Lake Huron fishing activity in Alcona County (56,063 angler days). Michigan's Department of Natural Resources' latest estimate of angler use on Lake Huron in Alcona County is 72,320 angler days (Jamsen, 1979), thereby suggesting our estimates of economic impact would tend to be conservative. Total gross expenditures in Alcona County for the year by non-resident anglers was estimated to be \$1,357,918. We feel that estimate was strongly corroborated by our estimate of all anglers' expenditures of \$1,425,952 calculated from the business survey. Average non-resident angler expenditures in Alcona County were \$25.96/angler day. Table 14 lists the gross expenditures by category for the goods and services non-resident anglers purchased for the fall salmon fishery, the spring-summer lake trout fishery, and the charter fishery.

We believe the fall salmon fishery had higher average angler expenditures than the spring-summer lake trout fishery because it is predominately an adult male "clientele". Because of the time of year (school and more inclement weather) the women and children, who are a significant part of the summer fishery anglers, are not present in the fall. For that reason each season demands a different strategy for realizing the economic potential available.

Activities should be planned in the summer which are attractive to family involvement, and which are actively publicized near the harbor. Families who may have come to Alcona County predominantly to go fishing may stay longer or come back sooner if the trouble is taken to inform them of events in the area which would interest them as a family. More activities like the Summerfest would be beneficial, especially if tackle store owners, charter captains, and resort owners encouraged their clients and customers to attend with them. The Harbor Commission's proposed informational sign could be an excellent advertising medium at the harbor, especially if a section of it were devoted to publicizing the latest events.

In the fall a more appropriate strategy would be to appeal to the male competitive nature. Besides having one or two long-running salmon and trout derbys, perhaps daily contests should be held where the largest legally caught fish of the day would win that angler a free dinner in town that night. The two fish cleaning stations could easily record the largest fish caught in the last 24 hours, and a community representative would award a certificate at 5:00 p.m. for a free meal at one of the restaurants who contribute on a rotating basis. Such daily contests would: 1) give the anglers a perception that the town is glad to have them in the area; 2) give the participating restaurants inexpensive publicity, and; 3) give the donating restaurant additional business, as it is likely the winner will bring his buddies along to eat dinner with him. Other businesses could offer similar rewards.

The men who come in the fall are in the area to fish, therefore, any activity or promotion at that time of the year should have a tie-in with the fishing.



**Table 14. Non-resident anglers' gross annual expenditures in Alcona County.**

Category of expenditure	Fall	Spring-summer	Charter	Total	% of annual
1. Major equip.	39,847	8,807	--	48,654	3.6
2. Tackle	106,980	11,359	--	118,339	8.7
3. Licenses	42,446	1,729	4,412	48,587	3.5
4. Launching and parking fees	40,280	--	30	40,310	2.9
5. Charter fees	--	--	53,380	53,380	4.0
6. Camping fees	59,771	5,021	141	64,933	4.7
7. Boat gas and oil	40,713	21,236	--	61,949	4.7
8. Lodging	132,102	5,021	4,351	141,474	10.4
9. Restaurants	190,573	17,779	7,265	215,617	15.9
10. Groceries	152,891	31,278	2,753	186,922	13.8
11. Vehicle gas	175,414	20,495	7,095	203,004	14.9
12. Miscellaneous (spirits, cigs., clothes, etc.)	159,388	10,206	5,155	174,749	12.9
Total	\$1,140,405	\$132,930	\$84,582	\$1,357,918	100.0
% of total	84%	10%	6%		
Total angler days	43,312	8,231	773	52,316	

The snagging or attempting-to-snag problem in the fall is bound to remain a problem, simply because that many fish in that confined an area (harbor) will always present a temptation to anglers. The DNR has made their position clear - strict enforcement to acheive compliance - so those concerned should accept the fact that some anglers will continue to be upset and irate. The area's best alternative to the DNR's policy is to initiate compensatory activities which give anglers the perception that the local communities are concerned about the situation. Signs which are highly visible and easy to understand should be located at the harbor to explain: 1) the regulations; 2) the DNR's interpretation of those regulations; 3) legal fishing techniques; 4) what is attempting-to-snag, and 5) what are the consequences of snagging or attempting-to-snag. Community representatives (perhaps members of a civic group) should frequently traverse the harbor shoreline and make an effort to talk to anglers. If at least those two things were done, cited anglers could not plead ignorance, and a genuine concern on the part of the community will have been demonstrated.

We feel that the fall fishery is at or beyond the "saturation" point. Even with the expanded boat launching facility at Harrisville, parking will still be at a premium in the harbor area and the thousands of anglers which come to Harrisville each week will by their very presence continue to present formidable problems (litter, sanitation, and law enforcement).

While the local communities do not necessarily need more anglers visiting in the fall, they do need to realize that anglers could very well be spending more in their stores while in town. Local communities should be innovative in their approach to showing anglers what their town has to offer. They should investigate means of complementing an angler's fishing experience, providing him/her with reasons other than the good fishing for either coming back to Alcona County or staying longer. The same kind of planning and community spirit which goes into the area's Labor Day Harmony Weekend could be instrumental in tapping the economic potential of a huge group of people (anglers) who voluntarily come to town.

Harrisville, and especially its Chamber of Commerce, needs to be aggressive in promoting the fishing available in the summer. With lake trout catch rates far above the state average, a launch facility being used at less than one-half its capacity, and an area with facilities and summer activities ideally suited to family vacationing, Harrisville could easily accommodate and profit from having twice the number of anglers currently visiting the area in summer.

The economic impact of angling in Alcona County is not limited to the gross expenditures of non-resident anglers. The money they spend will exhibit a multiplying effect as it circulates through the local economy. Simply stated, additional money initially spent by anglers will result in increased local respending. Successive rounds of spending, beginning with the fishermen and continuing with community residents will in effect multiply the impact of anglers' original expenditures.

The scale of the multiplicative effect is dependent on a number of factors. The "mix" of businesses (i.e., manufacturing-service-retail ratios), the integration of businesses (manufacturing-distributing-retailing-servicing linkages), and where additional dollars are initially spent in the local economy are all influential. Because of Alcona County's location and economy, it is unlikely all the goods and services required can be produced within its confines. Therefore, a large proportion of the gross income the county receives from anglers must quickly leave the area as payment for imported (out-of-county) goods and services. Money spent in labor-intensive establishments such as restaurants and motels will have a larger proportion stay in the local economy than money spent in merchandizing establishments (gas stations, grocery, and hardware stores).

While in this study a multiplier was not empirically estimated for Alcona County, we can use a multiplier of 1.5 from the literature which was estimated for a rural area in Wisconsin similar to Alcona County (Kalter and Lord, 1968). Applying the multiplier gives an estimate of county gross expenditures or sales attributable to non-resident angling of \$2,036,877. However, one must remember that a large proportion of those sales dollars will eventually leave the county. Gross sales must be adjusted by an income component to estimate what the direct net income is to the county. Again from the literature (Pearse and Laub, 1969; Kalter and Lord, 1968), a value of 30%, based on a range (28% to 51%) of income component values, can be used to estimate that non-resident anglers' expenditures generated \$611,063 of net personal income to Alcona County residents. Therefore, the direct income effects are approximately one-half actual angler expenditures. We want to stress that since empirical studies of multipliers and income components were not actually done for Alcona County, our estimates, though generated conservatively, are only approximations of the true income impacts.

