2010 VERMONT ANGLER SURVEY REPORT

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EXECUTIVE SUMMARY

In order to more closely align Vermont's fisheries management with angler desires, comprehensive information is needed periodically on the fishing patterns, preferences, and attitudes of anglers. Such information is most efficiently obtained from a statewide mail survey of licensed anglers. This report documents the results of a third statewide angler survey conducted in January 2010 and focused on resident and nonresident fishing experiences in Vermont during the calendar year 2009. The Human Dimensions Research Unit (HDRU) in the Department of Natural Resources at Cornell University conducted the study for the Vermont Department of Fish and Wildlife.

The survey was sent to a sample of 5,400 resident and nonresident anglers who bought a license permitting fishing in Vermont in 2009. The survey was mailed through the U.S. Postal Service on Jan. 6, 2010. Up to three follow-up mailings were sent to non-respondents over the course of the following month. Of the 5,400 questionnaires mailed out, 216 were undeliverable and 2046 completed questionnaires were returned. This resulted in an adjusted response rate of 40%.

A non-respondent telephone follow-up was conducted with a sample of 150 non-respondents to the mail survey to determine the degree of non-response bias particularly in estimates of fishing effort. Analysis showed that non-respondents were less likely to have fished in 2009 and 2008, and fished for fewer days than respondents. Because of these differences, all estimates of days fished were adjusted to account for this non-response bias (except when comparing with 1990 and 1999 data, where non-response bias had not been estimated). In doing so, the results reported herein represent a best estimate of fishing effort in Vermont in 2009.

Most people (91% of residents and 97% of nonresidents) who bought a license that permitted fishing in Vermont in 2009 actually went fishing in 2009. Commitment to fishing in Vermont, as measured by year-to-year participation, was higher among Vermont residents than nonresidents. Seventy percent of 2009 Vermont resident license buyers fished in each of the past 3 years compared with 54% of nonresidents. Respondents who had fished at least once in the past 3 years were asked to continue with the survey. This reduced the sample size only slightly because most respondents had fished in the past 3 years.

Of Vermont residents with a species preference who had fished open water in the past 3 years, the most preferred species to fish for were brook trout, largemouth bass, and rainbow trout. Those species, along with smallmouth bass and brown trout, were among the top 3 for over a third of Vermont residents. Among nonresidents, the most preferred species in open water were bass (largemouth and smallmouth). For those who went ice fishing in the past 3 years, the most preferred species were yellow perch and northern pike.

The majority of respondents rated the quality of fishing in Vermont during the past 3 years as fair to good. Fewer rated it as poor or excellent. Nonresidents were more likely to give a positive rating than residents.

We estimated that over 75,000 residents and almost 33,000 nonresidents fished at least one day in Vermont in 2009, and almost all of them fished open water. Adjusting for non-response bias, we estimated that residents spent almost 2 million days fishing open water in Vermont in 2009; nonresidents spent 278,000 days. Fewer anglers engaged in ice fishing, but residents and nonresidents spent almost 400,000 days ice fishing in 2009. Bass fishing accounted for the greatest number of open water days for both residents and nonresidents; yellow perch was highest for ice fishing.

Of those who fished in Vermont in 2009, just over 40% fished Lake Champlain during the open water season, or roughly 46,000 anglers. Trout from various types of waters and bass were the most popular species to fish for during the open water season. Yellow perch and northern pike were also very popular. During the ice fishing season, yellow perch and northern pike were again the most popular species.

Survey respondents were asked for their opinion about a number of potential issues in Vermont. The issues respondents were most likely to think were serious problems in Vermont were contaminant levels in fish and the recently adopted baitfish regulations. However, only about one-quarter of residents and fewer nonresidents thought these were serious problems. None of the other issues were considered serious problems by more than 15% of anglers.

The majority of residents, and even more nonresidents, thought the present quality of fishing access areas in Vermont were good to excellent. The most important amenities to have at boat launch and fishing access sites according to respondents were boat ramps and bulletin boards with information.

Most Vermont residents used the fishing regulations guide as a source of information in 2009 and the majority indicated it was the most likely source they would refer to in 2010. About half were getting information from friends and bait and tackle shops, as well. The website was used by about one-third of residents and nonresidents. Nonresidents also used the printed guide, but not to the same extent as residents.

Three statewide angler surveys have been conducted over the past 20 years using similar methods and many identical questions. The number of people buying fishing licenses in 1990 and subsequently going fishing was much larger in 1990 compared with 1999 and 2009. Whereas the mean number of days fished by Vermont residents has not changed over time, the change in the number of people fishing has resulted in a decrease in total days fished of about one-third between 1990 and 1999/2009. For nonresidents, the number of people fishing has declined as well as the average number of days fished, so the estimated total has decreased by over half.

All of the topics discussed above are covered in more detail in the body of the report, along with information from more specific management questions. All data were analyzed by resident versus nonresident, by open water-only angers versus ice anglers, and at regional levels. Comparisons were also made with the 1991 and 2000 surveys where possible.

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INTRODUCTION

In order to more closely align Vermont's fisheries management with angler desires, comprehensive information is needed periodically on the fishing patterns, preferences, and attitudes of anglers. Such information is most efficiently obtained from a statewide mail survey of licensed anglers. Vermont has conducted two such surveys, in 1991 (assessing 1990 fishing activity) and 2000 (assessing 1999 fishing activity) (Vermont Department of Fish and Wildlife, 1992; School of Natural Resources, University of Vermont, 2000). This report documents the results of a third statewide angler survey. The survey was conducted in January 2010 and focused on resident and nonresident fishing experiences in Vermont during the calendar year 2009. The Human Dimensions Research Unit (HDRU) in the Department of Natural Resources at Cornell University conducted the study for the Vermont Department of Fish and Wildlife.

The study had multiple objectives, including to:

1. estimate angler effort statewide, by region, species, and type of fishing;
2. assess angler preferences by species;
3. assess angler satisfaction with fishing opportunities;
4. gather angler opinions on specific regulations and current management issues; and
5. compare, as applicable, the above information with the 1991 and 2000 surveys, by resident versus nonresident, by open water-only angers versus ice anglers, and at regional levels.

METHODS

The 2010 Vermont angler survey was implemented by mail with a sample of resident and nonresident anglers who bought a fishing license permitting fishing in Vermont in 2009. A non-respondent telephone follow-up was conducted with a sample of non-respondents to the mail survey to determine the degree of non-response bias on key questions. The data were weighted by age and license type to account for non-response bias and analyzed using SPSS (a statistical analysis package for the social sciences). Estimates of days fished were weighted using non-respondent data, and also reported as unweighted data to enable comparisons with 1990 and 1999 estimates, which were not weighted for non-response bias. These research methods have been approved by the Institutional Review Board at Cornell University, protocol #0910000984.

Sample Selection

A database was obtained from the Vermont Department of Fish and Wildlife that contained contact information for all U.S. license holders aged 18 or older who purchased a license that permitted fishing in Vermont in 2009 (N=116,752). This included lifetime, annual resident fishing and combination (fishing and hunting), annual nonresident fishing and combination, and short-term (1day, 3-day, 7-day) resident and nonresident fishing license holders. The licenses were divided by region of residence within Vermont (Fig. 1). A random sample of 900 licenses was drawn from each region of residence and out-of-state, for a total

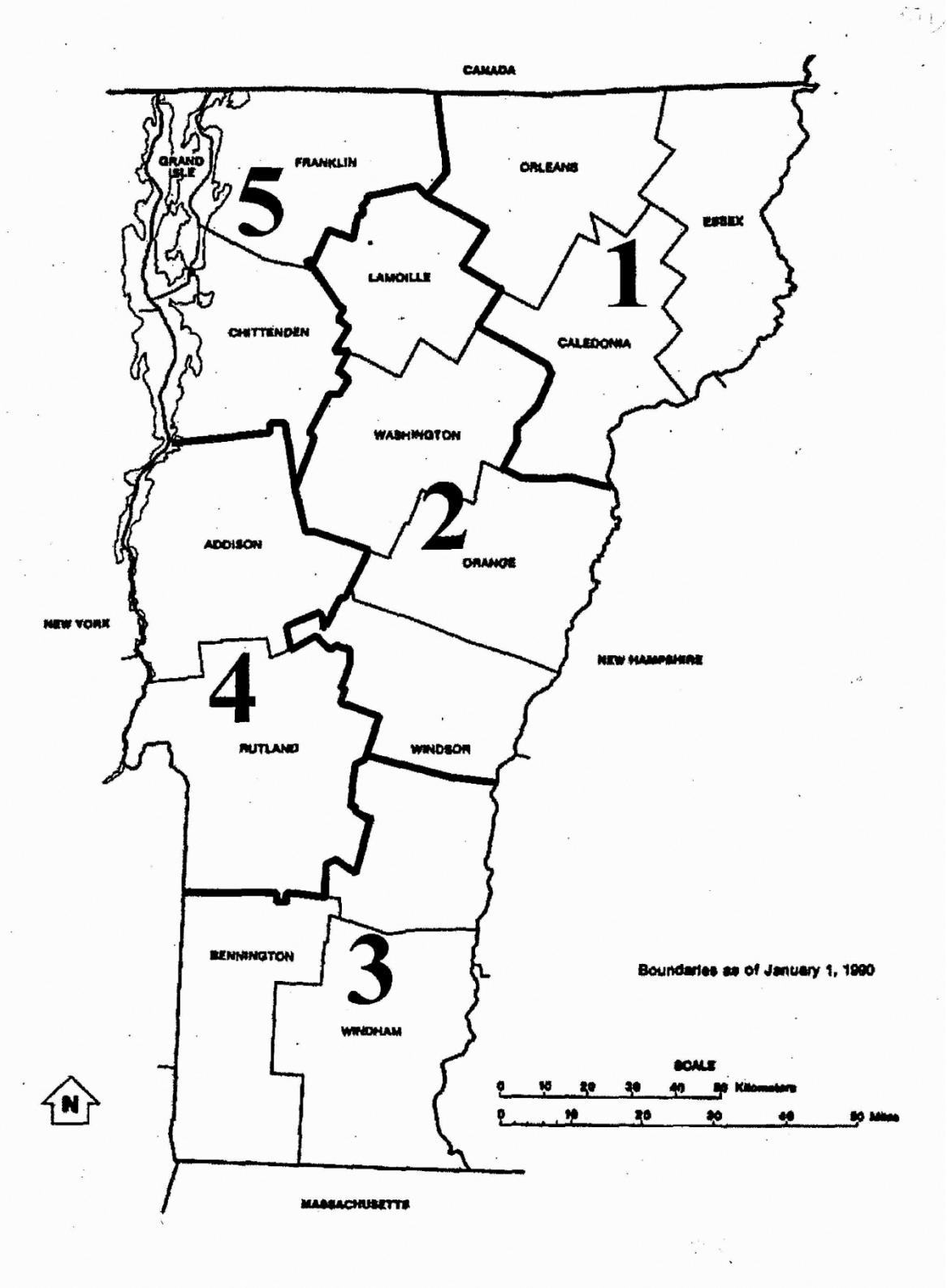

Figure 1. Map showing regions in Vermont used for sampling and in regional analysis.

sample size of 5,400. The sampling scheme should allow for a sufficient number of respondents by region of residence for statistical analysis at the 95% confidence level.

Questionnaire Design

The mail questionnaire was designed based on the 2000 questionnaire for comparability in trend analysis, and with input from the state agency regarding critical management issues. Appendix A contains the content and wording of the questionnaire. The questionnaire was pre-tested with a small group of Vermont anglers and several Vermont fisheries staff, and modified accordingly.

Mail Survey Implementation and Non-respondent Telephone Follow-up

The survey was mailed through the U.S. Postal Service on Jan. 6, 2010. Up to three follow-up mailings were sent to non-respondents over the course of the following month. A telephone follow-up to 150 non-respondents was implemented approximately two months after the first mailing of the questionnaire. Questions were asked on fishing effort and key management issues. Past research has found that non-respondents fished less than respondents (e.g., Connelly et al., 1997; School of Natural Resources, University of Vermont, 2000). Collecting and analyzing non-respondent data allows us to adjust overall fishing estimates to account for any non-response bias.

Analysis and Data Weighting

Returned questionnaires were entered into SPSS. Response rates differed by age and the type of license purchased, so the data were weighted to account for these differences. Because an equal number of Vermont residents were sampled from each region, the data also had to be weighted by region of residence when reporting statewide estimates. Analysis of the non-respondent survey, using t-tests, showed a significant downward bias in the number of days fished by non-respondents compared with respondents. Therefore, estimates of days fished were adjusted to account for this bias. However similar adjustments were not made in the 1990 and 1999 fishing activity survey data. Therefore, the section of this report on fishing trends includes unadjusted estimates of days fished to allow for comparisons with these earlier studies.

Survey questions were analyzed by comparing Vermont residents with nonresidents, open water-only anglers with ice anglers, residents of the five regions in Vermont, and with the results of the 1991 and 2000 surveys. Chi-square, t-test, and Scheffe's test were used as appropriate to test for statistically significant differences between groups at the P=0.05 level.

RESULTS

Mail Survey Response and Adjustments for Non-response Bias

Of the 5,400 questionnaires mailed out, 216 were undeliverable and 2046 completed questionnaires were returned (Table 1). This resulted in an adjusted response rate of 40%. The

response rate was slightly higher for license buyers living outside Vermont, and slightly lower for those living in the southern and central parts of the state.

Analysis of the non-respondent telephone follow-up survey showed that non-respondents were less likely to have fished in 2009 and 2008, and fished for fewer days than respondents (Table 2). Because of these differences, all estimates of days fished were adjusted to account for this non-response bias (except when comparing with 1990 and 1999 data, as mentioned previously). In doing so, the results reported herein represent a best estimate of fishing effort in Vermont in 2009. Responses on fishing participation over a three-year period generally did not differ between respondents and non-respondents. Opinions on management issues did differ with non-respondents more likely to indicate that access, understandability of fishing regulations, and the recently adopted baitfish regulations were not a problem compared with respondents. Adjustments for these differences were not made in the data, but the implications of these differences are discussed in more detail later in the management opinion section of the report. Differences in the perceived importance of various programs appears to be an artifact of the difference in methodology (mail versus phone) rather than between respondents and non-respondents, as there is no consistent trend in level of importance.

Table 1. 2010 Vermont angler survey response rates, by region of residence.

Region of Residence	Initial Sample Size	# Undeliverable	# Responded	Adjusted Response Rate
Northeast Kingdom	900	35	354	40.9
East Central	900	38	322	37.4
Southern	900	46	318	37.2
West Central	900	27	327	37.5
Northwest	900	41	338	39.3
Out-of-state	900	29	383	44.0
TOTAL	5,400	216	2,046*	39.5

*Includes 4 respondents who removed ID# from questionnaire so region of residence could not be determined.

Table 2. Tests for non-response bias.			
Response	Respondents (%)	Non-respondents (%)	Test significance
Fished in 2009			
No	9.0	14.7	(x^2 = 5.4, df = 1, p = 0.02)
Yes	91.0	85.3	
Fished in 2008			
No	21.7	28.7	(x^2 = 3.9, df = 1, p = 0.05)
Yes	78.3	71.3	
Fished in 2007			
No	25.2	31.0	NS
Yes	74.8	69.0	
Quality of fishing in Vermont during the past 3 years			
Poor	8.6	14.3	NS
Fair	40.9	42.1	
Good	43.9	36.1	
Excellent	6.6	7.5	
Fished for brook, brown, or rainbow trout in streams or rivers in Vermont in any of the past 3 years			
No	31.7	45.9	(x^2 = 11.6, df = 1, p = 0.001)
Yes	68.3	54.1	
Fished for trout or salmon in ponds or lakes in Vermont in any of the past 3 years			
No	46.0	45.2	NS
Yes	54.0	54.8	
Fished for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead or smelt in Vermont in any of the past 3 years			
No	24.4	29.6	NS
Yes	75.6	70.4	
Fished on Lake Champlain during either the open water or ice fishing seasons in any of the past 3 years			
No	56.3	48.1	NS
Yes	43.7	51.9	
How important to you is it that Vermont provides the following programs:			
a. Manage strictly for wild trout in some streams and rivers			
Not important	13.3	9.6	(x^2 = 11.0, df = 3, p = 0.01)
Somewhat important	23.2	33.4	
Very important	41.7	31.1	
No opinion	21.8	25.9	

Table 2. (cont.)			
Response	Respondents (%)	Non-respondents (%)	Test significance
b. Manage strictly for wild trout in some lakes and ponds			
Not important	14.3	10.4	(x^2 = 12.4, df = 3, p = 0.01)
Somewhat important	24.2	34.8	
Very important	38.8	27.4	
No opinion	22.7	27.4	
c. Stocking brook, brown, and rainbow trout to be caught within the same season in some streams and rivers			
Not important	7.6	11.8	(x^2 = 22.8, df = 3, p < 0.001)
Somewhat important	24.8	40.4	
Very important	51.3	33.8	
No opinion	16.3	14.0	
d. Stocking brook, brown, and rainbow trout to be caught within the same season in some lakes and ponds			
Not important	7.4	9.6	(x^2 = 22.6, df = 3, p < 0.001)
Somewhat important	24.1	40.4	
Very important	51.5	33.1	
No opinion	17.0	16.9	
Your opinion of the following issues in Vermont:			
a. Your ability to understand Vermont fishing regulations			
Not a problem	63.6	72.9	(x^2 = 10.2, df = 4, p = 0.04)
Minor problem	16.6	8.3	
Moderate problem	9.1	8.3	
Serious problem	3.6	6.0	
No opinion	7.1	4.5	
b. Access to fishing areas			
Not a problem	50.3	82.2	(x^2 = 51.9, df = 4, p < 0.001)
Minor problem	20.5	5.9	
Moderate problem	15.0	6.7	
Serious problem	7.4	3.7	
No opinion	6.8	1.5	

Table 2. (cont.)			
Response	Respondents (%)	Non-respondents (%)	Test significance
c. Recently adopted baitfish regulations			
Not a problem	23.0	46.1	(x^2 = 36.2, df = 4, p < 0.001)
Minor problem	12.5	7.8	
Moderate problem	15.2	7.0	
Serious problem	21.7	16.4	
No opinion	27.6	22.7	
For those who fished in Vermont in 2009:			
Fished open water			
No	3.7	7.9	(x^2 = 5.4, df = 1, p = 0.02)
Yes	96.3	92.1	
Ice Fishing			
No	62.3	68.8	NS
Yes	37.7	31.2	
	Respondents (Mean)	Non-respondents (Mean)	Test significance
# days open water fishing (for those who fished open water)	24.4	18.0	(t = 3.2, df = 162, P = 0.002)
# days ice fishing (for those who went ice fishing)	13.7	8.7	(t = 2.4, df = 46, p = 0.02)

Socio-demographic Characteristics and License Purchase

Information from license records indicates that most people buying a fishing license in Vermont are male and are over the age of 40 (Table 3). This parallels national trends, with 75% of anglers nationally being male and approximately 60% over the age of 40 according to the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (USFWS, 2007). Respondents did not differ from license buyers in terms of gender but did differ by age, with respondents being older than the general population of license buyers. As mentioned previously, the data were weighted to account for this difference (i.e., younger respondents received more weight in the analysis than older respondents).

Most license buyers are residents of Vermont (N=83,017), with the majority of the licenses sold specific to fishing only as compared with licenses that allow hunting and fishing (Table 3). For nonresidents (N=33,735), the majority of the licenses are short-term rather than annual or lifetime. Survey respondents differed from the general population of license buyers and their data were weighted to adjust for those differences.

Table 3. Comparison of license buyers and survey respondents by gender, age, and type of license purchased.		
	License Buyer Sample (%)	Survey Respondents (%)
Gender		
Male	78.2	78.3
Female	21.8	21.7
Age		
18-29	24.1	13.2
30-39	19.4	15.9
40-54	34.9	36.6
55+	21.6	34.3
License Types		
Resident Fishing (Annual, 3-day Youth, Lifetime)	48.0	40.4
Resident Combo (Annual, Youth, Lifetime)	34.8	40.1
Nonresident Annual or Lifetime (Fishing, Youth, Combo, Lifetime)	7.7	10.8
Nonresident Short-term (1-day, 3-day, 7-day)	9.5	8.6

Fishing in Vermont

Most people who bought a license that permitted fishing in Vermont in 2009 actually went fishing in 2009 (Table 4). This was especially true of nonresidents, perhaps because of the commitment of time and resources needed to fish outside their home state. Commitment to fishing in Vermont, as measured by year-to-year participation, was higher among Vermont residents than nonresidents. Seventy percent of 2009 Vermont resident license buyers fished in each of the past 3 years compared with 54% of nonresidents. Respondents who had fished at least once in the past 3 years were asked to continue with the survey. This reduced the sample size only slightly because most respondents had fished in the past 3 years.

Virtually all anglers who had fished in Vermont in the past 3 years had fished in open water during that period (Table 5). About half of Vermont residents and one-quarter of nonresidents had gone ice fishing.

A majority of Vermont residents had fished for bass (largemouth and smallmouth), trout (brook, brown, and rainbow), yellow perch, and northern pike in the past 3 years (Table 6). Very few had fished for sauger, American shad, or burbot. About one-quarter said they had fished for anything. Among nonresidents, the species most frequently fished for were bass (smallmouth and largemouth). Vermont residents had fished for an average of 8 species over the past 3 years; nonresidents had fished for 5 species. Less than 5% of respondents had fished for only 1 species.

Table 4. Fishing participation over the past 3 years, by Vermont residents and nonresidents.		
	Vermont residents (%)	Nonresidents (%)
Fished in 2009	91.0	97.1
Fished in 2008	80.9	66.6
Fished in 2007	77.5	59.8
Did not fish in any of the past 3 years	7.5	2.4
Fished every year (2009, 2008, and 2007)	70.2	53.5
Fished intermittently (1 or 2 of the past 3 years)	22.3	44.1

Table 5. Seasons fished in Vermont in past 3 years, by Vermont residents and nonresidents.		
Seasons fished in Vermont in past 3 years	Vermont residents (%)	Nonresidents (%)
Open water	99.5	96.7
Ice fishing	51.8	24.0

Table 6. Species fished for in Vermont in past 3 years, by Vermont residents and nonresidents.		
Fished in Vermont in past 3 years for:	Vermont residents	Nonresidents
	Percent fishing for:[a]	
Smallmouth bass	70.9	59.3
Brook trout	66.8	34.7
Rainbow trout	66.6	37.4
Yellow perch	66.0	41.0
Largemouth bass	65.6	55.5
Brown trout	57.6	35.2
Northern pike	50.3	39.6
Sunfish (bluegill, pumpkinseed)	37.8	26.4
Lake trout	35.5	21.0
Pickerel	33.8	26.8
Walleye	32.0	18.9
Rock bass	31.0	18.9
Bullhead (hornpout)	28.9	6.8
White perch	25.2	16.1
Crappie	21.8	12.3
Landlocked salmon	21.7	11.7
Smelt	16.6	5.5
Channel catfish	12.7	3.3
Bowfin	9.3	6.0
Sucker	7.1	0.8
Drum (sheepshead)	6.1	3.0
Carp	5.4	0.8
Muskellunge	4.8	3.8
Whitefish (Lake Champlain)	3.7	1.6
Gar	2.1	0.5
Sauger	1.7	0.3
American shad (Connecticut River)	1.2	0.5
Burbot (cusk)	0.9	0.3
Anything	25.0	15.0
[a]Percentages add to more than 100% because more than one species could be fished for.		

When asked about species preference, 10-15% had no preference. Of Vermont residents with a preference who had fished open water in the past 3 years, the most preferred species were brook trout, largemouth bass, and rainbow trout (Table 7). Those species, along with smallmouth bass and brown trout, were among the top 3 for over a third of Vermont residents. Among nonresidents, the most preferred species in open water were bass (largemouth and smallmouth). For those who went ice fishing in the past 3 years, the most preferred species were yellow perch and northern pike (Table 8).

The majority of respondents rated the quality of fishing in Vermont during the past 3 years as fair to good (Table 9). Fewer rated it as poor or excellent. Nonresidents were more likely to give a positive rating than residents.

As mentioned previously, almost everyone who bought a license in 2009 actually went fishing. We estimated that over 75,000 residents and almost 33,000 nonresidents fished at least one day in Vermont in 2009, and almost all of them fished open water (Table 10). Adjusting for non-response bias, we estimated that residents spent almost 2 million days fishing open water in Vermont in 2009; nonresidents spent 278,000 days. Fewer anglers engaged in ice fishing, but residents and nonresidents spent almost 400,000 days ice fishing in 2009. Tables 11 through 14

Table 7. For those who fished <u>open water</u> in the past 3 years and had a species preference, the most preferred species and the ones among the top 3, by Vermont residents and nonresidents.

	Open water preference			
	Vermont residents		Nonresidents	
Species	Most preferred (%)	Among top 3 (%)	Most preferred (%)	Among top 3 (%)
Brook trout	26.9	45.3	16.2	33.5
Largemouth bass	18.2	38.2	20.9	46.2
Rainbow trout	13.6	44.0	10.6	30.9
Smallmouth bass	9.9	37.9	21.2	49.1
Brown trout	6.5	33.5	6.3	28.2
Walleye	4.9	11.6	3.6	9.3
Landlocked salmon	4.5	9.9	3.0	6.6
Yellow perch	4.5	15.2	1.3	14.1
Lake trout	3.5	12.6	7.0	13.3
Northern pike	3.0	16.7	7.3	26.9
Bullhead	<1.0	4.1	<1.0	1.4
White perch	<1.0	3.2	<1.0	3.6
Channel catfish	<1.0	2.4	<1.0	2.0
Crappie	<1.0	2.4	<1.0	1.7
Sunfish	<1.0	2.4	<1.0	3.6
Pickerel	<1.0	1.9	<1.0	3.1
Smelt	<1.0	1.5	<1.0	0.5
Rock bass	<1.0	1.2	<1.0	1.4
All other species among top 3 for less than 1% of respondents.				

