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**Kentucky Fishermen Attitude Survey: 1982**

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## CONTENTS

Abstract . . . . .	.1
Introduction. . . . .	.2
Procedures. . . . .	.3
Results . . . . .	.6
Discussion. . . . .	16
Recommendations . . . . .	21
Appendix A. . . . .	25

## ABSTRACT

A survey of the attitudes, opinions, and preferences of Kentucky anglers was conducted during November and December 1982. A total of 9,900 questionnaires was distributed to a random sample of resident anglers, with 20% (2,016) of the questionnaires being returned and used in the analyses. Responses were analyzed on both a regional and state-wide basis. The typical Kentucky angler spent \$25 or less to travel 50 miles or less to fish 2-6 hours from a boat. Most anglers were males residing in a community of <10,000 people and were not members of any sportsman organizations. Reservoirs (>500 a) were the preferred type of water body to fish by anglers; however, rivers and streams, along with ponds and private lakes were a close second and third. The five most popular fish species in descending order were largemouth and Kentucky bass, crappie, catfish, smallmouth bass, and sunfish.

Most anglers thought the quality of fishing had declined over the past 5 years. Anglers did not recognize overharvest as a problem, although the main reasons given for this decline were related to overharvest, such as not enough fish and too many fishermen. Seventy-two percent of the fishermen did not believe they had to keep bass to have a satisfying bass fishing trip. Anglers also favored the use of length and/or slot limits on black bass. Anglers were overwhelmingly supportive of the fish stocking program and believed that this program, lake fish management and habitat protection, were the most important functions of the Department of Fish and Wildlife Resources. Most fishermen (79%) were aware of the Division of Fisheries, and almost two-thirds (63%) of the anglers rated the Division's performance as

being fair to very good. A majority of anglers believed that policy decisions should be based on both public opinion and scientific research. Ninety-three percent of the fishermen felt this type of survey was a good way to collect people's ideas.

Recommendations based on this survey include the following: increase management efforts statewide for black bass and crappie in reservoirs; increase management efforts on walleye, musky, and trout, particularly in the eastern region; develop educational and promotional programs to inform the public about many of the Division of Fisheries programs, i.e. predator stockings, fishing methods for predator fish, fish stocking practices, etc.; promote the catch and release of certain predator fish, and discontinue the announcement of trout stocking dates.

#### **INTRODUCTION**

In recent years, fisheries agencies have taken a greater interest in becoming more aware of the fishing public's opinions toward fish management programs and needs. Public relations seminars and publications, radio and television shows, conservation education programs, and attitude surveys are means by which federal and state agencies have established contact with the public, both to inform them and solicit ideas and opinions about environmental and fisheries matters.

Fishing habit and angler preference data are lacking in the periodic National Survey of Fishing, Hunting, and Wildlife Associated Recreation. This survey adequately documents characteristics of fishermen, i.e. sex, age, race, household income, education, angler days, expenditures, etc.; however, fishing habits, attitudes, and pre-

ferences are absent. The 1982 angler attitude survey has been the first attempt to survey the attitudes of Kentucky fishermen regarding a variety of fisheries topics.

Expected benefits derived from this survey include: (1) determining anglers fishing habits, attitudes, and preferences (2) determining support for current programs, (3) determining support for developing new programs for protecting and enhancing the fisheries, and (4) measuring the effectiveness of our current 5-year fisheries management plan by conducting a follow-up survey near the completion of the 5-year period.

#### PROCEDURES

Questions used in the survey questionnaire were provided by the Division of Fisheries, Kentucky Department of Fish and Wildlife Resources (KDFWR) and from a literature review of similar surveys. Each of the 59 selected questions was numbered, with each possible response assigned a smaller computer number set off in parenthetical brackets. The questionnaire was pre-tested by members of the General Motors and FMC Bass Clubs of Bowling Green. The physical outlay of the questions and artwork of the questionnaire were established by the Graphics Art Department of Western Kentucky University (WKU). The cover design for the document was provided by the KDFWR. Printing of the questionnaire was by the WKU Print Shop.

Participants in the study were selected from fishing and combination hunting-fishing license receipts for 1981. Only resident Kentucky license holders were selected. The size of the sample population was determined on the basis of the percent error desired in the results. Based upon a desired sample error of 2% and a total of

500,000+ licenses sold in 1981, a sample size of 10,000 was selected, of which 2,800 returns were expected. The number of individuals selected from each Kentucky county was proportional to the number of each license type purchased in that county, based upon the 10,000 sample size. Individual license holders were selected by random computer draw. Since Kentucky license booklets were not completely sold during the calendar year, the average number of licenses sold in each county booklet was established by dividing the total number of licenses sold in each county by the number of license booklets issued to that county. Once this average was determined, the individuals to receive the survey were identified as to license booklet and page number by the random computer draw. All computer programming was accomplished by the Academic Computer Research Center at WKU.

The names and addresses of the sample population were recorded on punch-card transcription forms by personnel of the KDFWR. Information recorded included name, address, age, sex, and county of license purchase. In those cases in which a partial license book did not have sufficient pages to meet the random draw instructions, the next book was chosen. If the designated page was voided or not readable, the next page was selected until a valid name and address was found.

The names and addresses of the sample population were punched onto computer punch cards by personnel of the Office of Institutional Research at WKU. Once punched, the sample list was entered onto a computer tape and a sample list and two sets of address labels were produced. Each individual in the sample was assigned a computer number that was printed on the address label and stamped inside the survey document.

The questionnaire and a size 24, metered, first class, addressed return envelope were inserted into a size 20 envelope bearing the computer address label of the sample participant. Each outgoing envelope bore the logo of the KDFWR, Division of Fisheries, with the words "Fisherman Attitude Survey" in bold type on the face of the envelope. All questionnaires were sent by metered third class mail. Return envelopes were addressed to the Mid-Western District Fishery Biologist Office in Bowling Green. Pre-survey publicity included news releases by the KDFWR to all statewide newspapers and the Kentucky Radio Network. An additional newsgram, subsequent to the KDFWR release, was distributed to all newspapers in the counties of southern and western Kentucky.

The first mailing of the questionnaire occurred during 1-5 November 1982. As completed surveys were returned, the number of the questionnaire was recorded and any written comments on the document were transcribed. After 4 weeks, all members of the sample population not having returned the first questionnaire were sent a second. After a second 6-week return period, which ended on 14 January 1983, the information on all completed questionnaires was transcribed on computer forms and punched on data cards.

The survey information was first sorted by the computer and the frequency of responses to each question was printed. These data were sent to the KDFWR for their suggestions as to analysis and cross referencing. A second frequency of response was then determined and a third set of analyses was developed by the project director. All survey questionnaires containing specific questions for the KDFWR were sorted, the address of the individual placed on the questionnaire, and sent to the KDFWR for their response. All general comments recorded

from the survey were collated into categories, the frequencies of each statement recorded, and sent to KDFWR.

For regional comparisons, the state was divided into three geographic areas by personnel of the KDFWR. The areas and the counties they included are shown in Figure 1. In analyzing the survey response, percentage differences of 6% or greater for each answer were considered statistically different, based upon the 2% error adopted for the survey.

### RESULTS

A total of 9,930 questionnaires was mailed during 25-30 October 1982 and a second follow-up mailing of 6,980 was mailed on 1 December 1982. A total of 2,075 survey documents was returned, of which 2,016 (20%) were completed and not altered as to preclude their use. Seventy-eight percent (1,572) of the returned questionnaires were received from the first mailing and 22% (444) from the second. Table 1 presents a regional breakdown of the mailings and the percent return by region. The western region received the largest mailing (43%) and produced the most respondents (45%) although the percent return from the western region (21.6%) was quite similar to the central and eastern regions. It should be mentioned that the original sampling procedures involved sampling anglers in each of our 7 statewide fishery management districts. Insufficient returns precluded district level data analysis; therefore, the state was divided into three regions (east, central, west) using basic geographic and physiographic differences.



