## STATEWIDE FISHERIES MANAGAMENT PLANNING PROCESS

Job Performance Report

State: Vermont
Study No.: I

Job No.: I-3

Pro.ject No.: F-12-R-25
Pro.ject No.: Lake, Pond and Stream Investigations

Job Title: Management Evaluation

Period Covered: July 1, 1991 - June 30, 1992

## BACKGROUND:

For years the Fisheries Division has recognized the necessity to re-examine its management programs and to develop formal management plans. Unfortunately due to budgetary constraints and on-going program commitments, these initiatives were never developed under a statewide planning process. Consequently, management changes and shifts in program direction were usually done on a piecemeal basis, often as a result from pressure of special interest groups. This has resulted in fragmented fisheries regulations which are inconsistent throughout the state and which of ten provide little biological management value. A trend that appears to be gaining momentum among the angling community is the desire for a greater diversity of quality angling opportunities. In order to more effectively manage the fisheries resources of the state to meet these desires, it is necessary to include anglers in the process of defining management goals.

In an effort "to more closely align fisheries management with public desires and the ecology of Vermont's waters," a large-scale mail survey was developed to determine the use, needs and attitudes of Vermont anglers. The results of the Vermont Angler Survey will be integrated with the results of scientific studies of fisheries biology and management, both within and outside Vermont, to form the basis of formal fisheries management plans for Vermont's important sportfish species.

## TROCEDUPRS:

Content - A team of four fisheries biologists were assigned the task of developing and implementing an attitude survey of both resident and non-resident anglers to include all types of fisheries available in Vermont. A general outline of desired information from Vermont anglers was developed:
I. Angler Profile
A. Age
B. Sex
C. Residency / geographic location
D. License type
E. Affiliation (organized club)
II. Angler Behavior
A. Species fished for
B. Type of fishing (ice, trout stream, Lake Champlain, etc.)
C. Avidity (days fished)
D. Gear use
III. Angler Attitudes / Desires
A. Species preferences
B. Fishery management options

1. Creel limits
2. Minimum and quality sizes
3. Special regulations
4. Season length
5. Gear limitations
6. Use of cultured fish
C. Current issues

Questionnaire Design - Several recent angler attitude surveys were obtained for reference from federal and state fisheries agencies (U.S. Fish and Wildlife Service, Wyoming, Washington, Colorado, North Carolins, Florida, Arkansas). Techniques described by Dillman (1978) for designing mail surveys were followed as closely as possible.

Following multiple in-house revisions, including reviews by the entire fisheries biological staff, a draft questionnaire booklet was developed for pretesting and external review. Pretesting the questionnaire was conducted with potential respondents (i.e. anglers) to identify problems with questions, directions, content and overall survey format. Approximately 60 anglers throughout the state, comprising members of diverse organized clubs (B.A.S.S., Trout Unlimited, local Fish and Game Clubs) and individual (unaffiliated) anglers, completed the draft questionnaire and provided immediate feedback on its content and design. Several problems were identified during this process. In addition, external review by Drs. Robert Manning and Alphonse Gilbert, School of Natural Resources, University of Vermont, lead to further revision of the survey.

The final draft questionnaire was again sub.ject to review by the fisheries biological staff. This resulted in the final questionnaire, a 16-page, $51 / 2 \mathrm{X}$ $81 / 2$ inch booklet, consisting of five sections and 185 individual questions (Appendix I).

As recommended by Dillman (1978), a multiple mailing was conducted. This consisted of an initial mailing of the questionnaire with an individually signed cover letter ( $1 / 14 / 91$ ), a follow up postcard reminder mailed one week later (1/21/91), and a second mailing of a questionnaire and cover letter to non-respondents three weeks after the original mailing (2/2/91). A mid January mailing was chosen for two reasons:

1) This was considered a time of year when people would be at home and likely to respond, and
2) The respondents would be able to accurately recall details of the 1990 fishing season which had just ended.

Sampling Design - A random stratified sample of 1990 fishing and combination (hunting/fishing) licenses was conducted to select anglers for the survey. To avoid potential under-representation of a particular region, the state was stratified into five zones, generally following county lines (Fig 1) while also attempting to broadly categorize distinctive fishing regions.

Based upon this stratification, six "subpopulations" of interest were identified: resident anglers in each of the five zones, and nonresident anglers (statewide). Based upon response rates reported from similar surveys, we assumed a 50\% response rate for resident anglers and a $40 \%$ response rate for nonresidents. To obtain $95 \%$ confidence that a response to a yes/no question that is within $\pm 5 \%$ of the true mean, a minimm of 400 responses was required for each subpopulation. Using our estimated response rates, this would require a sample of 800 resident anglers per zone and 1000 nonresidents, statewide.

Although each subpopulation should be adequately represented by this method, large differences in license sales among the five zones required an additional weighting of the sampling procedure to obtain results which could also be considered representative on a statewide basis. Therefore, a weighting factor, based upon average license sales from 1988 and 1989, was calculated for each zone and used to weight the sample of resident anglers:

RESIDENT ANGLER SAMPLE


Weighted Sample
800
1326
1076
1168
1880
Total 6250

As conducted with resident anglers, a weighting factor was calculated for nonresidents in each zone based upon average license sales from 1988 and 1989. Due to administrative procedures for procuring license receipts from the state park system, an additional "state park zone" was created after the five zones were sampled. The total weighted sample from the state parks was, therefore, proportionately subtracted from the weighted sample of each of the five zones to maintain a sample size of 1,000 .

NONRESIDENT ANGLER SAMPLE

|  |  | NONRESIDENT ANGLER SAMPLE |  |
| :---: | :---: | :---: | :---: |
| Zone | AVg. Saleg(1988-89) | Weighting Factor | Weighted Sample |
|  | 8250 | 0.163 | 157 |
| 2 | 7391 | 0.147 | 141 |
| 3 | 12461 | 0.250 | 240 |
| 4 | 10443 | 0.210 | 202 |
| 5 | 11404 | 0.230 | 221 |
| State Parks | $1948 *$ | 0.039 | 39 |
|  |  |  | Total 1000 |

* Included in sales from zone 1-5.

The stratified, weighted sampling procedure resulted in a total sample of 6,250 of the 103,636 resident fishing and combination licenses ( $6.3 \%$ ), and 1000 of the 51,607 nonresident fishing and combination licenses (1.9\%) sold in 1990.

License Collection and Sampling - In May, 1990 all license agents were contacted and requested to begin mailing in the "Department Copy" of the license receipt on a monthly basis. Department Game Wardens were requested to obtain 1990 license receipts collected prior to May, 1990 from agents within their districts. License receipts were logged by month and license agent, and filed by county. Individual agents were contacted in September 1990 for delinquent receipts.

License receipts through September, 1990 were used to obtain the sample of anglers to be surveyed. Based upon the timing of 1989 license sales, this resulted in the collection of approximately $97 \%$ of all resident, and $93 \%$ of all nonresident fishing and combination licenses sold in 1990.

In December, 1990 license receipts were seperated into the five predefined zones. License receipts were thorourhly mixed and a random sample of the predetermined number of resident and nonresident fishing and combination licenses were selected for each zone. Information on name, address, phone number, age, sex, license type and sampling zone were used to develop a computerized mailing list. In addition, an ID number was assigned to each license sample to be used in tracking nonrespondents for the second mailing, and to facilitate the merger of demographic information from the mailing list with the questionnaire responses for analysis. Names were not linked with questionnaire results, providing complete confidentiality for the respondents.

Data Entry and Analysis - All surveys were screened for responses which were illedgible or did not conform to the data entry format. Codes were assigned to these entries prior to keypunching. Data was keypunched and verified by the State Information Services during April, May and Jume of 1991. The survey data file was then transferred to an in-house personal computer (IBM PS2 Model 50) where it was merged with demographic data from the license data file. Analysis of questionnaire responses was conducted with SYSTAT (5.0) statistical software.

Non-response Bias - Non-response bias in surveys may occur if a substantial segment(s) of the survey population does not respond and therefore are under-represented by the survey results. To address this potential bias, demographic information (age, sex, license type, geographic area) from the total sample will be compared with the sample of nonrespondents.

In addition, a weighted sample (by zone) of 100 resident anglers who did not respond to the survey were contacted by phone and asked several questions (Appendix II). Information collected in this non-response survey will be used to compare various attributes (avidity, species preference, ice vs openwater participation, gear use) of non-respondents and respondents as an insight into potential non-respose bias.

## RESULTS:

Questionnaire Returns - A total of 4,740 questionnaires were returned for an overall return rate of $65.4 \%$. In addition, 262 surveys were returned as "undeliverable" by the postal service ( 224 from first mailing, 38 from second mailing). Completed questionnaires from both the first and second mailings were recieved by 29 respondents. In these cases, only the first questionnaire was included for analysis. Subtracting these double returns, as well as those questionnaires returned damaged or blank, resulted in a total of 4,661 "useable" surveys for an overall "useable" response rate of 64.3\%.

Nonresident anglers responded at a slightly higher rate ( $66.6 \%$ ) than resident anglers (63.9\%). Return rates by sample zones were similar for both resident and nonresident anglers, while the minimum sample size goal of 400 responses was exceeded for all subpopulations:

| ZONE | RESIDENT RETURNS | NONRESIDENT RETURNS |  |
| :---: | ---: | ---: | ---: |
| 1 | $515 / 800=64.4 \%$ | $107 / 157=68.2 \%$ |  |
| 2 | $881 / 1326=66.4 \%$ | $94 / 141=66.7 \%$ |  |
| 3 | $692 / 1076=64.3 \%$ | $161 / 240=67.1 \%$ |  |
| 4 | $725 / 1168=62.1 \%$ | $131 / 202=64.9 \%$ |  |
| 5 | $1176 / 1880=62.6 \%$ | $149 / 221=67.4 \%$ |  |
| State Parks |  | $24 / 39=61.5 \%$ |  |
|  |  |  |  |
| TOTAL | $3995 / 6250$ | $=63.9 \%$ | $666 / 1000=66.6 \%$ |

Angler Demographics - Table 1 presents the sex ratio and age distribution of the Vermont resident and nonresident licensed anglers, as represented by the random stratified sampling of Vermont 1990 fishing and combination license receipts. These statistics for the Vermont population at large, provided by the 1990 Census (U.S. Department of Commerce, Bureau of the Census) are also included for comparison. Age strata follow those used in the U.S. Fish and Wildlife Service (USFWS) " 1985 National Survey of Fishing, Hunting and Wildlife-associated Recreation." However, anglers age 65 and older sampled in this survey were comprised soley of those purchasing a license in 1990, and do not include permanent license holders as did the USFWS survey. Therefore, this age strata should be considered under-represented by this survey.

