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TOURNAMENT ANGLING IN WISCONSIN: THE ECONOMIC IMPACT OF BASS, SALMON, AND WALLEYE FISHING TOURNAMENTS ON HOST COMMUNITIES

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TOURNAMENT ANGLING IN WISCONSIN: THE ECONOMIC IMPACT OF BASS, SALMON, AND WALLEYE FISHING TOURNAMENTS ON HOST COMMUNITIES

By Sara Erickson

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ABSTRACT

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This study investigated the economic impacts of tournament angling, specifically bass, salmon, and walleye fishing tournaments on host communities in the state of Wisconsin. Fifteen salmon, bass, and walleye tournaments were surveyed throughout the summer of 2014 to determine dollar values associated with each tournament. Tournament anglers were asked to share information on their spending habits throughout their stay in the community hosting the event. Anglers were asked to report their expenditures in nine main sectors: housing, grocery stores, restaurants, automobile transportation, boat operation, fishing equipment, boat launch fees, entrance or parking fees, and entertainment. Total median spending amounts for the bass, salmon, and walleye tournaments surveyed were $555.00, $371.00, and $1,562.00 respectively. Housing accounted for bass anglers' largest expenditure with a median value at $150.00 and a maximum value at $1,800.00. Salmon anglers' largest expenditure was boat operation with a median value at $100.00 and a maximum value at $1,700.00. Walleye anglers spent the most money overall with their largest expenditure also being housing with a median value of $400.00 and a maximum value of $1,500.00.

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INTRODUCTION

Competitive fishing is an ever-growing income and recreational opportunity for many anglers across the United States; the sport continues to prosper year after year, often offering thousands of dollars in prize money to the angler with the heaviest sum of caught fish (Schramm et al., 1991). Competitive fishing first occurred in the form of bass tournaments in 1967 after Ray Scott, an insurance salesman, thought of the idea while watching a basketball game. Months later, the winner of the first bass fishing tournament won $2,000 in prize money and a trip to Acapulco (Bassmaster, 2010).

Competitive fishing has evolved since 1967, and it continues to thrive and attract anglers to an array of host communities throughout the United States. Recently, there is increased need to better comprehend the economic significance of tournament angling on host communities, especially with growing human demand for aquatic-integrated recreational resources. In the state of Wisconsin there has been emerging interest on the topic of natural resources and how they relate to human recreation and economic impacts at the community level (Marcouiller et al., 2007). In 2001, angling in Wisconsin was a $2.3 billion dollar industry that supported more than 26,000 jobs and generated $100 million in state tax revenue (WI DNR, 2007). With the number of both private and regional/national tournament events increasing in Wisconsin, the ability to measure the economic significance of fishing tournaments on host communities becomes even more important. To help shed light upon the dollar values associated with tournament angling on Wisconsin communities, researchers from the University of Wisconsin – La Crosse

took a closer look at the most popular fishing tournaments in Wisconsin (bass, walleye, and salmon) to quantify revenue values associated with each tournament on its host community. Research objects were as follows:

1. How much revenue (on average) is generated through fishing tournaments and which spending sectors generate the most revenue for host communities?
2. How does participant spending compare between bass, walleye, and salmon fishing tournaments?

LITERATURE REVIEW

Economic Research of Fishing Tournaments

The economic impact of American fishing tournaments has and continues to spark the interest of various researchers throughout the United States. In 2010, researchers in Texas assessed Sam Rayburn Reservoir on its annual economic value of tournament and non-tournament angling. In 2010, 405 tournament events with 25,396 participants were held on Sam Rayburn Reservoir. Researchers discovered that the average expense for practice fishing before a tournament was $86 per person per day and for tournament fishing was $120 per person per day. On average, automobile operation, tournament entry fees, and boat operation accounted for the largest expenditures. Angling expenditures for tournament anglers totaled $23.7 million dollars and the total economic value of tournament angling in the reservoir was $31.0 million dollars. Through direct (sales, income, and employment generated by purchases made by anglers), indirect (industries which supply directly-affected businesses), and induced effects (economic activities created by increased incomes from angler expenditures), the state of Texas acquired $39 million dollars in output by tournament anglers at Sam Rayburn Reservoir which included $12.8 million dollars in labor income and 486 full or part-time jobs (Driscoll et al., 2010).

In another study that explored the economic impact of tournament fishing, O'Keefe and Miller (2011) assessed Great Lakes salmon and trout tournaments and the economic impact they had on host communities. Sixteen tournaments on Lake Michigan

and Lake Huron were analyzed in terms of expenditures relating to hotels/motels/B&Bs/camping, dock fees, fuel for boats, fuel for automobiles/trucks, boat/marine expenditures other than fuel, auto/truck expenditures other than fuel, groceries and beverages, restaurants and taverns, fishing equipment, souvenirs and shopping, entertainment, and other. The study determined that the sixteen tournaments created, on average, $53,257 in revenue to local communities per tournament based on direct output by captains and their fishing and/or travel parties. Anglers generated $310,189 in personal income and 21,386 employment hours in the coastal Lake Michigan and Huron communities they were held in (O'Keefe & Miller, 2011).

In 2011, researchers from the University of Florida conducted a study on the economic impact of the Florida BASS Federation Tournament in Osceola County. After receiving results from 157 participants, Larkin et al. (2011) discovered that the average tournament participant spent $703.68 on trip and tournament expenses. Truck fuel, boat fuel and oil, and lodging accounted for the majority of the costs (63.5% of total expenses). The total output/revenue impact of the tournament on Osceola County was estimated at $73,995 and the total labor income generated was estimated at $26,300 (Larkin et al., 2011).

The Wisconsin Department of Natural Resources (WI DNR) Bureau of Fisheries Management conducted a report in 2007 which examined bass mortality, the economic impacts of several tournaments on host communities, and public awareness, participation, and opinions on fishing tournaments in Wisconsin. The WI DNR discovered that the Bassmaster Elite 50 tournament in Chippewa Falls, WI brought in the most revenue with an economic impact of $2.1 million dollars; anglers spent most of their money on

lodging, food, and travel. The WI DNR calculated the following economic impacts by each of the additional tournaments they surveyed: Fishing League Worldwide La Crosse 2005: $452,465, Wisconsin Bass Federation Shawano 2005, $105,555: Sturgeon Bay Open 2006, $440,718: Fishing League Worldwide La Crosse 2006, $459,143: BASS Winneconne 2006, $66,672: and Wisconsin Bass Federation Madison 2006, $65,368. Overall, the WI DNR concluded that bass fishing tournaments provided positive local economic impacts with the largest contributor being non-local spectators (WI DNR, 2007).