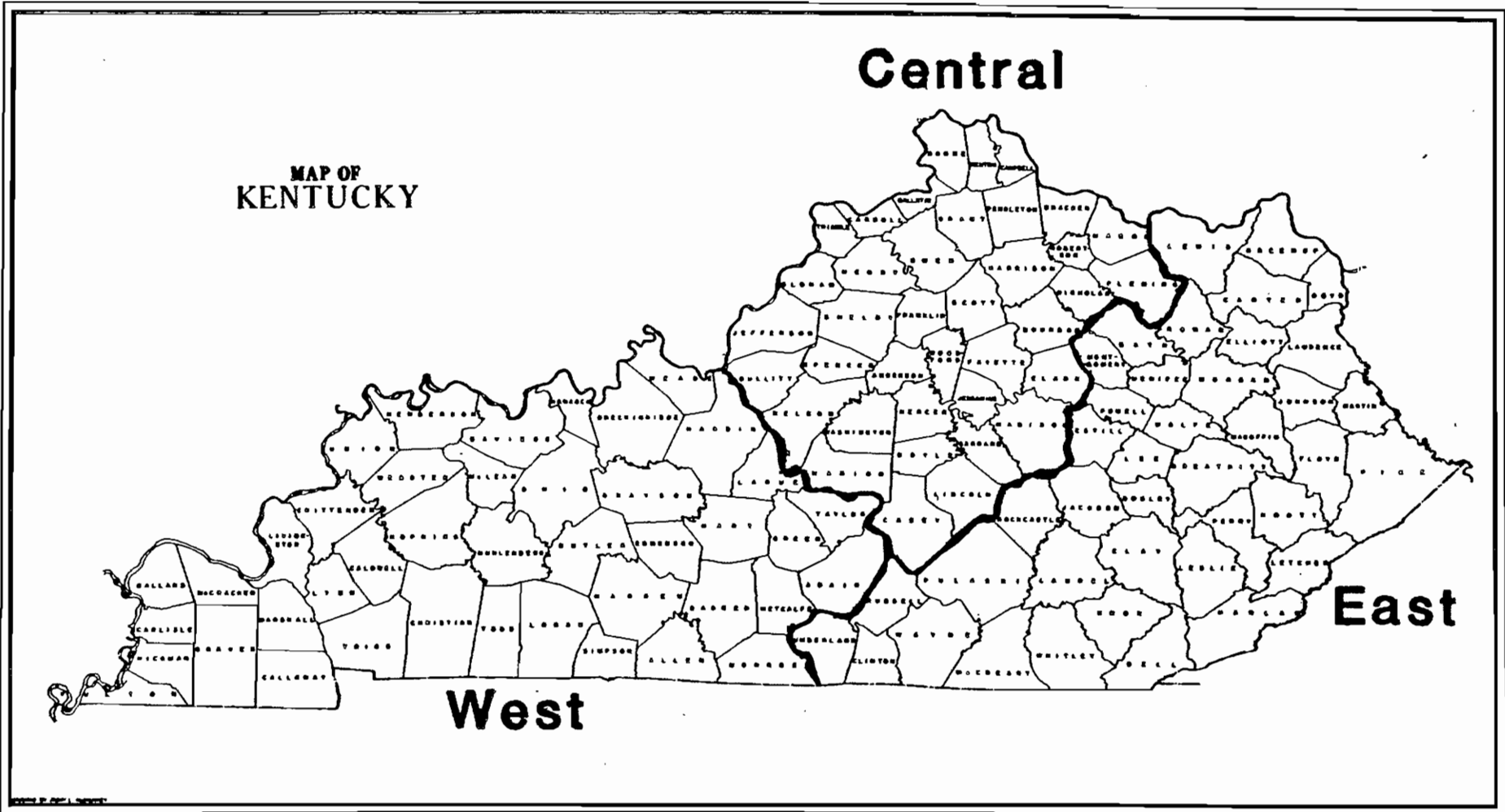


Figure 1. Map of Kentucky showing the three geographic areas used in this study.

Table 1. Regional comparisons of questionnaire response.

	East	Central	West	Statewide
Questionnaires mailed	3,542 (35.7%)	2,134 (21.5%)	4,254 (42.8%)	9,930
Questionnaires returned	623	470	923	2,016
Percent (%) returned	17.5	22.0	21.6	20.3

### Demographics

Angler ages were recorded from license receipts as our random sample was drawn; therefore, we obtained information on ages of non-respondents as well as respondents. Anglers from 40-69 years of age provided the best response rate to the questionnaire of all the age groups (40-49 yr - 17%; 50-59 yr - 14%; 60-69 yr - 6%), while the youngest, 10-19 years old, provided the worst response rate and the greatest number of incomplete responses (8%). The average age of the selected sample was 35, while the average age of the respondent was 36.3 and the non-respondent was 34.8. The average age of males and females responding to the survey, 36.1 and 37.2 years, respectively, was higher than the average age of males and females not responding, 34.7 and 35.4, respectively.

The percent distribution of the age groups of respondent anglers by region are presented in Table 2. No statistical difference in age groups was noted between the three regions. Also, regional differences in respondent and non-respondent ages were very slight.

Table 2. Percent age groups of respondents.

Age	East	Central	West	Statewide
Under 25	24.9	19.6	19.0	21.0
25-34	33.4	30.4	30.2	31.2
35-44	17.9	20.4	21.0	19.9
45-54	11.9	16.6	15.7	14.7
55-64	11.7	12.7	14.0	13.0
65-over	0.2	0.2	0.1	0.1

Questionnaires were not sent to fishermen over 65, since a license is not required; however, 1981 license data were used and some fishermen were recruited into this age group.

Most anglers (81.5%) were males, with females only representing 18.5 percent of the fishing public. Again, there were no statistical differences between the male:female ratio among the three regions. Data on relative differences in male and female responses to other questions were computed; however, those data are not included in this report.

Angler responses according to the size of their residing community indicated most (>50%) of the fishing public lived in communities with populations above 10,000 people, with statistical differences being noted for the various regions. Fewer anglers lived in large communities (>10,000) in the eastern region, and the fewest anglers resided in rural areas (<10,000) in the central region. These regional differences understandably were commensurate with the location of metropolitan areas in the state, although the larger proportion of anglers lived in urban areas as opposed to rural areas.

#### Fishing Habits and Preferences

A typical Kentucky angler is not a member of any sportsman organization (80%) who spends less than \$25 (66%) to travel less than 50 miles (70%) to fish 2-6 hours (56%) from a boat (48%). Statewide,

more anglers purchased fishing licenses (52%) as opposed to combination hunting and fishing licenses (42%). Regional deviations from this norm were slight except for central region sportsmen who were primarily anglers (62%) versus combination hunters and fishermen (34%). Anglers not purchasing a license in 1982 cited a multitude of reasons with not enough spare time (44%) predominating. Generally, less than 40% of the anglers fished outside of Kentucky for freshwater fish and those departing the state made less than 5 trips in 1982. A cross reference of questions revealed that 83% of the anglers who fished outside of Kentucky were fishing for species found within the state - namely largemouth bass, crappie, and catfish, in that order. Finally, of the 20% of the respondents who belonged to sportsmen organizations, 44.3% belonged to Fish and Game clubs and 40.1% were bass club members.

Respondents were asked specific questions about fish species and water body preferences and the number of fishing trips they made. Preference and trip data were compiled as weighted percentages to give proportional weighting to anglers' second and third choices. Statewide, reservoirs were the first choice (27%) for water body preference, followed by rivers and streams (22%) and pond and private lakes (21%). Regionally, these three types of water bodies were also the top 3 choices, with some reversal in the order of preference. In the central region, reservoirs (25%) and ponds and private lakes (25%) were most preferred, while rivers and streams (27%) ranked nearly co-equal with reservoirs (29%) in the eastern region, followed distantly by ponds and private lakes (15%). Trip data to different water body types exhibited a similar trend to that of water body preference on a statewide basis, although regional trip data did not parallel preference data. Less trips were made to rivers and streams (17%) than to

reservoirs (26%) and ponds and private lakes (24%) in the western region, while eastern region fishermen made more trips to reservoirs (28%) and rivers and streams (26%) than to ponds and private lakes (17%). Central area fishermen were more evenly split in their number of trips - ponds and private lakes (27%), rivers and streams (25%), and reservoirs (22%).

The most popular fish species in Kentucky with respect to preference and number of trips for each species were largemouth and Kentucky bass, crappie, and catfish, in that order. Based on weighted percentages, these species accounted for 64% of statewide percentage points available for preference (largemouth bass - 28%, crappie - 20%, and catfish - 16%), with regional data closely resembling this preference ranking and respective percentages. Other preferred species statewide were smallmouth bass (8%), sunfish (7%), white bass (3%), and trout (3%). No statistical differences were recorded in other regional species preference other than differences existing between the rankings of the leading three species, although there were relative differences in the distribution of other species preference. Catfish were notably higher in importance (preference and trip data) in the western region than the other regions, yet their ranking (3rd place) remained the same. Panfish (sunfish) followed in fourth place in both the central and western regions, exceeding smallmouth bass for both preference and number of fishing trips. Angler preference and number of fishing trips for smallmouth bass, musky, trout, and walleye were greater in the eastern region than elsewhere.

Respondents were asked specific reasons for not fishing for musky (and tiger musky), rockfish (and hybrids), walleye, and trout in 1982.

Anglers either did not know where to fish for musky (23%), did not have enough time (20%), did not regard musky as desirable (18%), did not know how to catch musky (18%), or thought it was too far to travel (18%). Reasons for failing to fish for rockfish (and hybrids) were similar for statewide anglers: do not regard as desirable (24%), don't know where to fish (24%), and not enough time (18%). Eastern region respondents significantly differed on this species and felt it was too far to travel (22%) to fish for rockfish. The main response for not fishing for walleye was not knowing where to fish (27%). Trout responses were evenly split - not enough time (22%), too far to travel (21%), and don't know where to fish (20%).