Men, who accounted for only $48 \%$ of the Vermont population at large 15 years of age and older, comprised $78 \%$ of the resident and $85 \%$ of the nonresident licensed anglers in 1991. Although the age distribution differed slightly among zones, the majority of resident anglers were comprised of anglers 25-44 years of age. The 1990 Census indicate that this age group is more heavily represented by anglers than observed in the Vermont population at large. A similar age distribution was observed for nonresident anglers, although they tended to be somewhat more heavily represented in the older age strata than resident anglers.

Vermont Angler Survey Results - The analysis of resident and nonresident responses to questions Q-1 through Q-41 of the Vermont Angler Survey are presented in Appendix III. In addition, written comments supplied by survey respondents were indexed into 14 broad sub.ject headings and presented in Appendix IV.

Non-response Bias - Comparison of sex ratio, age distribution and license type of respondents with the original angler survey sample, did not reveal any significant non-response bias associated with the survey returns (Table 2). Sex ratios of respondents were identical to the original survey sample, while only slight deviations in the age distribution of the respondents were evident. In general, these deviations tended to show anglers of older age strata responding at a greater rate than anglers of younger age strata. Resident combination (hunting and fishing) license holders did respond at a slightly greater rate than resident anglers holding a fishing license only, while nonresident season license holders replied at a slightly greater rate than their term license counterparts.

Anglers contacted during the telephone survey of non-respondents fished less often than anglers who returned the mail survey. Forty-eight percent of the non-respondents fished five days or less in 1990 in contrast to $15 \%$ of the respondents (Table 3). Non-respondents were also less likely to ice fish than were survey respondents, $33 \%$ versus $54 \%$, respectively.

Species preferences were similar for respondents and non-respondents (Table 4). Trout (brook, brown and rainbow) were the most preferred fish species targeted during the open water fishing season by both groups, followed by black bass (largemouth and smallmouth) and yellow perch. The most preferred species indicated for the ice fishing season by both groups was yellow perch.

The tackle most often used to fish for trout and black bess was also similar for repondents and non-respondents. Both groups indicated that bait was most often used when trout fishing, while lures were primarily used when bass fishing.

## RISFERENCES:

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Date: November 23, 1992

Table 1. Age and sex distribution (presented as percentages) of resident (total and by zone) and nonresident Vermont anglers as determined by a random stratified sample of 1990 fishing and combination license receipts.

## ANGLLRR AGE DISIRIBUIION:

| Age | MALE ANGHERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 <br> Vermont <br> Census | Total | Residents by Zone |  |  |  |  | Total NonRes |
|  |  | Resident | 1 | $\underline{2}$ | $\underline{3}$ | $\underline{4}$ | 5 |  |
| 15 | 2 | 1 | 1 | 1 | $<1$ | I | 1 | <1 |
| 16-17 | 4 | 3 | 4 | 3 | 5 | 3 | 3 | 2 |
| 18-24 | 15 | 14 | 16 | 12 | 14 | 12 | 15 | 8 |
| 25-34 | 22 | 30 | 28 | 29 | 28 | 32 | 33 | 27 |
| 35-44 | 22 | 26 | 25 | 27 | 27 | 27 | 23 | 29 |
| 45-54 | 13 | 15 | 16 | 15 | 14 | 15 | 15 | 15 |
| 55-64 | 10 | 10 | 10 | 11 | 11 | 9 | 10 | 11 |
| $65+$ | 12 | 1 | 1 | 2 | 1 | 1 | 1 | 8 |
| N | 213331 | 4859 | 625 | 1000 | 861 | 904 | 1469 | 844 |

FEMALE ANGHERS

| Age | FKMALP ANGIERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 <br> Vermont <br> Census | Total | Residents by Zone |  |  |  |  | Total |
|  |  | Resident | 1 | $\underline{2}$ | $\underline{3}$ | $\underline{4}$ | $\underline{5}$ | NonRes |
| 15 | 2 | 1 | 1 | $<1$ | <1 | 0 | 1 | 1 |
| 16-17 | 3 | 3 | 5 | 3 | 4 | 2 | 1 | 1 |
| 18-24 | 14 | 16 | 19 | 13 | 13 | 17 | 20 | 7 |
| 25-34 | 21 | 31 | 24 | 32 | 33 | 32 | 32 | 35 |
| 35-44 | 20 | 25 | 28 | 31 | 24 | 25 | 20 | 23 |
| 45-54 | 13 | 14 | 13 | 12 | 14 | 14 | 17 | 18 |
| 55-64 | 10 | 8 | 10 | 9 | 10 | 9 | 8 | 8 |
| $65+$ | 17 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| N | 228387 | 1385 | 174 | 324 | 215 | 263 | 409 | 154 |

ANGLER SKX RATIO:

| VERMONT ANGIERS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | Total | Residents by Zone |  |  |  |  | Total |
| Age 15+ | Census | Resident | 1 | $\underline{2}$ | $\underline{3}$ | 4 | $\underline{5}$ | NonRes |
| \% Male | 48 | 78 | 78 | 76 | 80 | 77 | 78 | 85 |
| \% Female | 52 | 22 | 22 | 24 | 20 | 23 | 22 | 15 |
| N | 441718 | 6246 | 799 | 1325 | 1076 | 1167 | 1879 | 998 |

1 Does not include permanent license holders and percentages, therefore, under-represent this age strata.

Table 2. Comparison of age distribution, sex ratio, and license type (presented as percentages) for the original angler sample vs. respondents of 1991 Vermont Angler Survey.

## ACF DISTRIBUTION:

|  | MALE ANGIERS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RESIDENTS |  |  | NONRESIDENTS |  |
|  | Total |  | Total |  |
| Age | Sample | Respondents | Sample | Respondents |
| 15 | 1 | 1 | <1 | <1 |
| 16-17 | 3 | 3 | 2 | 1 |
| 18-24 | 14 | 11 | 8 | 6 |
| 25-34 | 30 | 28 | 27 | 28 |
| 35-44 | 26 | 27 | 29 | 28 |
| 45-54 | 15 | 17 | 15 | 15 |
| 55-64 | 10 | 12 | 11 | 12 |
| $65+$ | 1 | 1 | 8 | 9 |
| N | 4859 | 3107 | 844 | 564 |

FEMALE ANGLERS

RESIDENTS
Total
Age
15
16-17

18-24
25-34
35-44
45-54
55-64 $65+$

N
N

Sample
1
3
16
31
25
14
8
2

| Respondents |
| :---: |
| 1 |
| 2 |
| 12 |
| 31 |
| 25 |
| 15 |
| 12 |
| 1 |

877
1385

3107

Total
$844 \quad 564$

Table 2. Continued.

## LICENSE TYPE:

## RESTDENT ANGIERS

License Type

| Total | $\frac{\text { Season Fishing }}{\text { Sample }}$ | 59 | $\frac{\text { Combination }}{41}$ |
| :---: | :---: | :---: | :---: |
| Respondents | 54 | 46 | $6 \frac{N}{248}$ |
|  |  | 3987 |  |

## NONRESIDENT ANGHERS

License Type

| Total | Season <br> Sample | $\frac{\text { Fishing }}{35}$ | $\frac{\text { Comb. }}{4}$ | $\frac{3 \text {-day }}{39}$ | $\frac{7 \text {-day }}{16}$ | $\frac{14 \text {-day }}{5}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Respondents | 39 | 5 | 34 | 16 | $\frac{N}{1000}$ |  |

Table 3. Number of days fished (open-water and ice fishing) by respondents and non-respondents in Vermont during the 1990 fishing season. Residents only.

|  | Respondents |  | Non-respondents |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Days | $\#$ | $\%$ | $\#$ | $\%$ |
| 0 | 120 | 3 | 10 | 10 |
| $1-5$ | 452 | 12 | 37 | 38 |
| $6-10$ | 508 | 13 | 15 | 15 |
| $11-20$ | 828 | 21 | 16 | 16 |
| $21-30$ | 651 | 17 | 9 | 9 |
| $31-40$ | 428 | 11 | 2 | 2 |
| $41-50$ | 654 | 7 | 3 | 3 |
| $50+$ |  | 18 | 6 | 6 |
|  |  |  |  |  |
| TOTAL | 3939 |  | 98 |  |

Table 4. Types of fish preferred by respondents and non-respondent during open and ice fishing seasons and the percentage of anglers that chose each type.

| OPRN-WATER |  |  |  |
| :---: | :---: | :---: | :---: |
| Respondents |  | Non-responden |  |
| Trout | 47\% | Trout | 41\% |
| Black Bass | 18\% | Black Bass | 16\% |
| Yellow Perch | 8\% | Yellow Perch | 16\% |
| Number of |  | Number of |  |
| Respondents | 3375 | Respondents | 93 |

## ICB-FISHING

| Respondents |  | Non-respondent |  |
| :---: | :---: | :---: | :---: |
| Yellow perch | 30\% | Yellow Perch | 48\% |
| Northern Pike | 14\% | Smelt | 13\% |
| Smelt | 14\% | Walleye | 13\% |
| Lake Trout | 11\% | Anything | 13\% |
| Walleye | 10\% | Northern Pike | 10\% |
| Number of | 1870 | Number of Respondents | 28 |


Vermont Angler Survey

APPENDIX I. Questionnaire and cover letters.





## QUESTIONNAIRE INSTRUCTIONS <br> Please Read Carefully

This questionnaire refers to all types of fishing found in Vermont; from lake trout to largemouth bass to yellow perch; from open-water fishing to ice-fishing. Regardless of how often you fish, please take the time to fill out the questionnaire. Your opinions are important.

The questions are divided into five sections. Depending upon your answers, the directions may tell you to skip a question or a whole section. Please follow the arrows carefully.

If you would like a summary of the results of this questionnaire, please remember to check the box on the last page.

When you have completed the questionnaire, simply staple or tape it closed and drop it in the mail, no postage is needed. Your answers will be kept strictly confidential. Thank you.

## FISHING IN VERMONT

Q-1 Which of the following fish do you fish for in Vermont? (Circle the number(s) of ALL the kinds of fish that you fish for.)