Along with benefiting the economies of host communities, fishing tournaments also provide a social dimension for participants. In 1991, Ditton (1991) published a study examining both the social and economic dimensions of fishing tournaments in the southeastern United States and the Caribbean. After surveying saltwater fishing tournament participants, Ditton discovered that tournaments not only encompass the act of pursuing and catching fish, they also act as social experiences for anglers, their families, and friends. The study showed that tournament anglers are motivated by competition and the potential to win prize money, but also by relaxation, the escape from the routine, being outdoors, being with friends, experiencing natural surroundings, and the challenge and experience of the catch (Ditton, 1991). Ditton found these motivators to be essential to the extent that if a tournament solely focused on matters of catching fish while ignoring the cultural context, it was less likely to succeed. Due to the cultural context surrounding fishing tournaments, many other people besides registered anglers involve themselves in tournaments. A tournament scene typically consists of family and friends accompanying fishermen, bystanders and visitors who are attracted to the weigh-

in event, and community and non-community members who provide support to the tournament. In addition, utilizing local products and services enhanced local involvement and commitment so that tournament dollars stayed in the host community. Overall, in Ditton's study, the largest expenditure was gas and oil for boats with restaurant meals and lodging coming in at second and third (Ditton, 1991).

A similar study, published in 1989, aimed to compare patterns of participation and motivation between recreational fishermen and tournament anglers. Over twenty studies were reviewed in order to obtain information on several saltwater tournaments; the tournaments varied in size and location and the studies represented both tournament and recreational anglers. In terms of recreational fishing, participants' number one motivations included: relaxation, nature, and escape. For tournament anglers, participants' top motivations included: sport/challenge, companionship, and relaxation. Overall, studies show that tournament anglers attach greater importance to the sport and challenge of pursuing certain fish species than to relaxation and the feeling of escape (Falk et al., 1989).

Fishing Tournaments in Wisconsin

In the state of Wisconsin, tournament angling grew in popularity during the 1980s. Tournaments in Wisconsin did not require documentation or permission from the WI DNR prior to 1994, but in that same year, a permitting system was generated to help better regulate tournaments (Marcouiller et al., 2007) At the start of documentation in 1994, 300 tournaments were permitted; as of 2012, 603 applications were received, 0 were denied, and 566 tournaments were approved and held (37 of the tournament applications were either withdrawn, cancelled, or left incomplete) (Boehm, 2012). Three-

hundred sixteen of these tournaments were traditional tournaments, (i.e., a tournament that has been issued consecutive permits in the previous two years or four out of the previous five years for the same water body and time period) (WI DNR, 2008). Three-hundred thirty four were catch-hold-release tournaments, a tournament where caught fish are held until their length or weight is recorded; fish are then released to the water they came from (WI DNR, 2008). One-hundred forty nine were ice-fishing tournaments. Eighty-three were immediate release tournaments in which fish are held only long enough to be identified and measured/weighed and are then immediately released to the water which they came from (WI DNR, 2008). Fifty-seven were Great Lakes tournaments (Boehm, 2012). In terms of distribution, 64 counties throughout Wisconsin held at least one fishing tournament; top counties included Winnebago (45), Dane (31) and La Crosse (28) (Boehm, 2012). In total for 2012, 74,980 anglers participated in fishing tournaments, 18,695 boats were used, 1,890,519 hours were spent fishing, and $4,526,748 in prizes were awarded (Boehm, 2012). The most popular fish sought in tournaments were bass (smallmouth and largemouth), walleye/sauger, and Great Lakes salmon/trout with 36,966, 20,765, and 19,506 individual fish registered respectively (Boehm, 2012). In terms of organization, most fishing tournaments in Wisconsin are locally sponsored by fishing clubs, private businesses, and local government organizations, though regional and national events are becoming more popular (Marcouiller et al., 2007).

METHODS

To investigate the economic impacts of salmon, bass and walleye fishing tournaments on host communities in Wisconsin, an online survey to be completed by both boat owners and co-anglers was created spring of 2014 on the survey software, Qualtrics (Qualtrics, Provo, UT). Survey questions were modeled after examples from similar studies (Larkin et. al., 2011, O'Keefe & Miller, 2009, Marcouiller et. al., 2007, and Driscoll et. al., 1991). The questionnaire solicited information about the participants tournament-related expenses, how many days they stayed in the host community, the number of individuals in their travel party, whether or not they practice fished, tournament history questions (such as how many tournaments they compete in per year), age, zip code, whether the tournament was local to them (within 50 miles of their home residence) and whether they were a boat owner (pro) or co-angler. In regards to the expenditure information, participants were asked to share their expenses within nine distinct categories, similar to the categories presented in Marcouiller et al. (2007) and O'Keefe & Miller (2009): housing, grocery stores, restaurants, automobile transportation, boat operation, fishing equipment and gifts, boat launch fees, entrance or parking fees, and entertainment.

The WI DNR website was used to locate salmon, bass, and walleye fishing tournaments around the state of Wisconsin so that a list of tournament organizers could be identified and contacted (WI DNR, 2014). After a list was generated, fishing tournament organizers were contacted via telephone and email. If organizers showed

interest in the study, word documents of the surveys (Appendix A) were provided to them via email so they could contribute insight and suggestions to the survey. Tournaments were selected based on response rate/time and cooperation of the tournament organizer. Several tournament organizers either declined to participate or did not respond to emails or phone calls. All tournament organizers who were interested in the study were invited to participate. A total of fifteen different tournaments approved the survey and identical online copies were emailed to all participants the week following each tournament (similar to the method used by O'Keefe & Miller, 2009) (see Appendix A for the complete survey instrument). Tournaments represented by the surveys ranged in size, location, and tournament type. A total of three walleye, three salmon, and nine bass fishing tournaments were surveyed between the months of May and November 2014. The fifteen different tournaments represented were: Cabela's National Team Championship (NTC) – Green Bay, Cabela's Master Walleye Circuit (MWC) – Oconto, North American Bass Circuit (NABC) – Sturgeon Bay, NABC – Oshkosh, Mercury National Walleye Tournament – Fond du Lac, Fishing League Worldwide (FLW) Walmart Bass Fishing League (BFL) – La Crosse, Rayovac FLW – La Crosse, FLW Walmart BFL – Winneconne, FLW Walmart BFL – Prairie du Chien, Salmon-A-Rama – Racine, West Suburban Bass Anglers – Madison, FLW Walmart BFL – La Crosse, West Suburban Bass Anglers – Pewaukee, Burnout Bash – Racine, and the Brew City Salmon Tournament – Milwaukee.