Equally important with species preference and trip data was what anglers perceived as the level of emphasis the KDFWR should place on the management of selected species. Responses were varied for the various species, but no species received a significant response to decrease the present level of emphasis. An increase in emphasis was expressed for black bass (60%), crappie (47%), white bass (40%), and trout (38%). Most anglers felt that maintaining the present level of emphasis for catfish (43%) and sunfish (45%) was adequate, while most anglers had no opinion regarding emphasis on walleye (42%), musky (43%), and hybrid rockfish (39%). Of those anglers who did have an opinion on these species, the greatest percent wanted increased emphasis on walleye and muskellunge. Regional responses resembled these statewide preferences, except for musky (37%) and walleye (48%) in the eastern region where there was a stronger preference for an increase in emphasis. Anglers in the eastern region also had a greater preference for increased emphasis on black bass (72%) and trout (49%) than anglers from the other regions.

Two questions were asked alluding to anglers' perceptions of a quality fishing trip. First, they were asked what they considered as a successful fishing trip. Statewide and regional answers were equally split, with the following answers: catching a few large fish (31%), catching several medium sized fish (31%), and catching several fish of any size (29%). The catch question was followed with a species list and size ranges to determine what anglers considered as a keeper and quality size fish. The results of this question are given in Table 3. No statistical differences in regional responses were detected.

Table 3. Minimum and quality lengths (in) of selected species that statewide respondents considered keeper and quality size fish.

Species	Minimum	Quality
Black bass	12	16
Musky	24 & 30	40
Rockfish	12	18-20
Walleye	12-16	20-24
White bass	10-12	14-20
Sauger	12	16-20
Sunfish	6	8-10
Crappie	8	12
Catfish	12	24
Trout	10-12	14-18

Sizes given in this table based on statewide responses.

#### General Opinions

Most anglers statewide (44%) felt that the quality of fishing had declined over the past 5 years; however, the remaining 56% were split between believing that fishing had improved (28%) and had stayed the same (28%). Respondents were equally divided as to the reasons this decline occurred: too many fishermen (19%), too many small fish (18%),

and not enough fish (21%). However, two-thirds (68%) did not feel that catching too many fish was a problem when asked "Do you feel catching too many fish is a problem in Kentucky waters". A significant majority (>75%) of respondents expressed satisfaction with present creel limits for black bass, rock bass, walleye, sauger, rockfish, and trout. Less than 30% of the respondents felt the creel limits were too high for crappie (26%) and white bass (28%), while the majority (76%) felt them to be adequate.

A series of questions were asked regarding fish stocking. Anglers were overwhelmingly supportive (94%) of fish stocking programs. The basis for fish stocking was less clear; the dominant category regionally and statewide was to support native lake and stream fish(40%). Second in importance was to establish new lake fish (24%). Stocking emphasis (statewide) was directed toward the following species: largemouth bass (37%), trout (16%), rockfish (13%), walleye (12%); hybrid rockfish (12%), and musky and tiger musky (10%), in that order.

Four other questions concerned general opinions of anglers. Slightly less than one-half (47%) favored bass tournaments, while 27% had no opinion. Concurrently, over one-half (52%) felt that bass tournaments had no affect on their fishing activities or opportunities, while 32% felt there was some impact. Most respondents (44%) opposed commercial netting of rough fish during the winter months, with 34% favoring netting and 22% offering no opinion. Significantly more (42%) respondents favored hand grabbing for catfish, although 31% had no opinion.



## Opinions and Knowledge of Specific Projects

### Black Bass

A series of questions was asked relating to black bass size limits and criteria for defining a successful bass fishing trip. As previously stated, black bass were the most preferred species in Kentucky, and more fishing trips were made for black bass than any other species. Most people (44%) preferred the statewide 12-inch minimum size limit, but indecisiveness was evident when respondents were asked if the 12-inch size limit had improved bass fishing. Respondents were split on their opinions of the effects of the 12-inch size limit on ponds (<100a) and rivers and streams, while 44% of the anglers believed the size limit has improved bass fishing on small lakes (10-500a). Most people (38%) felt the size limit had improved reservoir (>500a) fishing; however, an equal percent did not know. Respondents were generally unfamiliar (54%) with the slot limit regulation, but they favored (53%) the enactment of slot limits on bass at certain Kentucky lakes.

Approximately three-fourths (72%) of the fishermen did not feel that keeping bass was necessary for a satisfying bass trip. Responses to the question, as to what these same fishermen considered a satisfying bass trip, were difficult to interpret since their opinions were equally mixed. For instance, anglers considered catch and release of 1-4 12-inch or longer bass (24%), catch and release of 5-10 12-inch or longer bass (22%), and catching 5 or more bass of any size (21%) as equally satisfying. Anglers that indicated they must keep bass for a satisfying trip (28%) felt that keeping 1-4 keeper-size bass (32%) and keeping 5-10 keeper-size bass (24%) was necessary for satisfaction.

## Trout

Fourteen percent of the respondents purchased a trout stamp in 1982, with the eastern region (28%) more than doubling the sales of each of the other two regions. The majority (62%) of trout anglers did not favor publicizing trout stocking dates and indicated they fished for trout anytime they could (80%) rather than the day of stocking (8%). Almost three-fourths (73%) of the trout anglers favored an increase in the trout stamp cost, if necessary, to maintain the trout hatchery in Kentucky. Seventy-four percent of these anglers favored the development of trout populations in remote areas.

Most fishermen (79%) were aware of the Kentucky Division of Fisheries, and almost two-thirds (63%) rated the Division's performance as being fair to very good. Thirty percent of the anglers offered no opinion on the performance of the Division. Few fishermen (19%) were aware of the Dingell-Johnson (D-J) tax utilized as revenue by the Division of Fisheries. Approximately two-thirds of the people favored extending this tax to additional fishing tackle (68%) and new boats (62%). The most important functions of the Division of Fisheries were felt to be fish stocking (24%), lake fish management (18%), habitat protection (14%), developing more access to fishing areas (13%), and stream fish management (10%). Emphasis on Kentucky streams should be directed toward protection and improvement of stream habitat (26%), fish stocking (26%), and the protection of high quality streams (24%), according to anglers. Surprisingly, improvement and development of access was rated 5th in importance. Approximately two-thirds of the sample (62%) had never fished at a Division of Fisheries fish attractor site, while an additional 20% did not know. About one-third of the anglers (36%) felt the Division's fertilization program was successful,

while 41% were unaware of the program.

Other questions regarding the Division of Fisheries related more to the Departmental level. Consistent with previous questions, anglers (54%) felt the KDFWR should buy or lease land along high quality streams to protect the streams and ensure fishermen access. Policy decisions by KDFWR should be based on both public opinion and scientific research (42%) and, overwhelmingly, most people felt the angler attitude survey was a good way to collect people's ideas (93%).

More than half of the respondents (52%) watched the "Kentucky Afield" television show occasionally, while only 7% were regular viewers. Most anglers (57%) were aware of the fishing report prepared by KDFWR; however, a lesser number (39%) utilized the fishing report for planning their trips. Fishing information was provided by the following: fishing friends (28%), magazines (16%), television (15%), newspaper (14%), and sporting goods and bait shop dealers (10%).

#### DISCUSSION

Originally, the survey design specified collecting information from each of our seven fishery management districts; yet, insufficient response dictated only a regional (east, central and west) analysis of data. Reasons for the low response (20%) to the attitude survey are not completely understood. Mailing of questionnaires inherently creates sources of errors. Our questionnaires were mailed third class bulk rate, which is often considered "junk" mail by the public and often discarded. Non-deliverable questionnaires due to incorrect addresses were to be returned (1st class mail) to our fishery office in Bowling Green; yet, only seven questionnaires were returned from an estimated 2,000 non-deliverable, suggesting that problems exist within

the mailing system. The questionnaire itself was lengthy and complicated and possibly created problems for many anglers in correctly understanding the questions, which caused them to not respond. Also, many occasional anglers are apathetic toward the fishery resource and failed to respond.

The magnitude of the non-response bias was not measured. This measurement would have required costly personal contacts or telephone conversations to obtain data from non-respondents. We are assuming that non-respondents have similar habits and preferences as respondents. Our estimates may be statistically precise but inaccurate due to this bias and other biases not discussed. Based on previous knowledge about anglers' opinions and the fisheries, regional and statewide response corresponded to many of our expectations.

A number of analyses and cross references of demographics and opinions were made during this survey but will not be discussed in this report. For instance, subtle differences in age classes or urban versus rural anglers were compiled but not included since we were primarily interested in prevailing statewide and regional habits and preferences. Therefore, some of the more obvious, over-riding trends and attitudes will be addressed in this discussion.