Table 8. For those who went ice fishing in the past 3 years and had a species preference, the most preferred species and the ones among the top 3, by Vermont residents and nonresidents.

Species	Ice fishing preference			
	Vermont residents		Nonresidents	
	Most preferred (%)	Among top 3 (%)	Most preferred (%)	Among top 3 (%)
Yellow perch	30.6	60.7	14.9	48.7
Northern pike	17.7	41.4	25.7	39.7
Brown trout	7.8	15.6	4.1	11.0
Lake trout	7.5	20.8	6.8	16.6
Rainbow trout	6.6	15.7	10.8	18.0
Walleye	6.6	15.7	2.7	11.9
Smelt	4.9	14.0	1.4	8.4
Largemouth bass	4.6	12.9	12.2	22.5
Smallmouth bass	3.8	13.0	6.8	25.2
Landlocked salmon	3.0	10.1	1.4	6.9
Brook trout	1.9	6.8	2.7	6.0
White perch	1.4	9.1	1.4	10.0
Crappie	<1.0	8.1	<1.0	12.1
Pickerel	<1.0	6.3	<1.0	11.2
Sunfish	<1.0	5.5	<1.0	8.2
Channel catfish	<1.0	2.4	<1.0	<1.0
Rock bass	<1.0	1.2	<1.0	1.1
Bullhead	<1.0	1.2	<1.0	<1.0
Muskellunge	<1.0	<1.0	<1.0	5.3
All other species among top 3 for less than 1% of respondents.				

Table 9. Evaluation of the overall quality of fishing in Vermont during the past 3 years, by Vermont residents and nonresidents.

Quality of fishing in Vermont during the past 3 years	Vermont residents (%)	Nonresidents (%)
Poor	7.9	8.6
Fair	41.7	26.2
Good	44.3	50.0
Excellent	6.1	15.2
Mean score[a]	2.5	2.7

[a]Scale ranged from 1 = poor to 4 = excellent.

Table 10. Estimated number of anglers and days fished in Vermont in 2009, by Vermont residents and nonresidents. (Number in parenthesis is 95% confidence interval.)

	Vermont residents		Nonresidents	
	%	N	%	N
License buyers	100.0	83,017	100.0	33,735
Fished in 2009	91.0	75,545	97.2	32,790
Of those who fished in 2009:				
Open-water fishing	98.9	74,714	95.3	31,249
Days open water	24.4	1,823,022 (±121,784)	8.9	278,116 (±40,331)
Ice fishing	43.7	33,013	16.7	5,476
Days ice fishing	11.0	363,143 (±31,219)	5.2	28,475 (±8,604)
Total days fished		2,186,165		306,591

Table 11. Among Vermont residents who fished open water in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Vermont residents – open water	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Largemouth or smallmouth bass	61.9	46,248	14.5	672,908	66,756
Brook, brown, or rainbow trout in small brooks or beaver ponds	59.5	44,455	8.8	390,313	47,823
Brook, brown, or rainbow trout in large streams or rivers	56.5	42,213	9.6	405,249	41,987
Brook, brown, or rainbow trout in ponds or lakes	44.1	32,949	9.0	295,551	38,493
Yellow perch	43.0	32,127	13.3	426,968	65,934
Northern pike or pickerel	34.7	25,926	13.4	347,405	53,497
Lake trout	24.7	18,454	9.8	181,591	30,602
Walleye	24.1	18,006	9.6	173,398	37,061
Panfish (sunfish, crappie, etc.)	20.5	15,316	14.1	215,501	52,128
Bullhead	18.9	14,121	8.8	124,829	22,660
Landlocked salmon	16.8	12,552	12.1	151,251	35,654
Channel catfish	10.4	7,770	10.6	82,753	21,343
Smelt	3.4	2,540	7.0	17,680	4,315
Muskellunge	3.2	2,391	11.2	26,706	12,920
American shad in the Connecticut River	2.2	1,644	4.9	8,021	4,156

Table 12. Among Vermont residents who went ice fishing in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Vermont residents – ice fishing	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Yellow perch	69.4	22,911	10.4	237,816	46,423
Northern pike or pickerel	44.7	14,757	8.1	119,973	21,028
Smelt	23.3	7,692	6.9	52,998	10,722
Brook, brown, or rainbow trout in ponds or lakes	23.2	7,659	8.3	63,417	11,539
Lake trout	21.5	7,098	7.8	55,718	11,418
Walleye	19.3	6,372	6.2	39,631	8,386
Largemouth or smallmouth bass	16.9	5,579	7.4	41,342	8,414
Landlocked salmon	16.1	5,315	7.8	41,298	9,899
Panfish	15.3	5,051	15.0	75,765	41,360
Bullhead	2.9	957	a	a	a
Muskellunge	2.7	891	a	a	a
Channel catfish	1.4	462	a	a	a

[a]Sample size was too small to estimate.

Table 13. Among nonresidents who fished open water in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Nonresidents – open water	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Largemouth or smallmouth bass	57.4	17,937	7.7	138,832	25,973
Brook, brown, or rainbow trout in small brooks or beaver ponds	28.4	8,875	4.5	39,492	7,842
Brook, brown, or rainbow trout in large streams or rivers	29.3	9,156	4.4	40,195	8,185
Brook, brown, or rainbow trout in ponds or lakes	24.7	7,719	6.6	51,174	14,509
Yellow perch	26.4	8,250	7.8	64,513	20,222
Northern pike or pickerel	34.1	10,656	7.0	74,698	15,943
Lake trout	13.9	4,344	7.4	32,143	12,371
Walleye	11.6	3,625	5.7	20,771	7,351
Panfish (sunfish, crappie, etc.)	16.2	5,062	8.9	45,257	20,016
Bullhead	5.4	1,687	8.4	14,141	8,620
Landlocked salmon	7.7	2,406	6.4	15,279	4,923
Channel catfish	3.1	969	4.4	4,224	1,766
Smelt	a	a	a	a	a
Muskellunge	3.7	1,156	9.2	10,683	5,276
American shad in the Connecticut River	a	a	a	a	a

[a]Sample size was too small to estimate.

Table 14. Among nonresidents who went ice fishing in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Nonresidents – ice fishing	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Yellow perch	56.9	3,116	5.3	16,358	7,257
Northern pike or pickerel	43.8	2,398	[a]	[a]	[a]
Smelt	20.0	1,095	[a]	[a]	[a]
Brook, brown, or rainbow trout in ponds or lakes	23.4	1,281	[a]	[a]	[a]
Lake trout	15.6	854	[a]	[a]	[a]
Walleye	14.1	772	[a]	[a]	[a]
Largemouth or smallmouth bass	26.6	1,457	[a]	[a]	[a]
Landlocked salmon	10.8	591	[a]	[a]	[a]
Panfish	17.2	942	[a]	[a]	[a]
Bullhead	3.1	170	[a]	[a]	[a]
Muskellunge	[a]	[a]	[a]	[a]	[a]
Channel catfish	[a]	[a]	[a]	[a]	[a]

[a]Sample size was too small to estimate.

report the estimated number of anglers and angler days spent fishing for various species. (All of the estimates of days fished have been weighted for non-response bias.) Trout from various types of waters and bass fishing accounted for the greatest number of open water days for both residents and nonresidents; yellow perch was highest for ice fishing.

Fishing for Trout in Streams and Rivers

Three-quarters of Vermont residents and just over one-third of nonresidents fished for trout in streams or rivers in Vermont in the past 3 years (Table 15). Residents were most likely to use bait when fishing in these situations, whereas nonresidents were more likely to use flies. Nonresidents rated the quality of fishing higher on average than residents.

All survey respondents were asked how important was it that Vermont provided programs that managed strictly for wild trout, and programs for stocking of trout in some streams and rivers. A plurality thought both types of programs were very important (Table 16). Examining only the respondents who had fished for trout in streams or rivers in the past 3 years because they are more likely to have an opinion, it appears that more of this group think both types of programs are very important.

Similarly, respondents who had fished for trout in streams or rivers in the past 3 years were asked what special regulations they would support for trout fishing in some streams or rivers. The majority of residents would support special length limits or lower creel limits (Table 17). The majority of nonresidents would support these regulations as well as catch and release, and artificial lures and flies-only regulations. Very few people do not support the use of any special regulations.

Table 15. Respondents who fished for brook, brown, or rainbow trout in streams or rivers in Vermont in any of the past 3 years, the tackle used most often, and their evaluation of the quality of fishing, by Vermont residents and nonresidents.

Response	Vermont residents (%)	Nonresidents (%)
Fish for brook, brown, or rainbow in streams or rivers in Vermont in any of the past 3 years		
No	25.9	62.8
Yes	74.1	37.2
If yes: Tackle used most often		
Bait	51.0	29.2
Flies	18.8	45.8
Lures	18.1	20.8
Lures with bait	12.1	4.2
Quality of fishing for trout in streams and rivers during past 3 years		
Poor	13.6	10.1
Fair	48.0	39.5
Good	34.6	40.3
Excellent	3.8	10.1
Mean score[a]	2.3	2.5

[a]Scale ranged from 1 = poor to 4 = excellent.

Table 16. Importance of programs that manage strictly for wild trout, and programs for stocking trout in some streams and rivers, by Vermont residents and nonresidents and for those who fished for trout in streams or rivers in past 3 years.

How important is it that Vermont provides the following programs?	Vermont residents		Nonresidents	
	All (%)	Fished for trout in streams or rivers in past 3 years (%)	All (%)	Fished for trout in streams or rivers in past 3 years (%)
Manage strictly for wild trout (no stocking) in some streams and rivers				
Not important	13.1	13.1	9.0	10.9
Somewhat important	24.9	25.9	18.6	28.1
Very important	42.3	46.8	35.9	50.1
No opinion	19.7	14.2	36.5	10.9
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some streams and rivers				
Not important	7.0	6.4	7.9	13.2
Somewhat important	26.1	26.5	23.2	25.6
Very important	53.0	58.8	37.7	54.2
No opinion	13.9	8.3	31.2	7.0

Table 17. Support for special regulations for trout fishing in some streams or rivers, by Vermont residents and nonresidents.		
Special regulations for trout fishing in some streams or rivers	Vermont residents	Nonresidents
	Percent supporting[a]	
Special length limits	63.6	67.4
Lower creel limits	50.7	61.4
Catch and release – all fish must be released	34.3	52.3
Artificial lures and flies only	29.1	54.5
I do not support the use of any special regulations	9.9	6.8
No opinion	13.2	6.8
[a]Percentages can add to more than 100% because more than one regulation could be chosen.		

Survey respondents who had fished for trout in streams or rivers in the past 3 years were asked a series of questions about preferred species lengths and creel limits by species. Results from these questions can be found in Tables 18 through 24.

Table 18. Smallest length brook trout you would keep or consider a quality size fish when fishing in streams or rivers, by Vermont residents and nonresidents. (Mean length is an average of the 6 to 14 inch categories.)		
	Brook trout in streams or rivers	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	20.9	17.3
8	37.4	14.3
10	11.6	13.5
12	6.1	8.3
14 or more	2.8	3.8
Do not keep	21.2	42.8
Mean "keeper" size	8.3	8.8
Smallest "quality" size		
6 inches or less	8.9	7.5
8	33.4	33.1
10	31.3	33.1
12	15.3	15.7
14 or more	5.4	6.8
No opinion	5.7	3.8
Mean "quality" size	9.5	9.6

Table 19. Smallest length brown trout you would keep or consider a quality size fish when fishing in streams or rivers, by Vermont residents and nonresidents. (Mean length is an average of the 6 to 14 inch categories.)		
	Brown trout in streams or rivers	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	4.6	2.3
8	22.8	8.6
10	20.8	15.6
12	15.3	14.8
14 or more	11.6	10.2
Do not keep	24.9	48.5
Mean "keeper" size	10.2	10.8
Smallest "quality" size		
6 inches or less	1.0	0.8
8	11.4	7.8
10	25.3	23.3
12	28.3	34.0
14 or more	27.8	30.2
No opinion	6.2	3.9
Mean "quality" size	11.5	11.7

Table 20. Smallest length rainbow trout you would keep or consider a quality size fish when fishing in streams or rivers, by Vermont residents and nonresidents. (Mean length is an average of the 6 to 14 inch categories.)		
	Rainbow trout in streams or rivers	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	4.2	4.0
8	21.8	9.5
10	23.0	14.3
12	16.0	15.9
14 or more	12.2	9.5
Do not keep	22.8	46.8
Mean "keeper" size	10.3	10.7
Smallest "quality" size		
6 inches or less	1.3	0.8
8	12.5	10.2
10	23.8	24.4
12	28.9	33.1
14 or more	28.4	27.6
No opinion	5.1	3.9
Mean "quality" size	11.5	11.6

Table 21. Agreement with the current daily creel limit for brook trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brook trout of 12 fish in streams or rivers	Vermont residents (%)	Nonresidents (%)
Agree	56.6	40.6
Disagree	33.6	48.5
No opinion	9.8	10.9
Recommended limit for those who disagreed		
Higher	5.2	3.5
Lower	94.8	96.5
Mean recommended limit	6.1	4.4

Table 22. Agreement with the current daily creel limit for brown trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brown trout of 6 fish in streams or rivers	Vermont residents (%)	Nonresidents (%)
Agree	59.9	41.3
Disagree	29.0	46.8
No opinion	11.1	11.9
Recommended limit for those who disagreed		
Higher	13.0	5.3
Lower	87.0	94.7
Mean recommended limit	3.9	2.8

Table 23. Agreement with the current daily creel limit for rainbow trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for rainbow trout of 6 fish in streams or rivers	Vermont residents (%)	Nonresidents (%)
Agree	60.1	43.2
Disagree	28.8	44.0
No opinion	11.1	12.8
Recommended limit for those who disagreed		
Higher	14.5	5.7
Lower	85.5	94.3
Mean recommended limit	4.0	2.8

Table 24. Agreement with the current daily creel limit for a combination of brook, brown, and rainbow trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for combination of brook, brown, and rainbow trout of 12 fish in streams or rivers	Vermont residents (%)	Nonresidents (%)
Agree	58.0	44.8
Disagree	29.6	41.2
No opinion	12.4	14.0
Recommended limit for those who disagreed		
Higher	10.5	4.5
Lower	89.5	95.5
Mean recommended limit	7.7	5.4

Fishing for Trout and Salmon in Lakes and Ponds (Excluding Lake Champlain)

This section specifically excludes opinions about fishing on Lake Champlain, which is covered in a later section. Over half of Vermont residents and one-third of nonresidents fished for trout or salmon in lakes or ponds in Vermont in the past 3 years (Table 25). Respondents rated the quality of fishing for various species in lakes and ponds (Table 25). Some did not have an opinion for a particular species, so quality also was reported only for those with an opinion. Anglers appeared to have more positive opinions about trout compared with landlocked salmon. Over one-third of the anglers with an opinion about landlocked salmon thought the quality of fishing for that species was poor.

All survey respondents were asked how important was it that Vermont provided programs that managed strictly for wild trout, and programs for stocking of trout in some lakes and ponds. A plurality thought both types of programs were very important (Table 26). Among the respondents who had fished for trout in lakes or ponds in the past 3 years (who may be more likely to have an opinion), it appears that more think both types of programs are very important.

Similarly, respondents who had fished for trout or salmon in lakes or ponds in the past 3 years were asked what special regulations they would support for trout or salmon fishing in some lakes or ponds. The majority of residents and nonresidents would support special length limits (Table 27). Very few people do not support the use of any special regulations.

Survey respondents who had fished for trout or salmon in lakes or ponds in the past 3 years were asked a series of questions about preferred species lengths and creel limits by species. Results from these questions can be found in Tables 28 through 36. Respondents were also asked about creel limits for various species in lakes that offer lake trout fishing. These results can be found in Tables 37 through 42.

Table 25. Respondents who fished for trout or salmon in ponds or lakes (excluding Lake Champlain) in Vermont in any of the past 3 years, and their evaluation of the by species quality of fishing, for Vermont residents and nonresidents.				
Response	Vermont residents (%)		Nonresidents (%)	
Fish for trout or salmon in ponds or lakes in Vermont in any of the past 3 years				
No	43.1		68.9	
Yes	56.9		31.1	
If yes: ***Quality of fishing for brook, brown, and rainbow trout in ponds and lakes during past 3 years***				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	16.5	17.6	15.0	16.7
Fair	44.8	47.8	32.7	36.3
Good	29.8	31.7	36.4	40.1
Excellent	2.8	2.9	6.2	6.9
No opinion	6.1		9.7	
Mean score[a]		2.2		2.4
Quality of fishing for lake trout in ponds and lakes during past 3 years				
Poor	17.8	23.7	13.3	19.7
Fair	34.3	45.8	30.1	44.8
Good	20.2	26.9	18.6	27.6
Excellent	2.7	3.6	5.3	7.9
No opinion	25.0		32.7	
Mean score[a]		2.1		2.2
Quality of fishing for landlocked salmon in ponds and lakes during past 3 years				
Poor	24.7	38.8	20.0	36.7
Fair	25.2	39.7	22.7	41.7
Good	12.2	19.2	10.9	20.0
Excellent	1.5	2.3	0.9	1.6
No opinion	36.4		45.5	
Mean score[a]		1.8		1.9
[a]Scale ranged from 1 = poor to 4 = excellent.				

Table 26. Importance of programs that manage strictly for wild trout, and programs for stocking trout in some lakes and ponds, by Vermont residents and nonresidents and for those who fished for trout or salmon in ponds or lakes in past 3 years.

How important is it that Vermont provides the following programs?	Vermont residents		Nonresidents	
	All (%)	Fished for trout or salmon in ponds or lakes in past 3 years (%)	All (%)	Fished for trout or salmon in ponds or lakes in past 3 years (%)
Manage strictly for wild trout (no stocking) in some lakes and ponds				
Not important	13.5	14.4	10.4	9.7
Somewhat important	25.7	26.9	18.4	24.7
Very important	40.0	44.1	33.7	47.3
No opinion	20.8	14.6	37.5	18.3
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some lakes and ponds				
Not important	7.0	6.6	8.0	6.0
Somewhat important	25.5	25.1	22.9	24.0
Very important	52.9	60.2	37.8	62.0
No opinion	14.6	8.1	31.3	8.0

Table 27. Support for special regulations for trout and salmon fishing in some ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents.		
Special regulations for fishing in some ponds or lakes	Vermont residents	Nonresidents
	Percent supporting[a]	
For brook, brown, rainbow trout		
Special length limits	62.2	67.9
Lower creel limits	39.7	42.0
Catch and release—all fish must be released	24.0	32.4
Artificial lures and flies only	27.9	32.4
I do not support the use of any special regulations	9.9	11.6
No opinion	15.8	8.9
For lake trout		
Special length limits	61.8	64.9
Lower creel limits	34.9	36.5
Catch and release—all fish must be released	21.6	26.0
Artificial lures and flies only	21.6	25.0
I do not support the use of any special regulations	9.7	9.4
No opinion	21.4	11.5
For landlocked salmon		
Special length limits	60.2	59.1
Lower creel limits	35.2	33.3
Catch and release—all fish must be released	26.4	36.2
Artificial lures and flies only	22.6	29.0
I do not support the use of any special regulations	8.4	9.7
No opinion	23.2	16.0

[a]Percentages can add to more than 100% because more than one regulation could be chosen.

Table 28. Smallest length brook trout you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Brook trout in ponds or lakes	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	11.8	6.0
8	33.0	21.5
10	21.1	22.6
12	12.2	7.1
14 or more	4.5	9.5
Do not keep	17.4	33.3
Mean "keeper" size	9.1	9.8
Smallest "quality" size		
8 inches or less	19.8	14.3
10	36.6	33.0
12	27.4	27.4
14	9.0	11.0
16 or more	2.6	5.5
No opinion	4.6	8.8
Mean "quality" size	10.7	11.1

Table 29. Smallest length brown trout you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Brown trout in ponds or lakes	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	2.7	0.0
8	16.3	12.1
10	21.8	16.5
12	20.7	19.8
14 or more	19.3	20.9
Do not keep	19.2	30.7
Mean "keeper" size	10.9	11.4
Smallest "quality" size		
10 inches or less	13.5	8.3
12	27.2	28.1
14	23.3	24.0
16	17.2	19.8
18 or more	14.0	14.6
No opinion	4.8	5.2
Mean "quality" size	13.8	14.1

Table 30. Smallest length rainbow trout you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Rainbow trout in ponds or lakes	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	2.9	2.3
8	16.5	9.1
10	21.2	13.6
12	24.1	21.6
14 or more	19.2	19.3
Do not keep	16.1	34.1
Mean "keeper" size	11.0	11.4
Smallest "quality" size		
10 inches or less	14.3	10.5
12	28.3	26.2
14	22.2	25.3
16	16.7	21.1
18 or more	13.9	11.6
No opinion	4.6	5.3
Mean "quality" size	13.7	13.9

Table 31. Smallest length lake trout you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Lake trout in ponds or lakes	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
12 inches or less	10.5	5.2
15	15.2	13.0
18	23.7	19.5
21	15.4	22.1
24 or more	13.5	7.8
Do not keep	21.7	32.4
Mean "keeper" size	18.2	18.7
Smallest "quality" size		
15 inches or less	13.4	8.1
18	24.1	18.6
21	21.5	25.6
24	20.0	19.8
27 or more	13.6	11.6
No opinion	7.4	16.3
Mean "quality" size	20.9	21.3

Table 32. Smallest length landlocked salmon you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Landlocked salmon in ponds or lakes	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
9 inches or less	4.3	0.0
12	13.7	12.7
15	20.6	15.9
18	25.6	15.9
21 or more	13.9	19.0
Do not keep	21.9	36.5
Mean "keeper" size	16.2	17.0
Smallest "quality" size		
12 inches or less	7.3	4.2
15	20.1	12.7
18	28.9	31.0
21	20.7	18.3
24 or more	15.0	11.3
No opinion	8.0	22.5
Mean "quality" size	18.5	18.7

Table 33. Agreement with the current daily creel limit for brook trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brook trout of 6 fish in ponds or lakes (excluding Lake Champlain)	Vermont residents (%)	Nonresidents (%)
Agree	66.2	44.7
Disagree	25.4	35.9
No opinion	8.4	19.4
Recommended limit for those who disagreed		
Higher	32.5	13.5
Lower	67.5	86.5
Mean recommended limit	5.5	3.9

Table 34. Agreement with the current daily creel limit for brown trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brown trout of 6 fish in ponds or lakes (excluding Lake Champlain)	Vermont residents (%)	Nonresidents (%)
Agree	64.5	39.3
Disagree	26.8	40.1
No opinion	8.7	20.6
Recommended limit for those who disagreed		
Higher	13.2	9.5
Lower	86.8	90.5
Mean recommended limit	3.9	3.4

Table 35. Agreement with the current daily creel limit for rainbow trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for rainbow trout of 6 fish in ponds or lakes (excluding Lake Champlain)	Vermont residents (%)	Nonresidents (%)
Agree	65.2	37.1
Disagree	26.8	41.9
No opinion	8.0	21.0
Recommended limit for those who disagreed		
Higher	18.6	9.3
Lower	81.4	90.7
Mean recommended limit	4.1	3.4

Table 36. Agreement with the current daily creel limit for combined trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for combined trout of 6 fish in ponds or lakes (excluding Lake Champlain)	Vermont residents (%)	Nonresidents (%)
Agree	64.3	45.2
Disagree	26.0	34.0
No opinion	9.7	20.8
Recommended limit for those who disagreed		
Higher	49.7	35.3
Lower	50.3	64.7
Mean recommended limit	7.3	5.7

Table 37. Agreement with the current daily creel limit for lake trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for lake trout of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	70.8	72.4
Disagree	16.8	8.6
No opinion	12.4	19.0
Recommended limit for those who Disagreed		
Higher	85.2	[a]
Lower	14.8	[a]
Mean recommended limit	4.1	[a]
[a]Sample size was too small to estimate.		

Table 38. Agreement with the current daily creel limit for landlocked salmon, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for landlocked salmon of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	71.2	69.3
Disagree	14.1	7.9
No opinion	14.7	22.8
Recommended limit for those who Disagreed		
Higher	76.0	[a]
Lower	24.0	[a]
Mean recommended limit	3.6	[a]
[a]Sample size was too small to estimate.		

Table 39. Agreement with the current daily creel limit for brook trout caught in lakes that offer lake trout fishing, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brook trout of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	63.2	66.7
Disagree	26.4	13.7
No opinion	10.4	19.6
Recommended limit for those who Disagreed		
Higher	92.6	[a]
Lower	7.4	[a]
Mean recommended limit	5.3	[a]
[a]Sample size was too small to estimate.		

Table 40. Agreement with the current daily creel limit for brown trout caught in lakes that offer lake trout fishing, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brown trout of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	66.9	67.3
Disagree	22.1	13.5
No opinion	11.0	19.2
Recommended limit for those who Disagreed		
Higher	86.9	[a]
Lower	13.1	[a]
Mean recommended limit	4.6	[a]
[a]Sample size was too small to estimate.		

Table 41. Agreement with the current daily creel limit for rainbow trout caught in lakes that offer lake trout fishing, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for rainbow trout of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	65.8	64.7
Disagree	24.1	15.7
No opinion	10.1	19.6
Recommended limit for those who Disagreed		
Higher	90.3	[a]
Lower	9.7	[a]
Mean recommended limit	4.6	[a]
[a]Sample size was too small to estimate.		