The online survey closed November 10th, 2014. Statistical analyses were performed via Statistical Package for the Social Sciences (SPSS ver. 22) (IBM Corporation, Armonk, NY) with assistance from the University of Wisconsin – La Crosse

Statistical Consulting Center. Median values opposed to mean values were used in statistical analyses due to the fact that many anglers reported zero dollar values for several of the spending sectors.

RESULTS

Overall, 268 bass, 80 salmon, and 134 walleye anglers (n = 482) completed useable surveys. Anglers competing in the surveyed tournaments represented 24 states and 1 Canadian province: New York, Pennsylvania, Alabama, Tennessee, Kentucky, Ohio, Indiana, Michigan, Iowa, Wisconsin, Minnesota, South Dakota, North Dakota, Illinois, Missouri, Kansas, Nebraska, Louisiana, Arkansas, Oklahoma, Texas, Colorado, Wyoming, California, and Ontario. The majority of bass and walleye anglers who completed surveys were not local to the community hosting the tournament (See Figure 1). Salmon anglers showed higher amounts of local participation compared to the other tournament types. The median amount of days spent in the host community for non-local bass, salmon, and walleye anglers was 4, 4, and 7 days respectively.

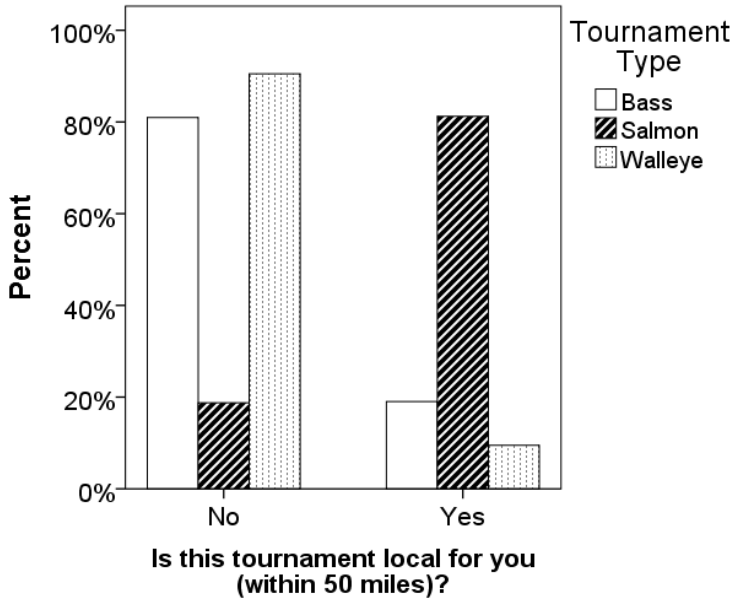
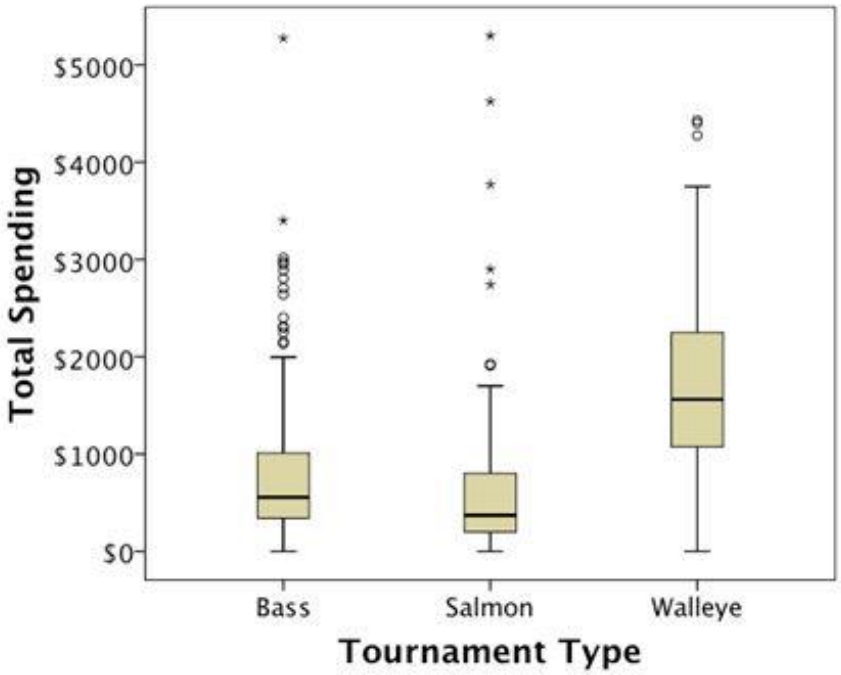


Figure 1. Percent of local vs. non-local anglers based on tournament type.

Total median spending for bass anglers was $555, for salmon anglers was $371 and for walleye anglers was $1,562. Walleye anglers spent the most money and their median value of total spending was significantly greater than that of bass and salmon anglers (See Figure 2).



Kruskal Wallis Test: $\chi^2 = 130.133, df = 2, P < 0.005$

Figure 2. Total median spending by tournament type. Diagram illustrates the minimum value (bottom of line), lower quartile (bottom of box), median (line in box), upper quartile (top of box), maximum value (top of line), outliers (circles), and extreme outliers (asterisks).

In terms of spending sectors, both bass and walleye anglers spent the most money on housing (median values of $150 and $400 respectively) (See Table 1). Salmon anglers spent the most money on boat operation (median value of $100). The largest spending sectors for combined tournament spending were housing, boat operation, and automobile operation with median values of $550, $525, and $400 respectively.

Table 1. Total median spending by tournament type per spending sector.

	Tournament Type		
Spending Sector	**Bass**	**Salmon**	**Walleye**
Hotel, motel, bed/breakfast, camping	$150	$0	$400
Grocery stores	$25	$27	$100
Restaurants	$50	$20	$200
Automobile operation	$100	$50	$250
Boat operation	$125	$100	$300
Fishing equipment and gifts	$50	$50	$125
Boat launch fees	$14	$0	$40
Entrance fees or parking	$0	$0	$0
Entertainment	$0	$0	$0
Other	$0	$0	$0

The majority of anglers surveyed practice fished (82.1% vs. 17.9% who did not practice fish) (See Table 2). Overall, 97.8% of walleye, 63.3% of salmon, and 79.9% of bass anglers' surveyed practice fished. Local and non-local walleye anglers spent the most time practice fishing with a median value of 5 days. Local bass anglers spent a median value of 4 days while non-local bass anglers spent a median value of 3 days practice fishing. Surveyed salmon anglers spent the least amount of time practice fishing with median values for local and non-local anglers equating to 3 and 2 days respectively.

