

# Fish and Wildlife Resources in Indiana

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## Fishing in Indiana Attitudes of Indiana Anglers Toward Policies and Regulations 2005 Survey

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### Introduction

As the human population in Indiana continues to grow and change, so does the population that constitutes Indiana anglers; but in the future, we'll see a change in the demographics of Indiana anglers. Each angler will enter the sport of fishing with different expectations and preferences as to what they want out of a fishing experience. Due to the various needs and wants of Indiana anglers, fisheries biologists must be able to manage people, as well as manage fish and aquatic habitats. Research in the area of human dimensions has been conducted to gather this information. Effective policies and regulations can be created when fisheries managers combine human dimensions research with the scientific knowledge that is guided by the fisheries biologists.

### 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, one-day, or combined hunting/fishing licenses. 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.



Brian Schoenung

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 years. 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 the anglers who 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.

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**Angler Attitudes Toward Policies**

The survey administered to licensed Indiana anglers asked questions regarding angler’s attitudes toward certain policies and statements related to policies. A scale of 15 questions capturing the full range of attitudes toward policies was used. These items factored into six different dimensions: 1) population protection should be present; 2) DFW management improves fishing success; 3) piers and speedboats create negative impacts to fishing experience; 4) aquatic vegetation control is needed; 5) government involvement is important to improve fishing; and 6) tournament fishing is a positive aspect of fishing.

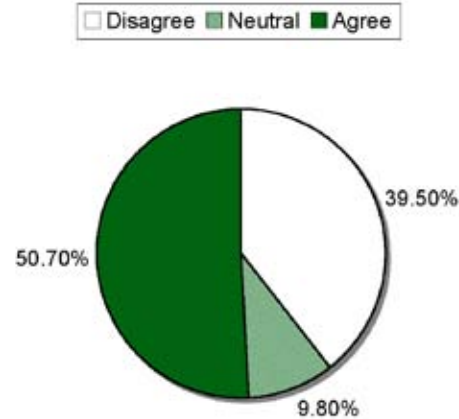
Over half of Indiana anglers agreed that population protection regulations should be in place. These regulations include more restrictive bass size and creel limits to the improve quality of bass fishing and catch and release programs for predators like bass, walleye, and muskellunge. Approximately half of Indiana anglers also agree that DFW management improves fishing success. Resources that could help improve fishing success include having a Website that posts tournament schedules and stocking more fish in order to improve fishing quality. Seventeen percent of Indiana anglers were in agreement that the operation of speedboats detracts from a quality fishing experience, and that piers from private property take up too much public fishing water.

On the open-ended comment section of the survey, 10% of the anglers who commented on fisheries management identified the negative impacts of boats and jet-skis. Issues that were mentioned by anglers were the need for size and number limits on boats that can be launched due to overcrowding of lakes and reservoirs, the need for posted speed signs, and stricter enforcement of speed and wake zones. Others commented on how speed boats and jet skis were disruptive to fishing and family fishing experiences.

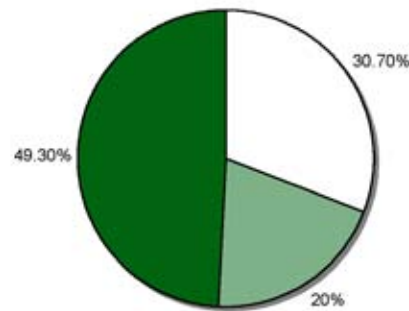
Indiana anglers also had a neutral opinion on whether aquatic vegetation control is needed. Thirteen percent of anglers agreed with statements about aquatic vegetation that included the following: more emphasis is needed on aquatic vegetation control; aquatic vegetation is a nuisance, aquatic vegetation can improve fishing and fish populations, and aquatic invasive species are limiting fishing experiences.

Most anglers were neutral as to government involvement, with 9% of anglers being in agreement with this government involvement. Statements in

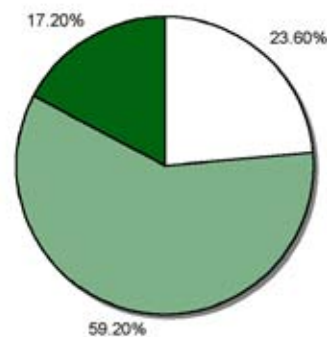
**Population Protection Regulations Should be Present**



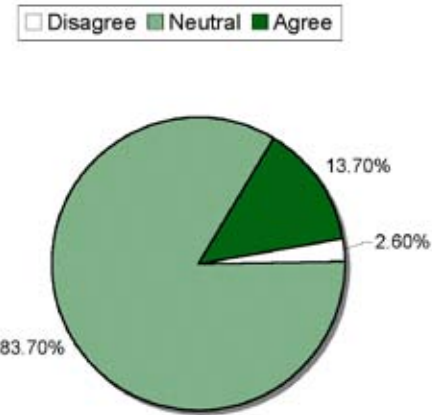
**DFW Management Improves Fishing Odds**



