

# Fish and Wildlife Resources in Indiana

FNR-IDNR-101-W



## Fishing in Indiana Motivations of Indiana Anglers 2005 Survey

Shorna Broussard, Alicia Haley, Matt Burlingame, and Stu Shipman

### Introduction

Indiana anglers have many different motivations for fishing. Some fish to get away from their regular routine; others fish for sustenance. There are also specific characteristics of fishing locations that are desirable to anglers. Knowing the motivations of anglers will help fisheries managers create programs and manage sites in such a way that will encourage greater fishing participation among the angler population. Human dimensions research also provides insights on why some anglers drop out of fishing and what will motivate lapsed anglers to resume fishing.

### Demographics of Indiana Anglers

A 2005 Indiana Licensed Angler Survey conducted by the Division of Fish and Wildlife (DFW) and Purdue University<sup>1</sup> was sent to 7,000 licensed anglers holding either a resident, 1-day, or combined hunting/fishing license. Twenty-seven percent or 1,887 anglers responded to the survey. Of these responding anglers, 93% were Caucasian and 2% were African American. Hispanic, Asian, and Native American anglers each represented approximately 1% of anglers in Indiana. There were also 2% of the respondents who stated that their race was other. As for gender, 81% of Indiana anglers were male, and 19% were female. The average



Ed Braun

age of Indiana licensed anglers is 48 years with a range of 18 years to 80. The mean education level of anglers in Indiana is between trade or technical school and having completed some college education. The average household income of anglers ranged from \$50,000 to \$59,000. Of anglers that are married, approximately 54% have spouses who also fish. For anglers who have children under the age of 17 living at home, at least 85% of those children also fish.

### Motivations

To determine the overall importance of certain fishing motivations to Indiana anglers, a scale of 18 questions capturing varying fishing motivations was used on the Indiana angler survey. These 18 motive

statements were then factored into the following six dimensions: 1) fishing to improve skills and trophies; 2) fishing for the thrill of the catch; 3) fishing for rest and relaxation; 4) fishing to experience nature; 5) fishing for the social time with friends and family; and 6) fishing for sustenance.

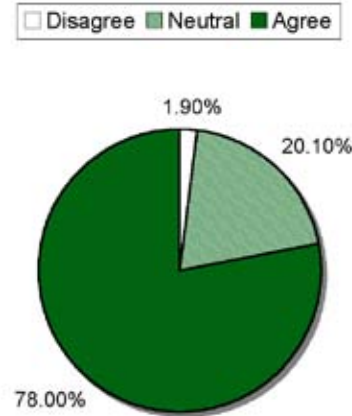
The rest and relaxation motivation had the highest mean agreement with 78% of anglers fishing for rest and relaxation. This motivation included the statements for relaxation, to get away from the regular routine, and to get away from the demands of other people. Sixty-nine percent of anglers also fish to experience nature. The fishing to experience nature motivation included the questions to be outdoors, to be close to the water, and to experience unpolluted natural surroundings.

The fishing for the thrill of the catch factor was just behind the experiencing nature factor when it came to agreement among anglers, with a 67% of anglers fishing for the thrill of the catch. The thrill of the catch motivation included the questions: for the experience of the catch, to experience adventure and excitement, for the fun of catching fish, and for the challenge or sport. Additionally, 43% of anglers fish for social time with friends and family. This motivation included the questions to be with friends and for family recreation.

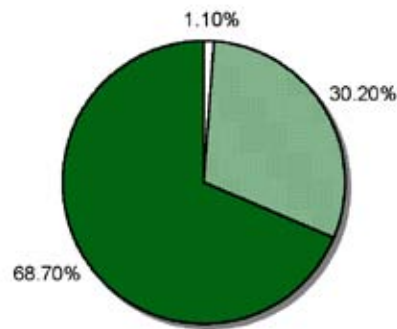
Two motivation factors were not particularly salient with Indiana anglers. Twenty-two percent of Indiana anglers fish for sustenance. This motivation included the questions to obtain fish for eating, and to catch a limit comprised the fishing for sustenance factor. Lastly, less than 1% of anglers agreed that fishing to improve skills and win trophies was a major motivating factor for their angling. The fishing to improve skills and win trophies motivation included the questions to obtain trophy fish, to test equipment, to win a trophy or prize, to develop skills, and for challenge or sport.