1. BROOK TROUT
2. BULLHEAD (HORNPOUT)
3. BROWN TROUT
4. YELLOW PERCH
5. RAINBOW TROUT
6. CRAPPIE
7. LAKE TROUT
8. LANDLOCKED SALMON
9. SUNFISH (PUMPKINSEED, BLUEGILL)
10. ROCK BASS
11. SMELT
12. WALLEYE
13. SAUGER
14. LARGEMOUTH BASS
15. SMALLMOUTH BASS
16. PICKEREL
17. NORTHERN PIKE
18. MUSKELLUNGE
19. AMERICAN SHAD (CONNECTICUT RIVER)
20. CHANNEL CATFISH

Q-2 Do you fish during the OPEN-WATER season in Vermont (spring, summer, fall)? (Circle one number.)


Q-3 What kinds of fish (listed in Q-1) do you prefer to fish for during the OPEN-WATER season in Vermont? (Please rank your top three choices by writing the species number in the appropriate box.)
MOST PREFERRED
SECOND MOST PREFERRED ...
THIRD MOST PREFERRED $\qquad$


OR
I HAVE NO PREFERENCE
(Check this box.) $\qquad$


Q-4 Do you ICE-FISH in Vermont? (Circle one number.)

1. $\mathrm{NO} \longrightarrow \quad$ Go to $\mathrm{Q}-6$
2. YES

Q-5 What kinds of fish (listed in Q-1) do you prefer to fish for during the ICE-FISHING season in Vermont? (Please rank your top three choices by writing the species number in the appropriate box.)
MOST PREFERRED $\qquad$


SECOND MOST PREFERRED.
THIRD MOST PREFERRED


OR
I HAVE NO PREFERENCE
(Check this box.) $\qquad$


Q-6 About how many days did you fish in Vermont in 1990? (Write the number of days in the appropriate box.)



Q-8 About how many days did you fish in the following types of water outside Vermont in 1990? (Please write in the number of days fished in the appropriate box.)

Number of days fished in 1990
GREAT LAKES (ONTARIO, ETC.) $\qquad$


## BROOK, BROWN, OR RAINBOW TROUT

 STREAMS or RIVERSQ-9 Do you fish for brook, brown, or rainbow trout in STREAMS or RIVERS in Vermont? (Circle one number.)
$\underset{\text { 2. }}{\text { 2. }} \mathrm{NO} \longrightarrow G G$ Go to Q-16
2. YES

Q-10 What tackle do you most often use to fish for brook, brown, or rainbow trout in STREAMS or RIVERS? (Circle one number.)

1. LURES
2. FLIES
3. BAIT
4. LURES WITH BAIT

Q-11 If there were no minimum length limits, what is the smallest length of each species that you would keep when fishing in STREAMS or RIVERS? (Circle only one number for each species. If you do not keep a particular species, circle DO NOT KEEP. If you do not fish for a species, circle NA.)

|  |  | INCHES |  |  | $\begin{aligned} & \text { DO NOT } \\ & \text { KEEP } \end{aligned}$ | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Brook Trout ....................... 6 <br> or lems | 8 | 10 | $12 \operatorname{or}^{14}$ |  |  |
| B. | Brown Trout $\qquad$ .. 6 <br> or lems | 8 | 10 | $1214$ | DO NOT KEEP | NA |
| C. | Rainbow Trout ................... 6 <br> or lese | 8 | 10 | $12 \underbrace{14}_{\text {or more }}$ | DO NOT KEEP | NA |

Q-12 When fishing in STREAMS or RIVERS, what is the smallest length of each species that you would consider a good or quality size fish? (Circle only one number for each species, or NA if you do not fish for a species.)

|  |  | INCHES |  |  | $\begin{aligned} & \text { NO } \\ & \text { OPINION } \end{aligned}$ | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Brook Trout ....................... 6 <br> or lees | 8 | 10 | $12 \underset{\text { or more }}{14}$ |  |  |
| B. | Brown Trout ...................... 8 or leat | 10 | 12 | $14 \underset{\text { or more }}{16}$ | $\begin{gathered} \text { NO } \\ \text { OPINION } \end{gathered}$ | NA |
| C. | Rainbow Trout .................. 8 | 10 | 12 | $14 \quad \begin{gathered} 16 \\ \text { or more } \end{gathered}$ | $\begin{gathered} \text { NO } \\ \text { OPINION } \end{gathered}$ | NA |


| Q-13 | The general daily creel limit for trout in STREAMS or RIVERS is 12 fish of any one species or combination of species. Do you agree with the present daily creel limits? (Circle one response for each species. If you disagree, please write in your recommended daily limit.) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Presen Daily Li |  | Write In Your Recommende Daily Limit |  |
| A. | Brook Trout .......... 12 | AGREE | AC | NO OPIN |
| B. | Brown Trout ......... 12 | AGREE | SAGRE | No 0 |
|  | inbow Trout ..... 12 | AGREE | DISAGREE $\rightarrow$ | NO OPIN |
|  |  |  |  |  |

Q-14 The present fishing season for trout in STREAMS and RIVERS runs from mid-April through October. What is your opinion of the length of this season? (Circle all numbers that apply for each epeoies)
A. Brook Trout:

1. JUST ABOUT RIGHT
2. OPEN EARLIER
3. OPEN LATER
4. close earlier
B. Brown Trout:
5. JuSt about right
6. CLOSE LATER
7. OPEN EARLEER
8. NO CLOSED SEASON
9. OPEN LATER
10. CLOSE EARLIER
Rainbow Trout:
11. Just about right
b. close later
12. OPEN EARLIER
13. NO CLOSED SEASON
14. OPEN LATER
15. NO OPINION
16. CLOSE EARLIER
17. CLOSE later
18. NO CLOSED SEASON
19. NO OPINION

Q-15 Special regulations can be used in certain waters to increase the number and/or size of fish available to be caught. (Please circle the number(s) of ALL the special regulations that you might support for trout fishing in some STREAMS or RIVERS.)

1. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
2. ARTIFICIAL LURES AND FLIES ONLY
3. SPECIAL LENGTH LIMITS
4. LOWER CREEL LIMITS
5. DO NOT SUPPORT ANY SPECIAL REGULATIONS
6. NO OPLNION

TROUT OR SALMON PONDS and LAKES


Q-19 When fishing in PONDS or LAKES, what is the smallest length of each species that you would consider a good or quality size fish? (Circle only one number for each species, or NA if you do not fish for a species.)

INCHES

| A. | $\text { rook Trout ........................... } 8$ | 1012 | $14{\underset{\text { or more }}{16}}_{16}$ | OPINION |
| :---: | :---: | :---: | :---: | :---: |
| B. | Brown Trout ..................... 10 | 1214 | $16 \underset{\text { or more }}{18}$ | OPINION |
| C. | Rainbow Trout .................. 10 | 1214 | $16{ }_{\text {or more }}^{18}$ | OPINION |
| D. | $\text { ..... } 15$ | $18 \quad 21$ | $24 \underset{\text { or more }}{27}$ | OPINION |
| E | andlocked Salmon .......... 12 | 1518 | $21 \underset{\text { or morer }}{24}$ | OPINION |

Q-20 The general daily creel limit for brook, brown and rainbow trout in PONDS and LAKES is 12 fish of any one species or combination of species. Do you agree with the present daily creel limits? (Circle one response for each species. If you disagree, please write in your recommended daily limit.)

| $\begin{gathered} \text { Preser } \\ \text { Daily Li } \end{gathered}$ |  | Write In Your Recommended Daily Limit |  |
| :---: | :---: | :---: | :---: |
| A. Brook Trout ..........12 | Agree | disagree - | No OPINION |
| B. Brown Trout ......... 12 | Agree | disagree | no opinion |
| C. Rainbow Trout ..... 12 | Agree | disagree - | NO OPINION |
| D. Combined Limit... 12 | Agree | disagree - | No OPINION |

Q-21 The general daily creel limit for landlocked salmon and lake trout is 2 salmon or 2 lake trout or 1 of each. Do you agree with the present daily creel limits? (Circle one response for each species. If you disagree, please write in your recommended daily limit.)

Present Daily Limit
A. Lake Trout $\qquad$ 2 AGREE
B. Landlocked Salmon 2 AGREE
C. Combined Limit........ 2 AGREE

Write In Your
Recommended
Daily Limit

NO OPINION NO OPINION NO OPINION

Q-22 The present OPEN-WATER fishing season for trout and salmon in PONDS and LAKES is from mid-April through October. What is your opinion of the length of this season? (Circle all numbers that apply for each group.)
A. Brook, Brown \& Rainbow Trout:

1. JUST ABOUT RIGHT
2. CLOSE LATER
3. OPEN EARLIER
4. NO CLOSED SEASON
5. OPEN LATER
6. NO OPINION
B. Lake Trout:
7. JUST ABOUT RIGHT
8. CLOSE LATER
9. OPEN EARLIER
10. NO CLOSED SEASON
11. OPEN LATER
12. NO OPINION
C. Landlocked Salmon:
13. JUST ABOUT RIGHT
14. CLOSE LATER
15. OPEN EARLIER
16. NO CLOSED SEASON
17. OPEN LATER
18. CLOSE EARLIER
19. NO OPINION

Q-23 The ICE-FISHING season for trout and salmon in some PONDS and LAKES is from the 3rd Saturday in January through the 2nd Sunday in March. What is your opinion of the length of this season? (Circle all numbers that apply for each group.)
A. Brook, Brown \& Rainbow Trout:

1. JUST ABOUT RIGHT
2. CLOSE LATER
3. OPEN EARLIER
4. NO OPINION
5. OPEN LATER
B. Lake Trout:
6. JUST ABOUT RIGHT
7. CLOSE LATER
8. OPEN EARLIER
9. NO CLOSED SEASON
10. OPEN LATER
11. CLOSE EARLIER
C. Landlocked Salmon:
12. JUST ABOUT RIGHT
13. OPEN EARLIER
14. CLOSE LATER
15. OPEN LATER
16. NO CLOSED SEASON
17. CLOSE EARLIER

Q-24 About how many days did you spend fishing on Lake Champlain for each of the following species during the 1990 open-water and ice-fishing seasons? (Please write in the number of days fished in the appropriate box.)