Table 2. Practice fishing percentages by tournament type.

Tournament Type	Practice fished	Did not practice fish	Total
Bass	214 (79.9%)	54 (20.1%)	268 (100%)
Salmon	50 (63.3%)	29 (36.7%)	79 (100%)
Walleye	131 (97.8%)	3 (2.2%)	134 (100%)
Total	395 (82.1%)	86 (17.9%)	481 (100%)

Chi-Square Test: $\chi^2 = 42.343$, $df = 2$, $P < 0.005$

Age was reported by 472 out of 482 survey participants. The largest age group for salmon anglers was 26-35 years old (25.3% of salmon angling participants). Approximately 32% of walleye anglers surveyed were between the ages of 36 and 45 and the same pattern persisted for bass anglers (32% of bass angling participants). Walleye anglers represented the highest proportion for anglers age 56+ (24.2 % of walleye angling participants) and the lowest proportion for anglers age 18-25 (1.5%). Salmon anglers represented the highest value for anglers between the ages of 18-25 with 6.7% of the total salmon angling participants.

Local and non-local tournament anglers displayed different spending patterns between tournament types. Both local and non-local walleye anglers spent the most money: total median values of $1,000 and $1,598 respectively (See Figure 3). Kruskal-Wallis Tests showed that the population median of total spending for local and non-local walleye anglers was significantly greater than that of bass and salmon anglers at a 5% level of significance (locals, $\chi^2 = 12.131$, $df = 2$, $P = 0.002$: non-locals, $\chi^2 = 105.720$, $df = 2$, $P < 0.005$). Among non-local anglers, salmon fishermen spent the least amount of money with a total median value of $355.50.

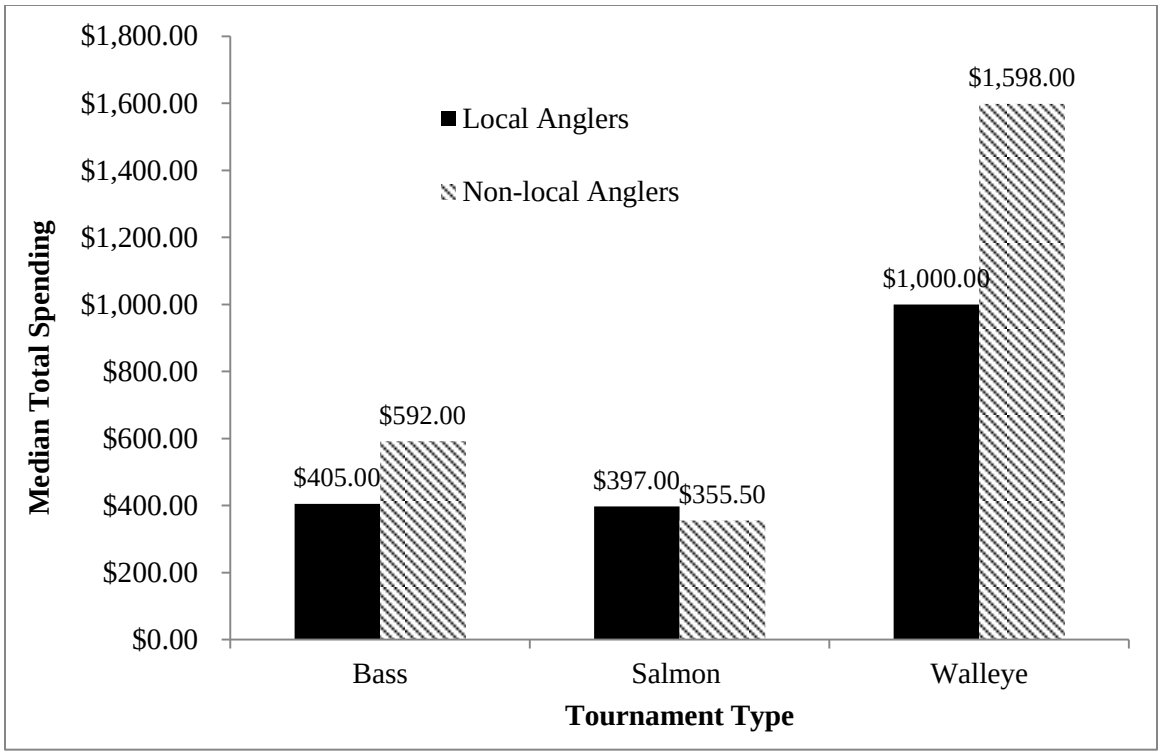


Figure 3. Local vs. non-local total median spending values per tournament type.

The size of each angler's travel party differed between tournament types. The median travel party size for bass was 1 person, for salmon were 2.5 people, and for walleye were 2 people. Kruskal-Wallis testing showed that there was a significant difference in the population medians with bass travel parties being significantly smaller than salmon and walleye travel parties (χ^2=53.335, *df*=2, *P* <0.0005). The relationship between tournament type and boat owners and co-anglers was also assessed. Walleye angler's owned the most boats (71.80%) and had the fewest number of co-anglers (28.20%) (See Figure 4). Bass anglers owned the least amount of boats (55.10%) and had the greatest amount of co-anglers (44.90%) per tournament type. A chi-square test for association showed a significant relationship between boat owner/co-angler and tournament type (χ^2=10.378, *df*=2, *P*=0.006). Overall, boat owners spent more than co-

anglers, but the only tournament type where boat owners spent significantly more than co-anglers was bass tournaments.