## APPENDIX A

### Survey Questionnaires



MICHIGAN STATE UNIVERSITY

DEPARTMENT OF FISHERIES AND WILDLIFE  
NATURAL RESOURCES BUILDING

EAST LANSING - MICHIGAN - 48824

LAKE HURON SPORT FISHING ECONOMIC IMPACT STUDY

Scott Jordan - Researcher

Business Questionnaire

This questionnaire consists of two sections. The first section provides data to calculate the primary economic impact of Lake Huron anglers on Alcona County's businesses. The second section asks for the subjective comments of the proprietor as regards the positive and/or negative aspects of Lake Huron sport fishing in Alcona County. Upon completing the questionnaire, please use the return envelope provided to send the questionnaire to the Alcona County building

Section I.

1. Describe your type of business (Example: tackle store, gas station, grocery store, auto repair shop). Please list combinations, if they apply (Example: tackle store - gas station).  
Description: \_\_\_\_\_
2. Your business is primarily (circle one)  
A. Merchandise oriented (retail or wholesale).  
B. Service oriented.
3. Circle the calendar months your business is usually closed, if at all.  
Jan. Feb. Mar. Apr. May June  
July Aug. Sept. Oct. Nov. Dec.
4. What were your gross receipts to the nearest \$10,000 in the last fiscal year for which you have records?  
\$ \_\_\_\_\_ Fiscal year: \_\_\_\_\_ to \_\_\_\_\_  
mo yr mo yr
5. What percentage of those gross receipts would you attribute to doing business with the local populace? \_\_\_\_\_%
6. What percentage of those gross receipts would you attribute to doing business with Lake Huron sport anglers? \_\_\_\_\_%
7. How many years have you conducted your present business in Alcona County? \_\_\_\_\_ years.

Do not write in this space  
Interview # \_\_\_\_\_

4 5

6

34 35 36

37 38 39

40 41

Please be assured all responses are unidentifiable and confidential. Data will be analyzed as a group, no one response will be singled out.

Section II.

1. How important do you feel Lake Huron sport angling is to Alcona County's economy?

<u>very</u> <u>important</u>	<u>largely</u> <u>important</u>	<u>moderately</u> <u>important</u>	<u>slightly</u> <u>important</u>	<u>not</u> <u>important</u>
—	—	—	—	—

2. How helpful are the following entities to your business fully exploiting the economic potential of Lake Huron sport fishing in Alcona County?

	<u>always</u> <u>helpful</u>	<u>usually</u> <u>helpful</u>	<u>sometimes</u> <u>helpful</u>	<u>usually not</u> <u>helpful</u>	<u>not</u> <u>helpful</u>
a. Your city or twp. government	—	—	—	—	—
b. Your local Chamber of Commerce	—	—	—	—	—
c. County government	—	—	—	—	—
d. DNR's Park Div.	—	—	—	—	—
e. DNR's Waterways Div.	—	—	—	—	—
f. DNR's Law Enforcement Div.	—	—	—	—	—
g. DNR's Fisheries Div.	—	—	—	—	—
h. Local service organizations (Lions, etc.)	—	—	—	—	—
i. Other local businesses	—	—	—	—	—

3. Circle those entities above which you feel could be more helpful than that level which you specified. Use the space below and the back of the page to explain how they could be more helpful.

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF FISHERIES AND WILDLIFE  
 NATURAL RESOURCES BUILDING

EAST LANSING · MICHIGAN · 48824

LAKE HURON SPORT FISHING ECONOMIC IMPACT STUDY

Scott Jordan - Researcher

Resident Questionnaire

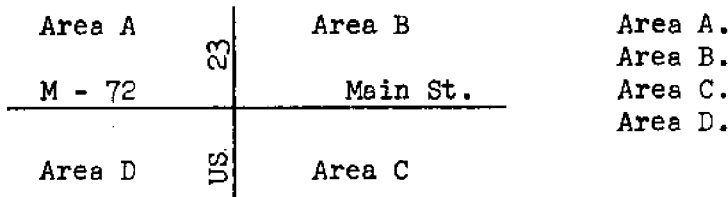
This questionnaire consists of two sections. The first asks for objective data about your residency in Alcona County. The second section asks for your subjective comments as regards the positive and/or negative aspects of Lake Huron sport fishing in Alcona County. If a question does not apply to you, or you feel you are unable to answer it, simply leave it blank.

Section I.

1. Please circle the city or village where you reside in Alcona County.

- A. Black River
- B. Greenbush
- C. Harrisville

2. If you reside in Harrisville, please circle the Area of town, as depicted by the map, where your residence is located.



3. How long have you resided in either Black River, Greenbush, or Harrisville?

yrs. \_\_\_\_\_ mos. \_\_\_\_\_

4. How long have you resided at your current address?

yrs. \_\_\_\_\_ mos. \_\_\_\_\_

5. Circle the calendar months, if any, in which you generally leave this residence for vacations or living elsewhere.

- |      |      |       |      |      |      |
|------|------|-------|------|------|------|
| Jan. | Feb. | Mar.  | Apr. | May  | June |
| July | Aug. | Sept. | Oct. | Nov. | Dec. |

Do not write  
 in this space  
 Interview # \_\_\_\_\_

4

5

6 7    8 9

10 11    12 13



Section I continued

6. Do you or anyone else residing with you consider themselves a Great Lakes angler?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, how many people at your residence, including yourself, if applicable, are Great Lakes anglers?

number of people \_\_\_\_\_

Also, if yes, approximately how many angler-days last year did you and/or they fish in the Great Lakes?  
(An angler day is one person fishing any part of one day)

number of days total \_\_\_\_\_

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26

27 28

29 30 31

Section II.

1. How important do you feel Lake Huron sport fishing is to Alcona County's economy?

<u>largely</u> <u>important</u>	<u>somewhat</u> <u>important</u>	<u>slightly</u> <u>important</u>	<u>not</u> <u>important</u>
------------------------------------	-------------------------------------	-------------------------------------	--------------------------------

\_\_\_\_\_

2. From a positive standpoint, do you believe Lake Huron sport fishing has had:

<u>large</u> <u>impact</u>	<u>moderate</u> <u>impact</u>	<u>slight</u> <u>impact</u>	<u>no</u> <u>impact</u>
-------------------------------	----------------------------------	--------------------------------	----------------------------

a. on you \_\_\_\_\_

b. on your local community \_\_\_\_\_

3. From a negative standpoint, do you believe Lake Huron sport fishing has had:

<u>large</u> <u>impact</u>	<u>moderate</u> <u>impact</u>	<u>slight</u> <u>impact</u>	<u>no</u> <u>impact</u>
-------------------------------	----------------------------------	--------------------------------	----------------------------

a. on you \_\_\_\_\_

b. on your local community \_\_\_\_\_

Section II continued

4. How helpful do you believe the following groups have been to you and your community in dealing with the problems and opportunities presented by Lake Huron sport fishing in Alcona County?