Table 42. Agreement with the current daily creel limit for combination of trout and salmon caught in lakes that offer lake trout fishing, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for combination of trout and salmon of 2 fish in lakes (excluding Lake Champlain) that offer lake trout fishing	Vermont residents (%)	Nonresidents (%)
Agree	58.4	59.0
Disagree	29.6	18.1
No opinion	12.0	22.9
Recommended limit for those who disagreed		
Higher	96.7	[a]
Lower	3.3	[a]
Mean recommended limit	5.8	[a]
[a]Sample size was too small to estimate.		

Fishing for Warmwater Gamefish and Panfish (Excluding Lake Champlain)

This section specifically excludes opinions about fishing on Lake Champlain, which is reported in the following section. Most Vermont residents and the majority of nonresidents said they fished for warmwater gamefish or panfish in Vermont in the past 3 years (Table 43). Respondents rated the quality of fishing during the past 3 years for various species (Table 43). Some did not have an opinion for a particular species so quality also was reported only for those with an opinion. Anglers appeared to have generally positive opinions about the quality of fishing for warmwater species with the possible exception of walleye, for which a third of respondents who had an opinion thought the fishing quality was poor.

Approximately half of the anglers who had fished for warmwater species in the past 3 years supported ice fishing for bass on selected lakes and ponds (Table 44). They also responded to a series of questions about special regulations, preferred species lengths, and creel limits by species. Results from these questions can be found in Tables 45 through 60.

Table 43. Respondents who fished for warmwater gamefish and panfish in Vermont in any of the past 3 years (excluding Lake Champlain), and their evaluation of the by species quality of fishing, for Vermont residents and nonresidents.				
Response	Vermont residents (%)		Nonresidents (%)	
Fish for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead, or smelt in Vermont in any of the past 3 years				
No	19.6		38.2	
Yes	80.4		61.8	
If yes: ***Quality of fishing for walleye during past 3 years***				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	19.9	33.6	9.2	25.0
Fair	26.1	43.9	13.8	37.5
Good	12.2	20.6	11.3	30.6
Excellent	1.2	1.9	2.6	6.9
No opinion	40.6		63.1	
Mean score[a`]		1.9		2.2
Quality of fishing for largemouth bass during past 3 years				
Poor	6.0	7.3	4.5	6.2
Fair	29.7	35.6	25.7	35.6
Good	40.1	48.1	33.2	45.9
Excellent	7.5	9.0	8.9	12.3
No opinion	16.7		27.7	
Mean score[a]		2.6		2.6
Quality of fishing for smallmouth bass during past 3 years				
Poor	5.4	6.2	4.5	5.8
Fair	30.4	35.1	26.9	35.1
Good	41.4	47.9	31.3	40.9
Excellent	9.4	10.8	13.9	18.2
No opinion	13.4		23.4	
Mean score[a]		2.6		2.7
Quality of fishing for northern pike during past 3 years				
Poor	7.5	10.1	4.5	8.3
Fair	29.6	40.0	18.1	33.0
Good	32.1	43.5	22.1	40.4
Excellent	4.8	6.4	10.1	18.3
No opinion	26.0		45.2	
Mean score[a]		2.5		2.7
Quality of fishing for yellow perch during past 3 years				
Poor	7.1	8.4	7.0	11.5
Fair	24.3	28.7	15.0	24.6
Good	39.9	47.0	25.5	41.8
Excellent	13.4	15.9	13.5	22.1
No opinion	15.3		39.0	
Mean score[a]		2.7		2.7

Table 43. (cont.)				
Response	Vermont residents (%)		Nonresidents (%)	
Quality of fishing for crappie during past 3 years				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	7.6	14.4	6.7	18.6
Fair	19.3	36.7	11.8	32.9
Good	20.1	38.1	12.8	35.6
Excellent	5.7	10.8	4.6	12.9
No opinion	47.3		64.1	
Mean score[a]		2.4		2.4
[a]Scale ranged from 1 = poor to 4 = excellent.				

Table 44. Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed), by Vermont residents and nonresidents.		
Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed)	Vermont residents (%)	Nonresidents (%)
No	12.8	8.6
Yes, somewhat	32.7	26.6
Yes, strongly	25.3	22.5
No opinion	29.2	42.3

Table 45. Support for special regulations for some warmwater species on some waters, by Vermont residents and nonresidents.		
Special regulations for fishing on some waters	Vermont residents	Nonresidents
	Percent supporting[a]	
For largemouth or smallmouth bass		
Special length limits	56.4	65.5
Lower creel limits	34.4	42.2
Catch and release—all fish must be released	29.1	37.7
Artificial lures and flies only	22.6	25.7
I do not support the use of any special regulations	10.5	6.8
No opinion	21.6	18.9
For walleye		
Special length limits	54.3	56.7
Lower creel limits	32.1	31.5
Catch and release—all fish must be released	22.7	19.6
Artificial lures and flies only	17.4	16.2
I do not support the use of any special regulations	8.5	5.6
No opinion	29.9	36.0
For northern pike		
Special length limits	52.2	58.4
Lower creel limits	31.5	37.8
Catch and release—all fish must be released	22.7	25.9
Artificial lures and flies only	17.0	19.5
I do not support the use of any special regulations	10.5	5.9
No opinion	28.7	30.8
[a]Percentages can add to more than 100% because more than one regulation could be chosen.		

Table 46. Smallest length walleye you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Walleye	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
9 inches or less	1.7	0.0
12	14.2	10.6
15	28.6	19.9
18	22.3	12.1
21 or more	7.1	9.2
Do not keep	26.1	48.2
Mean "keeper" size	15.8	16.2
Smallest "quality" size		
12 inches or less	6.6	4.3
15	20.8	24.8
18	32.3	24.8
21	17.4	18.4
24 or more	8.4	7.1
No opinion	14.5	20.6
Mean "quality" size	18.0	18.0

Table 47. Smallest length largemouth bass you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Largemouth bass	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	0.5	0.0
8	7.9	2.7
10	19.1	11.2
12	22.2	13.9
14 or more	17.6	15.0
Do not keep	32.7	57.2
Mean "keeper" size	11.4	11.9
Smallest "quality" size		
10 inches or less	9.1	3.7
12	23.9	16.8
14	24.7	25.1
16	20.6	29.2
18 or more	13.8	12.6
No opinion	7.9	12.6
Mean "quality" size	14.1	14.7

Table 48. Smallest length smallmouth bass you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Smallmouth bass	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	0.6	0.0
8	10.8	4.2
10	20.2	9.5
12	21.6	13.8
14 or more	13.9	15.3
Do not keep	32.9	57.2
Mean "keeper" size	11.1	11.8
Smallest "quality" size		
10 inches or less	12.9	6.6
12	28.4	25.0
14	25.6	26.6
16	16.4	23.0
18 or more	8.5	7.1
No opinion	8.2	11.7
Mean "quality" size	13.5	14.0

Table 49. Smallest length northern pike you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Northern pike	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
16 inches or less	4.6	1.8
18	9.9	5.8
20	14.3	5.8
22	8.0	9.4
24 or more	27.1	24.6
Do not keep	36.1	52.6
Mean "keeper" size	21.3	22.1
Smallest "quality" size		
18 inches or less	8.6	5.8
22	24.2	18.1
26	21.1	25.8
30	21.1	24.6
34 or more	13.8	9.9
No opinion	11.2	15.8
Mean "quality" size	26.3	26.7

Table 50. Smallest length yellow perch you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Yellow perch	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	13.5	4.8
7	20.0	9.6
8	31.0	23.5
9	6.8	9.6
10 or more	11.2	10.8
Do not keep	17.5	41.7
Mean "keeper" size	7.8	8.2
Smallest "quality" size		
8 inches or less	24.3	18.4
9	22.6	17.8
10	28.5	33.4
11	6.3	3.4
12 or more	10.3	12.1
No opinion	8.0	14.9
Mean "quality" size	9.5	9.7

Table 51. Smallest length crappie you would keep or consider a quality size fish, by Vermont residents and nonresidents. (Mean length is an average of the inch size categories.)		
	Crappie	
	Vermont residents (%)	Nonresidents (%)
Smallest "keeper" size		
6 inches or less	9.9	2.9
7	13.5	5.1
8	23.3	18.4
9	6.9	8.1
10 or more	8.1	9.6
Do not keep	38.3	55.9
Mean "keeper" size	7.8	8.4
Smallest "quality" size		
8 inches or less	21.5	15.6
9	21.0	17.8
10	20.2	27.4
11	4.6	3.7
12 or more	7.4	8.1
No opinion	25.3	27.4
Mean "quality" size	9.4	9.6

Table 52. Agreement with the current daily creel limit for walleye, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for walleye of 3 fish	Vermont residents (%)	Nonresidents (%)
Agree	57.4	54.0
Disagree	14.1	7.4
No opinion	28.5	38.6
Recommended limit for those who disagreed		
Higher	40.7	[a]
Lower	59.3	[a]
Mean recommended limit	3.0	[a]
[a]Sample size was too small to estimate.		

Table 53. Agreement with the current daily creel limit for largemouth/smallmouth bass, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for largemouth/smallmouth bass of 5 fish	Vermont residents (%)	Nonresidents (%)
Agree	60.9	47.7
Disagree	21.8	29.2
No opinion	17.3	23.1
Recommended limit for those who disagreed		
Higher	18.9	6.9
Lower	81.1	93.1
Mean recommended limit	3.4	4.1

Table 54. Agreement with the current daily creel limit for northern pike, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for northern pike of 5 fish	Vermont residents (%)	Nonresidents (%)
Agree	55.2	42.9
Disagree	21.9	27.8
No opinion	22.9	29.3
Recommended limit for those who disagreed		
Higher	12.5	7.3
Lower	87.5	92.7
Mean recommended limit	4.3	4.8

Table 55. Agreement with the current daily creel limit for yellow perch, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for yellow perch of 50 fish	Vermont residents (%)	Nonresidents (%)
Agree	57.0	35.4
Disagree	26.3	36.0
No opinion	16.7	28.6
Recommended limit for those who disagreed		
Higher	32.5	10.0
Lower	67.5	90.0
Mean recommended limit	38.9	22.1

Table 56. Agreement with the current daily creel limit for crappie, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for crappie of 25 fish	Vermont residents (%)	Nonresidents (%)
Agree	54.2	36.1
Disagree	11.4	23.8
No opinion	34.4	40.1
Recommended limit for those who disagreed		
Higher	33.3	17.0
Lower	66.7	83.0
Mean recommended limit	23.6	17.4

Table 57. Agreement with the current daily creel limit for sunfish, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for sunfish, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	63.5	53.4
Disagree	6.0	10.5
No opinion	30.5	36.1
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	27.2	[a]
[a]Sample size was too small to estimate.		

Table 58. Agreement with the current daily creel limit for smelt, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for smelt, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	61.0	48.2
Disagree	8.0	9.4
No opinion	31.0	42.4
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	63.8	[a]
[a]Sample size was too small to estimate.		

Table 59. Agreement with the current daily creel limit for bullhead, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for bullhead, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	61.7	47.4
Disagree	7.9	9.9
No opinion	30.4	42.7
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	18.2	[a]
[a]Sample size was too small to estimate.		

Table 60. Agreement with the current daily creel limit for white perch, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for white perch, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	60.0	47.4
Disagree	8.0	13.0
No opinion	32.0	39.6
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	22.2	[a]
[a]Sample size was too small to estimate.		

Fishing on Lake Champlain

One section of the questionnaire was devoted specifically to fishing on Lake Champlain. Half of the anglers who live in Vermont, and almost half of the nonresidents had fished the Lake in the past three years (Table 61). Of those who fished in Vermont in 2009, just over 40% fished Lake Champlain during the open water season, or roughly 46,000 anglers.

Bass was the most popular species to fish for during the open water season, accounting for over 400,000 days of fishing effort by residents and nonresidents (Tables 62 through 65). Yellow perch and northern pike were also very popular. During the ice fishing season, yellow perch and northern pike were again the most popular species. (Note: We do not have an estimate of the total number of days anglers spent fishing on Lake Champlain because anglers reported days fished by species and could indicate more than one species for each day of fishing.)

Angler opinion about the quality of fishing varied widely by species (Table 66). In general, warmwater species seemed to have more favorable ratings compared with trout and salmon. One exception might be walleye, for which one-third of anglers fishing for that species thought the fishing quality was poor.

Almost half of the anglers who had fished Lake Champlain in the past 3 years supported ice fishing for bass on the Lake (Table 67). Many did not have an opinion about the length of the walleye season, and if they did have an opinion they tended to think the season opening and closing dates were “just right” (Table 68). They also responded to a series of questions about preferred species lengths, creel limits by species, and the number of lines allowed when open water and ice fishing. Results from these questions can be found in Tables 69 through 90.

Table 61. Fishing participation on Lake Champlain over the past 3 years, by Vermont residents and nonresidents.

	Vermont residents	Nonresidents
Fished Lake Champlain in any of the past 3 years		
No	49.3%	54.9%
Yes	50.7%	45.1%
Of those who fished in Vermont in 2009:		
% fishing Lake Champlain open water	43.1%	41.1%
Estimated number of anglers fishing Lake Champlain open water	32,545	13,475
% ice fishing on Lake Champlain	25.2%	8.8%
Estimated number of anglers ice fishing on Lake Champlain	19,066	2,875

Table 62. Among Vermont residents who fished Lake Champlain open water in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Vermont residents – open water	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Largemouth or smallmouth bass	72.3	23,530	14.0	328,950	48,893
Yellow perch	54.2	17,639	14.6	257,182	57,569
Northern pike	51.9	16,891	12.2	205,224	37,325
Walleye	36.9	12,009	9.6	115,047	24,341
Lake trout	36.1	11,749	9.2	107,619	26,480
Landlocked salmon	30.2	9,829	14.0	137,699	38,493
White perch	27.4	8,917	14.7	131,263	49,155
Brown trout	25.8	8,397	12.6	105,629	32,503
Steelhead/rainbow trout	24.2	7,876	12.6	99,551	32,458
Sunfish	23.1	7,518	13.2	99,011	24,257
Crappie	23.0	7,485	12.5	93,642	19,773
Bullhead	22.0	7,160	8.6	61,504	14,289
Channel catfish	20.1	6,542	8.9	58,481	19,867
Smelt	6.5	2,115	[a]	[a]	[a]
Muskellunge	4.9	1,595	[a]	[a]	[a]

[a]Sample size was too small to estimate.

Table 63. Among Vermont residents who went Lake Champlain ice fishing in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Vermont residents – ice fishing	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Yellow perch	74.8	14,261	9.1	129,493	21,410
Northern pike	51.2	9,762	7.2	70,187	12,845
Walleye	27.7	5,281	6.4	33,853	10,204
Smelt	27.3	5,205	5.3	27,482	9,576
Crappie	21.2	4,042	9.3	37,671	12,664
Lake trout	19.3	3,680	4.9	18,031	5,190
Landlocked salmon	19.0	3,623	5.7	20,467	5,259
White perch	18.0	3,432	9.0	30,956	13,839
Sunfish	15.8	3,012	7.3	21,870	6,337
Brown trout	14.2	2,707	5.1	13,808	4,241
Steelhead/rainbow trout	10.8	2,059	5.0	10,316	3,066
Muskellunge	5.1	972	[a]	[a]	[a]
Channel catfish	4.8	915	[a]	[a]	[a]
Bullhead	4.3	820	[a]	[a]	[a]

[a]Sample size was too small to estimate.

Table 64. Among nonresidents who fished Lake Champlain open water in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Nonresidents – open water	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Largemouth or smallmouth bass	86.7	11,683	7.7	89,374	21,819
Yellow perch	38.0	5,121	10.1	51,666	30,691
Northern pike	52.7	7,101	6.7	47,224	11,068
Walleye	28.0	3,773	6.3	23,921	5,634
Lake trout	14.7	1,981	[a]	[a]	[a]
Landlocked salmon	13.3	1,792	[a]	[a]	[a]
White perch	19.3	2,601	[a]	[a]	[a]
Brown trout	9.3	1,253	[a]	[a]	[a]
Steelhead/rainbow trout	6.0	809	[a]	[a]	[a]
Sunfish	12.0	1,617	[a]	[a]	[a]
Crappie	14.0	1,887	[a]	[a]	[a]
Bullhead	4.7	633	[a]	[a]	[a]
Channel catfish	5.3	714	[a]	[a]	[a]
Smelt	0.7	94	[a]	[a]	[a]
Muskellunge	10.0	1,348	[a]	[a]	[a]

[a]Sample size was too small to estimate.

Table 65. Among nonresidents who went Lake Champlain ice fishing in 2009: the percent, estimated number of anglers, mean days fished, estimated total days fished, and 95% confidence interval by species. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished.)

Nonresidents – ice fishing	% fishing	# fishing	Mean days fished	Total days fished	±95% confidence interval
Yellow perch	45.5	1,308	[a]	[a]	[a]
Northern pike	54.5	1,567	[a]	[a]	[a]
Walleye	18.8	541	[a]	[a]	[a]
Smelt	18.2	523	[a]	[a]	[a]
Crappie	39.4	1,133	[a]	[a]	[a]
Lake trout	21.2	610	[a]	[a]	[a]
Landlocked salmon	15.2	437	[a]	[a]	[a]
White perch	25.0	719	[a]	[a]	[a]
Sunfish	30.3	871	[a]	[a]	[a]
Brown trout	15.6	449	[a]	[a]	[a]
Steelhead/rainbow trout	9.1	262	[a]	[a]	[a]
Muskellunge	3.0	86	[a]	[a]	[a]
Channel catfish	3.0	86	[a]	[a]	[a]
Bullhead	6.1	175	[a]	[a]	[a]

[a]Sample size was too small to estimate.

Table 66. Of respondents who fished Lake Champlain in any of the past 3 years, their evaluation of the by species quality of fishing in Lake Champlain, for Vermont residents and nonresidents.				
Response	Vermont residents (%)		Nonresidents (%)	
Quality of fishing for brown trout during past 3 years				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	15.4	29.9	5.2	[a]
Fair	23.5	45.5	8.6	[a]
Good	12.1	23.5	6.0	[a]
Excellent	0.6	1.1	0.0	[a]
No opinion	48.4		80.2	
Mean score[b]		2.0		[a]
Quality of fishing for steelhead/rainbow trout during past 3 years				
Poor	16.7	31.6	6.1	[a]
Fair	24.3	45.9	7.8	[a]
Good	11.3	21.4	7.0	[a]
Excellent	0.6	1.1	0.0	[a]
No opinion	47.1		79.1	
Mean score[b]		1.9		[a]
Quality of fishing for lake trout during past 3 years				
Poor	7.9	13.5	4.3	14.7
Fair	21.1	35.8	8.6	29.4
Good	25.5	43.5	13.8	47.1
Excellent	4.3	7.4	2.6	8.8
No opinion	41.2		70.7	
Mean score[b]		2.4		2.5
Quality of fishing for landlocked salmon during past 3 years				
Poor	10.8	19.9	4.3	[a]
Fair	24.8	45.7	11.3	[a]
Good	17.1	31.4	8.7	[a]
Excellent	1.6	3.0	0.0	[a]
No opinion	45.7		75.7	
Mean score[b]		2.2		[a]
Quality of fishing for walleye during past 3 years				
Poor	19.6	31.4	16.1	33.9
Fair	27.8	44.4	13.6	28.6
Good	13.8	22.1	11.9	25.0
Excellent	1.3	2.1	5.9	12.5
No opinion	37.5		52.5	
Mean score[b]		1.9		2.1
Quality of fishing for largemouth bass during past 3 years				
Poor	3.7	4.6	2.6	3.0
Fair	20.3	25.4	19.2	21.5
Good	41.1	51.7	39.8	44.4
Excellent	14.6	18.3	27.8	31.1
No opinion	20.3		10.6	
Mean score[b]		2.8		3.0

Table 66. (cont.)				
Response	Vermont residents (%)		Nonresidents (%)	
Quality of fishing for smallmouth bass during past 3 years				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	3.4	4.2	1.3	1.5
Fair	19.3	23.6	15.0	17.0
Good	44.4	54.1	39.2	44.5
Excellent	14.8	18.1	32.7	37.0
No opinion	18.1		11.8	
Mean score[b]		2.9		3.2
Quality of fishing for northern pike during past 3 years				
Poor	5.7	7.4	6.4	8.7
Fair	22.7	29.3	16.3	22.1
Good	37.4	48.5	31.2	42.3
Excellent	11.5	14.8	19.9	26.9
No opinion	22.7		26.2	
Mean score[b]		2.7		2.9
Quality of fishing for crappie during past 3 years				
Poor	5.8	11.2	2.5	7.3
Fair	20.6	40.3	13.6	39.0
Good	20.5	40.1	11.0	31.7
Excellent	4.3	8.4	7.6	22.0
No opinion	48.8		65.3	
Mean score[b]		2.5		2.7
Quality of fishing for yellow perch during past 3 years				
Poor	6.7	8.4	6.3	10.4
Fair	21.6	26.9	15.1	24.7
Good	37.7	47.0	21.4	35.0
Excellent	14.1	17.7	18.3	29.9
No opinion	19.9		38.9	
Mean score[b]		2.7		2.8
Quality of fishing for sunfish during past 3 years				
Poor	2.1	3.6	3.4	8.5
Fair	12.2	21.6	10.2	25.5
Good	26.0	46.2	13.6	34.1
Excellent	16.1	28.6	12.7	31.9
No opinion	43.6		60.1	
Mean score[b]		3.0		2.9
Quality of fishing for bullhead during past 3 years				
Poor	1.8	3.6	0.9	[a]
Fair	14.3	29.1	7.0	[a]
Good	23.8	48.4	13.9	[a]
Excellent	9.3	18.9	3.5	[a]
No opinion	50.8		74.7	
Mean score[b]		2.8		[a]

Table 66. (cont.)				
Response	Vermont residents (%)		Nonresidents (%)	
Quality of fishing for white perch during past 3 years				
	Overall	For those with an opinion	Overall	For those with an opinion
Poor	3.8	7.0	7.3	17.3
Fair	14.2	25.9	10.6	25.0
Good	24.8	45.2	13.0	30.8
Excellent	12.0	21.9	11.4	26.9
No opinion	45.2		57.7	
Mean score[b]		2.8		2.7

[a]Sample size was too small to estimate.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 67. Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed), by Vermont residents and nonresidents.		
Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed)	Vermont residents (%)	Nonresidents (%)
No	31.2	27.5
Yes, somewhat	28.0	20.3
Yes, strongly	17.5	17.0
No opinion	23.3	35.2

Table 68. Respondents' opinions about the length of the walleye season on Lake Champlain, which currently runs from the 1st Saturday in May to the following March 15th, by Vermont residents and nonresidents.		
Opinion on length of Lake Champlain walleye season	Vermont residents	Nonresidents
	Percent supporting[a]	
Just right	26.2	17.7
Close earlier	7.4	2.5
Close later	1.9	2.5
Open earlier	7.1	1.3
Open later	7.0	4.4
Open year-round	5.3	5.7
No opinion	48.4	70.9

[a]Percentages can add to more than 100% because more than one option could be checked.

Table 69. Agreement with the Lake Champlain current minimum length for brown/rainbow trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for brown/rainbow trout of 12”	Vermont residents (%)	Nonresidents (%)
Agree	62.6	44.1
Disagree	17.6	7.1
No opinion	19.9	48.8
Recommended limit for those who Disagreed		
Higher	89.1	[a]
Lower	10.9	[a]
Mean recommended limit	14.8	[a]
[a]Sample size was too small to estimate.		

Table 70. Agreement with the Lake Champlain current minimum length limit for lake trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for lake trout of 15”	Vermont residents (%)	Nonresidents (%)
Agree	60.2	41.1
Disagree	20.6	11.6
No opinion	19.2	47.3
Recommended limit for those who disagreed		
Higher	96.4	[a]
Lower	3.6	[a]
Mean recommended limit	18.8	[a]
[a]Sample size was too small to estimate.		

Table 71. Agreement with the Lake Champlain current minimum length limit for landlocked salmon, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for landlocked salmon of 15”	Vermont residents (%)	Nonresidents (%)
Agree	59.1	42.2
Disagree	18.8	10.2
No opinion	22.1	47.6
Recommended limit for those who disagreed		
Higher	96.8	[a]
Lower	3.2	[a]
Mean recommended limit	18.0	[a]
[a]Sample size was too small to estimate.		

Table 72. Agreement with the Lake Champlain current minimum length limit for walleye, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for walleye of 18”	Vermont residents (%)	Nonresidents (%)
Agree	67.1	50.0
Disagree	12.8	11.6
No opinion	20.1	38.4
Recommended limit for those who disagreed		
Higher	63.9	[a]
Lower	36.1	[a]
Mean recommended limit	18.5	[a]
[a]Sample size was too small to estimate.		