Kentucky fishermen are traditionalists in their choice of preferred kinds of fish they seek to catch, their top three choices being black bass, crappie, and catfish, in that order. The majority of the fishing trips was also directed toward these three types of fish. Part of this provincialism results from fishermen driving short distances to fish, fishing primarily for fun and relaxation, and the ubiquity of these common species. Respondents also desired more manage-

ment emphasis on black bass and crappie.

Musky, rockfish (and hybrids), walleye, and trout ranked low statewide in both preference and number of fishing trips for that species. Reasons for not fishing for these species were generally split between not knowing where to fish for that species and not regarding them as desirable. Statewide, anglers wanted increased emphasis on black bass, crappie, trout, and white bass management. Anglers who had an opinion on walleye and musky management wanted increased emphasis. Regionally, eastern Kentucky fishermen had a greater desire to increase emphasis on walleye, black bass, musky, and trout in their area. These responses support the recently planned programs to establish smallmouth bass, walleye, musky, wild trout and "two-story" trout fisheries in many lakes and streams in the eastern region where coolwater and coldwater habitat is available. If stocking programs for these species are going to be successful, more effort will be needed to inform the fishing public on where and how to catch these species.

Water body preference paralleled the regional availability of preferred water where anglers could generally catch their common and preferred species - black bass, crappie, and catfish. Reservoirs (>500a) represented the preferred fishing water body statewide; however, ponds and private lakes and rivers and streams were nearly co-equal with reservoirs in importance. These three categories of water were nearly the same in regard to both preference and trips in the central region. Rivers and streams co-qualified reservoirs in importance in the eastern region where ponds and private lakes are less abundant. Rivers and streams were lower in importance in western Kentucky where fewer high quality fishing streams and several major reservoirs are located. Future fishery management consideration should

be tailored regionally to meet demands expressed by anglers. Statewide management efforts should be equally committed to reservoirs, streams, and lakes.

Opinions regarding stream management indicated anglers primarily desired protection and improvement of stream habitat, stocking of streams, and protection of high quality streams. Access development unexpectedly ranked low (5th place) in importance, following stricter law enforcement (4th place). Respondents clearly favored the purchasing or leasing of land by the KDFWR to protect streams and assure fishermen access. Trout fishermen desired the development of wild trout populations in remote streams which could only be reached by walking.

The high importance attached to reservoirs statewide indicates the need for increased management efforts to meet fishing pressure needs. The survey showed a number of people (40%) are now departing the state on occasion to fish for species found in Kentucky, because they feel Kentucky fishing is less favorable than in surrounding states (based on written comments). Also, the comment section was replete with comments alluding to potential use conflicts on reservoirs. Suggestions included limiting numbers of boaters, better control of fishing tournaments, outboard motor restrictions, speed restrictions, etc. to alleviate this condition. The use of selected reservoirs by commercial fishermen was opposed by the majority of anglers, indicating the "age-old" conflict still exists.

Most people were aware of the Division of Fisheries and rated the Division's performance from fair to very good, but few were aware of one of our funding bases (DJ tax) or activities such as small lake fertilization, slot limits, and fish attractors. Only 7% were regular

viewers of "Kentucky Afield", and less than half (38%) utilized the fishing report for planning fishing trips. Most anglers seem to be occasional fishermen who are poorly informed. The "well-informed" organized angler is definitely a minority (<20%) in Kentucky.

The majority believed that the quality of fishing has declined over the past 5 years because there are too many fishermen (19%), too many small fish (17%), and not enough fish (21%). These opinions implied the recognition of over-harvest as a problem; however, anglers felt that catching too many fish was not a problem in Kentucky in direct response to the question asking if it was a problem. Most respondents were supportive of fish stocking (94%), and felt that the most important function of the Division of Fisheries was to stock fish (24%) to support native lake and stream fish (40%) primarily largemouth bass (37%). The data implies that most people feel that the solution to many problems in fish management is to stock fish, particularly bass, although they are very receptive to size limits on bass.

Several questions alluded to the angler's definition of quality fishing. Most anglers were generally satisfied with existing size and creel limits on the various species. Anglers were evenly split in defining a quality fishing trip from catching a few large fish (31%), catching several medium sized fish (31%), and catching several fish of any size (29%). However, 75% of the fishermen did not feel that keeping bass was necessary for a satisfying bass trip. Anglers are more receptive to catch and release than had been expected. Minimum "keeper" size and quality size for each kind of fish, as indicated by angler response to the survey, may be helpful when needing to know what anglers will accept when a size limit is being considered on a certain species of fish. Regionally, the minimum and quality size preferences

for each type of fish were similar except for minimum size for musky. Anglers preferred to keep musky 30 inches or longer in the eastern region and 24 inches or longer in the western region. These two lengths were almost equal in preference in the central region. Musky are more available to the angler in the eastern region, which evidently has influenced their opinion about releasing larger fish than by anglers to the west where musky fishing waters are less available. Anglers favored the use of slot limits on bass in certain lakes, emphasizing their willingness to catch rather than keep bass.

Most anglers seem to be sincere in fishing as a sport. They are willing to pay more by the extension of the DJ tax and an increase in trout stamp fees (if necessary) to promote and protect their sport. Anglers are overwhelmingly in support of this survey and felt their public opinion, coupled with scientific research, should be utilized to develop KDFWR policy.

#### **RECOMMENDATIONS**

1. Based upon the angling public's use and preference, more emphasis should be placed on the management of black bass and crappie statewide. Increased management efforts should also be considered in developing the walleye, musky, and trout fisheries, particularly in the eastern region.
2. Based on statewide use and preferences, reservoirs should receive the major management emphasis statewide. Rivers and streams should receive equal emphasis in eastern Kentucky, while rivers and streams and pond and private lakes should receive equal emphasis with reservoirs in central Kentucky.
3. Wild trout streams should be developed where the potential



exists.

4. Announcement of trout stocking dates should be discontinued if an adequate rate of return to the creel can be maintained at the put-and-take trout streams.
5. Stream management should be increased, especially in central and eastern Kentucky. Efforts should be directed toward ensuring that high quality streams are afforded the necessary regulatory protection; ie. with the outstanding water resource designation by the Department of Natural Resources for Environmental Protection (DNREP). Streams with fishery management potential need to be thoroughly surveyed to identify problems, limiting factors, and needs. Close cooperation should be maintained with the DNREP and/or the Soil Conservation Service to protect and improve stream habitat. Stream access sites should be bought and developed along fishable streams where the greatest need exists. Consideration should be given to purchasing or leasing stream buffer zones along certain high quality streams to protect those streams and provide fishing rights if the Department's funding base increases.
6. Most anglers believe stocking of fish, especially bass, is the solution to all their fishing needs. Anglers need to be better educated through a public relations program as to sound fish stocking practices and better approaches to improving fishing.
7. Educate anglers and sell other departmental programs by promoting the use of other predatory species such as rockfish, hybrid rockfish, walleye, muskellunge, and trout in our reservoirs, lakes, and streams. Pamphlets should be published on where to

fish for these species along with instructions on fishing techniques.

8. Educational and promotional programs to increase the angling community's awareness of the KDFWR should be directed through the Division of Public Relations. Existing media avenues such as the TV show, "Kentucky Afield", and the Happy Hunting Ground magazine are not adequately reaching the average angler. Efforts should be directed toward expanding the audience of these two. The fishing report should be improved to encourage better utilization of this information.
9. Educate the average angler about the use of commercial fishing.
10. Promote catch and release of major species such as musky and bass, since the fishing public is receptive to the idea. The Department should be encouraged by the acceptance of anglers to catch-and-release of bass in implementing proper size limits on lakes where bass fishing may be improved by protecting certain sizes of bass.
11. The leadership of many organized fishing clubs are often very vocal in expressing their opinions (about fishing preferences), and many times they purport to be expressing opinions of all fishermen. These clubs are a minority and there is always the question if the people are representing the preferences of the average licensed fishermen. The department should continue to promote the League of Kentucky Sportsmen to provide an appropriate forum for the average sportsman.
12. The Department should conduct similar attitude surveys (every 5-10 years) to monitor trends in angler preference, habits, and opinions. Methods should be modified to ensure a better response

from anglers, i.e. a simpler and shorter questionnaire, first class mailings, etc. Non-response bias should be measured in the future. Efforts should be made by the Division of Fisheries to coordinate statistical data collected during the National Survey of Fishing, Hunting, and Wildlife Associated Recreation. This survey collects statistics from fishermen but could be formatted differently to allow our direct use of the data. Duplication of data collection could be avoided and allow our future surveys to deal with more specific topics.

APPENDIX A

Table A-1.

The following is the questionnaire in its entirety as presented to the anglers. Following each question are both regional and statewide responses expressed as percentages. Responses to questions which required respondents to rank their choices (1-2-3) were weighed proportionally and the responses expressed as a weighted percentile.