	<u>always</u> <u>helpful</u>	<u>sometimes</u> <u>helpful</u>	<u>usually not</u> <u>helpful</u>	<u>never</u> <u>helpful</u>
a. Your city or twp. government	_____	_____	_____	_____
b. Your local Chamber of Commerce	_____	_____	_____	_____
c. Local businesses	_____	_____	_____	_____
d. Local service organ- izations (Lions, etc)	_____	_____	_____	_____
e. County government	_____	_____	_____	_____
f. DNR's State Park (Harrisville)	_____	_____	_____	_____
g. DNR's Boat Launch (Harrisville)	_____	_____	_____	_____
h. DNR's Law Enforce- ment	_____	_____	_____	_____
i. DNR's Fisheries	_____	_____	_____	_____

5. Circle those groups above which you feel could be more helpful.  
Use the space below and the back of the page to explain how they  
could be more helpful.

CHARTER ANGLER QUESTIONNAIRE

Do not write in this space

1. What state and county are you from?

\_\_\_\_\_  
State

\_\_\_\_\_  
County

\_\_\_\_\_  
Month

\_\_\_\_\_  
Day

\_\_\_\_\_  
Year

1 2 3 4

2. Today's date

5 6 7 8 9 10

3. How many fish have you caught today?

11 12

4. What species did you primarily come here to fish for?

13 14

5. Percentage-wise, how much was the purpose of this trip for fishing in this area?

15 16 17

56 57

6. How many days do you plan on fishing in this area?

18 19

58 59

7. I am going to list certain expenditures you are likely to make on this trip. For each category of expenditures tell me approximately how much you either spent or will spend while in this area.

A. Fishing licenses.

20 21 22 23

B. Charter fee and tips, if any.

24 25 26 27

C. Camping fees.

28 29 30 31

D. Parking fees.

32 33 34 35

E. Lodging.

36 37 38 39

F. Restaurants.

40 41 42 43

G. Grocery food and snacks.

44 45 46 47

H. Vehicle gas, oil, and etc.

48 49 50 51

I. Miscellaneous (beer, cigs., etc.)

52 53 54 55

ANGLER QUESTIONNAIRE

Number of anglers skipped, if shore fishery \_\_\_\_\_

1. Interview number ( interviewer, do not fill in )      1   2   3
2. Area.      4
3. Fishery.      5
4. Day of week. ( weekday = 1, weekend = 2 )      6
5. Month / Day / Year      7 8 / 9 10 / 11 12
6. If shore angler, "How long do you plan on fishing today?" ( hours in a 24-hour period, midnight to midnight. )      13   14
7. How many fish have you caught today?      15   16
- Number of each species:
- Salmon   17   Lake trout   18   Steelhead   19   Brown trout   20
- Other   \_\_\_\_\_   21
8. Where are you from?    County   \_\_\_\_\_      22   23
- State   \_\_\_\_\_      24   25
9. How many miles will you drive on this trip?      26 27 28 29
10. Percentage-wise, how much was the purpose of this trip for fishing here?      30   31   32

- 10A. Do you have other purposes for this trip? If so, what are some? 33 34
1. Pleasure boating
  2. Sightseeing
  3. Waterskiing
  4. Camping
  5. Vist relatives or friends
  6. Hiking
  7. Business
  8. Other recreation
- 10B. What is the main species of fish you are fishing for today? 35 species
1. Lake trout
  2. Steelhead
  3. Brown trout
  4. Salmon
  5. Bass, pike or walleye
  6. Panfish
  7. Other
- 10C. If that species or type of fishing were not available here, would you still have come to this area? yes/no  
36
- BOAT ANGLERS (interviewer ask questions 11 and 12 if person fished from a boat)
11. Did you fish from
  1. your own boat?
  2. a chartered boat?
  3. a rented boat? 37
  4. someone else's boat?
12. What is the length of the boat? 38 39
13. Where is your vehicle parked right now? 40
1. State park
  2. Waterways lot
  3. City street
  4. D&M station
  5. \_\_\_\_\_
  6. \_\_\_\_\_

OUT-OF-TOWN ANGLERS (Interviewer ask questions 14-17 if person is from out-of-town)

14. Are you here for longer than today? yes/no  
41
15. How many nights will you stay here? nights  
42 43
16. How many days? days  
44 45
17. Where are you staying overnight while here? 46
1. Motel
  2. State Park
  3. Own home or cottage
  4. Rented home or cottage
  5. Friends' home or cottage
  6. City street
  7. D&M station
  8. \_\_\_\_\_
  9. \_\_\_\_\_

19. How many are in your party? 47 48
20. How many in the party will be fishing in Lake Huron while here? 49 50

EXPENDITURES (Interviewer: is there is a party of anglers, have each respond and note their answers in the margin. Later fill out a questionnaire for each angler.)

21. I am going to list items or services that anglers often purchase. For each item tell me approximately how much money you spent for this trip at home, on the way here (including side trips), and while here. Please try to include what you think you will spend by the time you reach home.

	<u>Home</u>	<u>En route (plus side trips)</u>	<u>Here</u>
A. Major fishing equipment (rods, reels, etc.)	\$ <u>51</u> <u>52</u> <u>53</u>	\$ <u>54</u> <u>55</u> <u>56</u>	\$ <u>57</u> <u>58</u> <u>59</u>
B. Small fishing equipment (line, snaps, etc.)	\$ <u>60</u> <u>61</u> <u>62</u>	\$ <u>63</u> <u>64</u> <u>65</u>	\$ <u>66</u> <u>67</u> <u>68</u>

## 21. (continued)

	<u>Home</u>	<u>En route (plus side trips)</u>	<u>Here</u>
C. Bait and lures	\$ <u>69</u> <u>70</u> <u>71</u>	\$ <u>72</u> <u>73</u> <u>74</u>	\$ <u>75</u> <u>76</u> <u>77</u>
D. Fishing licenses	\$ <u>5</u> <u>6</u> <u>7</u>	\$ <u>8</u> <u>9</u> <u>10</u>	\$ <u>11</u> <u>12</u> <u>13</u>
E. Boat rentals	\$ <u>14</u> <u>15</u> <u>16</u>	\$ <u>17</u> <u>18</u> <u>19</u>	\$ <u>20</u> <u>21</u> <u>22</u>
F. Charter fee	\$ <u>23</u> <u>24</u> <u>25</u>	\$ <u>26</u> <u>27</u> <u>28</u>	\$ <u>29</u> <u>30</u> <u>31</u>
G. Launch fee	\$ <u>32</u> <u>33</u> <u>34</u>	\$ <u>35</u> <u>36</u> <u>37</u>	\$ <u>38</u> <u>39</u> <u>40</u>
H. Boat gas, oil, etc.	\$ <u>41</u> <u>42</u> <u>43</u>	\$ <u>44</u> <u>45</u> <u>46</u>	\$ <u>47</u> <u>48</u> <u>49</u>
I. Camping or park fees	\$ <u>50</u> <u>51</u> <u>52</u>	\$ <u>53</u> <u>54</u> <u>55</u>	\$ <u>56</u> <u>57</u> <u>58</u>
J. Lodging	\$ <u>59</u> <u>60</u> <u>61</u>	\$ <u>62</u> <u>63</u> <u>64</u>	\$ <u>65</u> <u>66</u> <u>67</u>
K. Restaurants	\$ <u>68</u> <u>69</u> <u>70</u>	\$ <u>71</u> <u>72</u> <u>73</u>	\$ <u>74</u> <u>75</u> <u>76</u>
L. Grocery food and snacks	\$ <u>5</u> <u>6</u> <u>7</u>	\$ <u>8</u> <u>9</u> <u>10</u>	\$ <u>11</u> <u>12</u> <u>13</u>
M. Vehicle gas, oil, etc.	\$ <u>14</u> <u>15</u> <u>16</u>	\$ <u>17</u> <u>18</u> <u>19</u>	\$ <u>20</u> <u>21</u> <u>22</u>
N. Miscellaneous (entertainment, sundries, etc.)	\$ <u>23</u> <u>24</u> <u>25</u>	\$ <u>26</u> <u>27</u> <u>28</u>	\$ <u>29</u> <u>30</u> <u>31</u>