Table 73. Agreement with the Lake Champlain current minimum length limit for largemouth bass, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for largemouth bass of 10”	Vermont residents (%)	Nonresidents (%)
Agree	57.5	41.1
Disagree	27.9	40.5
No opinion	14.6	18.4
Recommended limit for those who disagreed		
Higher	99.5	98.4
Lower	0.5	1.6
Mean recommended limit	13.3	13.3

Table 74. Agreement with the Lake Champlain current minimum length limit for smallmouth bass, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for smallmouth bass of 10”	Vermont residents (%)	Nonresidents (%)
Agree	58.4	43.9
Disagree	26.7	36.1
No opinion	14.9	20.0
Recommended limit for those who disagreed		
Higher	99.5	98.2
Lower	0.5	1.8
Mean recommended limit	13.3	13.2

Table 75. Agreement with the Lake Champlain current minimum length limit for northern pike, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for northern pike of 20”	Vermont residents (%)	Nonresidents (%)
Agree	57.9	44.4
Disagree	26.0	30.6
No opinion	16.1	25.0
Recommended limit for those who disagreed		
Higher	89.8	84.1
Lower	10.2	15.9
Mean recommended limit	26.2	24.1

Table 76. Agreement with the Lake Champlain current minimum length limit for crappie, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current minimum length limit for crappie of 8”	Vermont residents (%)	Nonresidents (%)
Agree	63.1	44.2
Disagree	7.9	15.3
No opinion	29.0	40.5
Recommended limit for those who disagreed		
Higher	76.9	[a]
Lower	23.1	[a]
Mean recommended limit	8.8	[a]
[a]Sample size was too small to estimate.		

Table 77. Agreement with the Lake Champlain current daily creel limit for brown/rainbow trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for brown/rainbow trout of 3 fish	Vermont residents (%)	Nonresidents (%)
Agree	64.1	52.6
Disagree	16.3	6.9
No opinion	19.6	40.5
Recommended limit for those who disagreed		
Higher	45.5	[a]
Lower	54.5	[a]
Mean recommended limit	3.4	[a]
[a]Sample size was too small to estimate.		

Table 78. Agreement with the Lake Champlain current daily creel limit for lake trout, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for lake trout of 3 fish	Vermont residents (%)	Nonresidents (%)
Agree	63.2	54.6
Disagree	16.8	6.2
No opinion	20.0	39.2
Recommended limit for those who disagreed		
Higher	46.5	[a]
Lower	53.5	[a]
Mean recommended limit	3.4	[a]
[a]Sample size was too small to estimate.		

Table 79. Agreement with the Lake Champlain current daily creel limit for landlocked salmon, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for landlocked salmon of 2 fish	Vermont residents (%)	Nonresidents (%)
Agree	65.0	52.7
Disagree	14.2	6.1
No opinion	20.8	41.2
Recommended limit for those who disagreed		
Higher	70.5	[a]
Lower	29.5	[a]
Mean recommended limit	3.1	[a]
[a]Sample size was too small to estimate.		

Table 80. Agreement with the Lake Champlain current daily creel limit for walleye, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for walleye of 3 fish	Vermont residents (%)	Nonresidents (%)
Agree	62.7	55.8
Disagree	18.4	10.1
No opinion	18.9	34.1
Recommended limit for those who disagreed		
Higher	44.0	[a]
Lower	56.0	[a]
Mean recommended limit	3.1	[a]
[a]Sample size was too small to estimate.		

Table 81. Agreement with the Lake Champlain current daily creel limit for largemouth/smallmouth bass, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for largemouth/smallmouth bass of 5 fish	Vermont residents (%)	Nonresidents (%)
Agree	65.1	68.0
Disagree	20.5	17.0
No opinion	14.4	15.0
Recommended limit for those who disagreed		
Higher	29.3	[a]
Lower	70.7	[a]
Mean recommended limit	4.0	[a]
[a]Sample size was too small to estimate.		

Table 82. Agreement with the Lake Champlain current daily creel limit for northern pike, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for northern pike of 5 fish	Vermont residents (%)	Nonresidents (%)
Agree	63.0	60.1
Disagree	21.9	16.8
No opinion	15.1	23.1
Recommended limit for those who disagreed		
Higher	19.7	[a]
Lower	80.3	[a]
Mean recommended limit	5.2	[a]
[a]Sample size was too small to estimate.		

Table 83. Agreement with the Lake Champlain current daily creel limit for crappie, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for crappie of 25 fish	Vermont residents (%)	Nonresidents (%)
Agree	62.2	48.5
Disagree	11.0	18.7
No opinion	26.8	32.8
Recommended limit for those who disagreed		
Higher	51.4	[a]
Lower	48.6	[a]
Mean recommended limit	30.8	[a]
[a]Sample size was too small to estimate.		

Table 84. Agreement with the Lake Champlain current daily creel limit for yellow perch, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for yellow perch, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	67.7	50.3
Disagree	15.1	20.2
No opinion	17.2	29.5
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	40.2	[a]
[a]Sample size was too small to estimate.		

Table 85. Agreement with the Lake Champlain current daily creel limit for sunfish, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for sunfish, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	69.7	53.6
Disagree	4.8	9.6
No opinion	25.5	36.8
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	[a]	[a]
[a]Sample size was too small to estimate.		

Table 86. Agreement with the Lake Champlain current daily creel limit for smelt, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for smelt, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	69.0	52.0
Disagree	6.1	4.9
No opinion	24.9	43.1
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	52.9	[a]
[a]Sample size was too small to estimate.		

Table 87. Agreement with the Lake Champlain current daily creel limit for bullhead, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for bullhead, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	69.0	52.5
Disagree	4.9	4.8
No opinion	26.1	42.7
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	[a]	[a]
[a]Sample size was too small to estimate.		

Table 88. Agreement with the Lake Champlain current daily creel limit for white perch, and if they disagreed their recommended limit, by Vermont residents and nonresidents.		
Agreement with current daily creel limit for white perch, which is no limit	Vermont residents (%)	Nonresidents (%)
Agree	69.1	50.8
Disagree	6.7	8.6
No opinion	24.2	40.6
Recommended limit for those who disagreed		
Higher	0.0	0.0
Lower	100.0	100.0
Mean recommended limit	27.4	[a]
[a]Sample size was too small to estimate.		

Table 89. Agreement with the current regulations on Lake Champlain that allow the use of 2 lines when fishing during the open water season, and if they disagreed their recommended number, by Vermont residents and nonresidents.		
Agreement with current regulations allowing for use of 2 lines on Lake Champlain during open water season	Vermont residents (%)	Nonresidents (%)
Agree	77.7	78.0
Disagree	16.0	9.4
No opinion	6.3	12.6
Recommended number for those who disagreed		
Higher	85.8	[a]
Lower	14.2	[a]
Mean recommended number	3.3	[a]
[a]Sample size was too small to estimate.		

Table 90. Agreement with the current regulations on Lake Champlain that allow the use of 15 lines when ice fishing, and if they disagreed their recommended number, by Vermont residents and nonresidents.		
Agreement with current regulations allowing for use of 15 lines when ice fishing on Lake Champlain	Vermont residents (%)	Nonresidents (%)
Agree	62.9	37.2
Disagree	22.9	33.1
No opinion	14.2	29.7
Recommended number for those who disagreed		
Higher	20.0	4.1
Lower	80.0	95.9
Mean recommended number	10.2	7.1

Angler Opinions about Fishery Management Issues, Fishing Access, and Sources of Information

Anglers generally agreed with current regulations for ponds and lakes that allow the use of 2 lines during the open water season and 15 lines during the ice fishing season (Tables 91 and 92). For the few who disagreed, Vermont residents were split as to whether there should be more or less lines allowed; nonresidents would prefer fewer lines.

Survey respondents were asked for their opinion about a number of potential issues in Vermont. The issues respondents were most likely to think were serious problems in Vermont were contaminant levels in fish and the recently adopted baitfish regulations (Table 93). However, only about one-quarter of residents and fewer nonresidents thought these were serious problems. None of the other issues were considered serious problems by more than 15% of anglers. For most issues, nonresidents either had no opinion or thought the issue was not a problem. Non-respondents to the survey were more likely than respondents to indicate that access, understandability of fishing regulations, and the recently adopted baitfish regulations were not a problem. These were the only opinion questions non-respondents were asked. Considering the overall angler population, it is likely that all the issues are perceived as less serious than indicated by respondent-only data.

The majority of residents, and even more nonresidents, thought the present quality of fishing access areas in Vermont were good to excellent (Table 94). The most important amenities to have at boat launch and fishing access sites according to respondents were boat ramps and bulletin boards with information (Table 95). Portable toilets, fishing piers or other shore fishing opportunities, and docks were very important to one-quarter of respondents and important to another one-quarter.

Most Vermont residents used the fishing regulations guide as a source of information in 2009 and the majority indicated it was the most likely source they would refer to in 2010 (Table 96). About half were getting information from friends and bait and tackle shops, as well. The website was used by about one-third of residents and nonresidents. Nonresidents also used the printed guide, but not to the same extent as residents. Nonresidents were divided in their most likely source to use in 2010 between the printed guide, friends, the website, and to a somewhat lesser, but perhaps important, extent fishing guides or charter operators.

Table 91. Agreement with the current regulations for ponds or lakes that allow the use of 2 lines when fishing during the open water season, and if they disagreed their recommended number, by Vermont residents and nonresidents.		
Agreement with current regulations allowing for use of 2 lines when fishing ponds or lakes during open water season	Vermont residents (%)	Nonresidents (%)
Agree	76.3	64.6
Disagree	14.1	11.8
No opinion	9.6	23.6
Recommended number for those who disagreed		
Higher	58.1	28.2
Lower	41.9	71.8
Mean recommended number	2.6	1.8

Table 92. Agreement with the current regulations for ponds or lakes that allow the use of 8 lines when ice fishing, and if they disagreed their recommended number, by Vermont residents and nonresidents.		
Agreement with current regulations allowing for use of 8 lines when ice fishing on ponds or lakes	Vermont residents (%)	Nonresidents (%)
Agree	62.0	43.6
Disagree	18.7	20.8
No opinion	19.3	35.6
Recommended number for those who disagreed		
Higher	44.0	10.3
Lower	56.0	89.7
Mean recommended number	8.0	4.6

Table 93. Opinions about issues in Vermont, by Vermont residents and nonresidents.						
Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	No opinion (%)	Mean score[a]
Contaminant levels in fish						
Vermont residents	29.6	30.3	18.1	11.3	10.7	2.9
Nonresidents	18.1	19.3	18.7	19.0	24.9	2.5
Recently adopted baitfish regulations						
Vermont residents	21.6	16.3	13.5	23.1	25.5	2.5
Nonresidents	10.2	11.1	8.0	24.1	46.6	2.1
Crowding at fishing areas						
Vermont residents	9.8	21.9	33.4	27.3	7.6	2.1
Nonresidents	2.8	14.2	28.8	38.2	16.0	1.8
Commercial sale of angler-caught perch						
Vermont residents	9.6	11.6	13.4	38.1	27.3	1.9
Nonresidents	11.4	9.7	8.0	21.6	49.3	2.2
Commercial sale of angler-caught crappie						
Vermont residents	7.3	10.1	11.5	38.3	32.8	1.8
Nonresidents	11.4	8.7	7.5	21.3	51.1	2.2
Commercial sale of angler-caught sunfish						
Vermont residents	6.3	8.3	11.5	41.1	32.8	1.7
Nonresidents	10.9	7.3	8.5	22.3	51.0	2.1
Shooting and spearing of northern pike in Lake Champlain as currently permitted						
Vermont residents	9.5	8.0	7.8	39.5	35.2	1.8
Nonresidents	13.6	6.3	7.1	18.5	54.5	2.3
Conflict between fishing and other recreational uses (e.g., skiing, boating)						
Vermont residents	9.4	25.9	25.3	25.0	14.3	2.2
Nonresidents	5.7	21.3	22.4	20.5	30.1	2.2
Access to fishing areas						
Vermont residents	7.3	16.1	21.6	49.0	6.0	1.8
Nonresidents	3.4	9.9	19.8	52.5	14.4	1.6
Fishing derbies/tournaments (other than "kids" derbies)						
Vermont residents	3.9	9.3	11.7	62.5	12.6	1.5
Nonresidents	4.8	6.8	9.3	52.8	26.3	1.5
Your ability to understand Vermont fishing regulations						
Vermont residents	3.9	8.6	16.8	64.1	6.6	1.5
Nonresidents	0.3	4.5	13.8	67.0	14.4	1.3
Conflict between open-water and ice-fishing						
Vermont residents	1.5	5.6	10.3	53.3	29.3	1.4
Nonresidents	2.0	4.5	6.2	31.5	55.8	1.5

[a]Scale ranged from 1 = not a problem to 4 = serious problem. Respondents who had "no opinion" were not included in the calculation of the mean.

Table 94. Present quality of fishing access areas in Vermont, by Vermont residents and nonresidents.		
Present quality of fishing access areas in Vermont	Vermont residents (%)	Nonresidents (%)
Poor	7.5	2.0
Fair	33.7	22.9
Good	53.1	62.5
Excellent	5.7	12.6
Mean score[a]	2.6	2.9
[a]Scale ranged from 1 = poor to 4 = excellent.		

Table 95. Importance of various boat launch and fishing access site amenities, by Vermont residents and nonresidents.						
Boat launch and fishing access site amenities	Very important (%)	Important (%)	Somewhat important (%)	Not important (%)	No opinion (%)	Mean score[a]
Boat ramps						
Vermont residents	37.7	31.7	15.4	9.2	6.0	3.0
Nonresidents	42.2	23.5	12.2	8.5	13.6	3.1
Bulletin boards with information						
Vermont residents	35.3	33.0	20.0	6.7	5.0	3.0
Nonresidents	35.1	32.6	17.6	6.8	7.9	3.0
Portable toilets						
Vermont residents	28.6	29.9	20.7	15.2	5.6	2.8
Nonresidents	33.1	24.0	17.4	14.9	10.6	2.8
Fishing piers or other shore fishing opportunities						
Vermont residents	26.0	28.7	21.9	17.1	6.3	2.7
Nonresidents	19.4	24.9	18.6	22.9	14.2	2.5
Docks						
Vermont residents	23.3	25.6	25.8	18.9	6.4	2.6
Nonresidents	27.3	23.8	18.8	15.9	14.2	2.7
[a]Scale ranged from 1 = not important to 4 = very important. Respondents who had "no opinion" were not included in the calculation of the mean.						

Table 96. Sources of fishing information used by anglers in 2009, and the most likely source to be used in 2010, by Vermont residents and nonresidents.

Sources of information	Vermont residents		Nonresidents	
	Used in 2009 (%)[a]	Most likely to use in 2010 (%)	Used in 2009 (%)[a]	Most likely to use in 2010 (%)
Fishing Regulations Guide from the Vermont Department of Fish and Wildlife	82.5	58.5	58.2	33.0
Friends	56.5	21.7	55.5	30.3
Bait and tackle shops	42.0	2.9	36.7	2.7
Website of the Vermont Department of Fish and Wildlife	36.2	6.9	35.3	16.1
Other pamphlets or documents from the Vermont Department of Fish and Wildlife	16.8	0.7	12.7	0.9
Newspaper	12.6	0.2	2.3	0.0
Direct contact with Vermont Department of Fish and Wildlife personnel	9.1	0.7	4.0	0.9
Other websites	7.3	1.5	9.9	2.7
Magazine	6.6	0.3	8.2	0.0
TV or radio	5.3	0.0	1.7	0.0
Newsletters from fishing clubs	4.1	1.5	3.7	4.5
Guides or charter boat operators	2.2	5.1	6.2	8.9

[a]Percentages can add to more than 100% because more than one source of information could have been used in 2009.

Comparisons by Vermont Region of Residence

Essentially all questions in the survey, and discussed previously, were analyzed and reported here by Vermont anglers' region of residence. Vermont was divided into five regions, shown in Fig. 1. Region 5, containing the urban area of Burlington and adjacent to Lake Champlain, appears to be the area most different from the others based on the data reported in the tables. Statistical tests were done to identify differences between regions. Comparisons by region can be found in Tables 97 to 132. Readers should keep in mind that the data reported are based on where residents lived, which is not necessarily where they fished. For example, Table 104 shows an estimated 228,733 days fished on open water by residents of Region 1. These are days fished in Vermont (by Region 1 residents), not days fished in Region 1.

Table 97. Gender, age, and type of license purchased, by region of residence.					
	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Gender					
Male	72.2	71.5	75.5	70.8	77.7
Female	27.8	28.5	24.5	29.2	22.3
Age					
18-29	22.9	27.5	27.8	25.4	24.2
30-39	20.1	19.6	18.4	19.8	20.2
40-54	33.0	34.5	33.2	35.3	37.6
55+	24.0	18.4	20.6	19.5	18.0
License Types[a]					
Resident Fishing (Annual, 3-day Youth, Lifetime)	49.6	60.8	59.4	56.5	63.1
Resident (Annual, Youth, Lifetime)	50.4	39.2	40.6	43.5	36.9
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 98. Fishing participation over the past 3 years, by region of residence.					
	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fished in 2009	92.0	92.4	88.3	92.2	90.5
Fished in 2008	81.8	78.8	81.5	79.7	82.1
Fished in 2007	77.9	77.1	79.8	72.0	79.6
Did not fish in any of the past 3 years	6.0	6.0	9.7	7.2	7.3
Fished every year (2009, 2008, and 2007)	69.6	68.0	72.8	69.1	71.6
Fished intermittently (1 or 2 of the past 3 years)	24.4	26.0	17.5	23.7	21.1

Table 99. Seasons fished in Vermont in past 3 years, by region of residence.					
Seasons fished in Vermont in past 3 years	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Open water	99.4	100.0	100.0	99.7	98.7
Ice fishing[a]	56.3	48.1	40.9	55.3	57.4
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 100. Species fished for in Vermont in past 3 years, by region of residence.					
Fished in Vermont in past 3 years for:	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
	Percent fishing for:[a]				
Smallmouth bass[b]	58.2	70.3	72.2	68.7	77.5
Brook trout[b]	78.8	72.9	78.6	63.1	53.0
Rainbow trout[b]	79.1	76.4	75.8	63.7	51.7
Yellow perch[b]	65.2	60.0	58.4	66.4	75.2
Largemouth bass[b]	48.3	58.8	69.0	72.5	70.5
Brown trout[b]	59.1	60.5	66.9	55.4	50.7
Northern pike[b]	37.8	40.0	42.7	57.1	62.9
Sunfish (bluegill, pumpkinseed)[b]	29.2	34.1	38.9	39.7	41.7
Lake trout[b]	55.1	34.8	27.1	36.6	32.8
Pickerel[b]	41.8	38.9	39.5	22.0	30.5
Walleye[b]	24.9	22.6	28.1	28.2	45.8
Rock bass[b]	24.6	22.6	33.5	35.6	34.4
Bullhead (hornpout)[b]	26.5	23.6	28.8	38.3	27.8
White perch[b]	16.0	19.3	14.6	30.8	36.1
Crappie[b]	8.9	9.8	19.6	37.6	26.8
Landlocked salmon[b]	34.2	17.6	13.9	14.6	28.8
Smelt[b]	27.1	13.2	8.9	21.7	16.6
Channel catfish[b]	4.3	5.7	14.6	25.4	11.6
Bowfin[b]	2.2	8.8	3.9	9.2	16.3
Sucker	10.8	7.8	6.8	5.8	6.6
Drum (sheepshead)[b]	1.2	3.0	4.3	9.2	9.6
Carp[b]	2.5	5.4	3.2	6.8	7.6
Muskellunge[b]	2.5	3.0	3.2	4.1	8.3
Whitefish (Lake Champlain)[b]	2.8	2.4	1.4	5.4	5.3
Gar	0.3	2.7	2.5	2.7	2.0
Sauger[c]	0.3	0.3	0.7	5.1	1.7
American shad (Connecticut River)[c]	1.2	0.7	2.8	0.3	1.0
Burbot (cusk)[c]	3.7	0.0	0.7	0.3	0.7
Anything	22.2	24.7	21.4	24.4	29.1

[a]Percentages add to more than 100% because more than one species could be fished for.
[b]Statistically significant difference between regions at P = 0.05 using chi-square test.
[c]Statistical test could not be conducted because too many cells had an expected frequency of <5.

Table 101. For those who fished <u>open water</u> in the past 3 years and had a species preference, the most preferred species by region of residence.

Species	Open water preference				
	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Brook trout	39.1	27.9	30.8	29.4	16.7
Largemouth bass	12.8	12.4	15.6	28.2	19.4
Rainbow trout	18.1	19.5	16.0	9.9	8.1
Smallmouth bass	5.0	15.1	8.0	3.2	14.3
Brown trout	3.2	6.4	14.8	3.2	3.9
Walleye	1.4	2.8	2.8	6.0	8.1
Landlocked salmon	3.6	4.4	2.4	2.4	7.8
Yellow perch	5.7	3.2	<1.0	4.8	7.4
Lake trout	6.0	3.6	3.2	3.6	2.7
Northern pike	<1.0	1.6	2.0	3.2	5.4
All other species most preferred by less than 1% of respondents.					

Table 102. For those who went <u>ice fishing</u> in the past 3 years and had a species preference, the most preferred species by region of residence.

Species	Ice fishing preference				
	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Yellow perch	25.9	26.4	15.3	25.7	44.3
Northern pike	4.1	19.8	20.4	18.4	20.8
Brown trout	6.1	15.1	13.3	11.0	0.7
Lake trout	27.2	7.5	7.1	3.7	2.0
Rainbow trout	14.3	6.6	9.2	5.1	2.7
Walleye	1.4	2.8	2.0	10.3	10.1
Smelt	4.8	2.8	3.1	8.8	4.0
Largemouth bass	2.7	5.7	10.2	5.9	1.3
Smallmouth bass	2.7	6.6	6.1	2.2	2.7
Landlocked salmon	3.4	2.8	2.0	1.5	4.7
Brook trout	1.4	1.9	5.1	1.5	1.3
White perch	2.0	0.0	0.0	1.5	2.7
All other species most preferred by less than 1% of respondents.					

Table 103. Evaluation of the overall quality of fishing in Vermont during the past 3 years, by region of residence.					
Quality of fishing in Vermont during the past 3 years[a]	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Poor	11.0	7.6	9.5	8.1	5.8
Fair	49.3	40.1	43.1	46.3	35.6
Good	36.9	48.1	36.5	41.7	51.8
Excellent	2.8	4.2	10.9	3.9	6.8
Mean score[b]	2.3	2.5	2.5	2.4	2.6

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 104. Estimated number of anglers and days fished in Vermont in 2009, by region of residence.					
Of those who fished in 2009:	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
% open-water fishing	97.8	99.7	99.6	99.0	98.3
Mean days fished	24.8	20.4	28.3	22.9	25.2
Total days open water	228,733	289,684	420,774	318,026	565,995
±95% confidence interval	33,933	40,721	69,012	43,746	81,447
% Ice fishing[a]	49.4	35.4	34.1	48.1	50.0
Mean days fished	12.9	9.6	10.0	10.3	11.6
Total days ice fishing	60,209	48,326	51,028	69,266	132,645
±95% confidence interval	9,577	11,635	9,261	12,155	25,180

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 105. Respondents who fished for brook, brown, or rainbow trout in streams or rivers in Vermont in any of the past 3 years, the tackle used most often, and their evaluation of the quality of fishing, by region of residence.

Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fish for brook, brown, or rainbow in streams or rivers in Vermont in any of the past 3 years[a]					
No	19.6	19.9	12.6	31.0	37.8
Yes	80.4	80.1	87.4	69.0	62.2
If yes: Tackle used most often[a]					
Bait	67.2	54.5	47.6	49.7	44.0
Flies	8.8	21.0	15.6	17.2	26.4
Lures	13.7	15.0	23.6	15.3	18.9
Lures with bait	10.3	9.5	13.2	17.8	10.7
Quality of fishing for trout in streams and rivers during past 3 years[a]					
Poor	16.9	12.6	16.5	11.0	11.5
Fair	51.7	44.4	48.8	47.5	48.6
Good	29.4	41.7	27.7	37.5	36.6
Excellent	2.0	1.3	7.0	4.0	3.3
Mean score[b]	2.2	2.3	2.2	2.3	2.3

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 106. Importance of programs that manage strictly for wild trout, and programs for stocking trout in some streams and rivers, by region of residence.

How important is it that Vermont provides the following programs?	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Manage strictly for wild trout (no stocking) in some streams and rivers[a]					
Not important	15.0	15.2	16.7	13.0	8.8
Somewhat important	22.0	29.0	27.7	22.7	23.0
Very important	46.1	40.2	41.6	40.9	43.1
No opinion	16.9	15.6	14.0	23.4	25.1
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some streams and rivers[a]					
Not important	8.2	8.5	7.1	5.8	6.0
Somewhat important	24.1	28.5	20.9	30.1	26.7
Very important	57.6	52.5	62.3	48.9	47.7
No opinion	10.1	10.5	9.7	15.2	19.6

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 107. Support for special regulations for trout fishing in some streams or rivers, by region of residence.					
Special regulations for trout fishing in some streams or rivers	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent supporting[a]				
Special length limits[b]	61.9	66.4	62.3	54.5	70.2
Lower creel limits[b]	42.4	52.0	49.8	39.7	61.9
Catch and release – all fish must be released[b]	26.8	38.2	34.3	23.1	43.1
Artificial lures and flies only[b]	22.6	33.8	25.1	22.6	36.5
I do not support the use of any special regulations	9.3	9.6	10.9	12.1	8.3
No opinion	15.5	12.2	8.4	21.1	12.2
[a]Percentages can add to more than 100% because more than one regulation could be chosen. [b]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 108. The average smallest length fish you would keep or consider a quality size fish when fishing in streams or rivers, by species and by region of residence.					
	Region 1 (mean)	Region 2 (mean)	Region 3 (mean)	Region 4 (mean)	Region 5 (mean)
Brook trout					
smallest "keeper" size	8.1	8.0	8.5	8.1	8.5
smallest "quality" size	9.4	9.2	9.5	9.4	9.7
Brown trout					
smallest "keeper" size	10.4	10.1	10.3	9.9	10.2
smallest "quality" size	11.7	11.3	11.4	11.2	11.8
Rainbow trout					
smallest "keeper" size	10.7	10.1	10.4	10.0	10.3
smallest "quality" size	11.6	11.2	11.4	11.2	11.8

Table 109. Agreement with the current daily creel limit for species in streams or rivers, by region of residence.					
	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current daily limit				
Brook trout (12)[a]	62.3	53.2	56.5	67.9	48.9
Brown trout (6)[a]	64.9	57.3	60.0	69.2	53.1
Rainbow trout (6)[a]	64.8	61.2	59.3	69.2	52.0
Combination of above (12)[a]	61.9	59.1	58.4	68.2	47.9
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 110. Respondents who fished for trout or salmon in ponds or lakes (excluding Lake Champlain) in Vermont in any of the past 3 years, and their evaluation of the quality of fishing by species for those with an opinion, by region of residence.

Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fish for trout or salmon in ponds or lakes in Vermont in any of the past 3 years[a]					
No	24.8	37.3	35.1	47.7	56.9
Yes	75.2	62.7	64.9	52.3	43.1
If yes: ***Quality of fishing for brook, brown, and rainbow trout in ponds and lakes during past 3 years***					
Poor	23.9	16.9	18.7	14.4	14.3
Fair	46.1	51.6	46.3	50.0	44.6
Good	28.7	28.7	32.7	33.6	34.8
Excellent	1.3	2.8	2.3	2.0	6.3
Mean score[b]	2.1	2.2	2.2	2.3	2.3
Quality of fishing for lake trout in ponds and lakes during past 3 years[a]					
Poor	25.4	20.2	32.8	24.8	15.4
Fair	43.0	49.6	47.7	47.7	41.8
Good	29.7	27.1	17.2	26.6	34.0
Excellent	1.9	3.1	2.3	0.9	8.8
Mean score[b]	2.1	2.1	1.9	2.0	2.4
Quality of fishing for landlocked salmon in ponds and lakes during past 3 years[a]					
Poor	43.8	37.4	49.5	29.3	31.8
Fair	42.6	43.8	32.7	47.5	35.3
Good	13.0	17.0	15.0	22.0	28.2
Excellent	0.6	1.8	2.8	1.2	4.7
Mean score[b]	1.7	1.8	1.7	2.0	2.0

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 111. Importance of programs that manage strictly for wild trout, and programs for stocking trout in some lakes and ponds, by region of residence.					
How important is it that Vermont provides the following programs?	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Manage strictly for wild trout (no stocking) in some lakes and ponds					
Not important	16.6	16.2	14.2	12.7	10.8
Somewhat important	24.0	27.3	27.2	26.3	23.9
Very important	41.8	41.1	41.9	37.8	38.4
No opinion	17.6	15.4	16.7	23.2	26.9
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some lakes and ponds[a]					
Not important	7.4	8.5	7.0	6.7	6.0
Somewhat important	24.3	25.6	20.2	27.4	28.3
Very important	57.0	54.5	62.7	50.0	45.6
No opinion	11.3	11.4	10.1	15.9	20.1
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 112. Support for special regulations for trout and salmon fishing in some ponds or lakes (excluding Lake Champlain), by region of residence.

Special regulations for fishing in some ponds or lakes	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent supporting[a]				
For brook, brown, rainbow trout					
Special length limits[b]	67.3	59.2	68.8	51.4	62.7
Lower creel limits[b]	35.4	36.3	43.4	29.3	50.0
Catch and release – all fish must be released[b]	15.5	27.9	20.2	14.3	36.5
Artificial lures and flies only	23.9	30.7	27.6	19.7	34.1
I do not support the use of any special regulations	9.7	8.9	7.5	15.6	8.8
No opinion	15.9	18.9	9.2	19.7	16.7
For lake trout					
Special length limits[b]	66.7	57.4	68.8	53.1	61.7
Lower creel limits[b]	30.4	30.9	36.4	25.2	46.3
Catch and release – all fish must be released[b]	14.2	25.3	18.6	11.8	30.8
Artificial lures and flies only[b]	16.2	24.7	22.1	12.5	28.3
I do not support the use of any special regulations	9.3	7.4	10.6	12.6	9.2
No opinion	20.1	27.2	15.0	24.4	20.8
For landlocked salmon					
Special length limits	65.0	57.0	63.8	52.0	62.1
Lower creel limits[b]	30.6	30.3	39.0	24.8	46.2
Catch and release – all fish must be released[b]	20.4	32.1	26.2	13.6	33.6
Artificial lures and flies only[b]	18.0	23.8	24.1	13.6	29.3
I do not support the use of any special regulations	8.7	6.7	7.7	12.8	7.8
No opinion	21.8	27.9	17.7	26.4	22.2

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 113. The average smallest length fish you would keep or consider a quality size fish when fishing in ponds or lakes (excluding Lake Champlain), by species and by region of residence.

	Region 1 (mean)	Region 2 (mean)	Region 3 (mean)	Region 4 (mean)	Region 5 (mean)
Brook trout					
smallest "keeper" size	8.9	9.2	9.1	8.9	9.6
smallest "quality" size	10.8	10.5	10.9	10.6	10.7
Brown trout					
smallest "keeper" size	11.3	10.8	10.8	10.5	11.2
smallest "quality" size	14.2	13.8	13.7	13.5	13.8
Rainbow trout					
smallest "keeper" size	11.4	10.9	10.6	10.7	11.3
smallest "quality" size	14.2	13.7	13.6	13.6	13.7
Lake trout					
smallest "keeper" size	18.7	18.3	17.7	17.7	18.6
smallest "quality" size	21.1	20.5	20.9	20.9	20.9
Landlocked salmon					
smallest "keeper" size	16.7	16.0	16.3	15.7	16.1
smallest "quality" size	18.9	18.3	18.9	18.0	18.4

Table 114. Agreement with the current daily creel limit for species in ponds or lakes (excluding Lake Champlain), or lakes that offer lake trout fishing, by region of residence.

	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current daily limit				
Ponds or lakes					
Brook trout (6)	67.2	70.0	64.7	66.7	63.0
Brown trout (6)	63.4	66.3	62.0	69.9	63.0
Rainbow trout (6)[a]	62.6	69.7	59.5	72.2	63.3
Combined limit (6)	64.6	68.2	63.8	65.5	60.3
Lakes that offer lake trout fishing					
Lake trout (2)	73.8	72.5	71.6	67.4	69.2
Landlocked salmon (2)	74.5	73.7	72.4	64.6	70.8
Brook trout (2)	63.9	66.5	63.2	55.9	65.0
Brown trout (2)	70.6	70.6	69.6	59.0	63.6
Rainbow trout (2)	70.9	68.8	65.3	57.6	66.4
Combination of above (2)	64.4	56.8	58.5	48.6	62.4

[a]Statistically significant differences between regions at P = 0.05 using chi-square test.

Table 115. Respondents who fished for warmwater gamefish and panfish in Vermont in any of the past 3 years (excluding Lake Champlain), and their evaluation of the quality of fishing by species for those with an opinion, by region of residence.

Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fish for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead, or smelt in Vermont in any of the past 3 years					
No	18.6	18.4	19.3	15.0	23.6
Yes	81.4	81.6	80.7	85.0	76.4
If yes: ***Quality of fishing for walleye during the past 3 years[a]***					
Poor	39.3	36.5	34.1	43.9	23.2
Fair	41.4	38.3	43.5	46.2	47.1
Good	19.3	24.3	21.0	9.1	26.1
Excellent	0.0	0.9	1.4	0.8	3.6
Mean score[b]	1.8	1.9	1.9	1.7	2.1
Quality of fishing for largemouth bass during past 3 years[a]					
Poor	16.2	8.6	7.5	6.6	2.8
Fair	37.1	32.6	40.5	42.2	28.5
Good	39.6	54.2	44.0	45.5	52.8
Excellent	7.1	4.6	8.0	5.7	15.9
Mean score[b]	2.4	2.5	2.5	2.5	2.8
Quality of fishing for smallmouth bass during past 3 years[a]					
Poor	8.9	9.7	7.1	7.0	1.1
Fair	38.0	29.6	36.0	44.7	29.8
Good	46.1	54.1	44.2	44.1	50.3
Excellent	7.0	6.6	12.7	4.2	18.8
Mean score[b]	2.5	2.6	2.6	2.4	2.9
Quality of fishing for northern pike during past 3 years[a]					
Poor	15.1	9.2	16.3	8.7	5.5
Fair	43.5	36.6	46.8	39.7	35.8
Good	38.0	51.6	32.5	44.6	47.8
Excellent	3.4	2.6	4.4	7.0	10.9
Mean score[b]	2.3	2.5	2.3	2.5	2.6
Quality of fishing for yellow perch during past 3 years					
Poor	9.5	6.8	8.4	9.5	8.4
Fair	29.9	28.6	27.9	34.3	24.7
Good	42.0	49.5	44.8	46.7	50.0
Excellent	18.6	15.1	18.9	9.5	16.9
Mean score[b]	2.7	2.7	2.7	2.6	2.8

Table 115. (cont.)					
Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Quality of fishing for crappie during past 3 years					
Poor	17.8	18.0	15.3	14.6	11.3
Fair	33.3	33.7	35.9	39.7	36.5
Good	35.6	37.1	33.5	39.1	42.6
Excellent	13.3	11.2	15.3	6.6	9.6
Mean score[b]	2.4	2.4	2.5	2.4	2.5

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 116. Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed), by region of residence.					
Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed)[a]	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
No	11.1	13.8	10.4	10.3	16.1
Yes, somewhat	29.4	34.5	28.1	33.7	35.6
Yes, strongly	27.1	21.1	31.2	31.7	18.8
No opinion	32.4	30.6	30.3	24.3	29.5

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 117. Support for special regulations for some warmwater species on some waters, by region of residence.					
Special regulations for fishing on some waters	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent supporting[a]				
For largemouth or smallmouth bass					
Special length limits	52.8	52.4	61.9	52.4	59.7
Lower creel limits[b]	24.2	34.5	32.2	28.8	44.8
Catch and release – all fish must be released	23.4	31.4	27.1	26.2	33.8
Artificial lures and flies only	20.2	24.2	21.8	17.9	26.9
I do not support the use of any special regulations	11.3	10.2	11.4	14.5	7.0
No opinion	26.2	22.1	15.2	24.5	21.9
For walleye					
Special length limits	52.2	48.4	54.1	51.2	61.3
Lower creel limits[b]	27.4	30.3	31.0	23.7	42.0
Catch and release – all fish must be released	21.2	24.0	18.4	18.1	28.5
Artificial lures and flies only	13.5	17.5	17.3	14.4	20.6
I do not support the use of any special regulations	9.1	8.3	9.2	10.2	6.5
No opinion[b]	31.3	37.3	27.0	33.5	24.0
For northern pike					
Special length limits[b]	47.4	48.1	54.5	45.8	59.6
Lower creel limits[b]	23.1	31.0	29.8	22.1	42.9
Catch and release – all fish must be released[b]	17.8	24.2	19.7	18.3	28.8
Artificial lures and flies only	14.8	16.7	16.2	14.0	20.7
I do not support the use of any special regulations	13.5	9.3	11.1	14.5	6.6
No opinion[b]	31.3	34.7	25.3	34.1	22.3

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 118. The average smallest length warmwater fish you would keep or consider a quality size fish, by species and by region of residence.					
	Region 1 (mean)	Region 2 (mean)	Region 3 (mean)	Region 4 (mean)	Region 5 (mean)
Walleye					
smallest "keeper" size	15.2[a]	15.1[a]	15.9	16.4[b]	15.8
smallest "quality" size	17.1[a]	17.6	18.0	18.4[b]	18.3[b]
Largemouth bass					
smallest "keeper" size	11.3	11.3	11.3	11.7	11.4
smallest "quality" size	13.7	14.1	14.0	14.3	14.3
Smallmouth bass					
smallest "keeper" size	10.9	11.1	10.9	11.3	11.2
smallest "quality" size	13.0[a]	13.5	13.3	13.6	13.9[b]
Northern pike					
smallest "keeper" size	21.0	20.6[a]	21.9[b]	21.6	21.5
smallest "quality" size	25.3	25.9	26.4	26.2	26.9
Yellow perch					
smallest "keeper" size	7.7[a]	7.6[a]	8.2[b]	7.9	7.6[a]
smallest "quality" size	9.4	9.5	9.5	9.6	9.5
Crappie					
smallest "keeper" size	7.6	7.7	7.9	8.0	7.8
smallest "quality" size	9.2	9.3	9.3	9.6	9.4

[a,b]Statistically significant difference between a and b in the same row at P = 0.05, using Scheffe's test.

Table 119. Agreement with the current daily creel limit for warmwater species, by region of residence.					
Species	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current daily limit				
Walleye (3)[a]	53.3	51.1	57.8	56.8	64.1
Largemouth/smallmouth bass (5)	61.8	56.5	65.0	63.1	59.1
Northern pike (5)[a]	53.4	47.8	52.4	61.3	59.0
Yellow perch (50)	59.9	56.6	52.4	61.0	56.6
Crappie (25)[a]	44.9	47.8	54.3	64.0	55.7
Sunfish (no limit)[a]	57.8	57.0	65.0	68.2	66.5
Smelt (no limit)	60.0	55.5	60.9	63.2	63.6
Bullhead (no limit)[a]	56.1	55.6	61.8	66.8	65.0
White perch (no limit)[a]	54.7	56.1	57.0	66.2	63.4
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 120. Fishing participation on Lake Champlain over the past 3 years, by region of residence.					
	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fished Lake Champlain in any of the past 3 years[a]					
No	87.9	60.3	70.4	43.0	16.3
Yes	12.1	39.7	29.6	57.0	83.7
Of those who fished in Vermont in 2009:					
% fishing Lake Champlain open water	9.7	32.2	23.8	47.6	73.7
Estimated number of anglers fishing Lake Champlain open water	913	4,588	3,558	6,674	16,826
% ice fishing on Lake Champlain	5.3	16.4	10.2	30.7	45.4
Estimated number of anglers ice fishing on Lake Champlain	499	2,337	1,525	4,305	10,365
[a]Statistically significant difference between regions at P = 0.05 using chi-square test.					

Table 121. Of respondents who fished Lake Champlain in any of the past 3 years, their evaluation of the quality of fishing by species in Lake Champlain for those with an opinion, by region of residence.

Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Quality of fishing for brown trout during past 3 years					
Poor	[a]	27.6	30.9	34.7	28.4
Fair	[a]	51.7	52.8	44.5	40.4
Good	[a]	20.7	12.7	19.4	30.3
Excellent	[a]	0.0	3.6	1.4	0.9
Mean score[c]	[a]	1.9	1.9	1.9	2.0
Quality of fishing for steelhead/rainbow trout during past 3 years					
Poor	[a]	34.4	31.5	31.4	31.9
Fair	[a]	49.2	59.2	47.2	38.9
Good	[a]	16.4	5.6	20.0	28.3
Excellent	[a]	0.0	3.7	1.4	0.9
Mean score[c]	[a]	1.8	1.8	1.9	2.0
Quality of fishing for lake trout during past 3 years[b]					
Poor	[a]	7.9	20.0	15.2	12.0
Fair	[a]	39.7	50.9	44.6	24.8
Good	[a]	42.9	20.0	33.7	56.0
Excellent	[a]	9.5	9.1	6.5	7.2
Mean score[c]	[a]	2.5	2.2	2.3	2.6
Quality of fishing for landlocked salmon during past 3 years					
Poor	[a]	18.5	22.4	20.9	17.8
Fair	[a]	49.2	57.2	41.8	42.4
Good	[a]	29.2	18.4	35.8	35.6
Excellent	[a]	3.1	2.0	1.5	4.2
Mean score[c]	[a]	2.2	2.0	2.2	2.2
Quality of fishing for walleye during past 3 years[b]					
Poor	[a]	31.0	35.2	46.7	24.8
Fair	[a]	46.6	51.0	39.4	44.3
Good	[a]	22.4	11.8	12.8	27.5
Excellent	[a]	0.0	2.0	1.1	3.4
Mean score[c]	[a]	1.9	1.8	1.7	2.1
Quality of fishing for largemouth bass during past 3 years[b]					
Poor	[a]	3.7	11.6	2.5	4.1
Fair	[a]	29.3	26.1	34.2	20.2
Good	[a]	52.4	50.7	48.3	52.9
Excellent	[a]	14.6	11.6	15.0	22.8
Mean score[c]	[a]	2.8	2.6	2.8	2.9

Table 121. (cont).					
Response	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Quality of fishing for smallmouth bass during past 3 years[b]					
Poor	[a]	2.4	11.8	4.1	2.6
Fair	[a]	27.1	25.0	33.3	18.4
Good	[a]	52.9	54.4	48.0	56.6
Excellent	[a]	17.6	8.8	14.6	22.4
Mean score[c]	[a]	2.9	2.6	2.7	3.0
Quality of fishing for northern pike during past 3 years[b]					
Poor	[a]	6.3	21.8	4.5	4.8
Fair	[a]	34.2	25.0	30.9	28.3
Good	[a]	54.4	39.1	50.1	49.3
Excellent	[a]	5.1	14.1	14.5	17.6
Mean score[c]	[a]	2.6	2.5	2.7	2.8
Quality of fishing for crappie during past 3 years					
Poor	[a]	4.9	12.8	10.2	12.4
Fair	[a]	51.2	51.0	37.5	36.3
Good	[a]	31.7	23.4	47.8	42.5
Excellent	[a]	12.2	12.8	4.5	8.8
Mean score[c]	[a]	2.5	2.4	2.5	2.5
Quality of fishing for yellow perch during past 3 years					
Poor	[a]	10.1	11.3	5.9	8.2
Fair	[a]	26.6	29.0	28.8	26.0
Good	[a]	45.6	48.4	49.2	46.6
Excellent	[a]	17.7	11.3	16.1	19.2
Mean score[c]	[a]	2.7	2.6	2.8	2.8
Quality of fishing for sunfish during past 3 years					
Poor	[a]	2.0	9.8	2.6	3.0
Fair	[a]	29.4	17.6	23.7	20.1
Good	[a]	41.1	35.3	43.4	50.8
Excellent	[a]	27.5	37.3	30.3	26.1
Mean score[c]	[a]	3.0	3.0	3.0	3.0
Quality of fishing for bullhead during past 3 years[b]					
Poor	[a]	0.0	10.0	1.2	3.8
Fair	[a]	40.0	44.0	27.4	22.6
Good	[a]	42.5	28.0	47.6	57.6
Excellent	[a]	17.5	18.0	23.8	16.0
Mean score[c]	[a]	2.8	2.6	2.9	2.9
Quality of fishing for white perch during past 3 years					
Poor	[a]	4.1	12.7	5.7	5.8
Fair	[a]	36.7	25.5	28.7	22.5
Good	[a]	30.6	40.0	39.2	53.4
Excellent	[a]	28.6	21.8	26.4	18.3
Mean score[a]	[a]	2.8	2.7	2.9	2.8

[a]Sample size was too small to estimate.
[b]Statistically significant difference between regions at P = 0.05 using chi-square test.
[c]Scale ranged from 1 = poor to 4 = excellent.

Table 122. Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed), by region of residence.

Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed)[a]	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
No	23.1	31.3	22.5	24.5	36.4
Yes, somewhat	25.6	33.1	23.8	31.4	26.4
Yes, strongly	12.8	11.3	32.4	20.8	14.6
No opinion	38.5	24.3	21.3	23.3	22.6

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 123. Respondents' opinions about the length of the walleye season on Lake Champlain, which currently runs from the 1st Saturday in May to the following March 15th, by region of residence.

Opinion on length of Lake Champlain walleye season	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Just right	12.5	22.6	21.0	26.3	29.3
Close earlier	15.0	10.4	9.9	7.5	5.4
Close later	2.5	2.6	1.2	1.3	2.1
Open earlier	7.5	5.2	4.9	5.6	9.1
Open later	15.0	8.7	4.9	4.4	7.9
Open year-round[b]	2.6	3.5	12.5	3.8	5.0
No opinion	59.0	54.8	44.4	52.5	45.0

[a]Percentages can add to more than 100% because more than one option could be checked.
[b]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 124. Agreement with the current minimum length limit for fish caught in Lake Champlain, by region of residence.

Species	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current minimum length				
Brown/rainbow trout (12")	67.6	60.7	63.2	67.7	60.6
Lake trout (15")	48.6	56.0	59.2	64.7	60.3
Landlocked salmon (15")	61.1	53.6	52.0	62.7	61.0
Walleye (18")	68.4	63.4	68.9	67.9	67.4
Largemouth bass (10")	63.2	59.1	50.0	54.4	59.4
Smallmouth bass (10")	65.8	59.1	51.3	57.3	59.8
Northern pike (20")	59.0	56.4	48.7	63.7	57.6
Crappie (8")	59.5	65.5	63.2	64.1	62.3

Table 125. Agreement with the current daily creel limit for fish caught in Lake Champlain, by region of residence.

Species	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current daily limit				
Brown/rainbow trout (3)	55.0	69.4	61.8	69.1	61.6
Lake trout (3)	55.0	67.0	64.0	63.6	62.4
Landlocked salmon (2)	69.2	72.0	70.7	64.4	61.9
Walleye (3)	51.3	66.7	65.8	58.9	63.1
Largemouth/smallmouth bass (5)	59.0	66.4	62.3	67.3	65.1
Northern pike (5)	61.5	62.6	61.8	68.2	61.5
Crappie (25)[a]	48.7	65.7	67.1	73.4	56.3
Yellow perch (no limit)	60.5	62.6	59.7	65.0	72.2
Sunfish (no limit)	64.9	66.0	67.5	70.4	71.2
Smelt (no limit)[a]	63.2	64.2	68.4	69.7	71.0
Bullhead (no limit)	64.9	66.3	63.6	71.8	70.2
White perch (no limit)	67.6	67.0	64.9	69.2	70.8

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 126. Agreement with the current regulations on Lake Champlain that allow the use of 2 lines during open water season and 15 lines during ice fishing season, by region of residence.

	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current regulations				
Open water (2 lines)	74.4	86.8	71.8	71.3	79.3
Ice fishing (15 lines)	46.2	60.7	63.9	68.8	61.5

Table 127. Agreement with the current regulations for ponds or lakes that allow the use of 2 lines during open water season and 8 lines during ice fishing season, by region of residence.

	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent agreeing with current regulations				
Open water (2 lines)	80.3	78.7	79.6	70.6	73.9
Ice fishing (8 lines)	62.9	62.6	63.6	61.7	60.5

Table 128. Opinions about issues in Vermont, by region of residence.						
Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	No opinion (%)	Mean score[b]
Contaminant levels in fish						
Region 1	26.7	27.4	19.8	16.0	10.1	2.7
Region 2	28.3	28.0	20.1	12.5	11.1	2.8
Region 3	28.7	34.3	17.2	9.0	10.8	2.9
Region 4	24.6	30.4	21.8	13.0	10.2	2.7
Region 5	35.3	30.1	14.4	9.2	11.0	3.0
Recently adopted baitfish regulations[a]						
Region 1	27.0	16.9	16.3	19.1	20.7	2.6
Region 2	15.8	18.3	13.7	22.5	29.7	2.4
Region 3	23.3	9.3	12.6	27.4	27.4	2.4
Region 4	22.5	19.7	12.0	20.4	25.4	2.6
Region 5	21.1	17.4	13.7	23.9	23.9	2.5
Crowding at fishing areas[a]						
Region 1	8.8	19.4	25.8	39.4	6.6	2.0
Region 2	7.9	20.4	37.4	26.8	7.5	2.1
Region 3	10.5	17.7	35.7	30.1	6.0	2.1
Region 4	14.8	25.1	26.9	25.8	7.4	2.3
Region 5	8.2	24.6	36.5	21.5	9.2	2.2
Commercial sale of angler-caught perch[a]						
Region 1	10.0	12.8	8.1	42.5	26.6	1.9
Region 2	6.9	10.8	13.5	37.5	31.3	1.8
Region 3	12.4	12.0	12.7	27.7	35.2	2.1
Region 4	13.3	13.7	14.0	33.4	25.6	2.1
Region 5	7.2	10.2	15.4	46.0	21.2	1.7
Commercial sale of angler-caught crappie[a]						
Region 1	6.3	6.6	8.3	42.9	35.9	1.6
Region 2	3.4	10.6	10.2	39.6	36.2	1.6
Region 3	9.2	9.6	11.6	30.0	39.6	2.0
Region 4	12.5	14.4	12.5	30.3	30.3	2.1
Region 5	6.0	9.2	12.7	45.6	26.5	1.7
Commercial sale of angler-caught sunfish						
Region 1	5.7	6.0	8.7	43.5	36.1	1.6
Region 2	2.6	9.1	10.6	41.5	36.2	1.6
Region 3	8.4	9.2	11.6	31.2	39.6	1.9
Region 4	9.5	10.6	12.1	37.4	30.4	1.9
Region 5	5.3	7.1	12.4	48.6	26.6	1.6
Shooting and spearing of northern pike in Lake Champlain as currently permitted[a]						
Region 1	9.1	6.0	5.4	36.0	43.5	1.8
Region 2	8.7	7.3	6.3	41.1	36.6	1.7
Region 3	9.0	7.1	8.3	30.8	44.8	1.9
Region 4	10.6	7.1	8.5	42.4	31.4	1.8
Region 5	9.7	10.3	9.0	44.1	26.9	1.8
Conflict between fishing and other recreational uses (e.g., skiing, boating)[a]						
Region 1	13.8	19.4	25.9	29.6	11.3	2.2
Region 2	8.8	25.0	29.9	20.5	15.8	2.3
Region 3	12.2	27.2	26.6	21.8	12.2	2.3
Region 4	7.8	27.2	23.7	25.0	16.3	2.2
Region 5	7.2	27.5	22.3	28.2	14.8	2.2

Table 128. (cont.)

Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	No opinion (%)	Mean score[b]
Access to fishing areas[a]						
Region 1	7.5	12.8	17.2	57.5	5.0	1.7
Region 2	4.6	14.1	26.5	48.1	6.7	1.7
Region 3	6.7	12.6	22.6	53.7	4.4	1.7
Region 4	11.6	17.2	19.6	44.9	6.7	1.9
Region 5	6.9	20.4	21.1	45.0	6.6	1.9
Fishing derbies/tournaments (other than "kids" derbies)						
Region 1	3.1	7.2	11.8	64.2	13.7	1.4
Region 2	2.1	11.7	11.8	57.8	16.7	1.5
Region 3	4.5	10.8	8.2	62.0	14.5	1.5
Region 4	3.9	8.9	12.8	63.8	10.6	1.5
Region 5	4.8	7.9	13.4	64.3	9.6	1.5
Your ability to understand Vermont fishing regulations						
Region 1	4.7	12.3	15.1	62.5	5.4	1.6
Region 2	3.2	8.1	16.5	65.2	7.0	1.4
Region 3	3.3	10.0	16.7	62.9	7.1	1.5
Region 4	5.6	8.1	18.3	62.0	6.0	1.5
Region 5	3.4	6.8	16.8	66.2	6.8	1.4
Conflict between open water and ice fishing						
Region 1	2.2	5.4	12.6	54.6	25.2	1.4
Region 2	2.1	6.4	11.7	49.3	30.5	1.4
Region 3	1.5	6.4	9.8	51.5	30.8	1.4
Region 4	1.4	8.1	8.1	53.1	29.3	1.4
Region 5	1.0	3.4	10.2	56.1	29.3	1.3

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = not a problem to 4 = serious problem. Respondents who had "no opinion" were not included in the calculation of the mean.

Table 129. Present quality of fishing access areas in Vermont, by region of residence.

Present quality of fishing access areas in Vermont[a]	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Poor	8.1	5.2	6.6	11.4	7.1
Fair	34.1	32.2	33.5	35.3	33.8
Good	53.7	57.4	50.0	47.1	55.4
Excellent	4.1	5.2	9.9	6.2	3.7
Mean score[b]	2.5	2.6	2.6	2.5	2.6

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 130. Importance of various boat launch and fishing access site amenities, by region of residence.						
Boat launch and fishing access site amenities	Very important (%)	Important (%)	Somewhat important (%)	Not important (%)	No opinion (%)	Mean score[b]
Boat ramps[a]						
Region 1	35.9	34.1	16.4	9.6	4.0	3.0
Region 2	34.4	34.0	12.7	11.7	7.2	3.0
Region 3	29.1	29.1	21.3	12.7	7.8	2.8
Region 4	44.7	31.3	10.1	8.7	5.2	3.2
Region 5	42.1	31.0	15.8	5.7	5.4	3.2
Bulletin boards with information						
Region 1	38.3	37.1	16.5	5.3	2.8	3.1
Region 2	36.5	33.1	18.3	6.2	5.9	3.1
Region 3	37.2	28.2	20.7	7.1	6.8	3.0
Region 4	36.1	35.1	17.7	6.9	4.2	3.0
Region 5	31.6	32.9	23.7	7.1	4.7	2.9
Portable toilets[a]						
Region 1	31.6	33.7	18.6	12.7	3.4	2.9
Region 2	29.3	24.5	22.8	17.2	6.2	2.7
Region 3	24.5	27.5	20.8	18.6	8.6	2.6
Region 4	33.8	27.9	19.7	14.5	4.1	2.8
Region 5	26.5	34.4	20.7	13.3	5.1	2.8
Fishing piers or other shore fishing opportunities[a]						
Region 1	23.8	32.1	18.7	20.6	4.8	2.6
Region 2	21.5	28.8	21.2	20.9	7.6	2.6
Region 3	22.4	28.4	22.0	19.0	8.2	2.6
Region 4	26.6	28.1	26.6	14.2	4.5	2.7
Region 5	31.7	28.0	20.3	13.9	6.1	2.8
Docks[a]						
Region 1	23.7	25.6	24.9	20.8	5.0	2.5
Region 2	16.8	27.0	25.3	23.5	7.4	2.4
Region 3	16.5	21.7	28.8	23.3	9.7	2.3
Region 4	26.2	26.9	24.2	17.8	4.9	2.6
Region 5	30.0	26.3	25.6	13.0	5.1	2.8

[a]Statistically significant difference between regions at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = not important to 4 = very important. Respondents who had "no opinion" were not included in the calculation of the mean.

Table 131. Sources of fishing information used by anglers in 2009, by region of residence.

Sources of information	Region 1	Region 2	Region 3	Region 4	Region 5
	Percent checking source[a]				
Fishing Regulations Guide from the Vermont Department of Fish and Wildlife	82.9	81.7	79.4	83.3	84.6
Friends	52.2	56.9	55.7	57.3	58.0
Bait and tackle shops[b]	41.9	36.7	35.7	43.8	48.2
Website of the Vermont Department of Fish and Wildlife[b]	27.3	34.5	35.9	36.6	41.1
Other pamphlets or documents from the Vermont Department of Fish and Wildlife	15.5	14.2	16.5	17.4	18.7
Newspaper	10.6	11.4	8.8	12.9	16.4
Direct contact with Vermont Department of Fish and Wildlife personnel	10.2	10.0	9.6	12.2	6.0
Other websites[b]	1.6	5.9	7.7	8.0	9.7
Magazine	3.7	6.6	8.8	5.2	7.3
TV or radio	6.5	6.6	1.8	6.6	5.7
Newsletters from fishing clubs[b]	0.9	3.8	2.9	4.9	6.0
Guides or charter boat operators[b]	0.9	4.5	2.9	2.1	1.0

[a]Percentages can add to more than 100% because more than one source of information could have been used in 2009.

[b]Statistically significant difference between regions at P = 0.05 using chi-square test.

Table 132. The most likely source of information to be used in 2010, by region of residence.					
Sources of information	Region 1 (%)	Region 2 (%)	Region 3 (%)	Region 4 (%)	Region 5 (%)
Fishing Regulations Guide from the Vermont Department of Fish and Wildlife	61.7	61.0	52.6	67.0	54.1
Friends	18.1	23.0	23.0	16.5	24.8
Bait and tackle shops	2.1	2.4	1.5	5.5	4.6
Website of the Vermont Department of Fish and Wildlife	6.3	4.8	9.6	5.5	7.3
Other pamphlets or documents from the Vermont Department of Fish and Wildlife	2.8	0.0	0.7	0.9	0.0
Newspaper	0.0	0.8	0.0	0.0	0.0
Direct contact with Vermont Department of Fish and Wildlife personnel	2.1	0.8	0.0	0.0	0.9
Other websites	0.0	0.0	1.5	0.0	3.7
Magazine	0.0	0.0	1.5	0.0	0.0
TV or radio	0.0	0.0	0.0	0.0	0.0
Newsletters from fishing clubs	0.0	4.0	0.7	0.9	1.8
Guides or charter boat operators	6.9	3.2	8.9	3.7	2.8

Comparing Vermont Residents Who Fished Open Water Only in 2009 with Those Who Went Ice Fishing

This section of the report compares Vermont residents who fished in 2009 on open water only with those who went ice fishing, and may or may not have fished open water. However, because almost all anglers did fish open water (Table 10), we can assume that the ice anglers also went fishing during the open water season. Vermont residents were divided almost in half between those who fished only open water and those who went ice fishing (Table 133). Statistical tests were done to identify differences between the two groups of anglers. Comparisons of all the survey questions by open water only versus ice anglers can be found in Tables 134 to 157.

Table 133. The estimated number and proportion of Vermont residents who fished open water only versus ice fishing in Vermont in 2009.

	%	N
Open water only	56.4	42,607
Ice fishing	43.6	32,938

Table 134. Comparison of Vermont resident open water only anglers with ice anglers, by gender, age, and type of license purchased.

	Open water only anglers (%)	Ice anglers (%)
Gender[a]		
Male	70.2	77.3
Female	29.8	22.7
Age		
18-29	24.4	28.5
30-39	19.7	20.7
40-54	35.7	34.2
55+	20.2	16.6
License Types[a]		
Resident Fishing (Annual, 3-day Youth, Lifetime)	69.7	45.0
Resident Combo (Annual, Youth, Lifetime)	30.3	55.0

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 135. Species fished for in Vermont in past 3 years, by Vermont resident open water only anglers and ice anglers.		
Fished in Vermont in past 3 years for:	Open water only anglers	Ice anglers
	Percent fishing for:[a]	
Smallmouth bass[b]	66.6	73.4
Brook trout[b]	66.0	73.6
Rainbow trout	67.7	72.3
Yellow perch[b]	50.6	84.9
Largemouth bass[b]	60.6	68.3
Brown trout[b]	55.0	63.0
Northern pike[b]	34.7	66.6
Sunfish (bluegill, pumpkinseed)	34.6	39.5
Lake trout[b]	29.0	49.9
Pickerel[b]	27.0	45.2
Walleye[b]	20.5	43.2
Rock bass	28.6	32.0
Bullhead (hornpout)[b]	21.8	38.6
White perch[b]	20.1	28.0
Crappie[b]	14.0	29.2
Landlocked salmon[b]	13.5	34.0
Smelt[b]	3.0	37.3
Channel catfish[b]	8.3	17.4
Bowfin[b]	5.3	11.8
Sucker	6.9	8.6
Drum (sheepshead)[b]	3.7	7.8
Carp[b]	3.0	7.8
Muskellunge[b]	2.3	6.7
Whitefish (Lake Champlain)	3.3	4.0
Gar[b]	1.0	3.3
Sauger[b]	1.0	2.6
American shad (Connecticut River)	1.4	0.9
Burbot (cusk)[b]	0.4	2.2
Anything	25.3	23.0

[a]Percentages add to more than 100% because more than one species could be fished for.
[b]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 136. Evaluation of the overall quality of fishing in Vermont during the past 3 years, by Vermont resident open water only anglers and ice anglers.		
Quality of fishing in Vermont during the past 3 years	Open water only anglers (%)	Ice anglers (%)
Poor	9.1	7.3
Fair	41.0	44.7
Good	43.5	43.2
Excellent	6.4	4.8
Mean score[a]	2.5	2.4
[a]Scale ranged from 1 = poor to 4 = excellent.		

Table 137. Respondents who fished for trout or salmon in ponds or lakes in Vermont in any of the past 3 years, and their evaluation of the quality of fishing by species for those with an opinion, for Vermont resident open water only anglers and ice anglers.		
Response	Open water only anglers (%)	Ice anglers (%)
Fish for trout or salmon in ponds or lakes in Vermont in any of the past 3 years[a]		
No	44.5	34.0
Yes	55.5	66.0
If yes: Quality of fishing for brook, brown, and rainbow trout in ponds and lakes during past 3 years		
Poor	19.4	17.3
Fair	48.6	47.6
Good	29.7	32.3
Excellent	2.3	2.8
Mean score[b]	2.1	2.2
Quality of fishing for lake trout in ponds and lakes during past 3 years		
Poor	26.4	22.5
Fair	45.0	46.7
Good	26.4	27.2
Excellent	2.2	3.6
Mean score[b]	2.0	2.1
Quality of fishing for landlocked salmon in ponds and lakes during past 3 years		
Poor	42.8	37.2
Fair	35.6	45.2
Good	19.2	16.2
Excellent	2.4	1.4
Mean score[b]	1.8	1.8
[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.		
[b]Scale ranged from 1 = poor to 4 = excellent.		

Table 138. Importance of programs that manage strictly for wild trout, and programs for stocking trout in some lakes and ponds, by Vermont resident open water only anglers and ice anglers.		
How important is it that Vermont provides the following program?	Open water only anglers (%)	Ice anglers (%)
Manage strictly for wild trout (no stocking) in some lakes and ponds		
Not important	14.7	13.2
Somewhat important	24.2	27.5
Very important	40.5	40.1
No opinion	20.6	19.2
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some lakes and ponds		
Not important	6.5	8.3
Somewhat important	24.8	25.5
Very important	54.5	52.8
No opinion	14.2	13.4

Table 139. Support for special regulations for trout and salmon fishing in some ponds or lakes, by Vermont resident open water only anglers and ice anglers.		
Special regulations for fishing in some ponds or lakes	Open water only anglers	Ice anglers
	Percent supporting[a]	
For brook, brown, rainbow trout		
Special length limits	60.5	64.4
Lower creel limits	39.9	36.3
Catch and release—all fish must be released	21.4	26.4
Artificial lures and flies only	27.2	26.6
I do not support the use of any special regulations[b]	7.9	12.2
No opinion	17.5	14.1
For lake trout		
Special length limits	60.2	64.1
Lower creel limits	35.3	31.2
Catch and release—all fish must be released	19.3	20.5
Artificial lures and flies only	21.9	18.6
I do not support the use of any special regulations	8.3	10.8
No opinion	21.9	21.1
For landlocked salmon		
Special length limits	57.6	63.7
Lower creel limits	35.7	32.0
Catch and release—all fish must be released	25.7	24.2
Artificial lures and flies only	23.5	19.6
I do not support the use of any special regulations[b]	6.2	10.8
No opinion	24.6	21.8

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 140. The average smallest length fish you would keep or consider a quality size fish when fishing in ponds or lakes, by species and by Vermont resident open water only anglers and ice anglers.

	Open water only anglers (mean)	Ice anglers (mean)
Brook trout		
smallest "keeper" size	9.1	9.1
smallest "quality" size	10.7	10.7
Brown trout		
smallest "keeper" size[a]	10.5	11.4
smallest "quality" size[a]	13.4	14.3
Rainbow trout		
smallest "keeper" size[a]	10.5	11.5
smallest "quality" size[a]	13.3	14.3
Lake trout		
smallest "keeper" size[a]	17.3	19.2
smallest "quality" size[a]	20.1	21.7
Landlocked salmon		
smallest "keeper" size[a]	15.7	16.7
smallest "quality" size[a]	18.2	18.9

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using t-test.

Table 141. Agreement with the current daily creel limit for species in ponds or lakes, or lakes that offer trout fishing, by Vermont resident open water only anglers and ice anglers.

	Open water only anglers	Ice anglers
	Percent agreeing with current daily limit	
Ponds or lakes		
Brook trout (6)	68.1	65.4
Brown trout (6)	66.7	63.2
Rainbow trout (6)	67.1	63.9
Combination limit (6)	62.7	67.4
Lakes that offer lake trout fishing		
Lake trout (2)[a]	67.0	75.8
Landlocked salmon (2)[a]	67.4	76.2
Brook trout (2)[a]	59.6	66.7
Brown trout (2)[a]	63.9	71.1
Rainbow trout (2)[a]	61.5	71.3
Combination of above (2)	57.6	60.7

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 142. Respondents who fished for warmwater gamefish and panfish in Vermont in any of the past 3 years (excluding Lake Champlain), and their evaluation of the quality of fishing by species for those with an opinion, for Vermont resident open water only anglers and ice anglers.		
Response	Open water only anglers (%)	Ice anglers (%)
Fish for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead, or smelt in Vermont in any of the past 3 years[a]		
No	24.5	10.7
Yes	75.5	89.3
If yes: Quality of fishing for walleye during past 3 years[a]		
Poor	28.7	41.2
Fair	48.4	38.5
Good	21.5	18.7
Excellent	1.4	1.6
Mean score[b]	2.0	1.8
Quality of fishing for largemouth bass during past 3 years		
Poor	10.3	6.4
Fair	38.3	34.5
Good	44.0	50.1
Excellent	7.4	9.0
Mean score[b]	2.5	2.6
Quality of fishing for smallmouth bass during past 3 years		
Poor	7.7	6.1
Fair	37.4	34.0
Good	45.8	49.7
Excellent	9.1	10.2
Mean score[b]	2.6	2.6
Quality of fishing for northern pike during past 3 years		
Poor	11.9	10.4
Fair	43.8	37.3
Good	38.8	46.3
Excellent	5.5	6.0
Mean score[b]	2.4	2.5
Quality of fishing for yellow perch during past 3 years[a]		
Poor	8.0	9.0
Fair	27.4	30.2
Good	44.3	48.5
Excellent	20.3	12.3
Mean score[b]	2.8	2.6
Quality of fishing for crappie during past 3 years[a]		
Poor	13.3	16.7
Fair	35.1	36.9
Good	35.8	39.9
Excellent	15.8	6.5
Mean score[b]	2.5	2.4

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 143. Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed), by Vermont resident open water only anglers and ice anglers.

Support for ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed)[a]	Open water only anglers (%)	Ice anglers (%)
No	13.1	11.7
Yes, somewhat	27.8	36.7
Yes, strongly	19.1	33.6
No opinion	40.0	18.0

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 144. Support for special regulations for some warmwater species on some waters, by Vermont resident open water only anglers and ice anglers.

Special regulations for fishing on some waters	Open water only anglers	Ice anglers
	Percent supporting[a]	
For largemouth or smallmouth bass		
Special length limits	55.5	55.9
Lower creel limits	31.5	33.8
Catch and release—all fish must be released	29.6	26.9
Artificial lures and flies only	22.2	21.9
I do not support the use of any special regulations[b]	8.8	13.4
No opinion	22.4	21.8
For walleye		
Special length limits[b]	48.4	59.1
Lower creel limits	29.3	32.4
Catch and release—all fish must be released	23.0	21.1
Artificial lures and flies only	17.9	15.6
I do not support the use of any special regulations	7.3	10.4
No opinion[b]	35.3	25.4
For northern pike		
Special length limits[b]	47.1	55.3
Lower creel limits	27.6	31.8
Catch and release—all fish must be released	23.8	19.6
Artificial lures and flies only	17.4	15.5
I do not support the use of any special regulations[b]	9.0	13.3
No opinion[b]	34.0	24.9

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 145. The average smallest length warmwater fish you would keep or consider a quality size fish, by species and by Vermont resident open water only anglers and ice anglers.

	Open water only anglers (mean)	Ice anglers (mean)
Walleye		
smallest "keeper" size[a]	15.3	16.0
smallest "quality" size[a]	17.5	18.3
Largemouth bass		
smallest "keeper" size[a]	11.2	11.7
smallest "quality" size[a]	13.8	14.4
Smallmouth bass		
smallest "keeper" size[a]	10.8	11.3
smallest "quality" size[a]	13.2	13.8
Northern pike		
smallest "keeper" size[a]	20.6	21.8
smallest "quality" size[a]	25.2	27.0
Yellow perch		
smallest "keeper" size	7.9	7.7
smallest "quality" size	9.5	9.6
Crappie		
smallest "keeper" size	7.8	7.8
smallest "quality" size	9.4	9.4

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using t-test.

Table 146. Agreement with the current daily creel limit for warmwater species, by Vermont resident open water only anglers and ice anglers.

	Open water only anglers	Ice anglers
Species	Percent agreeing with current daily limit	
Walleye (3)[a]	54.5	58.5
Largemouth/smallmouth bass (5)	58.6	63.8
Northern pike (5)[a]	49.7	60.0
Yellow perch (50)[a]	54.3	61.0
Crappie (25)[a]	51.3	55.6
Sunfish (no limit)[a]	57.6	68.5
Smelt (no limit)[a]	54.8	67.0
Bullhead (no limit)[a]	56.4	66.2
White perch (no limit)[a]	55.3	63.9

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 147. Respondents who fished Lake Champlain in any of the past 3 years, and their evaluation of the quality of fishing by species in Lake Champlain for those with an opinion, for Vermont resident open water only anglers and ice anglers.		
Response	Open water only anglers (%)	Ice anglers (%)
Fish Lake Champlain in any of the past 3 years[a]		
No	66.9	41.4
Yes	33.1	58.6
Quality of fishing for brown trout during past 3 years		
Poor	28.5	31.4
Fair	49.2	44.6
Good	20.8	22.9
Excellent	1.5	1.1
Mean score[b]	1.9	1.9
Quality of fishing for steelhead/rainbow trout during past 3 years		
Poor	27.6	33.3
Fair	50.8	45.7
Good	20.1	19.9
Excellent	1.5	1.1
Mean score[b]	1.9	1.9
Quality of fishing for lake trout during past 3 years		
Poor	15.7	12.6
Fair	37.0	38.8
Good	37.0	43.5
Excellent	10.3	5.1
Mean score[b]	2.4	2.4
Quality of fishing for landlocked salmon during past 3 years		
Poor	19.8	20.7
Fair	43.7	47.7
Good	31.7	30.0
Excellent	4.8	1.6
Mean score[b]	2.2	2.1
Quality of fishing for walleye during past 3 years		
Poor	26.5	36.4
Fair	46.3	43.2
Good	24.2	19.1
Excellent	3.0	1.3
Mean score[b]	2.0	1.8
Quality of fishing for largemouth bass during past 3 years		
Poor	6.9	3.3
Fair	29.9	24.1
Good	48.0	54.4
Excellent	15.2	18.2
Mean score[b]	2.7	2.9

Table 147. (cont.)		
Response	Open water only anglers (%)	Ice anglers (%)
Quality of fishing for smallmouth bass during past 3 years		
Poor	6.5	3.2
Fair	26.6	23.1
Good	51.5	56.0
Excellent	15.4	17.7
Mean score[b]	2.8	2.9
Quality of fishing for northern pike during past 3 years		
Poor	10.5	6.6
Fair	32.6	27.4
Good	44.7	50.4
Excellent	12.2	15.6
Mean score[b]	2.6	2.7
Quality of fishing for crappie during past 3 years		
Poor	10.7	11.2
Fair	36.6	42.8
Good	42.9	38.5
Excellent	9.8	7.5
Mean score[b]	2.5	2.4
Quality of fishing for yellow perch during past 3 years		
Poor	8.4	9.0
Fair	28.5	25.9
Good	42.4	49.5
Excellent	20.7	15.6
Mean score[b]	2.8	2.7
Quality of fishing for sunfish during past 3 years		
Poor	4.4	3.2
Fair	20.4	22.5
Good	46.7	44.4
Excellent	28.5	29.9
Mean score[b]	3.0	3.0
Quality of fishing for bullhead during past 3 years		
Poor	4.1	3.2
Fair	33.7	28.0
Good	45.9	46.6
Excellent	16.3	22.2
Mean score[b]	2.7	2.9
Quality of fishing for white perch during past 3 years		
Poor	6.6	7.4
Fair	32.8	23.6
Good	40.1	44.9
Excellent	20.5	24.1
Mean score[b]	2.7	2.9

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 148. Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed), by Vermont resident open water only anglers and ice anglers.

Support for ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed)[a]	Open water only anglers (%)	Ice anglers (%)
No	37.6	24.7
Yes, somewhat	22.6	32.7
Yes, strongly	8.8	23.6
No opinion	31.0	19.0

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 149. Respondents' opinions about the length of the walleye season on Lake Champlain, which currently runs from the 1st Saturday in May to the following March 15th, by Vermont resident open water only anglers and ice anglers.

Opinion on length of Lake Champlain walleye season	Open water only anglers	Ice anglers
	Percent supporting[a]	
Just right	22.7	27.0
Close earlier	9.9	6.5
Close later	0.8	3.0
Open earlier	6.8	7.1
Open later	5.7	8.2
Open year-round[b]	3.0	6.5
No opinion[b]	54.5	45.9

[a]Percentages can add to more than 100% because more than one option could be checked.
[b]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 150. Agreement with the current minimum length limit for fish caught in Lake Champlain, by Vermont resident open water only anglers and ice anglers.

Species	Open water only anglers	Ice anglers
	Percent agreeing with current minimum length	
Brown/rainbow trout (12")[a]	64.2	62.3
Lake trout (15")[a]	64.0	56.9
Landlocked salmon (15")[a]	60.7	57.0
Walleye (18")[a]	66.5	67.0
Largemouth bass (10")[a]	59.9	54.8
Smallmouth bass (10")[a]	60.3	56.4
Northern pike (20")[a]	61.5	54.8
Crappie (8")	58.9	65.7

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 151. Agreement with the current daily creel limit for fish caught in Lake Champlain, by Vermont resident open water only anglers and ice anglers.

Species	Open water only anglers	Ice anglers
	Percent agreeing with current daily limit	
Brown/rainbow trout (3)	64.5	65.1
Lake trout (3)	63.5	63.7
Landlocked salmon (2)	64.5	67.2
Walleye (3)[a]	60.2	64.2
Largemouth/smallmouth bass (5)	62.9	66.6
Northern pike (5)[a]	59.9	65.8
Crappie (25)[a]	61.2	65.0
Yellow perch (no limit)[a]	62.2	69.5
Sunfish (no limit)	66.0	71.8
Smelt (no limit)[a]	62.2	73.3
Bullhead (no limit)	64.1	72.5
White perch (no limit)	63.8	72.8

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 152. Agreement with the current regulations on Lake Champlain that allow the use of 2 lines during open water season and 15 lines during ice fishing season, by Vermont resident open water only anglers and ice anglers.

	Open water only anglers	Ice anglers
	Percent agreeing with current regulations	
Open water (2 lines)[a]	71.2	81.2
Ice fishing (15 lines)[a]	49.8	71.6

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 153. Agreement with the current regulations for ponds or lakes that allow the use of 2 lines during open water season and 8 lines during ice fishing season, by Vermont resident open water only anglers and ice anglers.

	Open water only anglers	Ice anglers
	Percent agreeing with current regulations	
Open water (2 lines)[a]	70.4	85.2
Ice fishing (8 lines)[a]	52.4	74.3

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Table 154. Opinions about issues in Vermont, by Vermont resident open water only anglers and ice anglers.

Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	No opinion (%)	Mean score[b]
Contaminant levels in fish[a]						
Open water only anglers	30.4	31.7	16.0	10.2	11.7	2.9
Ice anglers	25.6	27.7	22.2	14.8	9.7	2.7
Recently adopted baitfish regulations[a]						
Open water only anglers	9.9	12.3	13.2	28.4	36.2	2.1
Ice anglers	38.0	21.5	14.1	15.5	10.9	2.9
Crowding at fishing areas						
Open water only anglers	8.8	21.8	31.9	28.7	8.8	2.1
Ice anglers	11.2	21.0	32.9	29.5	5.4	2.1
Commercial sale of angler-caught perch[a]						
Open water only anglers	9.6	9.6	12.4	31.8	36.6	1.9
Ice anglers	10.5	14.4	12.9	45.3	16.9	1.9
Commercial sale of angler-caught crappie[a]						
Open water only anglers	7.2	7.9	11.3	33.1	40.5	1.8
Ice anglers	7.9	12.9	10.3	44.1	24.8	1.8
Commercial sale of angler-caught sunfish[a]						
Open water only anglers	6.7	7.7	10.8	34.1	40.7	1.8
Ice anglers	6.2	9.3	10.8	49.2	24.5	1.6
Shooting and spearing of northern pike in Lake Champlain as currently permitted[a]						
Open water only anglers	9.6	9.0	8.1	31.0	42.3	1.9
Ice anglers	9.3	5.9	6.2	49.0	29.6	1.6
Conflict between fishing and other recreational uses (e.g., skiing, boating)						
Open water only anglers	9.2	25.6	25.0	24.2	16.0	2.2
Ice anglers	10.8	24.6	27.0	26.5	11.1	2.2
Access to fishing areas[a]						
Open water only anglers	5.9	14.4	20.9	51.5	7.3	1.7
Ice anglers	9.4	16.0	21.8	48.5	4.3	1.9
Fishing derbies/tournaments (other than "kids" derbies)[a]						
Open water only anglers	3.1	8.1	11.8	60.5	16.5	1.4
Ice anglers	4.3	10.4	11.3	65.5	8.5	1.5
Your ability to understand Vermont fishing regulations						
Open water only anglers	3.9	7.8	15.2	65.5	7.6	1.5
Ice anglers	4.2	10.8	17.8	62.1	5.1	1.5
Conflict between open-water and ice-fishing[a]						
Open water only anglers	1.6	5.6	9.3	45.4	38.1	1.4
Ice anglers	1.6	6.3	11.7	63.4	17.0	1.3

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = not a problem to 4 = serious problem. Respondents who had "no opinion" were not included in the calculation of the mean.

Table 155. Present quality of fishing access areas in Vermont, by Vermont resident open water only anglers and ice anglers.

Present quality of fishing access areas in Vermont[a]	Open water only anglers (%)	Ice anglers (%)
Poor	7.0	8.7
Fair	30.2	37.2
Good	56.4	49.2
Excellent	6.4	4.9
Mean score[b]	2.6	2.5

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = poor to 4 = excellent.

Table 156. Importance of various boat launch and fishing access site amenities, by Vermont resident open water only anglers and ice anglers.

Boat launch and fishing access site amenities	Very important (%)	Important (%)	Somewhat important (%)	Not important (%)	No opinion (%)	Mean score[b]
Boat ramps[a]						
Open water only anglers	33.1	29.9	17.3	13.0	6.7	2.9
Ice anglers	43.0	34.3	13.1	5.0	4.6	3.2
Bulletin boards with information						
Open water only anglers	37.5	31.7	18.6	6.6	5.6	3.1
Ice anglers	34.9	34.9	19.7	6.7	3.8	3.0
Portable toilets[a]						
Open water only anglers	29.6	27.0	20.0	16.7	6.6	2.7
Ice anglers	28.0	33.2	21.6	13.4	3.8	2.8
Fishing piers or other shore fishing opportunities						
Open water only anglers	25.3	27.7	20.9	19.2	6.9	2.6
Ice anglers	25.3	30.4	23.0	16.1	5.2	2.7
Docks[a]						
Open water only anglers	22.7	23.3	25.5	20.8	7.7	2.5
Ice anglers	23.2	28.6	25.6	18.0	4.6	2.6

[a]Statistically significant difference between open water only anglers and ice anglers at P = 0.05 using chi-square test.
[b]Scale ranged from 1 = not important to 4 = very important. Respondents who had "no opinion" were not included in the calculation of the mean.

Table 157. Sources of fishing information used by anglers in 2009, and the most likely source to be used in 2010, by Vermont resident open water only anglers and ice anglers.

Sources of information	Open water only anglers		Ice anglers	
	Used in 2009 (%)[a]	Most likely to use in 2010 (%)	Used in 2009 (%)[a]	Most likely to use in 2010 (%)
Fishing Regulations Guide from the Vermont Department of Fish and Wildlife	80.9	56.2	84.5	64.4
Friends[b]	52.9	23.2	60.8	18.0
Bait and tackle shops[b]	35.1	2.2	50.5	3.9
Website of the Vermont Department of Fish and Wildlife	36.0	7.5	34.2	5.1
Other pamphlets or documents from the Vermont Department of Fish and Wildlife	15.4	1.4	17.9	0.0
Newspaper[b]	8.9	0.0	16.3	0.4
Direct contact with Vermont Department of Fish and Wildlife personnel[b]	6.8	0.8	13.4	0.8
Other websites	6.5	0.6	6.6	2.0
Magazine[b]	4.9	0.3	8.1	0.4
TV or radio[b]	4.4	0.0	7.0	0.0
Newsletters from fishing clubs	3.3	1.7	4.0	0.8
Guides or charter boat operators	3.0	6.1	1.4	4.2

[a]Percentages can add to more than 100% because more than one source of information could have been used in 2009.

[b]Statistically significant differences in source used in 2009 between open water only anglers and ice anglers at P = 0.05 using chi-square test.

Trends in Fishing Participation (1990, 1999, 2009) and Opinions About Fishing Regulations and Management Issues

Three statewide angler surveys have been conducted over the past 20 years using similar methods and many identical questions. Trends in opinions and participation are covered in this section of the report. Results of the first survey conducted in 1991, referencing fishing in 1990, were not adjusted for any potential respondent bias. In the other two surveys (2000, 2010), the results were adjusted for age and license type to account for differences in who responded to the survey.

A significant difference in the number of days fished was found in 2010 between respondents and non-respondents. Estimates of days fished discussed previously in this report were adjusted to account for this bias. However, similar adjustments were not made with the 1990 and 1999 survey data, so in this section on fishing trends, unadjusted estimates of days fished are provided to allow for comparisons between surveys.

It appears that the number of anglers fishing for certain species has grown over the years (e.g., bass, sunfish, white perch, crappie), while for other species it has declined (e.g., trout, walleye) (Table 158). The most preferred species to fish for in open water remains brook trout for Vermont residents, but has switched to bass for nonresidents (Table 159). Yellow perch remains the ice fishing favorite for Vermont residents, but among nonresidents Northern pike is now preferred by a larger percentage (Table 160).

While there was a statistically significant difference in the quality of fishing over time as rated by anglers, no meaningful trend could be discerned (Table 161). The vast majority of anglers rated the quality of fishing in Vermont as fair to good.

The number of people buying fishing licenses in 1990 and subsequently going fishing was much larger in 1990 compared with 1999 and 2009 (Table 162). Whereas the mean number of days fished by Vermont residents has not changed over time, the change in the number of people fishing has resulted in a decrease in total days fished from 3.3 million in 1990 to about 2.5 million in 1999 and 2009. For nonresidents, the number of people fishing has declined as well as the average number of days fished, so the estimated total has decreased from 700,000 to 360,000 days. Changes in fishing effort by species can be found in Tables 163 to 166.

The next set of tables (167 through 179) focus on anglers engaged in different types of fishing (e.g., trout in streams or rivers), and their opinions about related management issues. Although the issue question wording was the same between years, the group of anglers asked to answer the questions may be slightly different. In 2010, anglers who had done the type of fishing in question in the past 3 years were asked to answer the questions; previously no time referent was specified. Changes in the creel limit over time are noted in the appropriate tables.

Resident anglers appear to be fishing more days on average on Lake Champlain during the open water season now than in 1990 (Table 180). However, because the number of people fishing has declined, the estimate for total days fished by species has changed little over time. For nonresidents, the number of days fished on average has not changed, but the decline in the

number of people fishing has resulted in fewer days fished by species in 2009 (Table 181). This was most notable for walleye, which declined from 97,000 days in 1990 to 28,000 days in 2009. Ice fishing average effort on Lake Champlain by species for Vermont residents has not changed significantly over time (Table 182). Because of a change in the number of anglers fishing the total effort for yellow perch, walleye, and smelt appears to have declined, whereas crappie and sunfish has increased. The comparable table for nonresidents could not be constructed because the sample size was too small in 1999 and 2009.

Tables 183 to 185 report angler opinions regarding Lake Champlain management issues – season length, minimum length limits, creel limits. These questions were not asked in 1991.

Respondents were asked for their opinions about a series of potential issues in Vermont (Table 186). The response categories for the 1991 survey differed from the 2000 and 2010, so only the later two surveys are compared here. Those without an opinion about a specific issue were excluded from the analysis for that issue. The issue deemed a serious problem by the largest percentage of anglers in both years was contaminant levels in fish. Vermont residents were even more likely to think it was a serious problem in 2010 than in 2000.

Table 158. Species fished for in Vermont in past 3 survey years, by Vermont residents and nonresidents. (Note: In 1990 and 1999 no time referent was specified, in 2009 respondents checked species they had fished for in past 3 years.)

	Vermont residents (%)			Nonresidents (%)		
Fished in Vermont	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*
Smallmouth bass	64	67	71[b]	56	59	59
Brook trout	79	78	67[b]	54	59	35[b]
Rainbow trout	73	75	67[b]	57	57	37[b]
Yellow perch	73	65	66[b]	45	29	41[b]
Largemouth bass	60	63	66[b]	56	56	56
Brown trout	67	70	58[b]	52	57	35[b]
Northern pike	48	47	50	41	36	40
Sunfish (bluegill, pumpkinseed)	17	23	38[b]	20	17	26[b]
Lake trout	48	44	36[b]	36	35	21[b]
Pickerel	32	28	34[b]	30	17	27[b]
Walleye	44	37	32[b]	31	22	19[b]
Rock bass	18	18	31[b]	18	13	19
Bullhead (hornpout)	38	34	29[b]	14	10	7[b]
White perch	14	17	25[b]	11	9	16[b]
Crappie	10	16	22[b]	13	17	12
Landlocked salmon	27	26	22[b]	22	24	12[b]
Smelt	27	18	17[b]	8	5	6
Channel catfish	9	11	13[b]	4	8	3
Sucker	3	4	7[b]	1	1	1
Drum (sheepshead)	3	3	6[b]	2	2	3
Carp	2	3	5[b]	1	0	1
Muskellunge	6	3	5[b]	7	7	4
Whitefish (Lake Champlain)	1	2	4[b]	1	1	2
Gar	8	2	2[b]	1	0	1
Sauger	3	3	2[b]	2	1	<1
American shad (Connecticut River)	2	2	1	1	1	1
Anything	12	15	25[b]	10	8	15[b]

[a]Percentages add to more than 100% because more than one species could be fished for.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 159. For those who fished <u>open water</u> ("generally" in 1991, 2000 studies, and "in past 3 years" for 2010 study), the top 10 most preferred species by Vermont residents and nonresidents across three survey years.

Species	Open water preference					
	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Brook trout	32.8	26.3	26.9	22.9	16.6	16.2
Largemouth bass	10.5	11.5	18.2	15.9	11.8	20.9
Rainbow trout	14.9	13.4	13.6	15.2	12.7	10.6
Smallmouth bass	7.0	8.5	9.9	9.9	15.4	21.2
Brown trout	6.9	5.3	6.5	6.9	7.1	6.3
Walleye	8.1	5.2	4.9	7.7	1.5	3.6
Landlocked salmon	3.8	4.2	4.5	3.7	4.7	3.0
Yellow perch	5.7	3.7	4.5	3.8	1.7	1.3
Lake trout	4.2	2.5	3.5	5.7	5.4	7.0
Northern pike	3.1	1.6	3.0	4.4	4.4	7.3

Table 160. For those who went <u>ice fishing</u> ("generally" in 1991, 2000 studies, and "in past 3 years" for 2010 study), the top 11 most preferred species by Vermont residents and nonresidents across three survey years.

Species	Ice fishing preference					
	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Yellow perch	50.4	44.5	30.6	33.8	15.5	14.9
Northern pike	8.9	13.0	17.7	16.9	23.5	25.7
Brown trout	2.6	3.7	7.8	2.9	18.2	4.1
Lake trout	10.8	9.9	7.5	11.0	19.9	6.8
Rainbow trout	2.3	4.5	6.6	3.7	6.3	10.8
Walleye	8.1	7.0	6.6	11.8	1.8	2.7
Smelt	10.4	6.7	4.9	8.1	6.7	1.4
Largemouth bass	1.0	2.2	4.6	4.4	1.4	12.2
Smallmouth bass	0.5	0.6	3.8	0.0	0.0	6.8
Landlocked salmon	2.1	3.1	3.0	2.2	0.8	1.4
Brook trout	0.9	2.5	1.9	2.2	4.1	2.7

Table 161. Evaluation of the overall quality of fishing in Vermont, by Vermont residents and nonresidents across three survey years. (Note: In 1991 and 2000 no time referent was specified, in 2010 respondents reflected on the past 3 years.)

Overall Fishing Quality	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Poor	12.8	7.9	7.9	6.5	4.4	8.6
Fair	43.0	36.8	41.7	29.0	20.0	26.2
Good	35.2	44.5	44.3	45.9	45.3	50.0
Excellent	5.8	5.8	6.1	11.9	21.1	15.2
No opinion	3.2	4.3	[a]	6.7	7.9	[a]

[a]"No opinion" was not an option for respondents in 2010.

Table 162. Fishing participation of Vermont residents and nonresidents across three survey years (1990, 1999, 2009). (Note: 2009 data on days fished reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

	Vermont residents			Nonresidents		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*
Open water fishing						
% of license buyers	94.3	94.8	90.0[a]	92.5	94.0	92.6
N	97,729	72,123	74,714	47,736	38,247	31,239
Mean days	27.8	27.3	28.8	12.7[d]	9.5[e]	10.5
Total days (± 95% CI)	2,721,746 (±89,615)	1,966,070 (±105,133)	2,152,548 (±143,438)	607,685 (±56,389)	363,726 (±66,966)	326,443 (±47,541)
Ice fishing						
% of license buyers	45.3	41.2	39.8[a]	20.3	12.9	16.2[a]
N	46,947	31,345	33,041	10,476	5,249	5,465
Mean days	13.4	12.1	13.7	9.0[d]	[b]	6.5[e]
Total days (±95% CI)	629,561 (±30,773)	380,523 (±33,500)	452,658 (±39,009)	94,286 (±14,967)	[b]	35,414 (±10,721)
Total days fished	3,351,307	2,346,593	2,605,206	701,971	[c]	361,857

[a]Statistically significant difference between years at P = 0.05 using chi-square test.
[b]Sample size was too small to estimate.
[c]Could not calculate.
[d,e]Statistically significant difference between means with different letters at P = 0.05 using t-test.

Table 163. Among Vermont residents who fished open water: the percent, mean days fished and total days fished by species across three survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Vermont residents -	% fishing			Mean days fished			Total days fished		
Open water	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*
Largemouth or smallmouth bass	55.5	54.4	61.9[b]	13.2[c]	13.8[c]	17.2[d]	715,835	541,048	793,524
Brook, brown, or rainbow trout in small brooks or beaver ponds	69.7	60.6	59.5[b]	10.6	11.3	10.4	721,914	494,191	460,275
Brook, brown, or rainbow trout in large streams or rivers	66.3	57.1	56.5[b]	10.3[c]	12.4[d]	11.3	667,557	510,467	477,888
Brook, brown, or rainbow trout in ponds or lakes	52.7	48.3	44.1[b]	9.9	10.1	10.6	509,917	352,143	348,527
Yellow perch	47.6	39.1	43.0[b]	12.4[c]	13.0[c]	15.7[d]	577,260	366,486	503,500
Lake trout	32.3	26.4	24.7[b]	9.1[c]	8.8[c]	11.6[d]	287,458	167,579	214,140
Walleye	32.5	22.9	24.1[b]	9.9	10.0	11.3	314,783	165,227	204,479
Panfish (sunfish, crappie, etc.)	11.4	16.2	20.5[b]	13.0	11.9[c]	16.6[d]	144,639	138,856	254,128
Bullhead	25.5	[a]	18.9[b]	8.9	[a]	10.4	222,050	[a]	147,204
Landlocked salmon	18.7	17.1	16.8	10.9	10.0[c]	14.2[d]	199,580	123,220	178,362
Smelt	5.8	3.6	3.4[b]	9.7	8.5	8.2	54,590	22,217	20,849
American shad in the Connecticut River	1.1	1.7	2.2[b]	8.6	[a]	5.8	9,145	[a]	9,459

[a]Missing data or sample size too small to estimate.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.
[c,d]Statistically significant difference between means with different letters at P = 0.05 using t-test.

Table 164. Among nonresidents who fished open water: the percent, mean days fished and total days fished by species across three survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Nonresidents - Open water	% fishing			Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*
Largemouth or smallmouth bass	57.7	51.0	57.4	9.1[d]	13.9[c]	9.1[d]	250,701	271,053	163,717
Brook, brown, or rainbow trout in small brooks or beaver ponds	39.0	35.8	28.4[b]	5.8[d]	11.2[c]	5.3[d]	108,025	153,302	46,570
Brook, brown, or rainbow trout in large streams or rivers	40.7	40.7	29.3[b]	5.8	6.7	5.2	112,527	104,270	47,399
Brook, brown, or rainbow trout in ponds or lakes	36.4	26.5	24.7[b]	7.2	8.9	7.8	125,161	90,114	60,347
Yellow perch	33.5	17.2	26.4[b]	10.8	8.2	9.2	172,655	53,813	76,076
Lake trout	24.9	15.7	13.9[b]	6.9	7.6	8.7	81,927	45,601	37,904
Walleye	23.4	12.7	11.6[b]	10.3[c]	[a]	6.8[d]	115,103	[a]	24,494
Panfish (sunfish, crappie, etc.)	16.4	11.8	16.2	9.2	[a]	10.5	72,110	[a]	53,369
Bullhead	10.4	4.4	5.4[b]	9.3	[a]	9.9	46,190	[a]	16,676
Landlocked salmon	14.0	16.7	7.7[b]	8.1	6.2	7.5	54,059	39,525	18,018
Smelt	2.1	2.5	[a]	[a]	[a]	[a]	[a]	[a]	[a]
American shad in the Connecticut River	0.7	0.5	[a]	[a]	[a]	[a]	[a]	[a]	[a]

[a]Sample size was too small to estimate.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.
[c,d]Statistically significant difference between means with different letters at P = 0.05 using t-test.

Table 165. Among Vermont residents who went ice fishing: the percent, mean days fished and total days fished by species across three survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Vermont residents - Ice fishing	% fishing			Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*
Yellow perch	62.3	49.5	69.4[b]	11.2	11.2	13.0	327,361	173,553	296,899
Smelt	30.9	21.9	23.3[b]	9.0	8.8	8.6	130,712	60,378	66,165
Brook, brown, or rainbow trout in ponds or lakes	16.7	18.6	23.2[b]	8.0[c]	10.1	10.3[d]	62,866	58,926	79,172
Lake trout	23.5	20.4	21.5	7.3[c]	8.6	9.8[d]	80,652	54,992	69,560
Walleye	19.7	16.1	19.3	7.9	11.3	7.8	72,939	56,961	49,477
Largemouth or smallmouth bass	9.8	12.7	16.9[b]	8.5	10.1	9.2	39,019	40,070	51,613
Landlocked salmon	9.7	13.0	16.1[b]	8.2	10.3	9.7	37,217	41,825	51,558
Panfish (sunfish, crappie, etc.)	2.7	7.7	15.3[b]	9.8	10.8	18.7	12,200	26,212	94,588
Bullhead	1.5	1.6	2.9	[a]	[a]	[a]	[a]	[a]	[a]

[a]Sample size was too small to estimate.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.
[c,d]Statistically significant difference between means with different letters at P = 0.05 using t-test.

Table 166. Among nonresidents who went ice fishing: the percent, mean days fished and total days fished by species across three survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Nonresidents - Ice fishing	% fishing			Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*	*1990*	*1999*	*2009*
Yellow perch	56.3	[a]	56.9	8.4	[a]	6.6	49,543	[a]	20,422
Smelt	24.4	[a]	20.0	9.9	[a]	[a]	25,353	[a]	[a]
Brook, brown, or rainbow trout in ponds or lakes	21.5	[a]	23.4	[a]	[a]	[a]	[a]	[a]	[a]
Lake trout	23.0	[a]	15.6	5.5	[a]	[a]	13,232	[a]	[a]
Walleye	23.7	[a]	14.1	5.4	[a]	[a]	13,410	[a]	[a]
Largemouth or smallmouth bass	16.3	[a]	26.6	[a]	[a]	[a]	[a]	[a]	[a]
Landlocked salmon	9.6	[a]	10.8	[a]	[a]	[a]	[a]	[a]	[a]
Panfish (sunfish, crappie, etc.)	12.6	[a]	17.2	[a]	[a]	[a]	[a]	[a]	[a]

[a]Sample size was too small to estimate.

Table 167. The percent of respondents who fished for brook, brown, or rainbow trout in streams or rivers in Vermont, by Vermont residents and nonresidents across three survey years. (Note: In 1991 and 2000 no time referent was specified, in 2010 the referent was the past 3 years. No statistical comparisons were made because of the difference in question wording.)

Fish for brook, brown, or rainbow trout in streams or rivers in Vermont	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
No	18	20	26	44	45	63
Yes	82	80	74	56	55	37

Table 168. For those who fished for trout in streams or rivers, the importance of programs that manage strictly for wild trout and programs for stocking trout in some streams and rivers, by Vermont residents and nonresidents across three survey years.

How important is it that Vermont provides the following programs?	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Manage strictly for wild trout (no stocking) in some streams and rivers						
Not important	12.6	12.2	13.1[a]	10.6	8.2	10.9[a]
Somewhat important	29.1	25.0	25.9	25.2	33.6	28.1
Very important	36.3	46.5	46.8	36.7	41.8	50.1
No opinion	22.0	16.2	14.2	27.6	16.4	10.9
Stocking brook, brown, and rainbow trout to be caught within the same season (put-and-take) in some streams and rivers						
Not important	6.8	7.3	6.4[a]	7.4	3.3	13.2[a]
Somewhat important	31.8	29.9	26.5	28.5	43.0	25.6
Very important	49.6	50.8	58.8	42.9	43.8	54.2
No opinion	11.8	11.9	8.3	21.2	9.9	7.0

[a]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 169. Support for special regulations for trout fishing in some streams or rivers, by Vermont residents and nonresidents across three survey years.

Special regulations for trout fishing in some streams and rivers	Vermont residents			Nonresidents		
	Percent supporting[a]					
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Special length limits	61.0	64.0	63.6	69.0	57.0	67.4[b]
Lower creel limits	44.0	47.0	50.7[b]	59.0	53.0	61.4
Catch and release – all fish must be released	27.0	39.0	34.3[b]	45.0	55.0	52.3[b]
Artificial lures and flies only	24.0	29.0	29.1[b]	45.0	49.0	54.5[b]
I do not support the use of any special regulations	11.0	10.9	9.9	4.1	4.8	6.8
No opinion	12.8	10.8	13.2	7.9	13.5	6.8

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 170. The average smallest length fish you would keep or consider a quality size fish when fishing in streams or rivers, by species and by Vermont residents and nonresidents across three survey years.

	Vermont residents (mean)			Nonresidents (mean)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Brook trout						
smallest "keeper" size	7.8[a]	8.4[b]	8.3[b]	8.9[a]	9.5[b]	8.8[a]
smallest "quality" size	9.4[a]	9.7[b]	9.5[a]	10.1[a]	10.3[a]	9.6[b]
Brown trout						
smallest "keeper" size	9.6[a]	10.3[b]	10.2[b]	10.4[a]	11.0[b]	10.8
smallest "quality" size	12.2[a]	12.7[b]	11.5[c]	12.6[a]	12.7[a]	11.7[b]
Rainbow trout						
smallest "keeper" size	9.6[a]	10.3[b]	10.3[b]	10.4	10.8	10.7
smallest "quality" size	12.0[a]	12.5[b]	11.5[c]	12.5[a]	12.6[a]	11.6[b]

[a,b,c]Statistically significant difference between years with different letters at P = 0.05 using t-test.

Table 171. Agreement with the current daily creel limit for species in streams or rivers, by Vermont residents and nonresidents across three survey years.						
	Vermont residents			Nonresidents		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
	Percent agreeing with current daily limit					
Brook trout (12)	67.7	60.7	56.6[a]	47.3	36.0	40.6[a]
Brown trout (6, was 12 in 1991)	60.6	63.7	59.9[a]	44.3	44.1	41.3
Rainbow trout (6, was 12 in 1991)	60.8	64.2	60.1[a]	45.0	45.0	43.2
Combination of above (12)	68.0	61.9	58.0[a]	51.1	43.6	44.8[a]
[a]Statistically significant difference between years at P = 0.05 using chi-square test.						