Anglers were given the opportunity to provide open-ended comments at the end of the survey. Of the anglers who commented about fisheries management, approximately 16% discussed fishing motivations. Four broad motivations that anglers identified were: fishing as a family activity, fishing bringing back childhood memories, fishing as a great past time they wanted to keep up with, and that being out on the water brought a sense of enjoyment and contentment.

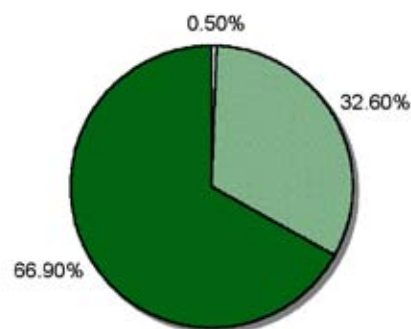
**Fish for Rest and Relaxation**



**Fish to Experience Nature**



**Fish for the Thrill of the Catch**



### Fishing Preferences

To determine overall attitudes towards what characteristics anglers are looking for when choosing a fishing location, a scale of 14 questions capturing the range of fishing site preferences was used on the Indiana angler survey. These items factored into 3 dimensions as follows: 1) facilities are important to fishing experience; 2) proximity is important to fishing experience; and 3) being undiscovered and fee free is important to fishing experience. The facilities dimension included site characteristics such as fishing where restrooms, campsites, boat launches, picnic tables, boat rentals, trash disposals, bait and tackle shops, where piers or jetties are available, and fishing where you do not have to walk more than 15 minutes to get to your location. The proximity dimension includes site characteristics such as being close to home or work. Lastly, the undiscovered and fee free dimension covered characteristics that include fishing in new waters, fishing in an area that doesn't have a users fee, and fishing in natural settings with few man made structures.

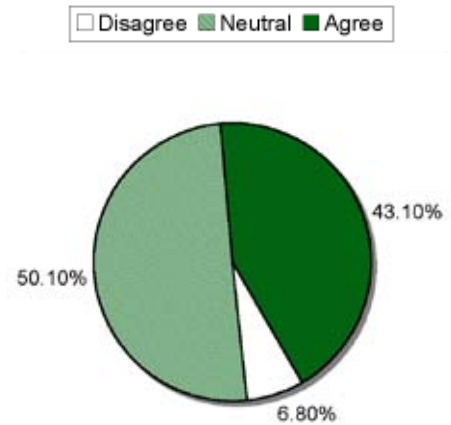
The most salient fishing preference for this sample was being undiscovered and fee free with almost 70% of the anglers who responded to the survey being in agreement with this dimension of fishing location. Alternatively, about 19 % of anglers were in agreement with characteristics that made up the proximity dimension, suggesting that many Indiana anglers are willing to travel a distance to fish. Likewise for facilities, anglers had neutral attitudes toward many of the amenities that could be provided on location.

On the open-ended comments section of the survey, about 11% of anglers who made comments related to fisheries management commented on their fishing preferences. Anglers noted particular lakes, reservoirs, rivers, streams, and ponds where they prefer to fish including: Patoka Lake, many strip pits, and Lake Michigan. Additional comments were related to where anglers would like to see new fishing spots, including more lake fishing in southern Indiana.

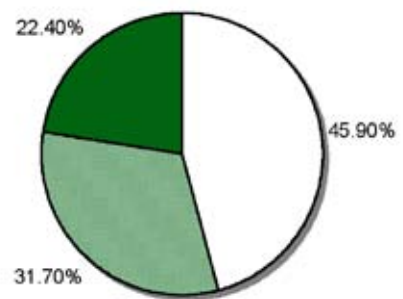
### Lapsed Anglers

Of the respondents who answered the angler survey, 11% had not gone fishing in Indiana in the past year. When asked why, the primary reasons stated were lack of time due to both work and family obligations. License fees being too high and not having a place to fish that was close to home were other factors that ranked high amongst lapsed anglers. Few respondents indicated that having no one to fish with, not having

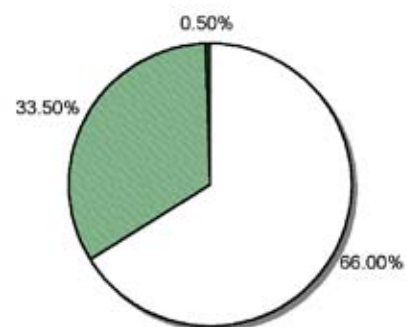
### Fish for the Social Time With Friends and Family