1. Where is your permanent residence: \_\_\_\_\_ County.

2. Population

Population size	East	Central	West	Statewide
Over 50,000	14.0	44.1	30.8	28.8
10,000-50,000	44.2	31.1	38.5	38.5
500 - 10,000	28.8	15.3	17.6	20.5
<500 and rural	13.0	9.4	13.1	12.2

3. Sex

Sex	East	Central	West	Statewide
Male	84.6	81.3	79.6	81.5
Female	15.4	18.7	20.4	18.5

4. What type of fishing license did you purchase in 1982?

License type	East	Central	West	Statewide
Fishing	49.0	61.6	48.3	51.7
Combination fishing and hunting	45.2	33.8	44.8	42.4
Neither	5.8	4.3	6.9	5.9

5. If you did not purchase a license in 1982, please check why.

Response	East	Central	West	Statewide
No place to fish	7.7	3.3	4.9	5.5
Fishing too poor	21.2	23.3	3.7	12.9
Too many fishermen	3.9	0.0	1.2	1.8
Not enough spare time	40.4	50.0	43.2	43.6
License cost too much	9.5	6.7	16.1	12.3
Fishing trips too expensive	7.7	0.0	1.2	3.1
Competition with other water users	1.9	3.3	1.2	1.8
Other	7.7	13.3	28.4	19.0

6. How many times did you fish out of Kentucky in 1982 for freshwater fish?

Number of trips	East	Central	West	Statewide
None	53.0	63.3	67.1	61.8
1-5	24.4	21.9	16.4	20.2
6-10	8.3	5.8	6.0	6.6
> 11	14.5	9.0	10.5	11.4

7. Did you fish out of Kentucky for any freshwater fish species not found in Kentucky?

Response	East	Central	West	Statewide
Yes	8.4	7.5	6.3	7.2
No	91.6	92.5	93.7	92.7

8. Are you a member of a sportsmen organization?

Response	East	Central	West	Statewide
Yes	18.3	18.6	22.2	20.1
No	81.7	81.4	77.8	79.9

9. If you checked yes, what type of organization are you a member?

Response	East	Central	West	Statewide
Fish & game club				
Yes	7.7	8.9	9.8	8.9
No	92.3	91.1	80.1	91.1
Bass club				
Yes	9.5	7.5	7.8	8.2
No	90.5	92.6	92.2	91.8
Musky				
Yes	0.2	0.4	0.1	0.2
No	99.8	99.6	99.9	99.8
Other organizations or checked more than one response	4.0	4.0	7.0	5.3

10. On the average, how many hours did you fish per trip in 1982?

Response	East	Central	West	Statewide
<1 hour	3.5	4.0	4.9	4.2
1-2 hours	5.2	5.1	7.0	6.0
2-4 hours	21.5	25.5	33.8	28.0
4-6 hours	25.5	30.8	28.4	28.1
6-8 hours	20.5	15.8	15.9	17.3
>8 hours	23.7	18.9	10.1	16.3

11. What was the average cost per fishing trip (in-state) including gas, meals, lodging, bait, and tackle?

Response	East	Central	West	Statewide
< \$10	23.1	25.6	31.5	27.5
\$10-\$25	36.9	36.4	40.9	38.6
\$25-\$50	20.6	22.7	15.4	18.7
\$50-\$100	12.8	10.2	8.4	10.2
> \$100	6.6	5.1	3.7	4.9

12. What was the average (one-way) distance traveled on your fishing trips in 1982?

Response	East	Central	West	Statewide
0-50 miles	68.8	60.3	74.6	69.5
51-100 miles	19.4	25.1	18.0	20.1
>100 miles	11.8	14.6	7.5	10.4

13. List the number of fishing trips you made to each kind of water body in 1982 and rank them in your order of preference (list your top 3 choices, 1-2-3).

Number of trips in 1982	East	Central	West	Statewide
Reservoirs (500+ acres)	28.3	22.2	25.9	25.9
Public owned lakes (10-500 acres)	14.9	14.7	13.8	14.3
Ponds and private lakes (<10 acres)	17.2	27.4	24.1	22.7
Strip pits	1.5	1.2	5.7	3.3
Rivers and streams	26.3	25.4	17.4	22.1
Streams below dams on major rivers and lakes	11.7	9.0	13.0	11.7

Preference	East	Central	West	Statewide
Reservoirs (500+ acres)	29.2	25.1	27.4	27.4
Public owned lakes (10-500 acres)	15.5	16.0	13.2	14.6
Ponds and private lakes (<10 acres)	15.0	25.4	22.6	20.9
Strip pits	1.3	1.2	5.2	3.1
Rivers and streams	26.7	23.0	18.5	22.1
Streams below dams on major rivers and lakes	12.4	9.1	13.2	12.0

14. Which of the following fishing methods do you prefer? (Rank your top 3 choices).

Response	East	Central	West	Statewide
Boat	47.9	46.4	49.2	58.1
Bank	29.9	31.3	29.8	30.2
Wading	14.9	12.6	9.1	11.7
Fishing pier	3.2	4.0	5.0	4.2
Dock	4.0	5.7	6.8	5.7

15. Please check the top three fish you prefer to fish for and give the number of fishing trips made for any or all of the fish on the list in 1982.

Species preference	East	Central	West	Statewide
Carp	1.8	1.9	0.9	1.4
Catfish	13.3	11.6	20.2	16.0
Crappie	15.7	18.5	23.8	20.0
Drum	0.6	0.4	0.3	0.4
Largemouth and Kentucky bass	27.4	31.3	26.8	28.1
Smallmouth bass	9.9	9.4	5.2	7.6
Musky	2.7	0.7	0.2	1.1
Sauger	0.6	0.6	1.3	0.9
Sunfish (bluegill)	4.6	8.4	8.3	7.2
Suckers	0.5	0.0	0.2	0.2
Trout	4.9	2.0	1.7	2.8
Rockbass (reduye)	1.2	1.2	0.6	0.9
Rockfish (striped bass)	0.9	0.8	0.8	0.8
Hybrid rockfish	0.3	0.3	0.2	0.2
White bass (stripers)	3.2	2.7	3.6	3.2
Walleye	2.5	1.0	0.8	1.4

Number of trips in 1982

Species	East	Central	West	Statewide
Carp	2.2	2.3	1.2	1.8
Catfish	12.8	12.3	17.8	14.9
Crappie	16.2	16.5	23.7	19.6
Drum	2.0	1.2	0.8	1.2
Largemouth and Kentucky bass	27.1	31.4	27.6	28.4
Smallmouth bass	10.2	9.5	5.6	8.0
Musky	3.4	0.9	0.3	1.4
Sauger	0.5	1.5	1.7	1.3
Sunfish (bluegill)	6.9	12.3	10.7	9.9
Suckers	0.9	0.2	0.3	0.5
Trout	6.3	2.4	1.9	3.4
Rock bass (reduye)	2.3	1.4	1.2	1.6
Rockfish (striped bass)	1.5	1.3	0.9	1.2
Hybrid rockfish	0.5	0.7	0.5	0.5
White bass (stripers)	3.9	3.8	4.7	4.3
Walleye	2.7	1.3	0.4	1.4
Other	0.6	1.0	0.6	0.7



16. If you did not fish for the following species in 1982, please check why.

Musky and Tiger Musky

Response	East	Central	West	Statewide
Not enough time	24.2	20.8	17.0	19.8
Too many people	2.7	0.8	0.4	1.2
Don't know how to catch	14.2	22.2	18.3	18.1
Don't know where to fish	17.0	18.5	29.5	23.4
Equipment too expensive	3.2	2.3	0.7	1.8
Do not regard as desirable	18.7	16.5	17.4	17.6
Too far to travel	20.0	18.8	16.6	18.0

Rockfish and Hybrids

Response	East	Central	West	Statewide
Not enough time	16.3	20.3	17.6	17.9
Too many people	3.0	1.6	1.3	1.8
Don't know how to catch	13.2	18.7	19.5	17.5
Don't know where to fish	17.1	25.3	27.1	23.8
Equipment too expensive	2.1	1.3	0.3	1.1
Do not regard as desirable	26.3	20.3	23.7	23.6
Too far to travel	22.1	12.7	10.5	14.4

Walleye

Response	East	Central	West	Statewide
Not enough time	21.3	21.4	15.2	18.3
Too many people	2.8	1.0	0.3	1.1
Don't know how to catch	15.1	21.4	17.5	17.8
Don't know where to fish	22.4	21.7	31.3	26.6
Equipment too expensive	2.0	1.2	0.5	1.1
Do not regard as desirable	14.9	15.3	20.2	17.5
Too far to travel	21.6	18.0	15.0	17.5

Trout

Response	East	Central	West	Statewide
Not enough time	25.4	20.8	20.3	21.8
Too many people	11.6	2.5	3.6	5.9
Don't know how to catch	7.5	12.0	12.1	10.9
Don't know where to fish	13.4	18.6	23.3	19.6
Equipment too expensive	1.8	3.8	3.3	3.0
Do not regard as desirable	21.5	15.8	17.2	18.0
Too far to travel	18.8	26.5	20.2	21.4

17. What do you enjoy most about going fishing?

Response	East	Central	West	Statewide
Fun and relaxation	34.8	32.8	34.1	34.0
Fishing as a sport	20.3	19.6	15.7	18.0
To get outdoors	17.7	17.2	18.3	17.8
Catching fish for food	7.2	8.6	10.8	9.2
To get away from people	5.2	6.1	5.7	5.7
Catching a limit	0.9	0.5	0.6	0.7
Catching a few fish	3.2	3.1	3.3	3.2
To be with friends	4.8	5.1	5.0	5.0
Competition of tournament fishing	1.6	1.6	1.3	1.5
Family experience	4.4	5.3	5.2	5.0

18. What do you consider a successful fishing trip?

Response	East	Central	West	Statewide
Catching a few large fish	33.1	31.0	29.7	31.1
Catching several medium sized fish	30.6	30.7	32.0	31.2
Other	4.4	3.9	4.0	4.1
Catching several fish of any size	27.8	29.9	30.3	29.4
Catching large numbers of small fish	4.0	4.7	4.1	4.2

19. For each of the following, please circle two sizes, the smallest fish you would keep and the size you consider to be a quality size fish.