OPEN ICE
A. BROWN TROUT $\qquad$


Q-25 Special regulations can be used in certain waters to increase the number and/or size of fish available to be caught. (Please circle the number ( $\beta$ ) of ALL the special regulations that you might support in some PONDS and LAKES for the types of fishing listed below.)
A. Brook, Brown, \& Rainbow Trout:

1. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
2. ARTIFICIAL LURES AND FLIES ONLY
3. SPECIAL LENGTH LIMITS
4. LOWER CREEL LIMITS
5. DO NOT SUPPORT ANY SPECIAL REGULATIONS
6. NO OPINION
B. Lake Trout:
7. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
8. ARTIFICIAL LURES AND FLIES ONLY
9. SPECIAL LENGTH LIMITS
10. LOWER CREEL LIMITS
11. DO NOT SUPPORT ANY SPECIAL REGULATIONS
12. NO OPINION
C. Landlocked Salmon:
13. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
14. ARTIFICIAL LURES AND FLIES ONLY
15. ARTIFICLAL LURES AND F
16. LOWER CREEL LIMITS
17. DO NOT SUPPORT ANY SPECIAL REGULATIONS
18. NO OPINION

WARMWATEIR GAME FISH AND PANFISH

Q-26 Do you fish for walleye, bass, pike, yellow perch, sunfish, black crappie, bullhead or smelt in Vermont? (Circle one number.)

```
    1. NO }\longrightarrow\mathrm{ YES }\longrightarrow\mathrm{ Go to Q-37
        2. YES
    If there were no minimum length limits, what is the smallest length
    of each species that you would keep? (Circle only one number for
    each species. If you do not keep a particular species, circle
    DO NOT KEEP. If you do not fish for a species, circle NA.)
```

|  |  | INCHES |  |  | $\begin{gathered} \text { DONOT } \\ \text { KEEP } \end{gathered}$ | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Walleye ............................... 9 | 12 | 15 | $18 \underset{\text { or more }}{21}$ |  |  |
| B. | Largemouth Bass .............. 6 <br> or less | 8 | 10 | $12 \underset{\text { or more }}{14}$ | $\begin{aligned} & \text { DONOT } \\ & \text { KEEP } \end{aligned}$ | NA |
| C. | Smallmouth Bass .............. 6 <br> or less | 8 | 10 | $12 \underset{\text { or more }}{14}$ | $\begin{aligned} & \text { DONOT } \\ & \text { KEEP } \end{aligned}$ | NA |
| D. | Northern Pike ................... 16 <br> or less | 18 | 20 | $22 \underset{\text { or more }}{24}$ | $\begin{aligned} & \text { DO NOT } \\ & \text { KEEP } \end{aligned}$ | NA |
| E. | Yellow Perch ........................ 6 | 7 | 8 | $9 \underset{\text { or more }}{10}$ | $\begin{aligned} & \text { DO NOT } \\ & \text { KEEP } \end{aligned}$ | NA |

Q-28 What is the smallest length of each species that you would consider a good or quality size fish? (Circle only one number for each species, or NA if you do not fish for a species.)

|  |  | INCHES |  |  | $\begin{gathered} \text { NO } \\ \text { OPINION } \end{gathered}$ | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Walleye .............................. 12 <br> or leas | 15 | 18 | $21 \quad 24$ |  |  |
| B. | Largemouth Bass ............... 10 | 12 | 14 | $16 \underset{\substack{\text { or more }}}{18}$ | $\begin{gathered} \text { NO } \\ \text { OPINION } \end{gathered}$ | NA |
| C. | Smallmouth Bass ............... 10 | 12 | 14 | $16 \underset{\substack{\text { or more }}}{18}$ | $\begin{aligned} & \text { NO } \\ & \text { OPINION } \end{aligned}$ | NA |
| D. | Northern Pike .................... 18 <br> or less | 22 | 26 | $30 \underset{\substack{\text { or more }}}{34}$ | $\begin{aligned} & \text { NO } \\ & \text { OPINION } \end{aligned}$ | NA |
| E. | Yellow Perch $\qquad$ 8 or lese | 9 | 10 | $\begin{array}{ll} 11 & 12 \\ \text { or more } \end{array}$ | $\begin{gathered} \text { NO } \\ \text { OPINION } \end{gathered}$ | NA |

Q-29 What tackle do you most often use to fish for largemouth and smallmouth bass? (Circle only one response for each species. If you do not fish for a particular species, circle NA.)

|  | TACKLE |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A. Largemouth Bass ...... LURES FLIES BATT | LURES WITH | NA |  |  |
| B. Smallmouth Bass ...... LURES FLIES | BAIT | LURES WFTH <br> BAIT | NA |  |

Q-30 The present OPEN-WATER fishing season for keeping largemouth and smallmouth bass is from the 2nd Saturday in June through November 30th. What is your opinion of the length of this season? (Circle all numbers that apply.)

1. JUST ABOUT RIGHT
2. OPEN EARLIER
3. OPEN LATER
4. CLOSE EARLIER
5. CLOSE LATER
6. NO CLOSED SEASON
7. NO OPINION

Q-31 The present ICE-FISHING season for largemouth and smallmouth bass in some PONDS and LAKES is from the 3rd Saturday in January through the 2nd Sunday in March. What is your opinion of the length of this season? (Circle all numbers that apply.)

1. JUST ABOUT RIGHT
2. OPEN EARLIER
3. OPEN LATER
4. CLOSE EARLIER
5. CLOSE EARLER
6. CLOSE LATER
7. NO CLOSED SEASON
8. NO OPINION

Q-32 The general daily creel limit for largemouth and smallmouth bass is 5 fish of any one species or combination of species. Do you agree with the present daily creel limits? (Circle one response for each species. If you disagree, please write in your recommended daily limit.)

## Present

 Daily LimitA. Largemouth Bass ..... 5 AGREE
B. Smallmouth Bass ..... 5 AGREE
C. Combined Limit $\qquad$ 5 AGREE
Write In Your Recommended Daily Limit

NO OPINION
NO OPINION NO OPINION

Q-33 The general daily creel limit for walleye and northern pike is 5 fish each. Do you agree with the present daily creel limits? (Circle one response for each species. If you disagree, please write in your recommended daily limit.)

Present
Write In Your
Recommended
Daily Limit
A. Walleye Daily Limit

Daily Limit 5 AGREE
B. Northern Pike $\qquad$ 5 AGREE


NO OPINION NO OPINION

Q-34 There is no daily creel limit for the following species. Do you agree with the present regulation? (Circle one response for each species. If you disagree, please write in your recommended daily limit.)

A. Yellow Perch $\qquad$ AGREE
 NO OPINION NO OPINION NO OPINION NO OPINION NO OPINION

Q-35 About how many days did you spend fishing on Lake Champlain for each of the following species during the 1990 open-water and ice-fishing seasons? (Please write in the number of days fished in the appropriate box.)
A. WALLEYE
B. LARGEMOUTH OR SMALLMOUTH BASS
C. NORTHERN PIKE $\qquad$
D. YELLOW PERCH $\qquad$
E. BLACK CRAPPIE $\qquad$
F. SUNFISH $\qquad$
G. SMELT $\qquad$
H. BULLHEAD $\qquad$
OPEN
ICE


Q-36 Special regulations can be used in certain waters to increase the number and size of fish available to be caught. (Please circle the number(s) of ALL the special regulations that you might support on some waters for the types of fishing listed below.)
A. Walleye:

1. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
2. ARTIFICIAL LURES AND FLIES ONLY
3. SPECIAL LENGTH LIMITS
4. LOWER CREEL LIMITS
5. DO NOT SUPPORT ANY SPECIAL REGULATIONS
6. NO OPINION
B. Largemouth or Smallmouth Bass:
7. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
8. ARTIFICIAL LURES AND FLIES ONLY
9. SPECIAL LENGTH LIMTTS
10. LOWER CREEL LIMITS
11. DO NOT SUPPORT ANY SPECIAL REGULATIONS
12. NO OPINION
C. Northern Pike:
13. CATCH AND RELEASE - ALL FISH MUST BE RELEASED
14. ARTIFICIAL LURES AND FLIES ONLY
15. SPECIAL LENGTH LIMITS
16. LOWER CREEL LIMITS
17. DO NOT SUPPORT ANY SPECLAL REGULATIONS
18. NO OPINION

## FISHING IN GENERAL

Q-37 Overall, how would you rate the present quality of fishing in Vermont?

1. EXCELLENT
2. POOR
3. GOOD
4. NO OPINION
5. FAIR

Q-38 General regulations allow the use of 2 lines when fishing during the OPEN-WATER season and 8 lines during the ICE-FISHING season. Do you agree with the number of lines allowed in each season? (Circle the appropriate response. If you disagree, please write in your recommended number of lines.)
$\left.\begin{array}{c}\text { Number } \\ \text { of Lines }\end{array} \quad \begin{array}{c}\text { Write In Your } \\ \text { Recommended } \\ \text { Number of Lines }\end{array}\right]$
A. OPEN-WATER $\qquad$ 2 AGREE DISAGREE $\rightarrow \square$ NO OPINION
B. ICE-FISHING $\qquad$ 8 AGREE

DISAGREE $\rightarrow$ $\square$ NO OPINION

Q-39 We would now like to find out your opinion on the use of HATCHERY TROUT in managing Vermont's fisheries. (Circle one response for each program.)
A. Stocking Brook, Brown, and Rainbow Trout to be caught within the same season (put-and-take) in STREAMS and RIVERS:

| VERY | SOMEWHAT | NOT | NO |
| :---: | :---: | :---: | :---: |
| IMPORTANT | IMPORTANT | IMPORTANT | OPINION |

B. Manage strictly for wild trout (no stocking) in some STREAMS and RIVERS:

| VERY <br> IMPORTANT | SOMEWHAT <br> IMPORTANT | NOT <br> IMPORTANT | NO |
| :---: | :---: | :---: | :---: |
| OPINION |  |  |  |

C. Stocking Brook, Brown, and Rainbow Trout to be caught within the same season (put-and-take) in LAKES and PONDS:

| VERY | SOMEWHAT | NOT | NO |
| :---: | :---: | :---: | :---: |
| IMPORTANT | IMPORTANT | IMPORTANT | OPINION |

D. Manage strictly for wild trout (no stocking) in some LAKES and PONDS:

| VERY | SOMEWHAT | NOT | NO |
| :---: | :---: | :---: | :---: |
| IMPORTANT | IMPORTANT | IMPORTANT | OPINION |

Q-40 What is your opinion of the following issues in Vermont? (Circle one response for each issue.)
A. Conflict between open-water and ice-fishing for trout and salmon:

| SERIOUS | MINOR | NO | NO |
| :--- | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

B. Conflict between open-water and ice-fishing for largemouth and smallmouth bass:

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

C. Conflict between fishing and other recreational users (skiing, boating, etc.):

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

D. Shooting of northern pike in Lake Champlain:

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

E. Commercial sale of panfish taken by hook and line:

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

F. Fishing with bait on treble hooks:

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

G. Fishing with bait on hooks that do not corrode (e.g. stainless steel):

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

H. Fishing derbies (other than "kids" derbies):

| SERIOUS | MINOR | NO | NO |
| :---: | :---: | :---: | :---: |
| PROBLEM | PROBLEM | PROBLEM | OPINION |

Q-41 Are you a member of a fishing organization or fish and game club? (Circle one number.)