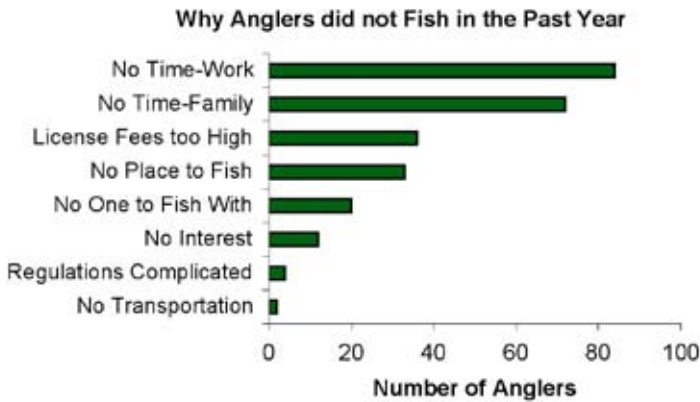
### Fish for Sustenance



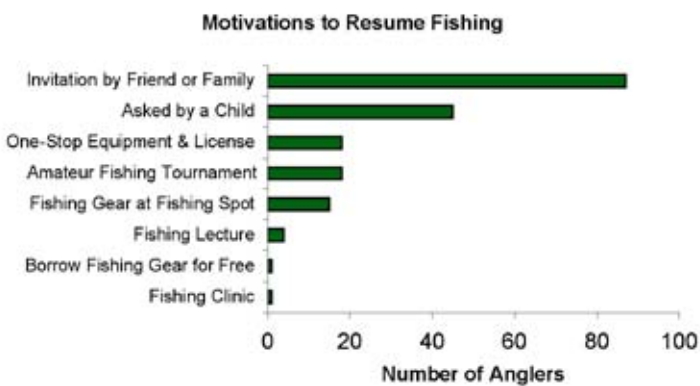
### Fish to Improve Skills and Win Trophies



an interest, the regulations being too complicated, and no transportation to get to the fishing location were important reasons why they did not fish in the past year.

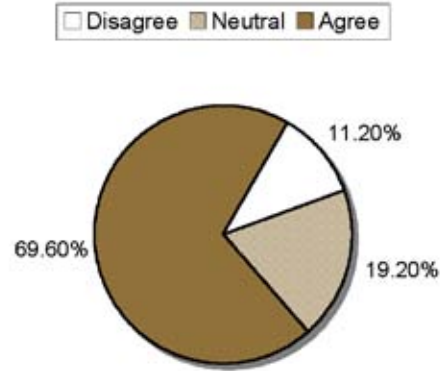


Lapsed anglers were also asked what would motivate them to resume fishing. The majority stated that an invitation from a friend or family member would be a motivating factor. Being asked by a child was also a main motivating factor to resume fishing. Other factors that would motivate anglers to resume fishing, but were not ranked as highly include: one-stop equipment and license purchasing, amateur fishing tournaments and having fishing gear provided at fishing locations. Having fishing lectures, borrowing fishing gear for free, and fishing clinics were ranked the lowest by anglers.

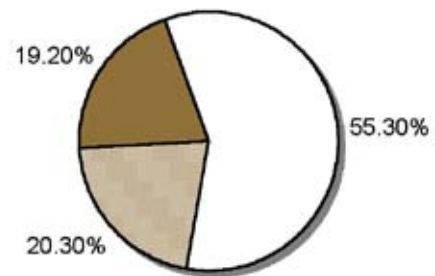


On the open-ended comment section, approximately 10% of the anglers who commented on the human dimensions of fisheries management, spoke about why they stopped fishing, and what would motivate them to fish again. In addition to the reasons

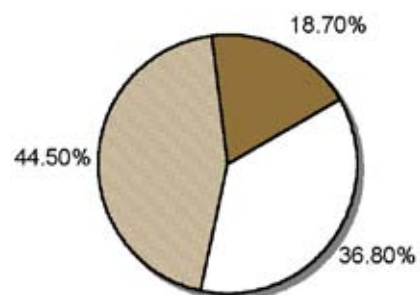
**Undiscovered and Fee Free Sites Influence Where you Fish**



**Proximity Influences Where you Fish**



**Facilities Influence Where you Fish**



on the survey, open-ended comments provided additional reasons why Indiana anglers had stopped fishing. Concerns that were mentioned include: wanting to be able to catch a reasonable amount of fish, and being able to eat the fish they catch without fear of contamination, the closure of facilities and the DFW not keeping up with other fishing locations, and lacking information about where to go fishing and how to get started. Also, there were anglers who had mentioned that they now fish out of state because it is cheaper and better fishing can be found (i.e., more to catch, less people, and they can eat what they catch). Motivations that would encourage these lapsed anglers to resume fishing included having better access to fishing locations, not paying access fees, eating the fish caught, and having knowledge of where to fish.