Inches	Smallest size				Quality size			
	East	Central	West	Statewide	East	Central	West	Statewide
6	1.0	0.2	0.8	0.7	0	0	0.1	0.1
8	2.0	1.8	3.0	2.4	0.2	0	0.3	0.2
10	16.5	17.4	16.2	16.6	1.2	0.8	1.1	1.0
12	58.6	57.8	53.0	55.9	5.7	5.6	4.5	5.2
14	15.1	17.4	20.0	17.8	10.9	16.2	14.2	13.6
15	4.5	3.6	3.7	3.9	12.8	15.4	15.4	14.6
16	2.0	1.0	2.3	1.9	27.8	27.7	26.3	27.1
18	0.4	1.0	1.0	0.7	22.7	17.4	19.1	19.8
20	-	-	-	-	18.7	16.9	19.1	18.5

MUSKY

24	18.8	28.7	35.4	27.1	0	0.5	0	0.1
26	6.3	11.7	9.2	8.6	3.8	4.5	8.1	5.5
28	10.1	8.5	13.9	11.0	3.0	5.8	2.2	3.4
30	39.1	29.2	22.5	30.8	6.8	11.2	14.0	10.4
32	10.3	11.7	9.9	10.5	8.7	7.2	12.2	9.5
34	4.1	3.6	2.8	3.5	11.9	12.1	13.1	12.4
36	8.2	4.9	4.3	6.0	22.0	23.0	21.0	21.9
38	3.0	1.8	1.9	2.3	12.5	9.0	7.0	9.6
40	0.3	0	0.3	0.2	31.4	26.9	22.4	27.2

Inches	Smallest size				Quality size			
	East	Central	West	Statewide	East	Central	West	Statewide
8	7.8	6.8	7.6	7.4	0	0	0	0.2
10	14.2	17.6	17.2	16.2	2.4	2.8	1.0	1.8
12	32.9	40.0	35.7	35.6	7.8	5.6	7.4	7.1
15	23.5	18.4	20.1	20.9	9.1	18.1	16.1	14.1
18	12.6	10.8	11.0	11.5	19.8	17.3	15.7	17.5
20	5.4	4.8	5.0	5.1	17.9	21.7	17.7	18.7
22	1.6	1.0	2.5	1.8	11.2	8.0	12.2	10.9
24	2.1	1.2	1.0	1.4	13.4	11.7	13.6	13.1
26	0	0	0	0	18.5	14.7	16.4	16.7
WALLEYE								
10	9.4	13.0	11.0	10.9	0	0	0	0
12	18.9	16.0	21.5	19.1	2.1	3.9	2.8	2.8
14	19.9	19.1	21.2	20.2	4.7	5.6	6.2	5.5
15	22.0	22.5	17.0	20.3	3.9	5.2	6.5	5.2
16	15.7	14.7	16.7	15.8	13.1	14.3	10.1	12.3
18	8.6	10.4	6.8	8.4	13.9	18.6	19.2	16.9
20	3.4	2.6	3.4	3.2	21.7	20.8	23.1	22.0
22	2.1	1.7	2.3	2.1	15.7	12.2	12.7	13.7
24	0	0	0	0.1	24.9	19.5	19.4	21.6
WHITE BASS								
4	0.7	0.7	2.1	1.3	0	0	0	0
6	2.7	3.9	2.9	3.1	0.7	0	1.0	0.5
8	10.4	14.8	15.6	13.7	1.0	1.0	0.4	0.6
10	31.5	34.5	31.6	32.3	1.5	2.5	3.7	2.7
12	37.2	33.8	34.3	35.2	11.7	17.0	14.0	13.9
14	12.2	9.5	9.6	10.4	16.6	18.4	24.9	20.6
16	3.0	2.1	2.0	2.3	27.1	25.8	22.4	24.8
18	2.2	1.0	2.0	1.7	23.3	20.5	18.5	20.5
20	0	0	0	0.1	18.4	15.2	15.6	16.4
SAUGER								
8	7.8	7.1	7.0	7.3	0	0	0	0
10	13.4	19.3	17.0	16.3	2.9	3.1	0.8	2.1
12	34.8	34.0	33.5	34.1	2.3	3.6	6.1	4.2
14	23.9	20.8	21.8	22.3	10.4	12.2	12.1	11.6
16	14.1	12.3	11.7	12.8	18.2	20.8	19.1	19.2
18	2.6	2.5	4.5	3.4	20.9	22.8	21.1	21.4
20	2.6	2.5	2.5	2.6	20.5	16.2	17.5	18.3
22	0.7	1.0	2.0	1.3	9.5	9.1	8.6	9.1
24	0	0	0	0	15.3	12.2	14.7	14.3
SUNFISH								
4	13.1	11.9	10.7	11.8	0	0	0	0
5	15.0	15.0	16.4	15.6	2.2	2.6	1.7	2.0
6	38.2	40.6	38.9	39.1	4.5	7.8	8.4	7.0
7	11.6	16.2	14.9	14.2	9.0	10.4	11.4	10.4
8	13.7	12.5	12.2	12.7	21.5	22.0	21.6	21.7
9	3.2	2.0	3.5	3.0	14.0	15.7	17.0	15.7
10	3.2	1.2	2.1	2.3	23.4	21.7	23.7	23.1
11	1.7	1.0	1.3	1.3	7.1	4.1	4.0	5.0
12	0.2	0	0	0.1	18.3	15.7	12.4	15.1

CRAPPIE	Smallest size				Quality size			
	Inches	East	Central	West	Statewide	East	Central	West
4	4.4	2.5	2.1	2.9	0	0	0	0
5	4.0	3.9	6.3	5.0	0.4	0.3	0.3	0.3
6	21.9	22.5	21.1	21.7	1.9	1.1	2.1	1.8
7	12.8	14.7	13.7	13.7	0.9	2.5	2.1	1.8
8	28.2	31.1	28.9	29.2	7.9	12.6	9.1	9.5
9	9.9	9.2	12.2	10.8	7.7	9.2	9.6	8.9
10	13.7	13.1	12.1	12.8	22.9	17.9	22.6	21.5
11	4.6	2.8	3.5	3.7	10.9	8.1	10.7	10.1
12	0.4	0.3	0.2	0.3	47.4	48.2	43.6	45.9

CATFISH

8	8.3	6.7	9.4	8.4	0	0	0	0
10	9.2	18.4	17.8	15.3	1.3	1.2	1.2	1.3
12	32.1	31.7	33.3	32.6	2.5	3.9	4.1	3.5
14	21.1	23.0	19.2	20.6	3.4	9.4	5.9	5.9
16	14.1	10.6	9.2	11.0	6.5	12.7	10.9	9.9
18	8.7	4.8	5.9	6.5	17.7	14.2	18.0	17.0
20	3.8	1.2	2.3	2.5	19.2	14.6	18.7	18.0
22	2.7	3.6	3.0	3.1	9.2	9.1	8.6	8.9
24	0	0	0	0	40.3	34.6	32.7	35.5

TROUT

6	4.8	3.8	7.3	5.5	0	0	0	0
8	15.7	16.9	16.4	16.3	0.5	0.4	1.1	0.7
10	24.6	25.8	27.2	25.9	3.9	2.6	2.8	3.1
12	36.2	34.8	31.8	34.0	10.1	9.0	13.3	1.1
14	12.6	10.5	10.5	11.3	11.6	16.9	19.5	15.9
16	2.4	5.6	4.3	3.9	22.7	24.1	19.5	21.8
18	1.9	1.1	1.8	1.7	21.7	17.3	20.0	19.9
20	1.5	1.5	1.1	1.3	12.3	14.3	11.2	12.4
22	0.2	0	0	0.1	17.2	15.4	13.0	15.1

20. In order for you to have a satisfying bass fishing trip, do you feel you must keep the bass you catch?

Response	East	Central	West	Statewide
Yes	24.0	30.2	30.0	28.0
No	76.0	69.8	70.5	72.1