1. NO
2. YES (Please specify):

If there anything else you would like to tell us about fishing in (-rmont? Any, comments you wish to make that you think may help us in future efforts to improve fishing in Vermont will be appreciated. (Please use the space below for your comments.)

Your contribution to this effort is greatly appreciated. If you would like a summary of results, please check the box and print your name and mailing address. We will see that you get a copy.
$\qquad$
Please tape or staple closed. Drop it in the mall - no postage needed. Thank you.

## State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
Natural Resources Conservation Council

AGENCY OF NATURAL RESOURCES 103 South Main Street, 10 South

Waterbury, Vermont 05676 802-244-7331
DEPARTMENT OF FISH AND WILDLIFE

January 14, 1991

## Dear Vermont Angler:

The Vermont Fish and Wildife Department is in the process of re-evaluating its fish management program. We are beginning this process by conducting a random survey of Vermont anglers because we believe your opinions must be included in our efforts to improve sportfishing. Enclosed is a questionnaire which provides us an opportunity to hear your views on such issues as creel limits, season length, use of hatchery reared trout and special regulations.

As this survey has been sent to only a small percentage of Vermont anglers, it is important that each questionnaire be returned. Regardless of how often you fished in 1990, we want to hear your opinions. Casual as well as serious anglers are an important part of Vermont's sportfishing community.

Please take the time to complete the questionnaire and drop it in a mailbox. No stamp or envelope is required. Your answers will be kept completely confidential. If you would like a summary of the results of this survey, please check the box on the last page.

Thank you for your time and help.


## Dear Vermont Angler:

Last week a cquestionnaire seeking your opinion on sportfishing in Vermont was mailed to you. If you have already completed and retunned it to us, please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small percentage of anglers, your answers are extremely important if the results are to accurately represent the opinions of Vermont anglers.

If you did not receive the questionnaire, or it was misplaced, please call me at (802) 485-7566 and I will get another one in the mail to you today.

Sincerely,
Rich Kirn
VI Department of Fish and Wildlife

## State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation Department of Environmental Conservation

State Geologist
Natural Resources Conservation Council

AGENCY OF NATURAL RESOURCES
103 South Main Street, 10 South
Waterbury, Vermont 05676
802-244-7331
DEPARTMENT OF FISH AND WILDLIFE

February 2, 1991

## Dear Vermont Angler:

About three weeks ago I wrote to you seeking your opinion on sportfishing in vermont. As of today we have not received your completed questionnaire.

The Fish and Wildlife Department is conducting this survey of Vermont anglers because we believe the opinions of anglers should be taken into account as we work to improve sportfishing in Vermont.

I am writing to you again because of the importance of your questionnaire to the results of this survey. You are one of the small percentage of licensed anglers selected to express opinions on fishing in Vermont. In order that the results of this survey truly represent the opinions of all vermont anglers it is essential that each person return their questionnaire. Even if you did not fish in 1990, we want to hear from you.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.


Enclosure

Appendix II. Telephone survey of nonrespondents.

1) About how many days did you fish in Vermont in 1990? $\qquad$
2) Do you fish during the open-water season in Vermont (spring, summer, fall)?
1. No
2. Yes

If YES to Q2
3) What kinds of fish do you prefer to fish for during the open-water season in Vermont?

1. $\qquad$ 2. $\qquad$
2. 

If they listed any salmonid spp. in Q-3, ask:
4) What tackle do you most often use to fish for (salmonid spp in Q3)?

1. Lures
2. Flies
3. Bait
4. Lures with bait

If they listed bess (LMB or SMB) in Q-3, ask:
5) What tackle do you most often use to fish for bass?

1. Lures
2. Flies
3. Bait
4. Lures with bait
6) Do you ice-fish in Vermont?
1. No .
2. Yes

If YES to Q3
7) What kinds of fish do you prefer to fish for during the ice-fishing season in Vermont?

1. $\qquad$ 2. $\qquad$
2. $\qquad$
Thank you for your time!
Comments:

APPENDIX III - Results of the Vermont Angler Survey

APPRNDIX IV - Additional comments received during the 1991 Vermont Angler Survey (enclosed seperately)

Table 1. What fish species do you fish for in Vermont? Species ranking is based on the percentage of respondents selecting the species.

Residents

| Spectes | Total <br> Rank * | $\begin{gathered} \text { Zone } 1 \\ \text { Rank } \end{gathered}$ | $\begin{gathered} \text { Zone } 2 \\ \text { Rank } \end{gathered}$ | $\begin{gathered} \text { Zone } \\ \text { Rank } \end{gathered}$ | Zone 4 <br> Rank | Zone 5 Rank | ```Nonresi- dents total Rank``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brook trout | 1 (79) | 1 (88) | 1 (86) | 1 (87) | 1 (77) | 3 (65) | 4 (54) |
| Rainbow trout | 2 (73) | 2 (80) | 2 (82) | 2 (82) | 3 (71) | 7 (60) | 1 (57) |
| Yellow perch | 3 (73) | 3 (73) | 4 (69) | 6 (63) | 2 (73) | 1 (81) | 6 (45) |
| Brown trout | 4 (68) | 4 (69) | 3 (74) | 3 (80) | 4 (67) | 8 (55) | 5 (52) |
| Smallmouth bass | 5 (64) | 6 (59) | 5 (61) | 4 (66) | 6 (59) | 2 (72) | 2 (56) |
| Largemouth bass | 6 (60) | 7 (50) | 6 (55) | 5 (63) | 5 (63) | 4 (65) | 3 (56) |
| Lake trout | 7 (48) | 5 (62) | 7 (48) | 8 (43) | 9 (46) | 9 (47) | 8 (36) |
| Northern pike | 8 (48) | 10 (31) | 8 (41) | 7 (45) | 7 (51) | 6 (61) | 7 (41) |
| Walleye | 9 (44) | 13 (28) | 9 (34) | 11 (38) | 10 (44) | 5 (62) | 9 (31) |
| Bullhead | 10 (38) | 9 (37) | 11 (34) | 9 (41) | 8 (48) | 11 (35) | 14 (14) |
| Pickerel | 11 (32) | 8 (40) | 10 (34) | 10 (39) | 14 (22) | 13 (29) | 10 (30) |
| Landlocked salmon | 12 (27) | 11 (29) | 12 (22) | 13 (22) | 13 (22) | 10 (36) | 11 (22) |
| Smelt | 13 (27) | 12 (29) | 13 (17) | 16 (15) | 11 (42) | 12 (30) | 17 (8) |
| Sunfish | 14 (18) | 15 (12) | 15 (14) | 12 (22) | 12 (24) | 15 (16) | 12 (26) |
| Rockbass | 15 (18) | 14 (19) | 14 (15) | 14 (19) | 16 (20) | 14 (16) | 13 (18) |
| White perch | 16 (16) | 16 (11) | 16 (10) | 15 (16) | 15 (21) | 17 (12) | 16 (11) |
| Crappie | 17 (10) | 19 ( 3) | 18 (5) | 18 ( 8) | 18 (18) | 16 (12) | 15 (13) |
| Channel catfish | 18 (9) | 18 (4) | 17 ( 6) | 17 (9) | 17 (19) | 19 (7) | 19 ( 4) |
| Muskellunge | 19 (6) | 20 (3) | 19 ( 4) | 20 (6) | 21 (5) | 18 ( 8) | 18 (7) |
| Sauger | 20 (4) | 25 (<1) | 23 (1) | 23 ( 2) | 19 (10) | 21 (3) | 20 ( 2) |
| Sucker | 21 (3) | 17 (5) | 20 (4) | 22 (3) | 22 (4) | 23 ( 2) | 26 (<1) |
| Drum | 22 (3) | $26(<1)$ | 21 ( 2) | $24(2)$ | 20 (6) | 20 (4) | 21 ( 2) |
| Carp | 23 ( 2) | 23 (1) | 25 ( 1) | 21 (3) | 23 (2) | 22 (3) | 23 ( 1) |
| American shad | 24 (2) | 22 (1) | 22 ( 1) | 19 (6) | 26 (<1) | $26(<1)$ | 22 (1) |
| Whiteftsh | 25 ( 1) | 21 ( 2) | 24 ( 1) | $26(<1)$ | 24 ( 2) | 24 (2) | 25 ( 1) |
| Gar | 26 (1) | 24 ( 1) | 26 (<1) | 25 ( 1) | 25 ( 2) | 25 ( 1) | 24 ( 1) |
| Total Responses | 3995 | 515 | 881 | 692 | 725 | 1176 | 666 |

## PREFKRIED SPECIES - OPEN WATER

Table 2. What kinds of fish do you prefer to fish for during the OPFN-WATKR season in Vermont? Anglers were asked to list their three preferred fish species. Results are presented for the single most preferred species ("Most") and the total of the top three preferred species ("Total") selected by respondents. Responses of resident anglers are further partitioned by sampling zone. [Species abbreviations: BKT = Brook Trout; RBT = Rainbow Trout, BNT $=$ Brown Trout, LKT = Lake Trout, LMB = Largemouth Bass, SMB = Smallmouth Bass, WAE = Walleye, YP = Yellow Perch]

RESIDENTS
Zone 1

|  | Most |  |  | Total |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Most |  |  |  |  |
| 1. | BKT | $43 \%$ |  | BKT |  |
| 2. | RBT | 19 | RBT | 19 |  |
| 3. | LKT | 9 | YP | 11 |  |
| 4. | YP | 7 | BNT | 11 |  |
| 5. | LMB | 6 | LKT | 10 |  |