22. During the period of time your current fishing license is effective, how many days will you have fished? 32 33 34

23. Do you think the services and facilities provided by the businesses of this community are adequate for the needs of anglers and their families? 35 yes/no

## 23. (continued)

If not, please list what you would like the community to offer.

- |    |  |           |           |           |           |
|----|--|-----------|-----------|-----------|-----------|
| 1. |  | <u>36</u> | <u>37</u> | <u>38</u> | <u>39</u> |
| 2. |  |           |           |           |           |
| 3. |  | <u>40</u> | <u>41</u> | <u>42</u> | <u>43</u> |
| 4. |  |           |           |           |           |
| 5. |  | <u>44</u> | <u>45</u> |           |           |

24. Do you think the services and facilities provided by the government agencies involved in this area are adequate for the needs of anglers and their families?

yes/no

—  
46

If not, please list what you would like the involved government agencies to offer.

- |    |  |           |           |           |           |
|----|--|-----------|-----------|-----------|-----------|
| 1. |  | <u>47</u> | <u>48</u> | <u>49</u> | <u>50</u> |
| 2. |  |           |           |           |           |
| 3. |  | <u>51</u> | <u>52</u> | <u>53</u> | <u>54</u> |
| 4. |  |           | <u>55</u> | <u>56</u> |           |
| 5. |  |           |           |           |           |

25. Could you list some of your positive and/or negative impressions or feelings about your fishing experience and visit in this area.

- |    |  |           |           |           |           |
|----|--|-----------|-----------|-----------|-----------|
| 1. |  | <u>57</u> | <u>58</u> | <u>59</u> | <u>60</u> |
| 2. |  | <u>61</u> | <u>62</u> | <u>63</u> | <u>64</u> |
| 3. |  |           | <u>65</u> | <u>66</u> |           |
| 4. |  |           |           |           |           |
| 5. |  |           |           |           |           |

26. Age.

67 68

27. Sex.

69



## APPENDIX B

The following sample statistics are for non-resident angler expenditures in Alcona County. We calculated sample statistics for each of the three angler groups in the fall salmon fishery, the boat anglers in the spring-summer lake trout fishery, and the charter boat anglers. Descriptive statistics listed are the sample mean, the standard deviation, the standard error of the mean, the 95% confidence interval of the mean, the measure of skewness of the distribution, and the coefficient of variation percentage.

For any particular good or service a large proportion of anglers do not make a purchase within the time constraints of one fishing trip. Therefore, for most categories of goods and services there are large numbers of observations of zero expenditures. This causes estimates of skewness to be strongly positive, meaning the frequency curve of most expenditures is asymmetric to the right. The common procedure is to perform a data transformation (for a large number of observations of zero, a log transformation is usually appropriate) to reduce the skewness. We did not transform our data however, because we were not so much interested in approximating a normal distribution as we were in determining the actual sample means. Therefore, the majority of sample statistics will show large measures of skewness and variability in our samples of anglers' expenditures. It should also be noted that we did transform the data by adding the value of one to all observations, therefore our sample means and confidence intervals displayed in the tables are a value of one greater than the actual sample statistics.

Tables B1-3 list the statistics for fall salmon fishery expenditures, Table B4 lists statistics for the spring-summer private boat fishery, and Table B5 lists the statistics for the charter fishery.

Table B1. Sample statistics for fall Harrisville shore angler expenditures in Alcona County, sample size = 131

Category of expenditure	Mean	Std. Dev.	Std. Error	.95 C.I.	Skewness	C.V. %
1. Major fishing equipment	2.400	8.279	.723	.969 - 3.831	9.722	345.0
2. Small fishing equipment	1.943	3.421	.299	1.352 - 2.535	7.323	176.1
3. Bait and lures	1.699	1.356	.188	1.464 - 1.933	2.161	79.8
4. Licenses	2.245	2.576	.255	1.800 - 2.691	2.903	114.7
5. Launching fees	1.051	.217	.019	1.013 - 1.088	4.699	20.7
6. Boat gas and oil	1.075	.542	.047	.981 - 1.169	7.811	50.4
7. Camping and parking fees	2.358	2.186	.191	1.980 - 2.736	1.459	92.7
8. Lodging	2.169	3.691	.322	1.531 - 2.807	3.282	170.2
9. Restaurants	5.092	5.567	.486	4.129 - 6.054	1.513	109.3
10. Groceries	2.928	3.168	.277	2.434 - 3.529	2.198	106.2
11. Vehicle gas	4.813	5.015	.438	3.947 - 5.680	1.795	104.2
12. Miscellaneous	2.359	3.035	.265	1.835 - 2.884	4.522	128.6
Total	19.186	18.131	1.584	16.052 - 22.320	2.150	94.6

Table B2. Sample statistics for fall Harrisville boat angler expenditures in Alcona County, sample size = 46.

Category of expenditure	Mean	Std. Dev.	Std. Error	.95 C.I.	Skewness	C.V. %
1. Major fishing equipment	1.752	2.351	.347	1.054 - 2.451	3.159	134.1
2. Small fishing equipment	2.297	2.745	.405	1.482 - 3.112	3.230	119.5
3. Bait and lures	2.738	3.360	.495	1.740 - 3.735	2.364	122.7
4. Licenses	1.864	1.467	.216	1.428 - 2.300	1.435	78.7
5. Launching fees	2.428	.732	.108	2.211 - 2.646	- .723	30.2
6. Boat gas and oil	2.451	3.904	.576	1.292 - 3.610	5.186	159.3
7. Camping fees	2.478	2.734	.403	1.666 - 3.290	1.550	110.3
8. Lodging	5.155	10.677	1.571	1.990 - 8.320	3.246	206.7
9. Restaurants	5.791	7.874	1.161	3.452 - 8.129	3.443	136.0
10. Groceries	5.485	8.967	1.322	2.822 - 8.148	3.563	163.5
11. Vehicle gas	5.229	5.632	.830	3.556 - 6.901	1.726	107.7
12. Miscellaneous	5.970	12.689	1.871	2.202 - 9.739	4.311	212.6
<b>Total</b>	<b>32.638</b>	<b>32.062</b>	<b>4.727</b>	<b>23.117 - 42.160</b>	<b>2.476</b>	<b>98.2</b>

Table B3. Sample statistics for fall Black River shore angler expenditures in Alcona County, sample size = 31.