21. If yes, please check the number of bass you must keep to have a satisfying bass trip.

Response	East	Central	West	Statewide
Keeping 1-4 keeper bass	31.4	35.0	29.8	31.5
Keeping 5-10 keeper bass	25.0	23.1	24.0	24.0
Keeping 1 or more trophy bass	14.5	13.1	14.8	14.3
Keeping 1-2 lbs of bass	8.1	7.7	8.0	7.9
Keeping 3-5 lbs of bass	12.2	13.1	13.4	13.0
Keeping more than 5 lbs of bass	8.7	8.1	10.1	9.2

22. If keeping bass is not important to you, what do you consider a satisfying bass trip?

Response	East	Central	West	Statewide
Catch & release of 1-4 12-inch or larger bass if they are protected.	25.5	23.1	23.7	24.2
Catch & release of 5-10 12-inch or larger bass if they are protected.	22.1	22.0	22.2	22.2
Catch & release of more than ten 12-inch or larger bass if they are protected.	16.7	16.7	15.7	16.3
Catching 1-4 bass of any size.	15.0	17.8	16.5	16.3
Catching 5 or more bass of any size.	20.7	20.3	21.8	21.1

23. Do you feel catching too many fish is a problem in Kentucky waters?

Response	East	Central	West	Statewide
Yes	18.7	19.6	21.5	20.2
No	70.5	68.7	65.8	67.9
No opinion	10.8	11.7	12.7	11.9

24. Are you familiar with the slot limit regulation, such as returning all 12-15 inch fish, as a means of controlling bass catch?

Response	East	Central	West	Statewide
Yes	41.0	47.4	47.8	45.6
No	59.0	52.6	52.2	54.4

25. Would you be in favor of a slot limit regulation on bass in certain Kentucky lakes?

Response	East	Central	West	Statewide
Yes	54.2	50.9	52.4	52.6
No	22.0	25.6	21.7	22.4
No opinion	23.8	23.6	26.5	25.0

26. The minimum size limit of bass in Kentucky is 12 inches, what minimum length limit would you prefer?

Inches	East	Central	West	Statewide
10	24.3	31.4	27.6	28.7
12	42.8	43.0	44.5	43.6
14	18.6	16.5	17.6	17.7
15	7.3	4.9	7.3	6.7
16	2.0	3.1	2.4	2.5
18	0.7	0.5	0.2	0.4
20	0.3	0.7	0.3	0.4

27. Do you think the statewide 12-inch size limit on bass has improved bass fishing on the following types of water?

Response	East	Central	West	Statewide
<b>RESERVOIRS (&gt;500a)</b>				
Yes	43.5	34.3	36.8	38.3
No	26.1	26.3	21.0	23.8
Don't Know	30.4	39.5	42.2	37.9
<b>LAKES (10-500a)</b>				
Yes	50.6	41.1	42.1	44.4
No	24.9	27.7	22.6	24.5
Don't Know	24.5	31.3	35.4	31.0
<b>PONDS (&lt;10a)</b>				
Yes	35.2	36.3	33.3	34.6
No	34.6	35.3	30.8	33.1
Don't Know	30.3	28.4	36.0	32.4
<b>RIVERS &amp; STREAMS</b>				
Yes	39.2	29.4	28.5	32.1
No	35.6	37.8	25.3	31.6
Don't Know	25.1	32.7	46.2	36.3

28. Did you purchase a trout stamp in 1982?

Response	East	Central	West	Statewide
Yes	27.6	9.8	7.9	14.4
No	72.4	90.2	92.1	85.6

29. If you fished trout streams in 1982, when did you fish?

Response	East	Central	West	Statewide
Day of stocking	7.3	13.2	8.2	8.5
The first 3 days after stocking	10.1	13.2	15.1	11.9
Anytime I could	82.6	73.7	76.7	79.6

30. Do you favor publicizing trout stocking dates?

Response	East	Central	West	Statewide
Yes	39.3	37.8	35.7	37.7
No	60.7	62.2	64.3	62.3

31. Trout stocked in Kentucky come from the Federal Government and future plans are to close the trout hatchery in Kentucky. Would you favor an increase in the trout stamp fee to continue the trout stocking program?

Response	East	Central	West	Statewide
Yes	74.9	76.8	69.7	73.3
No	25.1	23.2	30.3	26.7

32. Certain small mountain streams, not accessible by roads, are good areas for trout. Do you favor developing trout populations in these streams that can only be reached by walking?

Response	East	Central	West	Statewide
Yes	76.7	69.5	73.1	74.0
No	11.4	14.3	8.7	10.9
No opinion	11.9	16.2	18.3	15.1

33. Are you aware there is a Kentucky Division of Fisheries?

Response	East	Central	West	Statewide
Yes	78.1	83.8	77.2	79.0
No	21.9	16.2	22.8	21.0

34. Do you consider the Division of Fisheries performance in improving fishing as:

Response	East	Central	West	Statewide
Very good	14.4	14.5	13.2	13.9
Good	27.3	30.4	32.2	30.3
Fair	20.9	19.2	17.4	18.9
Poor	10.9	6.2	4.4	6.8
Don't Know	26.5	29.7	32.9	30.2

35. Do you believe the quality of fishing over the past 5 years has:

Response	East	Central	West	Statewide
Improved	28.7	25.5	28.1	27.7
Stayed the same	25.3	33.5	27.1	28.1
Declined	46.0	41.0	44.8	44.3

36. If you checked declined, please check those reasons you feel might have contributed to the decline (rank your top 3 choices).

Response	East	Central	West	Statewide
Too many fishermen	16.7	18.5	21.0	19.1
Too many small fish	16.1	20.8	17.3	17.7
Too many rough fish	8.8	6.0	9.6	8.5
Not enough fish	23.7	21.0	19.2	21.0
Too many weeds	2.0	3.0	2.3	2.4
Too many water skiers	11.5	12.0	9.8	10.8
Water not clear enough	7.4	4.9	4.3	5.4
Not enough boat ramps	0.9	0.8	1.0	0.9
Not enough shoreline access	4.2	4.9	3.7	4.2
Other	8.7	8.1	11.7	9.9

37. What level of emphasis would you like to see on the management of the following fish?

WALLEYE

Response	East	Central	West	Statewide
Increased emphasis	48.4	31.5	25.4	34.2
Maintain present emphasis	26.6	22.6	18.4	22.0
Decreased emphasis	1.6	1.8	2.1	1.9
No opinion	23.5	44.1	54.1	42.0

CRAPPIE

Increased emphasis	44.9	45.9	48.1	46.6
Maintain present emphasis	41.8	37.9	36.9	38.6
Decreased emphasis	4.6	1.2	1.5	2.4
No opinion	8.7	15.1	13.6	12.4

BLACK BASS

Increased emphasis	72.4	59.1	52.6	60.4
Maintain present emphasis	18.4	25.1	28.9	24.6
Decreased emphasis	2.7	2.4	2.7	2.6
No opinion	6.6	13.4	15.8	12.3

ROCKFISH

Increased emphasis	34.2	26.7	29.2	30.2
Maintain present emphasis	32.8	32.6	29.8	31.4
Decreased emphasis	12.4	9.9	6.9	9.3
No opinion	20.6	31.0	34.1	29.1

HYBRID ROCKFISH

Increased emphasis	24.7	23.8	24.2	24.3
Maintain present emphasis	31.7	28.3	21.7	26.5
Decreased emphasis	14.8	8.7	7.2	10.0
No opinion	28.9	39.2	50.0	39.3

MUSKY & TIGER MUSKY

Increased emphasis	37.2	25.7	16.8	25.5
Maintain present emphasis	27.1	26.0	22.2	24.7
Decreased emphasis	10.5	5.7	4.5	6.7
No opinion	25.3	42.7	56.5	43.1

TROUT

Increased emphasis	49.1	33.9	31.3	37.7
Maintain present emphasis	27.5	27.2	24.3	26.0
Decreased emphasis	8.5	5.6	5.6	6.5
No opinion	14.9	33.3	38.9	29.8

CATFISH

Increased emphasis	37.0	26.5	32.6	32.6
Maintain present emphasis	41.5	42.9	44.0	43.0
Decreased emphasis	9.0	8.5	5.2	7.1
No opinion	12.5	22.1	18.2	17.4



SUNFISH

Response	East	Central	West	Statewide
Increased emphasis	26.3	24.7	23.0	24.4
Maintain present emphasis	46.5	41.8	45.6	45.0
Decreased emphasis	14.1	15.6	10.6	12.9
No opinion	13.1	17.9	20.7	17.7

WHITE BASS

Increased emphasis	47.8	38.7	35.2	40.0
Maintain present emphasis	32.3	36.4	36.7	35.2
Decreased emphasis	5.7	5.5	4.5	5.1
No opinion	14.2	19.4	23.7	19.6