Number of
Responses 434

| Zone 2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Most |  |  | Total |  |
| BKT | $36 \%$ |  | RBT |  |
| RBT | 23 |  | $21 \%$ |  |
| LKT | 21 |  |  |  |
| LMB | 8 |  | BNT |  |
| BNT | 6 |  | 14 |  |
| SMB | 6 | LMB | 8 |  |
|  |  | YP | 8 |  |

## PREFERRRED SPBCIES - ICB FISHING

Table 3. What kinds of fish do you prefer to fish for during the ICB-FISHING season in Vernont? Anglers were asked to list their three preferred fish species. Results are presented for the single most preferred species ("Most") and the total of the top three preferred species ("Total") selected by respondents. Responses of resident anglers are further partitioned by sampling zone. [Species abbreviations: RBT = Rainbow Trout, BNT = Brown Trout, LKT = Lake Trout, NP = Northern Pike, WAE = Walleye, YP = Yellow Perch]


Zone 5

|  | Most |  |  | Total |  |
| :--- | :--- | :---: | :--- | :--- | ---: |
| 1. | YP | $65 \%$ |  | YP | $36 \%$ |
| 2. | SMELT | 8 |  | NP | 18 |
| 3. | NP | 8 |  | SMELT | 14 |
| 4. | WAE | 7 |  | WAE | 12 |
| 5. | LKT | 5 |  | LKT | 7 |
| Number of |  |  |  |  |  |
| Responses | 687 |  |  |  |  |

Total Residents

| Total |  |  |  | Residents |
| :--- | :---: | :--- | :--- | :--- |
| Most |  |  | Total |  |
| YP | $51 \%$ |  | YP | $30 \%$ |
| LKT | 11 | NP | 14 |  |
| SMELT | 10 | SMELT | 14 |  |
| NP | 9 | LKT | 11 |  |
| WAE | 8 | WAE | 10 |  |
|  |  |  |  |  |
|  | 1870 |  |  |  |

NONPRSIDENTS

|  | NONTRRSIDENTS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Most |  | Total |  |
| 1. | YP | 32\% | YP | 21\% |
| 2. | NP | 17 | NP | 15 |
| 3. | WAE | 12 | WAE | 11 |
| 4. | LKT | 11 | LKT | 10 |
| 5. | SMELT | 8 | SMELT | 8 |
|  | ber of ponses | 133 |  |  |

Table 4. About how many days did you fish in Versont in 1990? Anglers were asked to list both open-water fishing and ice-fishing days.

| Days | RESIDENT |  |  |  | NONRESIDENT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OPEN |  | ICE |  | OPEN |  | ICE |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| 0 | 132 | 3 | 293 | 14 | 10 | 2 | 24 | 15 |
| 1-5 | 519 | 13 | 601 | 29 | 237 | 38 | 59 | 38 |
| 6-10 | 642 | 17 | 486 | 23 | 152 | 25 | 42 | 27 |
| 11-20 | 940 | 24 | 420 | 20 | 122 | 20 | 23 | 15 |
| 21-30 | 716 | 19 | 165 | 8 | 62 | 10 | 7 | 5 |
| 31-40 | 271 | 7 | 44 | 2 | 11 | 2 | 0 | 0 |
| 41-50 | 171 | 4 | 25 | 1 | 8 | 1 | 0 | 0 |
| 50+ | 473 | 12 | 47 | 2 | 18 | 3 | 2 | 1 |
| Number of |  |  |  |  |  |  |  |  |
| Responses | 3864 |  | 2082 |  | 620 |  | 157 |  |
| Total Days | 104179 |  | 23986 |  | 7807 |  | 1192 |  |
| Mean | 27.0 |  | 11.5 |  | 12.6 |  | 7.6 |  |
| Median | 20.0 |  | 7.0 |  | 7.0 |  | 5.0 |  |

Table 5. About how many days did you fish in the following types of water outside Vermont in 1990? Results are presented as the percentage of the total days fished outside Vermont for each category and the percentage of all respondents who fished in each category.

Great Lakes
Other Freshwater
Saltwater

RESIDENT

| \% Days | \% Anglers |
| :---: | :---: |
| 15 | 11 |
| 70 | 20 |
| 15 | 18 |

NONRESIDENT

| \% Days | \% Anglers |
| :---: | :---: |
| 4 | 16 |
| 75 | 73 |
| 21 | 34 |

Percentage of respondents who fished outside Vermont in 1990

## FISHING DAYS BY CATBGORY

Table 6. About how many days did you spend fishing in each of the following categories during the 1990 open-water and ice-fishing seasons? Results are presented as the percentage of the total days fished in each category by each type of fishing.

Brook, Brown or Rainbow Trout in Small Brooks/Beaver Ponds 15

Brook, Brown or
Rainbow Trout in
Large Streams or Rivers 13
Brook, Brown or
Rainbow Trout in
Ponds or Lakes

| Lake Trout | 6 | 9 | 6 | 8 |
| :---: | :---: | :---: | :---: | :---: |
| Landlocked Salmon | 4 | 4 | 4 | 4 |
| Walleye | 7 | 8 | 9 | 8 |
| Smallmouth or Largemouth Bass | 16 | 4 | 19 | 7 |
| Northern Pike, Pickerel or Muskellunge | 8 | 15 | 12 | 12 |
| American Shad in the Connecticut River | <1 | -- | <1 | -- |
| Yellow Perch | 12 | 36 | 13 | 30 |
| Smelt | 1 | 15 | 1 | 15 |
| Panfish | 3 | 1 | 5 | 7 |
| Bullhead | 5 | <1 | 3 | <1 |
| Other | 1 | <1 | 1 | <1 |
| Total | 100\% | 100\% | 100\% | 100\% |

Figure 1. What tackle do you most often use to fish for brook, brown, or rainbow trout in streams or rivers?


Figure 2. What tackle do you most often use to fish for brook, brown, or rainbow trout during the open water season in ponds and lakes?

## BROOK TROUT



BROWN TROUT


RAINBOW TROUT


RESIDENTS
( $N=2292$ )

NONRESIDENTS
( $N=262$ )

Figure 3. What tackle do you most often use to fish for lake trout or landlocked salmon during the open water season in ponds and lakes?

LAKE TROUT


RESIDENTS
( $\mathrm{N}=1932$ )
NONRESIDENTS
( $\mathrm{N}=215$ )

LANDLOCKED SALMON


Figure.4. What tackle do you most often use to fish for largemouth and smallmouth bass?

LARGEMOUTH BASS


Figure 5. Percentage of anglers selecting (1) the smallest fish length they would keep, and (2) the smallest length they consider to be a quality size fish for the following species.

BROOK TROUT - STREAMS and RIVERS SMALLEST SIZE THAT WOULD BE KEPT


BROWN TROUT - STREAMS and RIVERS SMALLEST SIZE THAT WOULD BE KEPT


BROOK TROUT - STREAMS and RIVERS SMALLEST QUALITY SIZE


## BROWN TROUT - STREAMS and RIVERS SMALLEST QUALITY SIZE



Figure 5. Continued.

## RAINBOW TROUT - STREAMS and RIVERS SMALLEST SIZE THAT WOULD BE KEPT



BROOK TROUT - PONDS and LAKES SMALLEST SIZE THAT WOULD BE KEPT


BROWN TROUT - PONDS and LAKES SMALLEST SIZE THAT WOULD BE KEPT


RAINBOW TROUT - STREAMS and RIVERS SMALLEST QUALITY SIZE


BROOK TROUT - PONDS and LAKES SMALLEST QUALITY SIZE


BROWN TROUT - PONDS and LAKES SMALLEST QUALITY SIZE


Figure 5. Continued.

RAINBOW TROUT - PONDS and LAKES SMALLEST SIZE THAT WOULD BE KEPT


LAKE TROUT
SMALLEST SIZE THAT WOULD BE KEPT


LANDLOCKED SALMON SMALLEST SIZE THAT WOULD BE KEPT


RAINBOW TROUT - PONDS and LAKES SMALLEST QUALITY SIZE


LAKE TROUT
SMALLEST QUALITY SIZE


LANDLOCKED SALMON SMALLEST QUALITY SIZE


Figure 5. Continued.

SMALLMOUTH BASS SMALLEST SIZE THAT WOULD BE KEPT


LARGEMOÚTH BASS SMALLEST SIZE THAT WOULD BE KEPT


WALLEYE
SMALLEST SIZE THAT WOULD BE KEPT


SMALLMOUTH BASS SMALLEST QUALITY SIZE


LARGEMOUTH BASS
SMALLEST QUALITY SIZE


WALLEYE SMALLEST QUALITY SIZE


Figure 5. Continued.

NORTHERN PIKE

## SMALLEST SIZE THAT WOULD BE KEPT



YELLOW PERCH
SMALLEST SIZE THAT WOULD BE KEPT


NORTHERN PIKE SMALLEST QUALIT.Y SIZE


YELLOW PERCH SMALLEST QUALITY SIZE


Figure 6. The general daily creel limit for trout in streams or rivers is 12 fish of any one species or combination of species. Do you agree with the present daily creel limits?


BROWN TROUT


COMBINED LIMIT


NONRESIDENTS ( $N=343$ )

Figure 7. The general daily creel limit for brook, brown, and rainbow trout in ponds and lakes is 12 fish of any one species or combinationof species. Do you agree with the present daily creel limits?


Figure 8. The general daily creel limit for landlocked salmon or lake trout is 2 salmon or 2 lake trout or 1 of each. Do you agree with the present daily creel limits?


Figure
9. The general daily creel limit for largemouth and smallmouth bass is 5 fish of any one species or combination of species.

Do you agree with the present daily creel limits?



RESIDENTS
( $\mathrm{N}=3204$ )

Figure 10. The general daily creel limits for walleye and northern pike is five fish. Do you agree with the present daily creel limits?

## WALLEYE

Figure 11. There is no daily creel limit for the following species.
Do you agree with the present regulation?