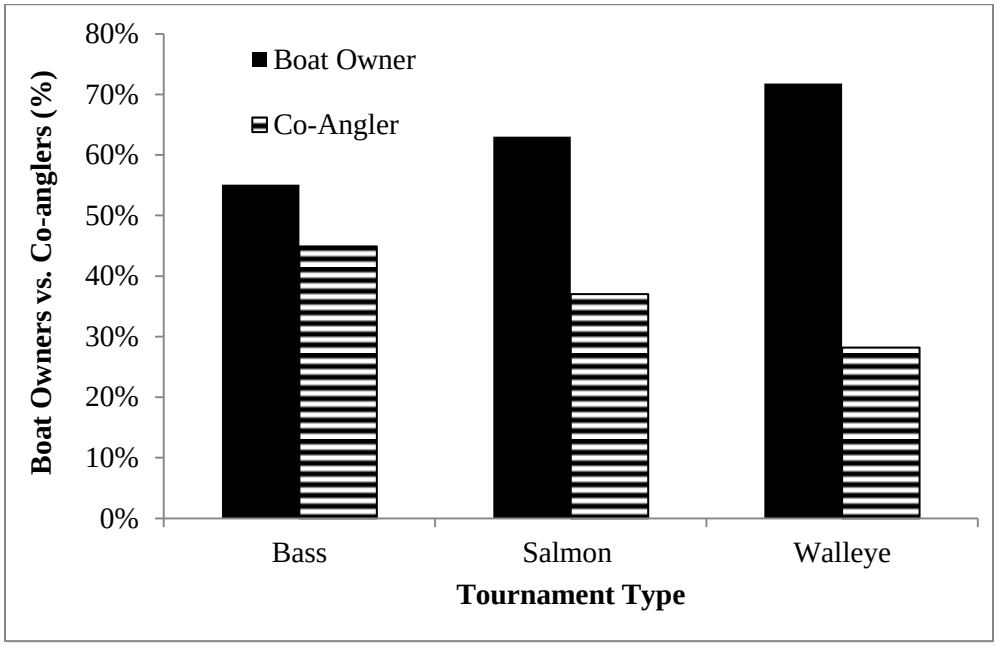


Figure 4. Proportion of boat owners to co-anglers per tournament type.

Fishing tournaments bring in both local and non-local participants (26.6% and 73.4% of survey respondents respectively). In this study, walleye anglers showed the highest proportion of non-local participants (90.5%) and also the highest total median spending amount ($1,562). Walleye anglers also spent the most money in each of the spending sectors analyzed in this study and stayed in the host community longer than salmon and bass anglers (7 days for walleye and 4 days for bass and salmon anglers) (See Figure 5). Bass anglers represented the second-highest proportion of non-local participants (81.0%) and total median revenue spent ($555) (See Figure 6). Salmon anglers showed the highest rates of local participation (81.25%) and spent the least amount of money (median value of $371) (See Figure 6). This data suggests that non-local tournament anglers spend the most money and therefore impact the host

community's economy at a greater level compared to local participants. Non-local anglers tended to spend more money on housing, food, and transportation, spending sectors which increase spending amounts for out-of-towners. Overall, non-local anglers are key components of fishing tournaments due to the fact that they bring in new sources of revenue to local communities and have more of an impact on the economy compared to local residents (Driscoll et al., 2010).

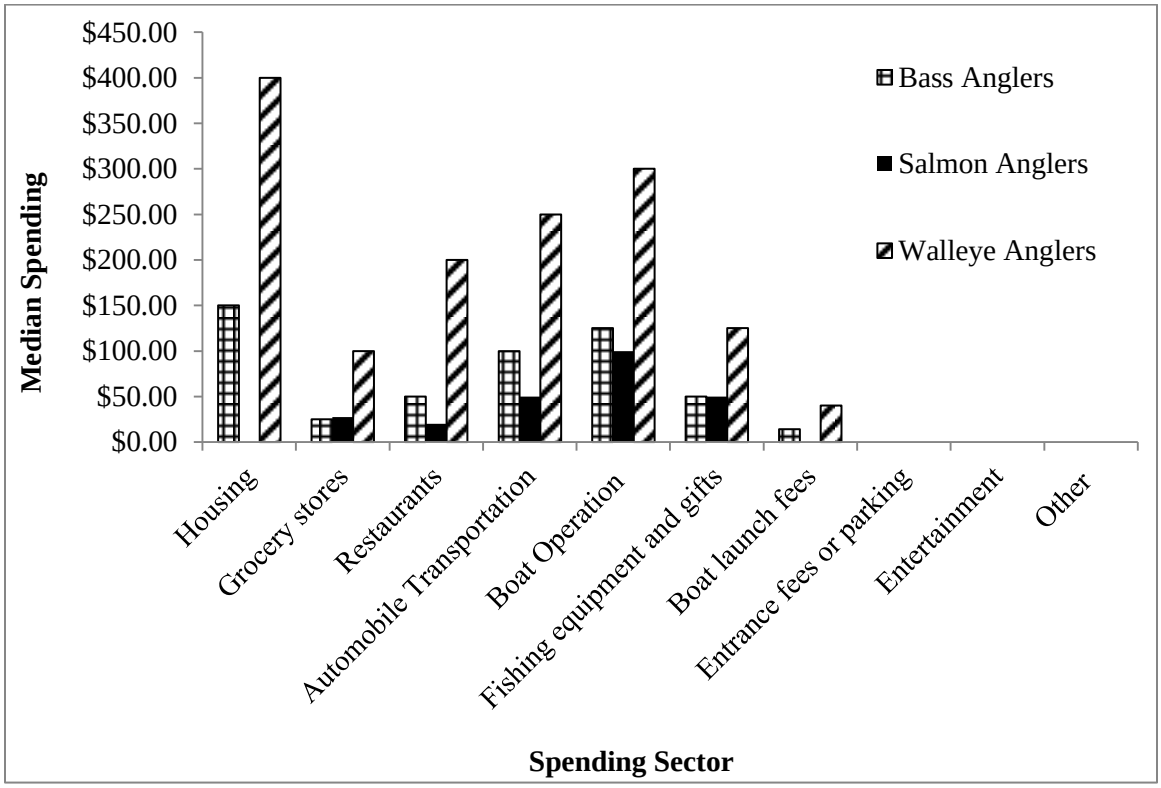


Figure 5. Median spending amounts within each sector by bass, salmon, and walleye anglers.