38. What is your opinion of the following daily creel limits?

BLACK BASS - 10 Fish

Response	East	Central	West	Statewide
Too low	6.8	4.5	5.5	5.6
Adequate	76.1	78.5	81.9	79.3
Too high	17.1	17.0	12.6	15.1

ROCK BASS - 15 Fish

Too low	9.9	9.1	5.6	7.8
Adequate	77.0	80.4	83.4	80.6
Too high	13.2	10.6	11.1	11.6

WALLEYE - 10 Fish

Too low	6.7	4.7	3.8	4.9
Adequate	76.8	81.1	85.6	81.7
Too high	16.5	14.2	10.6	13.4

SAUGER - 10 Fish

Too low	7.7	8.9	7.1	7.7
Adequate	80.8	84.0	86.2	83.9
Too high	11.5	7.1	6.7	8.3

WHITE BASS - 60 Fish

Too low	6.4	5.2	3.9	5.0
Adequate	63.0	67.6	70.0	67.2
Too high	30.6	27.2	26.1	27.8

ROCKFISH - 5 Fish

Too low	23.4	21.1	16.7	20.0
Adequate	70.2	75.3	79.9	75.7
Too high	6.4	3.6	3.3	4.4

CRAPPIE - 60 fish

Too low	7.3	5.7	4.8	5.8
Adequate	67.0	70.4	68.2	68.3
Too high	25.7	24.0	27.0	25.9

TROUT - 8 Fish

Response	East	Central	West	Statewide
Too low	24.7	15.6	15.4	18.5
Adequate	68.1	80.0	79.9	76.1
Too high	7.1	4.4	4.7	5.4

39. Have you fished at a fish attractor site made by the Kentucky Division of Fisheries?

Response	East	Central	West	Statewide
Yes	17.4	10.8	23.4	18.7
No	64.6	70.5	55.4	61.7
Don't know	18.1	18.7	21.1	19.6

40. Many of our state-owned lakes are fertilized to control aquatic vegetation and increase small fish food production. Do you think fertilization improved fishing success?

Response	East	Central	West	Statewide
Yes	34.8	33.3	38.3	36.0
No	13.4	10.7	9.1	10.8
No opinion	10.4	15.5	11.1	11.9
Unfamiliar with program	41.4	40.5	41.4	41.2

41. Are you in favor of bass tournaments?

Response	East	Central	West	Statewide
Yes	51.0	47.2	44.4	47.1
No	24.8	26.3	27.0	26.1
No opinion	24.3	26.5	28.6	26.8

42. Do you feel that bass tournaments affect your fishing activities or opportunities?

Response	East	Central	West	Statewide
Yes	28.9	31.9	33.4	31.6
No	56.3	50.8	49.3	51.8
Don't know	14.8	17.3	17.3	16.5

43. Are you in favor of commercial netting of rough fish in our reservoir during the winter months?

Response	East	Central	West	Statewide
Yes	31.5	32.9	36.6	34.1
No	48.5	41.7	41.2	43.6
No opinion	20.0	25.4	22.2	22.3

44. There is a method of catching catfish in streams called hand grabbing (tickling and noodling). Are you in favor of this method being allowed?

Response	East	Central	West	Statewide
Yes	44.1	38.9	42.0	41.9
No	30.6	26.3	24.7	26.9
No opinion	25.3	34.7	33.3	31.2

45. Do you watch the weekly TV show "Kentucky Afield?"

Response	East	Central	West	Statewide
Yes, regularly	6.7	7.3	6.6	6.8
Yes, on occasion	45.8	53.5	56.6	52.5
No	16.0	18.6	16.8	17.0
No, comes on too early	2.1	6.8	2.1	3.2
Not aware of the show	13.9	9.3	12.3	12.1
Show not available in our viewing area	15.5	4.5	5.6	8.4

46. From which of the following do you receive most of your fishing information?

Response	East	Central	West	Statewide
Radio	6.2	3.6	5.2	5.2
TV	13.3	15.4	15.0	14.6
Kentucky Afield (TV)	4.4	5.5	6.3	5.5
Kentucky Afield (Radio)	0.8	0.2	0.4	0.5
Newspaper	12.0	16.9	13.3	13.7
Magazines	17.3	16.8	15.0	16.1
Happy Hunting Ground Magazine	3.0	2.2	2.0	2.4
Fishing friends	28.8	26.8	28.5	28.2
Sporting Goods & Bait Shop Dealers	10.9	9.7	10.6	10.5
Other	3.5	2.8	3.7	3.4

47. Are you aware of the fishing report prepared by the Kentucky Department of Fish and Wildlife Resources for local newspapers?

Response	East	Central	West	Statewide
Yes	58.7	63.4	53.4	57.4
No	26.8	28.3	32.6	29.8
Not in our newspaper	14.4	8.4	14.0	12.8

48. If you checked yes, do you rely on the fishing report for planning any of your trips?

Response	East	Central	West	Statewide
Yes	42.0	42.4	34.3	38.8
No	58.0	57.6	65.7	61.2

49. The Kentucky Division of Fisheries receives 40% of its budget from a 10% federal tax on fishing tackle, the Dingell-Johnson tax. Were you aware of this tax?

Response	East	Central	West	Statewide
Yes	21.0	19.0	18.6	19.4
No	79.0	81.0	81.4	80.6

50. Would you be in favor of extending this tax to additional fishing tackle to improve state fishing programs?

Response	East	Central	West	Statewide
Yes	71.0	71.3	63.9	67.9
No	29.0	28.7	36.1	32.1

51. Would you be in favor of establishing a 3% tax on new boats, motors, and trailers to improve state fishing and boating programs?

Response	East	Central	West	Statewide
Yes	63.4	63.2	60.1	61.8
No	36.6	36.8	39.9	38.2

52. What do you feel should be the most important functions of the Kentucky Division of Fisheries?

Response	East	Central	West	Statewide
Develop more access to fishing areas	12.8	12.9	12.4	12.6
Stream fish management	12.5	9.6	7.6	9.6
Lake fish management	17.7	15.7	18.7	17.7
Building fish attractors	4.0	3.2	6.3	4.8
Habitat protection	12.9	13.1	14.3	13.6
Pond fish management	2.3	3.7	3.3	3.1
Fish stocking programs	26.1	25.8	22.3	24.3
Controlling aquatic vegetation	4.7	5.0	5.8	5.3
Education and information	7.0	10.9	9.4	9.0

53. Are you in favor of fish stocking programs?

Response	East	Central	West	Statewide
Yes	96.1	92.8	92.7	93.8
No	1.1	1.4	1.7	1.4
No opinion	2.8	5.8	5.6	4.8

54. If you checked yes, please rank the following categories relating to stocking.

Response	East	Central	West	Statewide
Establish farm pond fish	15.0	23.0	21.6	19.9
Support native lake and stream fish	42.6	37.6	39.1	39.8
Establish new lake fish	23.4	23.5	24.5	23.9
Establish new stream fish	15.7	14.3	11.6	13.5
No opinion	3.3	1.6	3.3	2.9

55. Fish to be considered for stocking:

Response	East	Central	West	Statewide
Musky	10.7	6.2	7.0	8.0
Tiger musky	3.2	2.4	2.0	2.5
Rockfish (striped bass)	8.5	12.9	15.5	12.7
Hybrid rockfish	8.9	12.5	13.0	11.6
Walleye	16.4	12.4	9.4	12.3
Trout	16.3	14.8	15.9	15.8
Black bass	35.9	38.7	37.1	37.1

56. On what basis should the Kentucky Department of Fish and Wildlife Resources make their policy decisions?

Response	East	Central	West	Statewide
Public opinion	25.6	24.3	24.2	24.7
Scientific research	30.4	30.1	29.8	30.1
Both public opinion and research	41.3	42.5	42.4	42.1
No opinion	2.7	3.0	3.5	3.2

57. What do you feel should be the major emphasis toward Kentucky streams?

Response	East	Central	West	Statewide
Protect high quality streams	26.1	24.0	22.6	24.0
Stock with fish	27.6	24.7	25.2	25.8
Improve and increase access	7.9	11.0	10.4	9.7
Protect and improve stream habitat	25.8	26.3	25.6	25.8
Stricter enforcement of fishing regulations	11.1	12.0	12.8	12.1
No opinion	1.6	2.0	3.5	2.5

58. Do you feel the Kentucky Department of Fish and Wildlife Resources should buy or lease land along high quality streams to protect the stream and ensure fisherman access?

Response	East	Central	West	Statewide
Yes	59.2	56.2	48.8	53.7
No	22.5	27.6	29.9	27.1
No opinion	18.3	16.2	21.4	19.2

59. What is your opinion of this survey?

Response	East	Central	West	Statewide
Good way to collect people's ideas	94.3	93.6	91.3	92.8
Too long	1.8	3.1	4.1	3.2
Waste of money	2.2	2.2	3.2	2.7
No opinion - don't care	1.7	1.1	1.3	1.4

Additional Comments - (write in):