BULLHEAD


## FISHING SRASON LXAGIH - TROUT IN STHBAMS/RIVERS

Table 7. The percentage of respondents selecting various options for the length of the trout season in streams and rivers. Responses are presented for those anglers who fish for trout in streams or rivers in Vermont.

| RESIDENTS (\%) |  |  |
| :--- | :---: | :---: |
| Brook | Brown | Rainbow |
| Trout | Trout | Trout |


| Just About Right... | . 67 | 64 | 65 | 66 | 64 | 65 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Open Earlier........ | . 3 | 3 | 4 | 2 | 3 | 3 |
| Open Later. . . . . . . . | . . 5 | 5 | 6 | 1 | 1 | 2 |
| Close Earlier..... | . 4 | 3 | 3 | 3 | 3 | 2 |
| Close Later....... | . 5 | 5 | 4 | 8 | 7 | 8 |
| Open Earlier/ Close Earlier... |  | <1 | <1 | 1 | 1 | 1 |
| Open Earlier/ <br> Close Later. | $\ldots 2$ | 2 | 2 | 1 | 1 | 1 |
| Open Later/ <br> Close Earlier.... |  | 2 | 2 | <1 | <1 | <1 |
| Open Later/ Close Later...... | $\ldots 2$ | 1 | 1 | 1 | <1 | 1 |
| No Closed Season. | .. 5 | 5 | 6 | 8 | 8 | 8 |
| No Opinion. . . . . . . . | . 5 | 9 | 8 | 9 | 11 | 9 |
| Number of Responses | 3140 | 3132 | 3134 | 360 | 359 | 361 |

## FISHING SEASON LENGTH - TROUT AND SALMON IN PONDS/LAKES

Table 8. The percentage of respondents selecting various options for the length of the open-water and ice fishing seasons for trout in ponds and lakes. Responses are presented for those anglers who fish for trout or salmon in ponds or lakes and who fish during the season in question.

|  | RESIDENTS (\%) |  |  | NONRESIDENTS (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Open-water Seascn | Brook, Brown Rainbow Trout | Lake Trout | Landlocked Salmon | Brook, Brown Rainbow Trout | Lake Trout | Landlocked Salmon |
| Just About Right... | . . . 68 | 63 | 54 | 69 | 65 | 59 |
| Open Earlier. . . . . . | . . . . 4 | 4 | 3 | 3 | 4 | 3 |
| Open Later. . . . . . . . | .... 4 | 3 | 3 | 2 | 1 | 2 |
| Close Earlier..... | . . . . 3 | 2 | 2 | 2 | 1 | 2 |
| Close Later....... | .... 5 | 4 | 4 | 6 | 5 | 5 |
| Open Earlier/ Close Earlier.... | . . . . . . <1 | <1 | <1 | 0 | 0 | 0 |
| Open Earlier/ <br> Close Later...... | $\text { .... } 2$ | 2 | 1 | 1 | 1 | 2 |
| Open Later/ <br> Close Earlier.... | $\text { ..... } 2$ | 1 | 1 | 1 | 1 | 1 |
| Open Later/ <br> Close Later. | $\ldots 1$ | 1 | 1 | 1 | <1 | 1 |
| No Closed Season. . | .... 5 | 5 | 4 | 5 | 5 | 5 |
| No Opinion. . . . . . . | .... 6 | 14 | 27 | 11 | 16 | 21 |
| Number of Responses | 2701 | 2700 | 2668 | 323 | 321 | 321 |
|  | RESIDENTS (\%) |  |  | NONRESIDENTS (\%) |  |  |
| Ice-fishing Season | Brook, Brown Rainbow Trout | Lake <br> Trout | Landlocked Salmon | Brook, Brown Rainbow Trout | Lake <br> Trout | Landlocked Salmon |
| Just About Right.. | . . . . 55 | 55 | 49 | 51 | 53 | 49 |
| Open Earlier........ | . . . 14 | 14 | 10 | 18 | 16 | 14 |
| Open Later. . . . . . . . | ..... 1 | 1 | 1 | 0 | 0 | 0 |
| Close Earlier... | .... 3 | 3 | 3 | 1 | 0 | 1 |
| Close Later....... | .... 1 | 2 | 1 | 0 | 0 | 0 |
| Open Earlier/ <br> Close Earlier.... |  | <1 | <1 | 0 | 0 | 0 |
| Open Earlier/ Close Later..... | $\ldots 3$ | 2 | 2 | 5 | 5 | 2 |
| Open Later/ <br> Close Earlier.... | $\text { ..... } 2$ | 2 | 2 | 0 | 1 | 0 |
| Open Later/ Close Later...... | $\ldots . .<1$ | <1 | <1 | 0 | 0 | 0 |
| No Closed Season. . . | ...... 6 | 6 | 5 | 10 | 11 | 13 |
| No Opinion. . . . . . . . | . . . . . 14 | 15 | 27 | 15 | 14 | 21 |
| Number of Responses | 1509 | 1504 | 1501 | 87 | 88 | 87 |

## FISHING SEASON LENGIH - LARGFMOUTH AND SMALLMOUTH BASS

Table 9. The percentage of respondents selecting various options for the length of the open-water and ice fishing seasons for bass. Responses are presented for those anglers who fish for warmater gamefish or panfish during the season in question

| Open-hater Season | RESIDENTS (\%) | NONRESIDENTS (\%) |
| :---: | :---: | :---: |
| Just About Right. . . | . . . . . 46 | 50 |
| Open Earlier........ | . . . . . 23 | 21 |
| Open Later. . . . . . . . | ..... 1 | 2 |
| Close Earlier. | . . . . 4 | 4 |
| Close Later. . . . . . . | . . . 1 | 1 |
| Open Rarlier/ <br> Close Earlier. . . . . | $\ldots 5$ | 4 |
| Open Earlier/ <br> Close Later. | $\ldots 2$ | 1 |
| Open Later/ <br> Close Earlier.... |  | <1 |
| Open Later/ Close Later. . | $\ldots<1$ | <1 |
| No Closed Season. . . | .... 3 | 4 |
| No Opinion. . . . . . . . . | . . . . 14 | 13 |
| Number of Responses | 3310 | 437 |
| Ice-fishing Season | RESIDENTS (\%) | NONRESIDENTS (\%) |
| Just About Right... | . . . . . . 49 | 44 |
| Open Earlier. . . . . . | . . . . . . 10 | 13 |
| Open Later. . . . . . . . . | . . . . . . 1 | 0 |
| Close Earlier. ..... | . . . . . . 2 | 1 |
| Close Later... | . . . . . 1 | 3 |
| ```Open Earlier/ Close Earlier...``` | $\ldots .$ | 1 |
| Open Earlier/ <br> Close Later...... | $\text { . . . . . } 2$ | 2 |
| Open Later/ <br> Close Earlier.... | $\text { ...... } 2$ | 2 |
| Open Later/ <br> Close Later....... | $\ldots \ldots 0$ | 0 |
| No Closed Season. . . | . . . . . . 5 | 11 |
| No Opinion. . . . . . . . . | . . . . . . 29 | 23 |
| Number of Responses | 1957 | 128 |

SPBCLAL REGULATIONS - BROOK, BRONN AND RAINBOW TROUT IN STREAMS/RIVERS
Table 10A. The percentage of respondents who indicated that they might support the use of various special regulation options for trout fishing on some streams or rivers. Anglers were asked to circle all of the special regulation options they might support.

|  | RESIDENT (\%) | NONRESIDENT (\%) |
| :---: | :---: | :---: |
| Support for each option: |  |  |
| Catch \& Release | 29 | 45 |
| Artificials Only | 25 | 45 |
| Length Limits | 49 | 45 |
| Lower Creel Limits | 32 | 34 |
| Support one or more special regulation option | 76 | 88 |
| Do not support any special regulations | 11 | 4 |
| No opinion | 13 | 8 |
| Total | 100\% | 100\% |
| Number of responses | 3144 | 363 |

Table 10B. Responses of resident anglers are presented by the tackle most often used to fish for trout in streans or rivers.

TACKLE MOST OFTEN USED

|  | TACKIE MOST OFTEN USED |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LURES | FLIES | BAIT | $\begin{gathered} \hline \text { BAIT W/ } \\ \text { LURES } \end{gathered}$ |
| Support for each option: |  |  |  |  |
| Catch \& Release | 37 | 54 | 20 | 26 |
| Artificials Only | 38 | 65 | 15 | 17 |
| Length Limits | 50 | 33 | 52 | 53 |
| Lower Creel Limits | 35 | 25 | 34 | 32 |
| Support one or more special regulation option | 84 | 90 | 72 | 77 |
| Do not support any special regulations | 7 | 5 | 13 | 10 |
| No opinion | 9 | 5 | 15 | 12 |
| Total | 100\% | 100\% | 100\% | 100\% |
| Number of reponses | 388 | 399 | 1807 | 283 |

SPECIAL REGNLATIONS - BROOK, BROWN AND RAINBOW TROUT IN PONDS/LAKES
Table 11A. The percentage of respondents who indicated that they might support the use of various special regulation options for trout fishing on some ponds or lakes. Anglers were asked to circle all of the special regulation options they might support.
$\qquad$ NONRESIDENT (\%)
Support for each option:

Catch \& Release
Artificials Only 22
23
52
32
Lower Creel Limits

76
Support one or more special regulation option

Do not support any special regulations 11

12
100\%
Total
Number of responses 2719 328

Table 11B. Responses of resident anglers are presented by the tackle most often used to fish for trout in ponds or lakes.

|  | TACKLE MOST OFTEN USED |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LURES | FLIES | BAIT | $\begin{gathered} \text { BAIT W/ } \\ \text { LURES } \end{gathered}$ |
| Support for each option: |  |  |  | 15 |
| Catch \& Release | 28 | 51 | 15 | 15 |
| Artificials Only | 28 | 68 | 11 | 14 |
| Length Limits | 51 | 33 | 56 | 55 |
| Lower Creel Limits | 36 | 24 | 32 | 31 |
| Support one or more special regulation option | 81 | 90 | 73 | 74 |
| Do not support any special regulations | 9 | 7 | 14 | 12 |
| No opinion | 10 | 3 | 13 | 15 |
| Total | 100\% | 100\% | 100\% | 100\% |
| Number of reponses | 248 | 182 | 734 | 170 |

## SPECIAL REGULATIONS - LAKE TROUT

Table 12A. The percentage of respondents who indicated that they might support the use of various special regulation options for lake trout fishing on some waters. Anglers were asked to circle all of the special regulation options they might support.