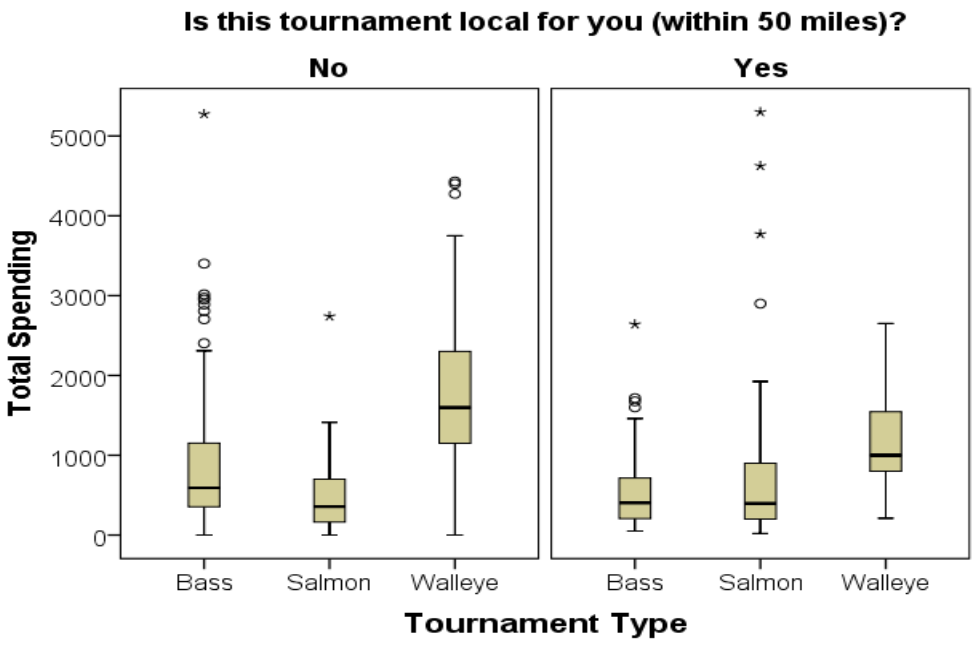


Figure 6. Total median spending by tournament type and local vs. non-local anglers.

Another important topic to explore in this study is the estimated total output generated by each specific tournament for its host community (See Figure 7). Salmon-A-Rama generated the highest amount of revenue estimated at $1,523,315.60. Cabela's NTC – Green Bay generated the second highest amount of revenue with an estimated value of $901,924.60. Tournaments with low response rates were emitted from this calculation as results would not accurately represent the entire tournament angler population for a specific tournament. A 95% confidence interval with upper and lower bounds was used to calculate the range of economic output for each tournament.

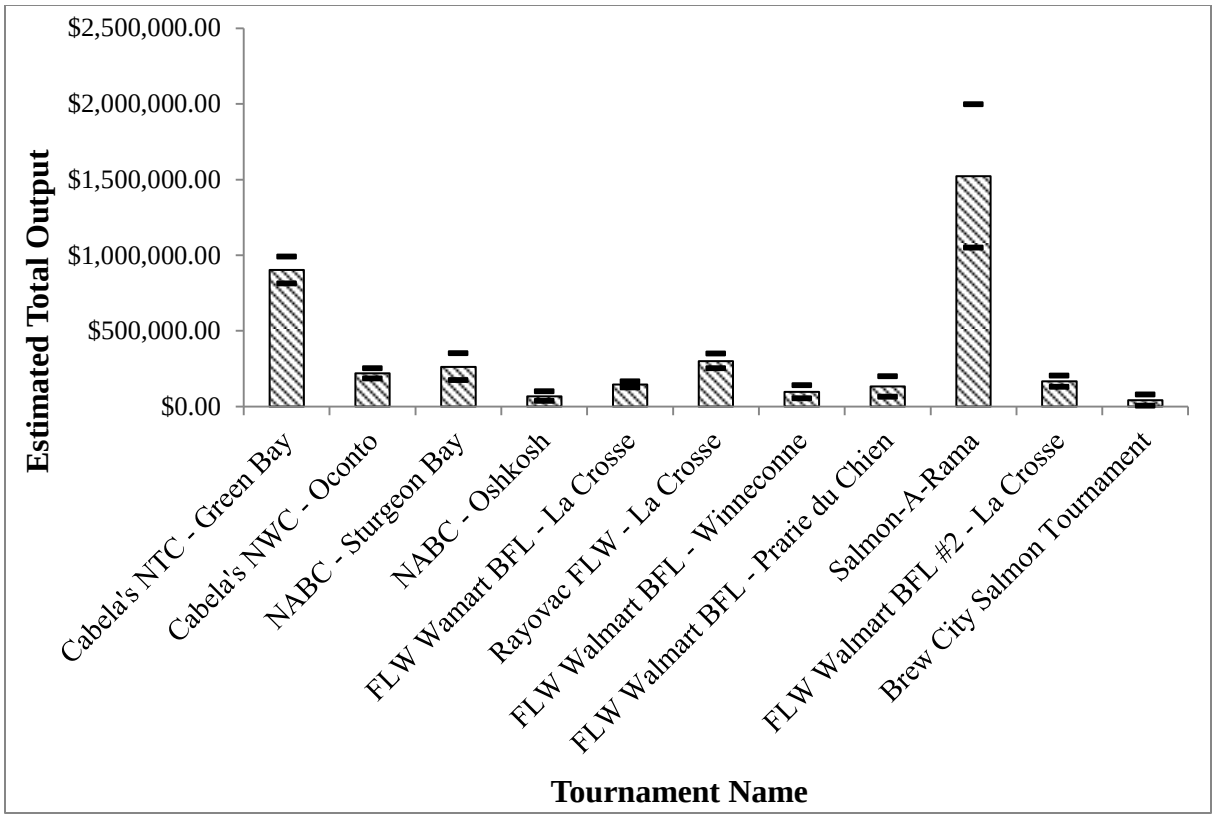


Figure 7. Estimated total revenue with lower and upper bounds (95% confidence interval) per tournament surveyed. Values could not be calculated for all tournaments due to low response rates.

Finally, it is also important to note the frequency at which anglers compete in tournaments, how long they have been competing in tournaments, and the number of states anglers typically fish in per season. In a given year, bass anglers reported fishing in the most tournaments with an average of 13. Walleye anglers reported the second highest number with an average of 7.6 tournaments and salmon anglers reported the lowest number with an average of 2.8 tournaments. Bass anglers also reported fishing in tournaments for the longest amount of time with an average of 15.2 years. Walleye anglers reported an average of 12.3 years and salmon anglers reported an average of 10.9 years. In terms of the number of states anglers traveled to per season, bass anglers also

reported the highest number with an average of 3.7 states. Walleye anglers reported an average of 3.1 states and salmon anglers reported an average of 1 state.

Anglers traveled from various regions across the United States to fish in the Wisconsin tournaments surveyed in this study. Overall, 24 states and 1 Canadian province were represented. From the provided zip codes, it can be found that the majority of anglers held primary residence in Wisconsin. The easternmost location reported was Apalachin, New York from an angler who participated in Salmon-A-Rama. The westernmost location reported was Burlingame, California from an angler who participated in the Rayovac FLW – La Crosse. The southernmost location reported was Leesville, Louisiana from an angler who participated in Cabela's MWC – Oconto. Finally, the northernmost location reported from a handful of anglers was Ontario, Canada. From the diversity of home residences reported, it can be concluded that anglers travel long distances in order to compete in a sport they love and ultimately help bring thousands of dollars to host communities.