Category of expenditure	Mean	Std. Dev.	Std. Error	.95 C.I.	Skewness	C.V. %
1. Major fishing equipment	1.226	.884	.159	.902 - 1.550	3.863	72.1
2. Small fishing equipment	1.396	.862	.155	1.080 - 1.712	2.246	61.7
3. Bait and lures	1.235	.443	.080	1.073 - 1.398	1.858	35.8
4. Licenses	1.595	1.189	.214	1.159 - 2.031	1.850	74.5
5. Launching fees	1.102	.315	.057	.986 - 1.218	3.623	28.6
6. Boat gas and oil	1.122	.291	.052	1.016 - 1.229	2.132	25.9
7. Camping fees	1.317	1.304	.234	.839 - 1.795	4.403	99.0
8. Lodging	2.082	2.334	.419	1.226 - 2.938	1.979	112.1
9. Restaurants	2.755	2.992	.537	1.657 - 3.852	1.613	108.6
10. Groceries	2.345	1.809	.325	1.681 - 3.009	1.277	77.1
11. Vehicle gas	4.368	4.049	.727	2.883 - 5.854	1.403	92.7
12. Miscellaneous	2.926	4.216	.757	1.380 - 4.473	3.053	144.1
Total	12.47	11.185	2.009	8.367 - 16.573	1.005	89.7

Table B4. Sample statistics for spring-summer Harrisville boat angler expenditures in Alcona County, sample size = 336.

Category of expenditures	Mean	Std. Dev.	Std. Error	.95 C.I.	Skewness	C.V. %
1. Major fishing equipment	2.073	9.774	.533	1.024 - 3.122	10.643	471.5
2. Small fishing equipment	1.101	.854	.047	1.009 - 1.193	11.809	77.6
3. Bait and lures	2.278	3.569	.195	1.895 - 2.661	3.750	156.7
4. Licenses	1.207	1.421	.078	1.054 - 1.360	8.274	117.7
5. Boat gas and oil	3.580	5.147	.281	3.028 - 4.132	2.707	143.8
6. Camping fees	1.614	1.958	.107	1.404 - 1.824	3.417	121.3
7. Lodging	1.606	3.110	.170	1.272 - 1.940	5.973	193.6
8. Restaurants	3.163	4.916	.268	2.635 - 3.690	2.530	155.4
9. Groceries	4.796	13.933	.760	3.301 - 6.292	9.802	290.5
10. Vehicle gas	3.485	5.119	.279	2.936 - 4.035	2.755	146.9
11. Miscellaneous	2.242	3.400	.185	1.877 - 2.607	3.649	151.6
Total	17.146	28.594	1.560	14.077 - 20.214	3.146	166.8

Table B5. Sample statistics for charter angler expenditures in Alcona County, sample size = 143.

Category of expenditure	MEAN	Std. Dev.	Std. Error	.95 C.I.	Skewness	C.V. %
1. Licenses	5.392	5.776	.483	4.437 - 6.346	1.021	107.1
2. Charter fees	54.122	56.818	4.751	44.730 - 63.515	1.313	105.0
3. Camping fees	1.142	.939	.079	.987 - 1.297	8.847	82.2
4. Parking fees	1.031	.280	.023	.985 - 1.078	9.571	27.1
5. Lodging	5.329	11.514	.963	3.425 - 7.232	4.141	216.1
6. Restaurants	8.229	10.375	.868	6.514 - 9.944	1.923	126.1
7. Groceries	3.735	4.824	.403	2.937 - 4.532	1.653	129.2
8. Vehicle	8.063	9.707	.812	6.548 - 9.667	1.445	120.4
9. Miscellaneous	6.125	7.552	.632	4.876 - 7.373	1.589	123.3
Total	85.167	71.046	5.941	73.423 - 96.912	1.179	83.4

APPENDIX C

BUSINESS COMMENTS

1. The DNR's Law enforcement Division needs to make up some different rules governing the taking of salmon. If you asked 15 different DNR officers for the snagging rules, you would receive 15 different answers. All the DNR is doing is chasing the down-state fisherman to the other side of the state. Snagging is important to the harvesting of dying salmon. Without snagging - don't plant salmon, plant lake trout, steelhead, or splake - anything that won't die.

Tell the DNR to put their time and money into polluters and people who litter. One person caught littering with a \$150.00 fine is worth six people snagging at a \$25.00 fine, and it is less costly in the courtroom.

2. Foul-hook salmon fishing is very important to our patrons. It brings most of our fall business (a resort owner).
3. The city could provide an alternative boat launching at an easement. They could also be more courteous to tourists.

If foul-hooking is not legal, then it should not be legal for local merchants to sell gear designed to foul-hook fish; at least they should warn the purchasers of the consequences of using the gear in the manner for which it was designed.

Many fishermen - particularly from out-of-state - get very upset when, after purchasing their license and gear from a local merchant, end up paying a fine to him for foul-hooking.

4. They can't wait to fine the fishermen; some act as though they do not want them around.
5. Businesses should be more unified in this community. City government should do more for the tourists. Sport fishing in Alcona County is a so-called shot-in-the-arm for the economy in the area. Before fishing, the tourist season used to be from Memorial Day to Labor Day. Now it has been extended due to fishing. All retail stores in the area, whether directly involved in fishing or not, still benefit from the influx of fishermen.
6. Sport angling in Alcona County is probably the single most important factor in increasing September and October business.

The DNR seems to be over-zealous in applying the law. Many customers complain about how strong the CO's come on when dealing with the public. Whether or not the fisherman is snagging or jerking his line seems to be a common problem - DNR's judgement on this matter seems to be in question. It is definitely bad for business when customers go home mad! Most of

these fishermen are sportsmen and do obey the laws; at least the ones I talk to. Without the salmon fishing my business would drop \$20,000 to \$30,000 a year. It is second only to summer tourism. I'm also aware that there are some turkeys out there - who call themselves fishermen - but the DNR will have to use some discretion in dealing with the public.

7. Enforce no snagging - stop there!

8. We need better harbor facilities. If the harbor was redone (docks) we would have what it takes to draw bigger and more fishing boats, besides being able to better take care of our regular fishing people.

The DNR should make the regulations available to the angler more explicit and clear as to what is legal and what is not - re: snagging.

I think, as with most businessmen, that income to the area is what we look at first. As far as legal snagging areas, they are O.K., but no money is really coming into the community as the fishermen bring their own food, drinks, and etc. with them. The real sportspersons and income people are the ones that bring boats and fish for the sport of fishing. To help our area be one of respect and prosperity, those are the type of fishermen we should have in our area.

9. The city government is just finding out how large an impact fishing can be. I don't say open your doors to everyone, but just being friendly and having a straightforward attitude toward the fishermen will help us make great strides forward.