With our data, we wanted to investigate if there was a difference in the strength of attitudes between active and lapsed anglers. In all cases, active anglers held significantly stronger attitudes toward “fishing to improve skills and win trophies,” “fishing for thrill of the catch,” and “fishing to experience nature” dimensions of fishing motivations compared to lapsed anglers. There was no difference in “the fishing for rest and relaxation,” “fishing for the social time with

family and friends,” and “fish for sustenance” angling motivations between lapsed and active anglers. Active anglers also held significantly stronger attitudes toward the “undiscovered and fee-free sites influence where you fish” when compared to lapsed anglers. There were no differences between active and lapsed anglers in preferences for “facilities influence where you fish” or “proximity influences where you fish”.

## Conclusions

Looking at what motivates anglers to fish gives fisheries managers an idea of what key areas they should focus on when creating programs to entice people to fish. Also, by knowing what Indiana anglers want in terms of amenities at a fishing location, fisheries managers can try to create fishing locations with different types of anglers in mind. According to results from the Indiana angler survey, managers should emphasize the “rest and relaxation” and the “experiencing nature” aspects of fishing. Also, many Indiana anglers are interested in the “thrill of the catch”, so any work that fisheries managers can do that creates a sense of adventure and challenge would garner a good response from anglers.

Indiana anglers also are searching for waters that are new to them and free from man-made structures. Combining some of these aspects and fishing locations that do not require a user fee would attract many anglers to these fishing holes.

Lapsed anglers could be targeted for a marketing campaign. Lack of interest, transportation, and unawareness of regulations were not major issues for Indiana anglers that had a lapse in their license. Therefore, appealing to the primary factors that did matter such as involving a family member, friend, or a child in their fishing experience would be enough to potentially get them back “on the hook.” Also, providing programs that accommodate the average work schedule would be well received by this group. Secondary factors in letting their licenses lapse were not having places to fish, not having anyone to fish with, and license fees that were too high. Secondary factors to motivate these lapsed anglers back to fishing were one stop equipment and license, tournaments, and providing gear. Lapsed anglers were also more likely to have children at home than were active anglers. Messages related to the family-centered, social, and relaxation aspects of fishing would be well received.



Tim Pickering

Open-ended comments provided additional insights into motivations that were important to anglers. One of the most salient motivations stated in the open-ended comments was going fishing because it was something they used to do as a child. Many commented on how they like to take their children and grandchildren fishing because their parents and grandparents took them. The open-ended comments suggest that it is important to involve children in fishing if fisheries managers want to create lifelong anglers. By understanding the needs and motivations of Indiana anglers, fisheries managers should be able to craft programs and enhance habitat in ways that will lead to more satisfied anglers.

For more information about fishing in Indiana visit: [www.in.gov/dnr/fishwild/](http://www.in.gov/dnr/fishwild/) or contact the following authors.

## About the Authors:

**Shorna R. Broussard, Ph.D.**  
Department of Forestry and Natural Resources  
Purdue University  
195 Marsteller Street  
West Lafayette, IN 47907-2033  
Office: (765) 494-3603  
Email: [broussar@purdue.edu](mailto:broussar@purdue.edu)

**Alicia Haley**  
Department of Forestry and Natural Resources  
Purdue University  
195 Marsteller Street  
West Lafayette, IN 47907-2033  
Office: (765) 494-0825  
Email: [abhaley@purdue.edu](mailto:abhaley@purdue.edu)

**Matt Burlingame**  
North Fisheries Research Biologist, INDR  
Northeast Regional Office  
Division of Fish and Wildlife  
1353 South Governors Drive  
Columbia City, IN 46725-7539  
Office: (260) 244-6805  
Email: [mburlingame@dnr.IN.gov](mailto:mburlingame@dnr.IN.gov)

**Stu Shipman**  
Northern Fisheries Supervisor, Districts 1-4  
Northeast Regional Office  
Division of Fish and Wildlife  
1353 South Governors Drive  
Columbia City, IN 46725-7539  
Office: (260) 244-6805  
Email: [sshipman@dnr.IN.gov](mailto:sshipman@dnr.IN.gov)

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