DISCUSSION

Fishing tournaments in Wisconsin offer anglers many unique opportunities and work as identity-forming elements for an array of host communities. Tournament angling positively impacts host communities economically and also helps to highlight the quality of fishing available to both tournament and recreational anglers (O'Keefe & Miller, 2009). One of the main findings in this study was the fact that walleye anglers spent overwhelmingly more money compared to bass and salmon anglers ($1,562 for walleye anglers, $555 for bass anglers, and $371 for salmon anglers). There are several reasons as to why this may be the case. First, walleye anglers showed the highest rates of non-local participation while salmon tournament participation was almost exclusively local. As discussed, non-local anglers contribute more to host communities as they bring in new sources of revenue. On average, non-local walleye anglers spent more money per day compared to non-local bass and salmon anglers ($228.29/day compared to $148.00/day for bass anglers and $88.88/day for salmon anglers). Non-local walleye anglers also spent the most time in the host communities (as compared to bass and salmon fishermen) with a median value of 7 days. This gave non-local walleye anglers more time to spend money on food, transportation, and housing. The amount of time practice fishing goes hand-in-hand with days spent in the area; both local and non-local walleye anglers spent the most time practice fishing at 5 days (See Figure 8).

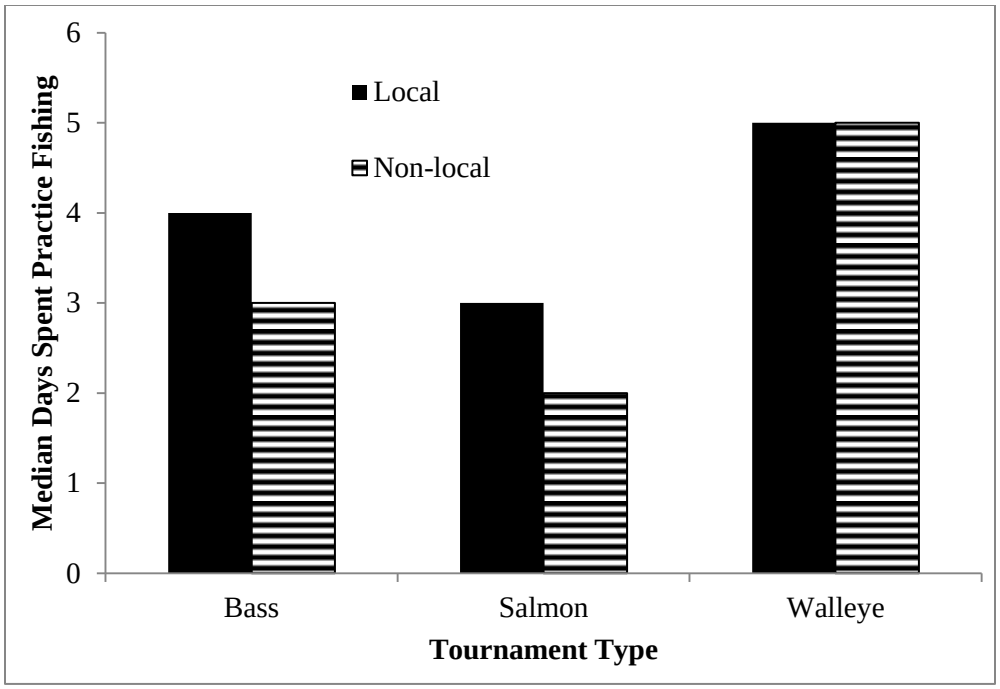


Figure 8. Median days spent practice fishing per tournament type.

Walleye angling participants also showed higher numbers of boat owners compared to co-anglers (71.80% boat owners and 28.20% co-anglers) (See Figure 4). About 55% of bass anglers were boat owners and 63% of salmon anglers were boat owners. Boat owners are often regarded as professionals and tend to receive higher winnings compared to co-anglers which might contribute to the reasons for their higher spending amounts. Higher response rates by walleye boat owners could have influenced the median amount spent per angler as a significant correlation between boat owner/co-angler status and total spending was only seen in bass fishing tournaments. Finally, age is another factor that can be taken into consideration in terms of spending amounts. Walleye anglers showed the highest proportion of participants ages 46-55 (28%) and 56+ (24.2%) (See Figure 9). Bass anglers had the highest proportion of anglers ages 36-45 (34%) and salmon anglers showed a comparable distribution of anglers between the ages of 26-35, 36-45, 46-55,

and 56+. Overall, walleye tournament anglers had the highest proportion of participants over the age of 36 (84.8%). While no data was collected on anglers' financial situation, people over the age of 36 and 46 and 56 may be more financially established and can afford to spend more money in a host community compared to their younger counterparts.

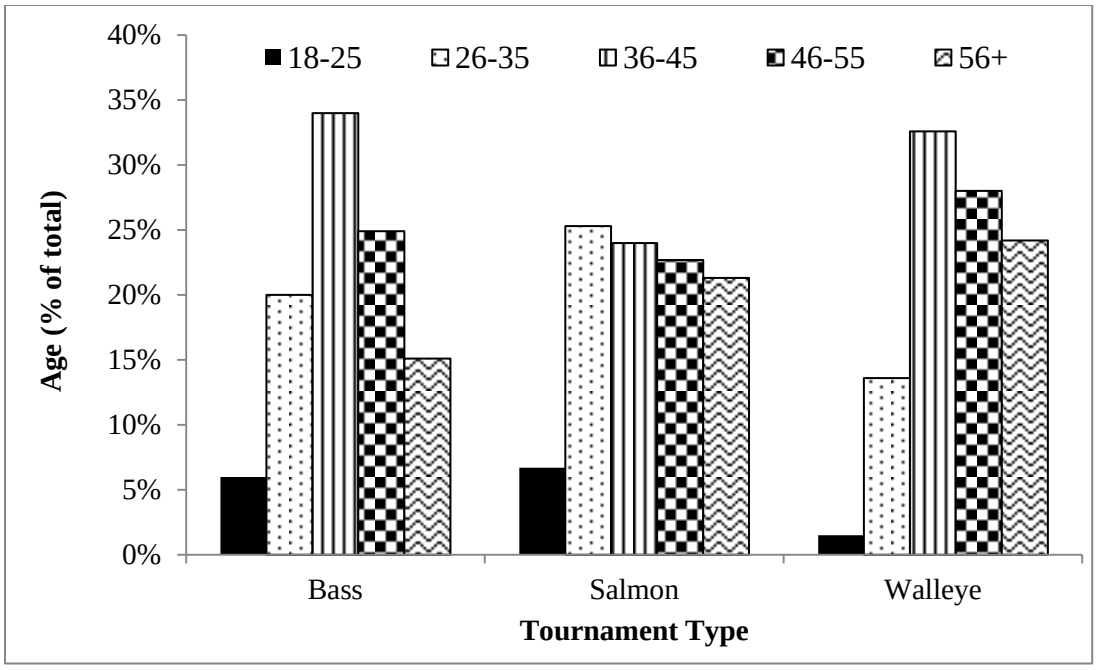


Figure 9. Age distribution (% of total) per tournament type.