The county government is not getting involved in the fishing industry at all. Waterways Division people will do nothing as long as the head of that division has it in for Harrisville harbor. He should be removed from his post, and someone more open-minded put in, so that the harbor could get its needed improvements.

10. Alcona County is lacking in having an industrial base, therefore the tourist trade is essential to bringing dollars into the community. Sportsfishing brings in the largest number of people over the longest period of time, and it is my feeling that without this trade many people would be out of work altogether.

Recently it seems that enforcement of regulations and fines have been arbitrarily applied, causing many people to leave the area with bad feelings.

11. Our city government has never done anything to help sport fishing in this area, or to fully understand the potential of the Lake Huron sport fishing industry. The county government has yet to spend one dime on our harbor.



DNR's Law Enforcement Division should come out in the open, not be hiding in a house up on the bluff above the harbor. There is no such thing as attempting to snag, either you're snagging or you're not. People are afraid to move or work their bait because they might get a ticket for attempting to snag.

We need the Fisheries Division to start planting more steelhead and brown trout along with our regular plants.

Lake Huron sport fishing is my business; without sport fishing I would have no business. We are sitting on one of the major sport fishing harbors of Michigan.

The lake trout extended all our business by better than two months. What is needed is for our city and county governments to fully understand the fishing industry, and the money it brings to Harrisville.

Street parking is a big problem in the fall. We have space for parking, so why not use it to get those cars off the street.

The harbor looks like it did 17 years ago. Why not make a big effort to have it completed to what the original plans called for; 150 slips. The plans are drawn, it just takes a big push by our local governments, but no, they just sit back and let things slide by.

12. The sport fishing in Alcona County is neither the pariah nor the godsend that it is painted to be. It should be encouraged, but not at the expense or the exclusion of all other tourist activities. The economics generated by the influx of these "sportsmen" greatly aids three major business entities; 1) gas stations, 2) tackle shops, and 3) party stores. Other businesses may feel a marginal effect, but some, like ourselves, feel none. My biggest problem with the fishermen is the singleness of their endeavor. Women and children are excluded; panfishing is absent.

Except for the fall harbor salmon run, the cost of operating and equipping a boat for Lake Huron fishing is prohibitive.

I am impressed by the fish, their size and number, almost as much by the numbers of people who pursue them. When I see 400 standing shoulder to shoulder, I am impressed. When 300 of them are snagging, I am depressed. How terribly low class!

13. In 1980 the DNR officers at the harbor were, in my opinion, much too rough on the out-of-state fishermen. The fines imposed and the quantity of the fines caused a great many fishermen that had traveled from as far away as Missouri to claim that they would never return because the new snag-hook law was overly enforced (One man was fined \$50 for snagging a catfish!).

They should allow snagging of the salmon - to the legal limit. It makes the long trip to Harrisville worthwhile for those that travel from out-of-state. Remember, travel and lodging are getting very expensive - the

fruits of their efforts must be rewarded or they will seek other vacation areas, whereupon my business, for one, will die! We have little else to offer visitors - other than sport fishing and hunting.

14. Our community, both the public and private interests need to advertise the fishing potential here.

We should not have a double standard regarding foul-hooking...either enforce it at all times, or allow it at all times in season. I talked to a hundred fishermen this past season, mostly from out-of-state, that said they will never be back. I do not feel they should be allowed to foul-hook trout, only salmon.

A boat launching facility with adequate parking needs to be developed in the Greenbush Twp. area. Increased fish plantings are also needed in the Alcona County area, besides improving the harbor at Harrisville.

15. Owning a beauty shop, the sport angling in no way affects my business.
16. The DNR could create more parking in the area. The city should also be more appreciative of the money that fishing brings to this community. Without fishing we couldn't survive. Also, the businesses should work together without their petty arguments and fights. Fishing is about the only thing this county has going for it.
17. Before Lake Huron fishing we had two months - July and August - of tourist season. Since the fishing began we have a very good business from April to November. Deer hunting has dropped considerably. The fishing has helped us to finally realize a little profit, something we never enjoyed in the past. The sportsmen we cater to are "gentlemen". They appreciate the accomodations, are well behaved, and have all units clean and in order when they leave. Without the fishing we would have to go out of business because of the operating costs.
18. DNR's CO's need to write fewer attempting-to-snag tickets. Our friendly city police need to stop ticketing pickup trucks for parking in the south harbor lot. Many people only have a pickup for transportation, but they should continue to ticket both campers and large R.V.'s in both lots, north and south.

A lot of business people give the impression that they want the tourists and fishermens' money but don't really want the people.

A lot of money is spent in the area by the snaggers. A few years ago when egg prices (salmon) were so high and they were catching salmon just for the eggs, they should have been ticketed. But now with our depressed economy and unemployment, the majority of the snaggers are getting the fish to make their winter food bills a little easier to handle.

19. Lake Huron sport fishing is quite beneficial to all of Alcona County. Sportsmen and their families come from all over the state as well as from Indiana and Ohio to participate in the salmon fishing contests and activities. Although our own business could survive without the fishing, we feel the county is much better off with the sport.
20. We are losing a lot of anglers due to the DNR's enforcement policies.
21. Generally, I think Lake Huron sport fishing is good for the economy of the county, but it has little direct effect on our business.
22. I feel that everyone with an interest in sport fishing in Alcona County could be more helpful. There is no central place where the fishermen can get information on the area. The Chamber of Commerce doesn't give much direction to anything.

The DNR and local law enforcement agencies have a bad name with our guests due to their attitudes and the lack of information provided to the fishermen. Having a magistrate who sells illegal snagging devices does not help. The local governments don't really cooperate and use a shotgun approach to solutions.

There needs to be a local coalition of government and business to really do a good job of attracting fishermen to this area. Then there has to be a concerted effort to cater to the fishermen, providing information either through a booth or some other distribution system explaining fishing regulations, local attractions, and maybe even a place for quest fishermen to "hang their boots" and have a cup of coffee, etc.

Finally we need to derive more benefit from the dollars that are spent by fishermen here by developing locally produced products which fishermen routinely buy in the area; fishing line, rods, lures, bait, etc. Basically, we need to lay out the red carpet, not chase them away.

23. The city could take positive action to develop more parking, picnicking and leisure areas - improve the appearance of Main Street, provide informational signs at the harbor, and promote more cooperation among businesses to provide services to boaters.

I feel that foul-hooking should be curtailed forcefully as it brings into the area fishermen whose actions reflect badly on the sport as a whole. Promote the sport in fishing and I won't hear so many complaints from area residents as to the "slob" behavior from outsiders.

APPENDIX D

RESIDENT COMMENTS

1. I used to be able to enjoy the facilities at Harrisville. Friends and I would go fishing 2-3 days a week before going to work, and usually one full day on weekends. Then the local business people decided to exploit every dollar they could get. The DNR moved in and developed a boat launch (which they capitalize on). Harrisville became a weekly topic on one of the sportsmen programs on TV, then things went to hell; local businesses raised their prices and launching your boat suddenly went from a "5 minute project" to a 45 minute ordeal (which the DNR charged for the privilege of participating in)!