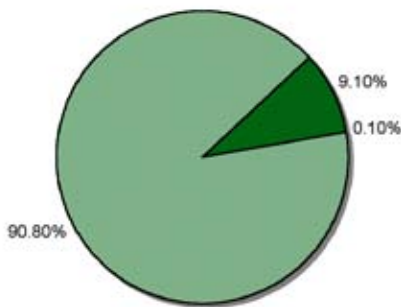
**Piers and Speedboats Create Negative Impacts to Fishing Experience**



**Aquatic Vegetation Control is Needed**

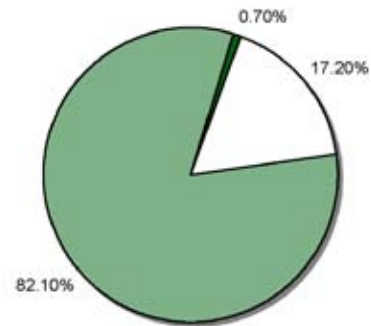


**Government Involvement is Important to Improve Fishing**



this dimension include: over harvesting limits fishing quality, availability of free public access to fishing areas, and stricter water quality regulations leading to improved fishing. The tournament fishing dimension was the least salient among anglers, with less than 1% of anglers being in agreement with these items (i.e., fishing tournaments should be exempt from some size and creel limits, and tournament fishing has no effect on the future of sport fishing).

**Tournament Fishing is a Positive Aspect of Fishing**

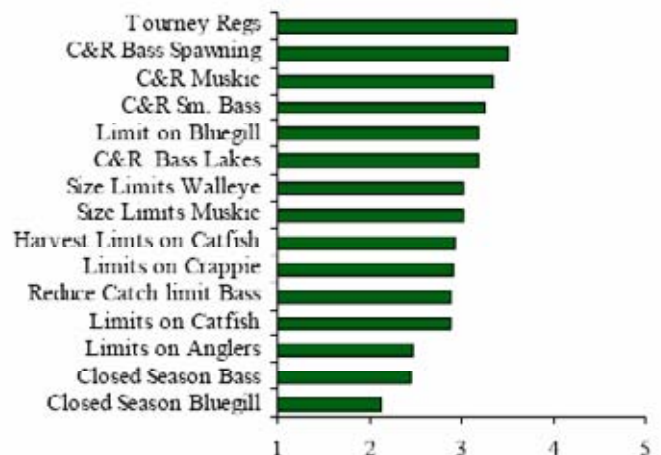


At the end of the survey, a section for open-ended comments was provided. This provided additional insights into angler attitudes toward policies. These open-ended comments were coded; 5% were related to fishing tournaments. While several anglers stated that they enjoyed fishing tournaments, most of the comments regarding tournaments were critical. Issues related to tournaments that were brought up were: too many tournament anglers, aggressive fishing by these anglers, and the belief that certain fish populations are harmed by tournaments.

**Angler Attitudes Toward Specific Regulations**

Indiana anglers were asked to rate their agreement (1=strongly disagree, 2= disagree, 3= undecided, 4= agree, 5= strongly agree) with 15 statements regarding specific fisheries policies and regulations.

**Attitudes towards Regulations**



The statement that had the highest agreement was placing tighter regulations on fishing tournaments. Even though this statement had the highest mean agreement, the average mean was just over 3.0, which suggests that the anglers are undecided on this topic.

Catch and release for bass during the spawning season and starting a catch and release programs for both muskellunge and smallmouth bass had slightly lower mean agreements. Imposing a harvest limit on bluegill, having catch and release only for bass on designated lakes, imposing size limits on walleye and muskey, having harvest limits on catfish, size limits on crappie, reducing catch limits on bass, imposing size limits on catfish, limiting the number of anglers on certain lakes, and having a closed season for bass, had even lower agreements by anglers. Having a closed season for bluegill was the least salient regulation among anglers. The majority of the means for this question were close to undecided (3), suggesting that most anglers do not have strong opinions toward many of the regulations.

Attitudes toward policies and regulations represented 22% of open-ended comments received regarding human dimensions of fisheries management. Most, but not all, anglers favored catch and release and creel and slot limits. Some anglers also noted that they thought closed seasons had a positive impact on fishing quality.

## Conclusions

By examining angler preferences for policies and regulations, fisheries managers can better manage for these preferences. Hoosiers are concerned about population protection and support DFW policies that improve fishing success.

According to results from the Indiana angler survey, anglers would be most supportive of policies that help to protect bass and other predatory populations and that help improve fishing success for anglers as long

as these policies are also biologically viable. Anglers would also like to see stricter regulations for fishing tournaments, and a strong policy on catch-and release fishing. By combining the recommendations and needs of anglers with sound scientific knowledge, fisheries managers can craft policies that will lead to more satisfied anglers.

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