

Fish and Wildlife Resources in Indiana

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Fishing in Indiana Information Use, Preferences, and Specialization of Indiana Anglers 2005 Survey

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Introduction

Anglers have many preferences regarding the best places to fish and what fish they feel are the best to catch. Many of these differences stem from the skill level and specialization of the angler and how they use information to make fishing decisions.

Demographics of Indiana Anglers

A 2005 Indiana Licensed Angler Survey conducted by the Division of Fish and Wildlife (DFW) and Purdue University¹ 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 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



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have children under the age of 17 living at home, at least 85% of those children also fish.

Angler Use of DFW Information

DFW has many outlets to dispense information about fishing in Indiana, which include Division of Fish and Wildlife fishing reports, open houses, fish consumption advisories and a DFW Website. Information on the quality of fishing in an area can be found in the fish consumption advisories prepared by the DFW. Fishing consumption advisories can also be found at the Indiana State Department of Health Website and the Purdue University Website.

Seventy-nine percent of the anglers who responded to the survey were aware of fish consumption advisories in Indiana. Of these anglers, 45% indicated that this information impacted where they fish.

Thirty-seven percent of anglers stated that they were aware of fishing reports developed by the DFW, and 12% indicated that these reports helped them to determine where to fish. These fishing reports include where anglers can fish in the state and what fish can be found at fishing locations. Thirteen percent of anglers were aware of the open-houses held by the DFW to receive input on proposed administrative rule changes for fisheries regulations. However, less than 1% of anglers actually attended one of these open houses.

Approximately half of respondents to the survey said they were aware of the DFW Website. Of these respondents, 61% had visited the Website. The majority of the anglers who use the Website (89%) felt that the information provided on the Website was very or somewhat useful for making decisions on where to fish and for what type of fish.

Anglers were also given the opportunity to provide open-ended comments at the end of the survey. Of the anglers who commented on human dimensions of fisheries management, 5% discussed their use of fishing related materials and their educational needs. Comments anglers made regarding the use of information and need for education included wanting maps of fishing locations, seeing pictures of fish so they can identify what they catch, and receiving updates regarding the stocking of fish. They would like this information to be posted on the Division of Fish and Wildlife Website. Other anglers commented on how they would like the DFW to reach out to children in order to bring new anglers into the sport.

Skill and Specialization

Many of the anglers' preferences come from different experiences and specializations. Specialized anglers may target a particular species or may be seeking a challenge, while an average skilled angler may be content just putting the pole in the water and catching something every once in a while.

When comparing their fishing skill level to other anglers, about half of the respondents felt that they were average anglers, while 39% rated their angling ability as above average. Three percent of anglers consider themselves to be experts when it comes to fishing, and 6% rated themselves as beginners. About half of the anglers in Indiana have been fishing

between 30 and 50 years. There were 92 anglers who have been fishing for less than 10 years, and 24 anglers had more than 60 years of fishing experience.

Eight percent of the anglers participated in a fishing tournament in Indiana in 2004, and 12% purchased an Indiana trout/salmon stamp during 2004. In addition, 5% of respondents belonged to a fishing club in Indiana.

We wanted to investigate whether skill level varied by fishing club membership, tournament participation, and rating of fishing quality in Indiana. Analysis was conducted to compare the mean skill level of anglers and whether or not the angler participated in a tournament during the past year. There was a significant difference in skill level between those who participated in fishing tournaments and those who did not fish in tournaments.

The average skill level of those who participated in tournaments was significantly higher than the average skill level of those who did not participate in tournaments. Additionally, more analysis was conducted to compare the mean skill level and whether or not the angler belonged to a fishing club. There was a significant difference in skill level between those who belonged to a fishing club and those who did not belong to a fishing club. The average skill level of those who belonged to a fishing club was significantly higher than the average skill level of those who did not belong to a fishing club.