I don't fish at Harrisville anymore. I have no desire to fight over 2 feet of standing space on the beach with a bunch of drunken animals from the metropolitan areas, tangling lines with everyone they can, and fighting, snagging, etc. That's not my idea of sport fishing. I have seen knife fights, broken bottle fights, etc. We can thank the few businessmen who benefit from those people's spending for that type of big city behavior being thrust upon all of us. It's a damn shame the majority has to suffer to benefit the affluence of a tiny minority.

2. I could care less about the economic impact of sport fishing. The only ones to benefit are the grocery stores, while we have to contend with the mess the fishermen bring here. Leave our town peaceful like it used to be.
3. It appears to me, in my few contacts with city representatives, that a wrong attitude toward the fishermen exists. Most officials seem to treat them as a detriment rather than an asset to the area. I would prefer an attitude that the fishermen are vital to our economy and what can we do to welcome them and cater to them, yet place regulations in a positive manner.

It's a shame that local restaurants do not accomodate the fishermen by opening very early in the morning for breakfast. This would only have to happen on weekends in the summer and every day during September and October. Most of the businessmen could do a better job of welcoming fishermen and showing more hospitality.

The DNR should be more positive and consistent in their law enforcement. I think a definite policy about snagging should be drawn up and then enforced.

Another thing that has irritated me more than any other problem is the Sheriff department's past policy of checking boats for safety requirements during the early morning hours of salmon season. It's terrible public relations and complete harrassment to go out among 150 boats that are trolling, make a boat bring in fishing lines, interrupt the flow of boat traffic, and check out a boat for safety violations. I have had it happen to me and my customers, and it was completely uncalled for. A check could just as well be made at the boat launch ramp before launching or after removing the boat from the water.

I think that Lake Huron fishing is one of the few legitimate attractions we have on this side of Michigan, and it should be cultured, nurtured, and developed to the best of our resources and abilities. Heaven knows it is hard enough to attract people to vacation here. Fishing can be the key to the future of the Lake Huron shoreline in the Harrisville-Greenbush area.

4. I feel that city government should more strictly enforce the local ordinances which pertain to fishermen. I am also for the expansion of the boat launch facilities, but with tighter control on campers in that area.

Fishermen often feel they are in the country, and the same laws they would not think of breaking in the city mean nothing to them in Harrisville. It is obvious the DNR created a problem, and should be prepared to solve it by expansion and good regulations.

5. We could use more parking space; new south DNR area (Sterling property). State park could be used more for overnight camping (fishermen).
6. The salmon season is a mess. My yard and the 2-block area around the harbor is littered with paper and trash of all kinds, including drunks and rude people.
7. DNR should have more CO patrols at the height of the salmon season; just driving through slows the illegal activity of shore fishermen.
8. The city finally passed some ordinances concerning parking, now they must enforce them.

The Lions Club should make some effort to have the cups they use disposed of properly. I am tired of having to pick them up all over my beach.

I resent the attitude of the fishermen that they can camp along the streets or anywhere they wish to, as this is "Hicksville". I would like to see their reaction if I pulled up in front of their house "down below" and started camping.

I would also like to see a "bottle law" on the fishing line. In other words, they would have to turn in used line to purchase new. I know this is unreasonable, but the fishermen don't have to live with the mess they leave behind.

9. The most obvious negative impression in regard to the fishing season is the lack of decent parking arrangements and the resulting "traffic-jams" on Lake Street. In a residential area this congestion seems less than appropriate.

My livelihood depends solely on area residents and tax payers and the tourist industry has a very indirect effect on me, therefore, it is difficult to judge what impact fishermen's presence has on my employment. On a number of occasions I had fishermen ask permission to park their vehicles on my property and fish in front of my house. In all cases I found their conduct to be courteous and respectful, although from neighbors I have heard this is not always the case.

During the tourist season there seems to be a tendency with some of the area merchants to give preferential treatment to the tourists while the local consumer is shoved aside to fend for themselves. This attitude has caused some poor feelings between the "locals" and the "outsiders", and when one considers who supports the businesses on a 12-month basis, it is not difficult to understand why.

I applaud your efforts with this survey, and hope the results lend themselves to a better understanding between the concerned parties. Any enterprise that helps the economy of the county should be nurtured with all concerned given equal consideration; but once again, it would appear we will be legislating after-the-fact. Hopefully, future decisions from local government will be equitable.

10. City government should stop free parking on city property. County government should stop free parking on county property. The Waterways people should limit parking to 24 hours in the boat launch lots, and should enforce the no camping law.

The CO's should more strictly enforce the snagging regulations.

The Fisheries people should plant more lake trout and less salmon. This would help stop the shoreline problems.

Lake Huron sport fishing in Alcona county is real great, except that I don't see where it is a benefit to the local people. All they get out of it are the fish they catch, and actually in the long run it is a benefit to the business people only.

If they planted the fish and all local governments, law enforcement and the DNR enforced all the rules, it would make a great sport and benefit for everyone, including myself.

11. The sport fishing put Harrisville on the map.
12. It is my opinion that the business people of Harrisville are only concerned about their own profits which they generate from the fishing sport, as their prices for fishing products are doubled at the opening of the season. Check them if you like, as this is very true.
13. Local businesses - These are the people who in true sense of the word, really reap all the benefits. I guess the adage of "what's good for business in the community is good for the community" holds true.

County government - Could help the city even more than they do now in enforcing traffic-parking regulations and overnight camping regulations.

DNR's Law enforcement - Last fall's enforcement was the best ever, even though the snaggers were back not too long after the officers left. Hopefully snagging will never be allowed in the harbor area - I, like many others, have seen a type of people and "conditions" at the Foote Dam site that I'm sure no one in Harrisville wants (Drunkin meat and egg hunters). Last fall more fishermen fished off the breakwall than ever before (and some got hurt falling over the rocks). In my opinion it would relieve the "shore pressure" to "pave" a walkway along the top of the breakwall with a guardrail - this has been discussed many times, but no action.

The returnable can and bottle law has cut down tremendously on trash around town and in the harbor area.

Regarding the newly acquired property in the launch site area - I for one would like to see the DNR adequately fence it to keep trespassers off the private property along the harbor shoreline. Also, the newly acquired property was former residences, and all the people that reside in this area, along with many summer and fall tourists, would appreciate seeing that property maintained the way it was in the past - grass cut and trimmed weekly.

This is the most beautiful area in town. Let all concerned try and keep it that way! Don't destroy its beauty.

14. I feel Black River's township government could be more helpful in carrying out the zoning laws we are supposed to have. A number of people who come here to fish have bought property, and then put junk trailers there to "vacation" in. One place in particular erected an outdoor outhouse. They have several campers, trailers and vans that come in for the weekend on just a postage stamp lot.

The DNR's law enforcement could be more stringent on the ruling of no overnight parking or camping. We have people that camp for a week or more with their vehicles right on the bank of the river. Perhaps the officers could issue permits or in some way mark the vehicles, so they would not just remain in the same site for several days.

I feel there is less panfish since the planting of the salmon. We did not catch any bass at all last summer, and wonder if the large fish are responsible to some degree.