Fishing tournaments have the capability to bring in large sums of income to local communities. Many factors such as tournament duration and size contribute to how much money each tournament brings into its host community. In this study, the tournament which brought in the most money was Salmon-A-Rama, a salmon fishing tournament located in Racine, WI which lasts approximately 8 days and draws in upwards of 2,000 contestants. It is estimated that Salmon-A-Rama brought in between $1,049,523.13 and $1,997,108.07 in 2014. Overall, salmon fishermen did spend the least amount of money

in this study, but due to the fact that Salmon-A-Rama lasted the longest and attracted more participants, this tournament brought in the most revenue to its host community's economy. Cabela's NTC – Green Bay brought in the second highest amount of revenue to its host community with amounts ranging between $813,581.34 and $990,267.85. Cabela's NTC – Green Bay hosted 470 walleye anglers and lasted 3 days. There are several reasons why Cabela's NTC – Green Bay lasted fewer days (compared to Salmon-A-Rama) and still brought in a significant sum of money; first, the payout for this tournament, out of all year-round events in North America, is the largest in the industry (R. Cartlidge, personal communication, January 28, 2015). Anglers who wish to compete in Cabela's NTC cannot be provided a spot through an entry fee; instead, they must qualify through a walleye club or circuit and earn a seat; only the top percent of anglers from local, state, and national walleye clubs/circuits can get into the National Team Championship and most anglers only qualify once or twice in their lifetimes. Due to this, most anglers arrive at the host community several days early and stay late to put in their utmost effort and make a true vacation of the event (R. Cartlidge, personal communication, January 28, 2015).

As displayed by Figure 7, there was some disparity in economic impact among tournaments for the same fish species. For example, though Cabela's NTC – Green Bay and Cabela's MWC – Oconto were both walleye fishing tournaments, Cabela's NTC – Green Bay was estimated to have brought in $683,314 more than Cabela's MWC – Oconto. There are many factors which help explain the difference in economic impact between the same types of fishing tournaments. First, the size of the tournament must be taken into account. In this study, the largest tournament, Salmon-A-Rama, brought in

2,000 participants while the smallest tournament, West Suburban Bass Anglers – Madison, brought in 16 participants. The more participants registered to fish in a tournament, the higher the overall economic impact is on the host community. Another factor for the disparity in economic impact between tournaments of the same type is the duration of the tournament. Some tournaments surveyed lasted a weekend while others lasted for almost 2 weeks. The longer the duration of the tournament, the more money brought into local host communities. Finally, the status of each tournament studied greatly affects both participant numbers and the amount of money spent in the host community. As demonstrated by Cabela's NTC – Green Bay, the more prestigious a tournament and the more prize money offered, the greater the economic impact is on the host community. When a tournament offers a greater amount of prize money and participants must qualify to fish in the tournament, more revenue is typically generated because anglers view the tournament as a vacation and chance of a lifetime.

Another important topic to address is the difference in the number of fishing tournaments competed in per year per angler. On average, bass anglers competed in 13.0 tournaments, walleye anglers competed in 7.6 tournaments, and salmon anglers competed in 2.8 tournaments. Reasons as to why this is can be attributed to the fact that smallmouth and largemouth bass are a more widespread species compared to walleye and salmon. Although there is no official data on the frequency of bass, walleye, and salmon fishing tournaments throughout the United States, it can be suggested that a greater number of bass tournaments are held each year. Healthy large and smallmouth bass populations are established in most locations across the United States based on maps generated by the United States Geological Survey. Walleye populations are also considered to be

prosperous throughout most of the northern states (Fuller & Neilson, 2014). Salmon populations are native to tributaries of the North Atlantic and Pacific Ocean and were introduced to the Great Lakes. Due to this, the majority of salmon fishing tournaments are centered along the west and east coasts as well as the Great Lakes.

CONCLUSION

Though economic output varied between tournaments studied, it can be concluded that all fishing tournaments have a positive impact on their host community's local economy. From this study, researchers were able to distinguish several key factors which positively influence the economic impact of fishing tournaments on host communities: high rates of non-local participation, more time spent in the host community, more time spent practice fishing, the ability to attract high numbers of professional anglers, the ability to attract anglers over the age of 36, longer tournament durations, greater tournament sizes, and the overall positive reputation of the tournament. Overall, this study brings to light the positive effects that fishing tournaments have on the communities which host them. With greater emphasis being placed on aquatic recreation in Wisconsin, competitive fishing tournaments will expectantly become more numerous and begin to draw in greater numbers of participants and spectators for future generations.

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APPENDIX A

COPY OF SURVEY COMPLETED BY TOURNAMENT ANGLERS

Economic Impact of Fishing Tournament Survey

1. Please indicate tournament type.
   ☐ Salmon ☐ Walleye ☐ Bass

2. Is this tournament local for you (within 50 miles)? Y / N
   - If No, when did you arrive in the area? __/__/2014;
   - and how many days did you spend in the area? _____ days.

3. To estimate the overall economic impact of fishing tournaments, we need to ask about your spending habits on this trip: please estimate your **total** expenses (including any expenses paid by your sponsor).
   a. Hotels, motels, Bed/Breakfast, camping $_____
   b. Grocery stores $_____
   c. Restaurants $_____
   d. Automobile transportation (fuel, rental cars, repairs, etc.) $_____
   e. Boat operation (fuel, oil, service, etc.) $_____
   f. Fishing equipment and gifts $_____
   g. Boat launch fees $_____
   h. Entrance or parking fees $_____
   i. Entertainment (gambling, theatres, bowling, etc.) $_____
   j. Other; please specify_____ _____ $_____

4. Including you, how many people are in your travel party? _____

5. Did you "practice fish" for this tournament? Y / N
   - If Yes, how many days did you do so? _____ days.

6. In a given year, how many fishing tournaments do you compete in? _____

7. Have you competed in fishing tournaments in any other states? Y / N
   - If Yes, which states? _____

8. How many years have you competed fishing in tournaments? _____

9. What zip code is your residence located in? _____

10. Check the box next to your age group.
    ☐18-25 ☐26-35 ☐36-45 ☐46-55 ☐56+

11. Please indicate whether you were the boat owner or a co-angler.
    ☐Boat owner ☐Co-angler