Fishing Preferences of Anglers

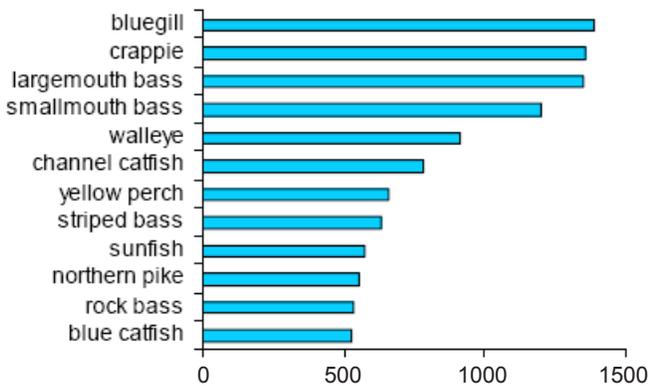
To better understand what anglers in Indiana seek while fishing, survey questions asked what Indiana anglers prefer to fish for and where and how they fish. Anglers were first asked to rate fishing quality in Indiana. The majority of Indiana anglers considered fishing in Indiana to be either good (41%) or fair (47%).

Four percent of anglers rated the quality of fishing as excellent, and 8% think the quality of fishing in Indiana is poor. Approximately half of anglers (46%) feel that fishing quality in Indiana is staying the same, while 35% find the quality of fishing to be declining. The additional 19% of anglers find the quality of fishing in Indiana to be improving. A little over half of anglers (51%) also feel that the overall performance of the Division of Fish and Wildlife is good. Six percent of anglers feel that the overall performance of the DFW is excellent, 35% think their performance is fair, and 8% feel their performance is poor.

We also wanted to investigate if there was a significant difference between the skill level of an angler and how they rated the fishing quality in Indiana. Analysis found that there was not a significant difference between skill level rating and rating of fishing quality in Indiana. Anglers of all skill levels rated the fishing quality near 2.5 on a 4-point scale ranging from poor (1) to excellent (4).

The most popular way to fish among Indiana anglers is by boat or from the bank. They are less likely to fish by wading, from a pier, or through the ice. For bodies of water, Indiana anglers prefer to fish in private ponds, small rivers and streams, and small reservoirs. They also fish in large reservoirs, natural lakes of Northern Indiana, strip pits and quarries, large rivers, and Lake Michigan and its tributaries. However, these bodies of water were not ranked as highly among anglers.

To determine which fish species Indiana anglers like to fish for, they were given a list of 26 species and were asked which species they would prefer to catch. The most preferred species were bluegill, crappie, largemouth bass, smallmouth bass, walleye, channel catfish, yellow perch, striped bass, sunfish, northern pike, rock bass, and blue catfish. They were also asked of the 26 species presented, which they actually fish for most often. The top three species that respondents actually fish for are bluegill, largemouth bass, and crappie.



Most fish species reproduce adequately enough to provide good fishing without stocking. However, some species that will not successfully reproduce must be stocked by the DFW. Stocked species give Hoosier anglers a wider range of fishing opportunities

in Indiana. The three most prominent responses for stocked fish preferences were walleye, striped bass, and channel catfish. Species that received lower rankings by Indiana anglers include: inland rainbow trout, muskellunge, brown trout, sauger, steelhead, chinook salmon, and coho salmon.

Conclusions

Where and how anglers choose to fish can be influenced by the experience and specialization of the angler, and how they access information about fisheries resources in Indiana. If given a choice, many Indiana anglers would prefer to be out on their boats, on the banks, or on private ponds fishing for bluegill, crappie, or bass. They would also like to see walleye, striped bass, and channel catfish continue to be stocked in waters around Indiana.

The best way reach the majority of anglers in Indiana is by keeping the DFW Website up to date with events and information. Anglers will use the Website; they need the Website to gather information they may not otherwise be able to find. The open houses and fishing reports were useful to a small percentage of anglers, but the majority did not take advantage of these resources. Also, many anglers use the fish consumption advisories to help them determine their next fishing location. Increased publicity of Indiana fish consumption advisories by the DFW will help to make consumption of recreationally caught fish a safe activity. Overall, Indiana anglers feel that the Division of Fish and Wildlife has been meeting their needs and that the quality of fishing in Indiana is fair to good. On the whole, quality fishing combined with a little challenge and desirable locations, can lead to many satisfied anglers.

For more information about fishing in Indiana visit the following Web site: www.in.gov/dnr/fishwild/

For more information regarding fish consumption advisories in Indiana, visit the following Indiana State Department of Health's Website:

http://www.in.gov/isdh/dataandstats/fish/fish_adv_index.htm

or the Fish for Your Health Website:
<http://fn.cfs.purdue.edu/anglingindiana/>



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