15. I think the DNR should be planting more fish in the area, heavier on rainbow and brown trout.

Being one of the old-time residents of Black River, I can remember when the commercial fishing boats kept the Black River channel dredged to accomodate boats and promote better conditions for fish going upstream to spawn. I am not satisfied with the DNR buying property intended for a harbor project with public money, and then not developing the river for the purpose intended. The Black River being the largest in Alcona County, at present is in worse conditions than it ever has been with a sandbar blocking the mouth and making the river usable only for the smallest boats and hampering the spawning runs. These conditions do not promote favorable public feelings toward the State or the DNR, when they buy property with public funds and just leave them idle without making them available for public use. With a small amount of dredging in the river this condition could be temporarily corrected. The Black River could then be returned to the status of being one of the best fishing streams in the upper Michigan area.

I feel that any promotion to draw tourists to the area is a benefit to local businesses and land owners.

16. Hundreds of fishermen use the beach in front of our cottage. The beach lot is owned by our son. The fishermen seldom, if ever come up the bluff or onto our property at the top of the bluff. Children play in the brook, but do not bother us.
17. There are still many parking problems.

Many fishermen trespass over private property and when they are approached relative to their action, they usually say that a neighbor or businessman told them that they could cross private properties. Naturally after dark, they as strangers do not know where property lines exist. They even park in your driveways. By comparing notes with neighbors, we find many of these fishermen have no relationship whatsoever with the property owners. It is nice to be friendly, but there are limitations.

18. County government does absolutely nothing to enforce laws or attempt to control fishermen. Parking and camping should be regulated, and I don't think it is entirely a Harrisville city government problem!

The DNR tears down our homes and gobbles up our land, and then puts a fence around it so no one can use it. They could very well develop the property they have already acquired for parking.

DNR law enforcement has improved this last season (1980).

I have a very poor attitude and it is getting poorer all the time. I don't think we have a single family in the city who moved here because they wanted to fish. People are here because they seek the semi-quiet rural village-type atmosphere, not the hurdy-gurdy carnival of swearing, sweaty, filthy fishermen. I feel we have rights too; the right to not be sworn at, the right to swim in the lake, the right to walk the beach, the right to park our cars in our own driveways and know we can get them out again.

Our children can no longer walk anywhere near the beach or play area, yes, even along the streets and sidewalks without getting fish hooks in their feet.

Harrisville residents were told they were selfish, the Harbor belonged to all people...this is not true! The residents of Harrisville are no longer able to use the harbor facilities at all, to boat, to swim in the area, walk along the beach, and etc., because of fishermen and their paraphernalia.

City taxpayers foot the bill for the clean-up of the garbage, mountains of beer cans (most from out-of-state), and fish carcasses left behind by these "sportsmen". We also pay for the electricity and the sewage disposal for the fishermen. The only additional business that has come to Harrisville because of the fishing industry are the tackle-bait shops. Nothing that would benefit the resident of the city. A quick check of the garbage deposited by the fishermen reveals mostly out-of-town supplies indicating that they really do not use our grocery stores that much for food or beer.

I think it is a crime that we are losing our lakefront homes to the DNR for parking lots: the way things are going, the businessmen should beware, Harrisville will be just one big parking lot.



I have absolutely no objection to the boaters and sailors.

I have absolutely no objection to the tourists.

I worry for fear that we may lose our barbershoppers due to the obscene presence of the fishermen.

I thank you for the opportunity to vent my pent-up feelings, which I assure you are shared by many.

19. You just can't beat the fishing. It is also a great spectator sport; it beats the Super Bowl.
20. Black River would be used more if the mouth of the river was dredged. At the present time we have to travel to Harrisville or Ossineke to get to Lake Huron. There could even be fish planted in the Black River itself to make local fishing better.
21. The breakwall should be extended to shore on the south side of the harbor to help alleviate the crowding associated with shore fishing in the Fall.
22. My property is at the southwest corner at the mouth of the Black River. Boats entering and leaving the river are not governed in any way as to the wake they create, and this is causing continuous erosion to my property. During salmon season the possibility of getting any DNR personnel into this area in time to apprehend trespassers and violators is nil.
23. There would be more sport fishermen fishing out of Black River if there were better facilities. Most of the time we can't get our boats out of the river because of the sandbar across the mouth.

Now that gas is so high, we can't drive 15 miles when the fishing is good off Black River. There are a lot of fishermen from Lost Lake Woods that are about 5 miles away from Black River, but they have to go to Harrisville or Alpena to fish because of the poor conditions at the mouth of the Black River.

24. No organizational group has done much to protect the rights of property owners along Lake and Dock Streets. The city law enforcement could do much more; offstreet parking could be provided in city lots. DNR buys the land and creates the problems, but does little to help alleviate them. Quite frankly, the commercial people (and especially the tackle store interests) have been reluctant to join together to work out solutions to any of the problems. Each group proceeds with its individual self-interest in a selfish manner, and the general welfare of the community be damned. I have about four pages of constructive notes and criticism, if you are interested.
25. The negative aspects of sport fishing here affect property owners near the fishing sites with regard to unlawful parking, litter, and use of beach areas privately owned. It does not affect me personally, as my property is one mile south of the harbor.

The business fishermen generate is good for local businessmen.

I would like to see good rules enforced at the State Park. Sometimes there is considerable litter left despite the availability of trash receptacles. I would also like to see signs posted at the State Park beach extremities informing the public that beach areas beyond the signs are private property. Most property owners have no objection to beach strollers, but do object to litter, dogs, and the use of their private beaches.

Development of fishing and the enforcement of good rules is helpful to the community. My late husband was an ardent fisherman, but much disgusted with the sloppy habits of some so-called sportsmen.

26. Improvements at the harbor are progressing. I sold my home last year. The one son of the family purchased the house next door, and the family has two large boats there. One is a charterboat. They maintain a home in Standish and have many friends coming to Harrisville to fish.

My husband is deceased and we had our own "runabout" boat in use all the time in Tawas Bay, Grand Lake, etc.

I'm not much help to you, but I know the "fishing sport" needs help in Alcona County, especially Harrisville and the harbor.

27. Obviously the loss of local control over a major portion of the shoreline in the city is most serious. The DNR is mandated to serve the public at large and not necessarily the city of Harrisville. I suspect that the expanding fishing facilities will adversely affect the quality of life in Harrisville, even though all efforts were well intentioned.
28. I think Harrisville is so lucky to be on beautiful Lake Huron. I meet lots of people who stop at my garage sale. All summer they speak highly of fishing here and of the beautiful State Park. Go to it! I have a son-in-law who has a tackle shop. He comes here fishing all the time. He also has many people come into his shop and speak highly about the fishing here. I could go on forever telling you about people's good word about the fishing and our town.
29. The economic impact must be felt by the businesses, but as a mother of teenage daughters, I am not able to allow them to wander safely through the park or town alone when there is a large fishing crowd in town. Some of the fishermen, like during hunting season, are looking for a different kind of sport too. We have to be aware of the bad along with the good and be prepared for the problems that come with increases in the population, however temporary.
30. The dredging of the mouth of Black River or a harbor at Black River would be of great help.

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