RESIDENT (\%) NONRESIDENT (\%)
Support for each option:
Catch \& Release 18
Artificials Only $19 \quad 27$
Length Limits 52
54
Lower Creel Limits 20
23
Support one or more
special regulation option
70
77
Do not support any special regulations 117

| No opinion | 20 | 16 |
| :--- | ---: | ---: |
| Total | $100 \%$ | $100 \%$ |
| Number of responses | 2708 | 324 |

Table 128. Responses of resident anglers are presented by the tackle most often used to fish for lake trout.

|  | TACKLE MOST OFIEN USED |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LURES | FLIES | BAIT | BAIT W/ LURES |
| Support for each option: |  |  |  |  |
| Catch \& Release | 22 | 40 | 15 | 11 |
| Artificials Only | 26 | 52 | 11 | 13 |
| Length Limits | 60 | 34 | 55 | 60 |
| Lower Creel Limits | 23 | 15 | 19 | 21 |
| Support one or more special regulation option | 80 | 87 | 68 | 73 |
| Do not support any special regulations | 9 | 9 | 16 | 11 |
| No opinion | 11 | 4 | 16 | 16 |
| Total | 100\% | 100\% | 100\% | 100\% |
| Number of reponses | 905 | 67 | 549 | 367 |

## SPECIAL REGULATIONS - LANDLOCKED SALMON

Table 13A. The percentage of respondents who indicated that they might support the use of various special regulation options for landlocked salmon fishing on some waters. Anglers were asked to circle all of the special regulation options they might support.

|  | RESIDENT (\%) | ONRESIDEN |
| :---: | :---: | :---: |
| Support for each option: |  |  |
| Catch \& Release | 18 | 25 |
| Artificials Only | 18 | 27 |
| Length Limits | 44 | 46 |
| Lower Creel Limits | 17 | 18 |
| Support one or more special regulation option | 61 | 72 |
| Do not support any special regulations | 9 | 5 |
| No opinion | 30 | 24 |
| Total | 100\% | 100\% |
| Number of responses | 2694 | 323 |

Table 13B. Responses of resident anglers are presented by the tackle most often used to fish for landlocked salmon.

|  | TACKLE MOST OFTEN USED |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LURES | FLIES | BAIT | BAIT W/ LURES |
| Support for each option: |  |  |  |  |
| Catch \& Release | 25 | 37 | 16 | 18 |
| Artificials Only | 29 | 59 | 13 | 18 |
| Length Limits | 58 | 49 | 53 | 62 |
| Lower Creel Limits | 21 | 20 | 17 | 26 |
| Support one or more special regulation option | 81 | 89 | 68 | 79 |
| Do not support any special regulations | 8 | 7 | 14 | 8 |
| No opinion | 11 | 5 | 18 | 13 |
| Total | 100\% | 100\% | 100\% | 100\% |
| Number of reponses | 639 | 123 | 293 | 205 |

Table 14A. The percentage of respondents who indicated that they might support the use of various special regulation options for bass fishing on some waters. Anglers were asked to circle all of the special regulation options they might support.

RESIDENT (\%) NONRESIDENT (\%)
Support for each option:
Catch \& Release
$18 \quad 22$
$\begin{array}{lll}\text { Artificials Only } & 16 & 23\end{array}$
Length Limits 49
58
Lower Creel Limits
20
24
Support one or more
special regulation option
67
80
Do not support any
special regulations 13
9

| No opinion | 20 | 11 |
| :--- | ---: | ---: |
| Total | $-100 \%$ | $100 \%$ |
| Number of responses | 3337 | 458 |

Table 14B. Responses of resident anglers are presented by the tackle most often used to fish for bass.

|  | TACKIE MOST OFTEN USED |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LURES | FLIES | BAIT | BAIT W/ LURES |
| Support for each option: |  |  |  |  |
| Catch \& Release | 24 | 34 | 12 | 14 |
| Artificials Only | 24 | 39 | 8 | 11 |
| Length Limits | 55 | 41 | 52 | 53 |
| Lower Creel Limits | 23 | 16 | 18 | 23 |
| Support one or more special regulation option | 78 | 79 | 66 | 69 |
| Do not support any special regulations | 11 | 14 | 16 | 19 |
| No opinion | 11 | 7 | 18 | 12 |
| Total | 100\% | 100\% | 100\% | 100\% |
| Number of reponses | 1301 | 56 | 628 | 350 |

Table 15. The percentage of respondents who indicated that they might support the use of various special regulation options for walleye fishing on some waters. Anglers were asked to circle all of the special regulation options they might support.

|  | RESIDENT (\%) | NONRESIDENT (\%) |
| :--- | :---: | :---: |
| Support for each option: |  |  |
| $\quad$ Catch \& Release | 15 | 16 |
| Artificials Only | 12 | 19 |
| Length Limits | 49 | 49 |
| Lower Creel Limits | 24 | 23 |
| Support one or more |  |  |
| special regulation option | 64 | 66 |
| Do not support any |  |  |
| special regulations | 9 | 8 |
| No opinion | 27 | 26 |
| Total | $--100 \%$ | $--100 \%$ |
| Number of responses | 3335 | 453 |

## SPBCIAL RBGULATIONS - NCRTHERN PIKR

Table 16. The percentage of respondents who indicated that they might support the use of various special regulation options for northern pike fishing on some waters. Anglers were asked to circle all of the special regulation options they might support.

Support for each option:
Catch \& Release
$14 \quad 18$
Artificials Only
11
17
Length Limits 43
53
Lower Creel Limits
18
19
Support one or more
special regulation option
56
70
Do not support any
special regulations
13
30
No opinion
Total
100\%
Number of responses
33299

Figure 12. Overall, how would you rate the present quality of fishing in Vermont?


Figure 13. Do you agree with the number of lines allowed under general regulations that can be used during the open-water and ice-fishing seasons?

OPEN-WATER SEASON


RESIDENTS ( $\mathrm{N}=3775$ )

NONRESIDENTS ( $\mathrm{N}=590$ )

## ICE-FISHING SEASON



RESIDENTS ( $\mathrm{N}=2016$ )


NONRESIDENTS ( $\mathrm{N}=149$ )

Figure 14. Anglers' opinions on the use of hatchery trout in managing Vermont's fisheries.

Stocking brook, brown and rainbow trout to be caught within the same season (put-and-take) in streams and rivers.


Stocking brook, brown and rainbow trout to be caught within the same season (put-and-take) in lakes and ponds.


Table 17. What is your opinion if the following issues in Vermont? Anglers were asked to select one response. Responses of resident anglers are further partitioned by sampling zone.

| RESIDENTS (\%) |  |  |  |  |  | $\begin{gathered} \text { NON- } \\ \text { RESIDENTS } \\ (\%) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | Total |  |

Conflict between open-water and ice-fishing for trout and salmon:

| Serious Problem | 15 | 9 | 7 | 7 | 6 | 8 | 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Minor Problem | 25 | 21 | 20 | 20 | 18 | 20 | 15 |
| No Problem | 36 | 35 | 40 | 41 | 40 | 39 | 27 |
| No Opinion | 23 | 34 | 33 | .32 | 36 | 33 | 52 |
|  |  |  |  |  |  |  |  |
| Number of Responses | 509 | 870 | 681 | 715 | 1149 | 3930 | 652 |


| Conflict between open-water | and ice-fishing | for | largemouth and smallmouth bass: |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| Serious Problem | 5 | 4 | 4 | 6 | 4 | 5 | 5 |  |
| Minor Problem | 17 | 19 | 15 | 17 | 16 | 17 | 16 |  |
| No Problem | 44 | 36 | 44 | 44 | 42 | 42 | 32 |  |
| No Opinion | 35 | 41 | 36 | 34 | 38 | 37 | 48 |  |
|  |  |  |  |  |  |  |  |  |
| Number of Responses | 506 | 868 | 677 | 714 | 1149 | 3920 | 647 |  |


| Conflict between fishing | and other | recreational | users | (skiing, | boating, etc): |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Serious Problem | 28 | 32 | 30 | 30 | 31 | 31 | 25 |  |
| Minor Problem | 42 | 43 | 43 | 42 | 45 | 43 | 42 |  |
| No Problem | 23 | 17 | 21 | 19 | 18 | 19 | 21 |  |
| No Opinion | 7 | 8 | 6 | 9 | 7 | 7 | 12 |  |
|  |  |  |  |  |  |  |  |  |
| Number of Responses | 513 | 869 | 681 | 716 | 1155 | 3940 | 653 |  |


| Shooting of northern pike in Lake Champlain: |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Serious Problem | 27 | 26 | 33 | 30 | 34 | 30 | 45 |
| Minor Problem | 15 | 18 | 13 | 17 | 19 | 17 | 12 |
| No Problem | 15 | 25 | 16 | 27 | 29 | 23 | 8 |
| No Opinion | 44 | 32 | 38 | 27 | 19 | 30 | 35 |
| Number of Responses | 503 | 865 | 678 | 716 | 1153 | 3921 | 647 |

Table 17. Continued.

| RESIDENTS (\%) |  |  |  |  |  | $\begin{gathered} \text { NON- } \\ \text { RESIDENTS } \\ (\%) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | Total |  |


| Commercial sale of panfish taken by hook and line: |  |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Serious Problem | 12 | 9 | 11 | 16 | 20 | 14 | 18 |
| Minor Problem | 19 | 18 | 17 | 17 | 20 | 18 | 19 |
| No Problem | 38 | 40 | 35 | 43 | 40 | 40 | 32 |
| No Opinion | 31 | 33 | 38 | 23 | 20 | 28 | 31 |
| Number of Responses | 508 | 864 | 678 | 715 | 1156 | 3926 | 652 |

Fighing with bait on treble hooks:

| Serious Problem | 17 | 11 | 11 | 11 | 13 | 12 | 20 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Minor Problem | 25 | 22 | 24 | 23 | 26 | 24 | 31 |
| No Problem | 34 | 38 | 36 | 42 | 39 | 38 | 26 |
| No Opinion | 24 | 29 | 29 | 25 | 23 | 26 | 23 |
|  |  |  |  |  |  |  |  |
| Number of Responses | 508 | 867 | 676 | 713 | 1156 | 3925 | 650 |



| Fishing derbies (other than "kids" | derbies): |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| Serious Problen | 18 | 13 | 11 | 17 | 22 | 17 | 14 |
| Minor Problem | 28 | 24 | 21 | 23 | 27 | 25 | 25 |
| No Problem | 41 | 45 | 52 | 48 | 40 | 45 | 43 |
| No Opinion | 14 | 18 | 16 | 12 | 11 | 14 | 18 |
| Number of Responses | 511 | 865 | 676 | 711 | 1154 | 3923 | 649 |

Figure 15. Are you a member of a fishing organization or fish and game club?