Table 172. The percentage of respondents who fished for trout or salmon in ponds or lakes in Vermont, by Vermont residents and nonresidents across three survey years. (Note: In 1991 and 2000 no time referent was specified, in 2010 the referent was the past 3 years. No statistical comparisons were made because of the difference in question wording.)						
Fish for trout or salmon in ponds or lakes in Vermont	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
No	29	32	43	47	52	69
Yes	71	68	57	53	48	31

Table 173. Support for special regulations for trout and salmon fishing in some ponds or lakes, by Vermont residents and nonresidents across three survey years.

Special regulations for fishing in some ponds or lakes	Vermont residents			Nonresidents		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
	Percent supporting[a]					
For brook, brown, rainbow trout						
Special length limits	62.0	62.0	62.2	64.0	60.0	67.9
Lower creel limits	42.0	38.0	39.7	52.0	40.0	42.0[b]
Catch and release—all fish must be released	22.0	31.0	24.0[b]	29.0	31.0	32.4
Artificial lures and flies only	23.0	31.0	27.9[b]	32.0	35.0	32.4
I do not support the use of any special regulations	11.2	11.5	9.9	4.2	12.1	11.6
No opinion	12.5	12.5	15.8	11.6	13.2	8.9
For lake trout						
Special length limits	59.0	61.0	61.8	66.0	60.0	64.9
Lower creel limits	27.0	30.0	34.9[b]	35.0	29.0	36.5
Catch and release—all fish must be released	18.0	26.0	21.6[b]	24.0	30.0	26.0
Artificial lures and flies only	18.0	25.0	21.6[b]	28.0	30.0	25.0
I do not support the use of any special regulations	10.8	10.5	9.7	6.7	9.1	9.4
No opinion	19.8	17.4	21.4	15.8	14.8	11.5
For landlocked salmon						
Special length limits	51.0	60.0	60.2[b]	60.0	58.0	59.1
Lower creel limits	24.0	31.0	35.2[b]	32.0	29.0	33.3
Catch and release—all fish must be released	18.0	34.0	26.4[b]	26.0	36.0	36.2
Artificial lures and flies only	18.0	26.0	22.6[b]	27.0	29.0	29.0
I do not support the use of any special regulations	8.8	9.2	8.4	4.5	8.2	9.7
No opinion	30.2	18.7	23.2[b]	23.0	18.8	16.0

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 174. The average smallest length fish you would keep or consider a quality size fish when fishing in ponds or lakes, by species and by Vermont residents and nonresidents across three survey years.

	Vermont residents (mean)			Nonresidents (mean)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Brook trout						
smallest "keeper" size	8.6[a]	9.1[b]	9.1[b]	9.7	10.0	9.8
smallest "quality" size	10.6[a]	10.9[b]	10.7	11.3	11.5	11.1
Brown trout						
smallest "keeper" size	10.5[a]	11.1[b]	10.9[b]	11.2	11.8	11.4
smallest "quality" size	13.5[b]	13.1[a]	13.8[c]	13.7[a]	14.4[b]	14.1
Rainbow trout						
smallest "keeper" size	10.5[a]	11.0[b]	11.0[b]	11.1	11.2	11.4
smallest "quality" size	13.4[a]	13.8[b]	13.7[b]	13.7	14.1	13.9
Lake trout						
smallest "keeper" size	17.4[a]	18.1[b]	18.2[b]	18.1	18.6	18.7
smallest "quality" size	20.3[a]	20.8[b]	20.9[b]	20.5	20.7	21.3
Landlocked salmon						
smallest "keeper" size	16.4[a]	16.7[b]	16.2[a]	16.8	16.9	17.0
smallest "quality" size	18.8[b]	19.1[c]	18.5[a]	19.0	19.2	18.7

[a,b,c]Statistically significant difference between years with different letters at P = 0.05 using t-test.

Table 175. Agreement with the current daily creel limit for species in ponds or lakes, or lakes that offer trout fishing, by Vermont residents and nonresidents across three survey years.

	Vermont residents			Nonresidents		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
	Percent agreeing with current daily limit					
Ponds or lakes						
Brook trout (6, was 12 in 1991)	63.7	67.1	66.2[b]	48.5	54.7	44.7[b]
Brown trout (6, was 12 in 1991)	56.9	65.6	64.5[b]	45.3	53.7	39.3[b]
Rainbow trout (6, was 12 in 1991)	57.7	66.2	65.2[b]	47.0	52.7	37.1[b]
Combination of limit (6, was 12 in 1991)	64.7	61.3	64.3	52.3	51.1	45.2
Lakes that offer lake trout fishing						
Lake trout (2)	[a]	68.5	70.8	[a]	69.2	72.4
Landlocked salmon (2)	[a]	69.2	71.2	[a]	67.3	69.3
Brook trout (2)	[a]	57.0	63.2[b]	[a]	57.8	66.7
Brown trout (2)	[a]	62.5	66.9	[a]	55.6	67.3
Rainbow trout (2)	[a]	61.0	65.8	[a]	56.4	64.7
Combination of above (2)	[a]	50.9	58.4[b]	[b]	47.7	59.0

[a]Question not asked in 1991.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 176. The percent of respondents who fished for warmwater gamefish and panfish in Vermont, by Vermont residents and nonresidents across three survey years. (Note: In 1991 and 2000 no time referent was specified, in 2010 the referent was the past 3 years. No statistical comparisons were made because of the difference in question wording.)

Fish for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead, or smelt in Vermont	Vermont residents (%)			Nonresidents (%)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
No	12	16	20	25	37	38
Yes	88	84	80	75	63	62

Table 177. Support for special regulations for some warmwater species on some waters, by Vermont residents and nonresidents across three survey years.

Special regulations for fishing on some waters	Vermont residents			Nonresidents		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
	Percent supporting[a]					
For largemouth or smallmouth bass						
Special length limits	54.0	57.0	56.4	67.0	66.0	65.5
Lower creel limits	25.0	34.0	34.4[b]	34.0	37.0	42.2
Catch and release—all fish must be released	18.0	32.0	29.1[b]	22.0	36.0	37.7[b]
Artificial lures and flies only	16.0	26.0	22.6[b]	23.0	45.0	25.7[b]
I do not support the use of any special regulations	13.2	12.2	10.5	8.8	10.4	6.8
No opinion	20.3	18.7	21.6	11.0	13.4	18.9
For walleye						
Special length limits	54.0	56.0	54.3	56.0	53.0	56.7
Lower creel limits	28.0	36.0	32.1[b]	31.0	32.0	31.5
Catch and release—all fish must be released	15.0	27.0	22.7[b]	16.0	23.0	19.6
Artificial lures and flies only	23.0	29.0	17.4[b]	19.0	25.0	16.2
I do not support the use of any special regulations	8.9	10.8	8.5	7.4	8.0	5.6
No opinion	27.0	23.1	29.9[b]	26.4	30.4	36.0[b]
For northern pike						
Special length limits	48.0	53.0	52.2[b]	61.0	58.0	58.4
Lower creel limits	22.0	33.0	31.5[b]	28.0	35.0	37.8[b]
Catch and release—all fish must be released	14.0	27.0	22.7[b]	19.0	29.0	25.9[b]
Artificial lures and flies only	11.0	20.0	17.0[b]	17.0	30.0	19.5[b]
I do not support the use of any special regulations	13.0	13.3	10.5	9.2	7.8	5.9
No opinion	30.5	23.6	28.7[b]	20.5	23.8	30.8[b]

[a]Percentages can add to more than 100% because more than one regulation could be chosen.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 178. The average smallest length fish you would keep or consider a quality size fish, by species and by Vermont residents and nonresidents across three survey years.

	Vermont residents (mean)			Nonresidents (mean)		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
Walleye						
smallest "keeper" size	15.5[a]	15.8[b]	15.8[b]	15.4	15.7	16.2
smallest "quality" size	18.0	18.2	18.0	18.0	18.1	18.0
Largemouth bass						
smallest "keeper" size	11.1[a]	11.5[b]	11.4[b]	11.8	12.1	11.9
smallest "quality" size	13.7[a]	14.2[b]	14.1[b]	14.2	14.7	14.7
Smallmouth bass						
smallest "keeper" size	10.7[a]	11.0[b]	11.1[b]	11.2	11.8	11.8
smallest "quality" size	13.1[a]	13.6[b]	13.5[b]	13.4	14.2	14.0
Northern pike						
smallest "keeper" size	20.5[a]	21.1[b]	21.3[b]	21.5	21.9	22.1
smallest "quality" size	25.4[a]	26.2[b]	26.3[b]	26.3	27.3	26.7
Yellow perch						
smallest "keeper" size	7.6	7.7	7.8	8.0	8.4	8.2
smallest "quality" size	9.5	9.6	9.5	9.7	10.0	9.7
Crappie						
smallest "keeper" size	[c]	7.6	7.8	[c]	8.4	8.4
smallest "quality" size	[c]	9.4	9.4	[c]	9.9	9.6

[a,b,]Statistically significant difference between years with different letters at P = 0.05 using t-test.
[c]Question not asked in 1991.

Table 179. Agreement with the current daily creel limit for warmwater gamefish and panfish, by Vermont residents and nonresidents across three survey years.

	Vermont residents			Nonresidents		
	1991	*2000*	*2010*	*1991*	*2000*	*2010*
	Percent agreeing with current daily limit					
Walleye (3, 5 in 1991 and 2000)	60.1	50.9	57.4[b]	57.1	46.7	54.0[b]
Largemouth/smallmouth bass (5)	[a]	63.4	60.9	[a]	61.8	47.7[b]
Northern pike (5)	61.2	52.6	55.2[b]	54.4	39.8	42.9[b]
Yellow perch (50, no limit in 1991)	81.0	62.5	57.0[b]	74.0	51.6	35.4[b]
Crappie (25, 50 in 2000)	[a]	49.0	54.2[b]	[a]	37.6	36.1
Sunfish (no limit)	70.6	62.7	63.5[b]	75.4	54.2	53.4[b]
Smelt (no limit)	73.2	60.6	61.0[b]	66.1	49.6	48.2[b]
Bullhead (no limit)	75.5	64.4	61.7[b]	66.7	50.8	47.4[b]
White perch (no limit)	[a]	60.8	60.0	[a]	51.0	47.4

[a]Question not asked in 1991.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 180. Mean days and total days fished open water on Lake Champlain, by Vermont residents by species across two survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Vermont residents – Lake Champlain open water	Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*
Largemouth or smallmouth bass	10.8[c]	[a]	16.5[d]	334,436	[a]	387,913
Yellow perch	10.9[c]	13.2	17.2[d]	306,154	232,886	303,281
Northern pike	9.3[c]	10.6	14.3[d]	218,281	178,109	242,009
Walleye	8.5	10.1	11.3	229,926	156,979	135,669
Lake trout	8.6	8.3	10.8	196,722	124,354	126,909
Landlocked salmon	10.0[c]	[a]	16.5[d]	172,467	[a]	162,380
White perch	[a]	10.9	17.4	[a]	70,207	154,791
Brown trout	8.5[c]	[a]	14.8[d]	119,482	[a]	124,562
Steelhead/rainbow trout	8.0[c]	9.6	14.9[d]	115,981	120,980	117,395
Sunfish	11.5	9.5	15.5	63,528	56,312	116,758
Crappie	9.5[c]	10.6	14.8[d]	44,595	78,170	110,427
Bullhead	8.6	10.0	10.1	121,334	88,214	72,528
Smelt	8.2	9.4	[b]	30,624	25,886	[b]

[a]Question not asked in survey.
[b]Sample size was too small to estimate.
[c,d]Statistically significant difference between years with different letters at P = 0.05 using t-test.

Table 181. Mean days and total days fished open water on Lake Champlain, by nonresidents by species across two survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Nonresidents – Lake Champlain open water	Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*
Largemouth or smallmouth bass	10.1	[a]	9.0	134,815	[a]	105,394
Yellow perch	11.9	9.8	11.9	116,360	60,638	60,927
Northern pike	9.1	9.6	7.8	101,693	81,001	55,689
Walleye	9.9	[b]	7.5	96,804	[b]	28,209
Lake trout	6.7	[b]	[b]	37,436	[b]	[b]
Landlocked salmon	6.6	[a]	[b]	29,707	[a]	[b]
White perch	[a]	[b]	[b]	[a]	[b]	[b]
Brown trout	8.5	[a]	[b]	28,364	[a]	[b]
Steelhead/rainbow trout	7.4	[b]	[b]	24,119	[b]	[b]
Sunfish	11.6	[b]	[b]	40,510	[b]	[b]
Crappie	16.1	[b]	[b]	38,732	[b]	[b]
Bullhead	12.2	[b]	[b]	33,137	[b]	[b]

[a]Question not asked in survey.
[b]Sample size was too small to estimate.

Table 182. Mean days and total days ice fishing on Lake Champlain, by Vermont residents by species across two survey years. (Note: Anglers could fish for more than 1 species per day, so the sum of days from this table is not reflective of total days fished. Days fished in 2009 reported elsewhere in this report were adjusted for non-response bias, but this was not done here to allow for comparisons with earlier years that were not adjusted for non-response bias.)

Vermont residents – Lake Champlain ice fishing	Mean days fished			Total days fished		
	1990	*1999*	*2009*	*1990*	*1999*	*2009*
Yellow perch	10.4	11.4	11.3	241,942	136,746	161,664
Northern pike	7.9	9.8	9.0	78,881	61,750	87,624
Walleye	7.2	9.9	8.0	70,771	40,201	42,263
Smelt	7.2	7.8	6.6	83,282	45,871	34,310
Crappie	10.5	10.4	11.6	11,982	22,814	47,030
Lake trout	5.8	6.9	6.1	43,923	34,460	22,511
Landlocked salmon	6.4	[a]	7.1	30,707	[a]	25,552
White perch	[a]	11.7	11.3	[a]	28,943	38,647
Sunfish	11.9	[b]	9.1	10,185	[b]	27,303
Brown trout	6.0	[a]	6.4	16,650	[a]	17,238
Steelhead/rainbow trout	5.4	8.0	6.3	17,926	24,644	12,879

[a]Question not asked in survey.
[b]Sample size was too small to estimate.

Table 183. Respondents' opinions about the length of the walleye season on Lake Champlain, which currently runs from the 1st Saturday in May to the following March 15th, by Vermont residents and nonresidents across two survey years.

Opinion on length of Lake Champlain walleye season	Vermont residents		Nonresidents	
	2000	*2010*	*2000*	*2010*
	Percent supporting[a]			
Just right	30.6	26.2	21.1	17.7
Close earlier	12.5	7.4[b]	7.9	2.5
Close later	2.6	1.9	4.5	2.5
Open earlier	8.4	7.1	5.6	1.3
Open later	6.4	7.0	12.2	4.4[b]
Open year-round	4.7	5.3	0.0	5.7
No opinion	40.6	48.4[b]	53.9	70.9[b]

[a]Percentages can add to more than 100% because more than one option could be checked.
[b]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 184. Agreement with the current minimum length limit for fish caught in Lake Champlain, by Vermont residents and nonresidents across two survey years.

Species	Vermont residents		Nonresidents	
	2000	*2010*	*2000*	*2010*
	Percent agreeing with current minimum length			
Brown/rainbow trout (12")	70.4	62.6[a]	64.3	44.1[a]
Lake trout (15")	65.7	60.2	52.0	41.1[a]
Landlocked salmon (15")	62.6	59.1	52.6	42.2[a]
Walleye (18")	68.4	67.1	67.9	50.0[a]
Largemouth bass (10")	58.6	57.5	45.7	41.1
Smallmouth bass (10")	62.6	58.4	47.3	43.9
Northern pike (20")	60.1	57.9	50.6	44.4
Crappie (8")	59.0	63.1	66.0	44.2[a]

[a]Statistically significant difference between years at P = 0.05 using chi-square test.

Table 185. Agreement with the current daily creel limit for fish caught in Lake Champlain, by Vermont residents and nonresidents across two survey years.				
	Vermont residents		Nonresidents	
	2000	*2010*	*2000*	*2010*
Species	*Percent agreeing with current daily limit*			
Brown/rainbow trout (3)	64.2	64.1	61.9	52.6
Lake trout (3)	63.8	63.2	53.2	54.6
Landlocked salmon (2)	66.0	65.0	62.1	52.7
Walleye (3, was 5 in 2000)	53.3	62.7[a]	56.4	55.8
Northern pike (5)	61.1	63.0	51.2	60.1
Crappie (25)	59.5	62.2	49.1	48.5
Yellow perch (no limit, was 75 in 2000)	56.4	67.7[a]	50.8	50.3
Sunfish (no limit)	65.4	69.7	51.9	53.6
Smelt (no limit)	64.5	69.0	45.9	52.0
Bullhead (no limit)	65.6	69.0	50.8	52.5
White perch (no limit)	65.0	69.1	47.0	50.8
[a]Statistically significant difference between years at P = 0.05 using chi-square test.				

Table 186. Opinions about issues in Vermont for those with an opinion, by Vermont residents and nonresidents across two survey years.					
Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	Mean score[b]
Contaminant levels in fish					
2000 Vermont residents[a]	25.9	29.4	27.3	17.4	2.6
2010 Vermont residents	33.2	33.9	20.3	12.6	2.9
2000 Nonresidents	22.0	29.5	18.9	31.6	2.4
2010 Nonresidents	24.2	25.6	24.9	25.3	2.5
Crowding at fishing areas					
2000 Vermont residents	7.9	24.1	37.5	30.5	2.1
2010 Vermont residents	10.6	23.7	36.2	29.5	2.1
2000 Nonresidents	3.5	22.8	32.2	41.5	1.9
2010 Nonresidents	3.4	16.9	34.2	45.5	1.8
Commercial sale of angler caught perch					
2000 Vermont residents[a]	16.1	18.7	17.9	47.3	2.0
2010 Vermont residents	13.2	16.0	18.5	52.3	1.9
2000 Nonresidents[a]	11.2	16.3	19.9	52.6	1.9
2010 Nonresidents	22.5	19.1	15.7	42.7	2.2
Commercial sale of angler caught crappie					
2000 Vermont residents	11.8	14.7	17.6	55.9	1.8
2010 Vermont residents	10.9	15.0	17.1	57.0	1.8
2000 Nonresidents[a]	12.2	16.4	19.1	52.3	1.9
2010 Nonresidents	23.3	17.8	15.3	43.6	2.2
Commercial sale of angler caught sunfish					
2000 Vermont residents	9.6	12.9	15.7	61.8	1.7
2010 Vermont residents	9.3	12.4	17.0	61.3	1.7
2000 Nonresidents[a]	7.9	12.1	17.1	62.9	1.7
2010 Nonresidents	22.2	14.8	17.3	45.7	2.1
Shooting and spearing of northern pike in Lake Champlain as currently permitted					
2000 Vermont residents[a]	15.0	12.4	16.3	56.3	1.9
2010 Vermont residents	14.6	12.4	12.0	61.0	1.8
2000 Nonresidents	24.6	15.0	13.1	47.3	2.2
2010 Nonresidents	30.0	13.8	15.6	40.6	2.3
Conflict between fishing and other recreational uses (e.g., skiing, boating)					
2000 Vermont residents[a]	11.6	29.1	34.9	24.4	2.3
2010 Vermont residents	11.0	30.3	29.5	29.2	2.2
2000 Nonresidents	5.9	37.2	33.8	23.1	2.3
2010 Nonresidents	8.1	30.5	32.1	29.3	2.2
Access to fishing areas					
2000 Vermont residents[a]	4.5	12.9	24.9	57.7	1.6
2010 Vermont residents	7.8	17.2	23.0	52.0	1.8
2000 Nonresidents	2.2	9.3	27.3	61.2	1.5
2010 Nonresidents	4.0	11.6	23.1	61.3	1.6

Table 186. (cont.)					
Issues in Vermont	Serious problem (%)	Moderate problem (%)	Minor problem (%)	Not a problem (%)	Mean score[b]
Fishing derbies/tournaments (other than "kids" derbies)					
2000 Vermont residents	3.4	8.2	15.5	72.9	1.4
2010 Vermont residents	4.4	10.6	13.4	71.6	1.5
2000 Nonresidents	2.0	10.8	14.1	73.1	1.4
2010 Nonresidents	6.5	9.2	12.6	71.7	1.5
Your ability to understand Vermont fishing regulations					
2000 Vermont residents[a]	3.8	8.2	22.8	65.2	1.5
2010 Vermont residents	4.2	9.2	18.0	68.6	1.5
2000 Nonresidents	1.4	5.7	19.1	73.8	1.4
2010 Nonresidents	0.3	5.3	16.2	78.2	1.3
Conflict between open water and ice fishing					
2000 Vermont residents[a]	2.8	4.8	13.1	79.3	1.3
2010 Vermont residents	2.2	8.0	14.6	75.2	1.4
2000 Nonresidents[a]	0.8	4.2	13.4	81.6	1.2
2010 Nonresidents	4.5	10.2	14.0	71.3	1.5

[a]Statistically significant difference between years at P = 0.05 using chi-square test.

[b]Scale ranged from 1 = not a problem to 4 = serious problem.

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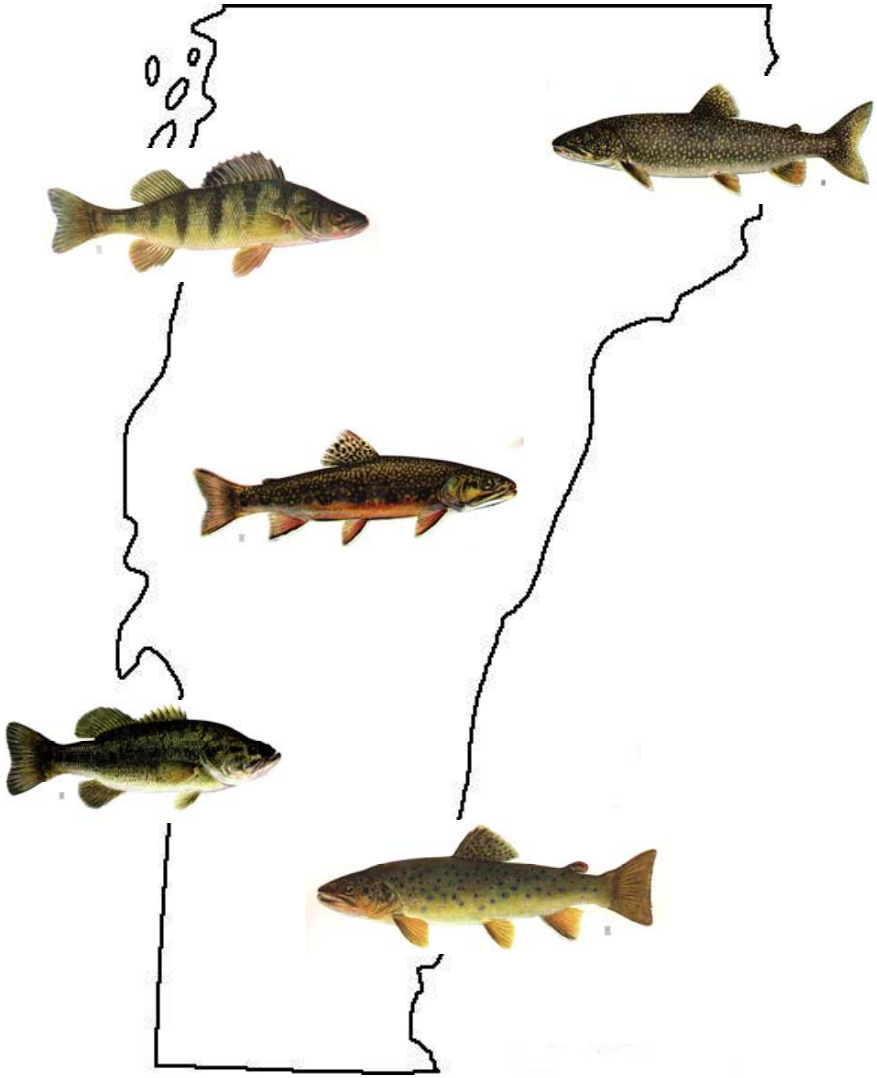
APPENDIX A:

Mail Questionnaire

2010 Vermont Angler Survey



A survey prepared for:
Vermont Department of Fish and Wildlife
By
Cornell University
Department of Natural Resources
Human Dimensions Research Unit

2010 Vermont Angler Survey

Research conducted by the Human Dimensions Research Unit in the Department of Natural Resources, Cornell University

Funded and directed by the Vermont Department of Fish and Wildlife

The purpose of this survey is to learn more about your fishing experiences in Vermont, your interests in different types of fishing opportunities, and your opinions about fisheries management issues. The Vermont Department of Fish and Wildlife will use the information you and others provide to help direct future fisheries management programs.

Your name was selected to receive this survey because license sale records indicate that you have a license that allowed fishing in Vermont in 2009.

The questionnaire is divided into 6 sections. Depending on your answers, the directions may tell you to skip a whole section, so be on the lookout for that.

Please complete this questionnaire at your earliest convenience, seal it with the white resealable label provided, and drop it in any mailbox; no postage is needed. Your participation in this survey is voluntary, but we sincerely hope you will take just a few minutes to answer our questions, regardless of how often you fish. Your identity will be kept confidential and the information you give us will never be associated with your name.

FISHING IN VERMONT

1. **In which of the past 3 years have you fished in Vermont?** (Check all that apply.)

☐ 2009 ☐ 2008 ☐ 2007

☐ I have not fished in Vermont in any of these years

STOP!!!

If you have not fished in Vermont in 2009, 2008, or 2007, please stop here and return this questionnaire to us.

If you have fished in Vermont in 2009 OR 2008 OR 2007, please continue with Question 2.

2. Which of the following fish have you fished for in Vermont in any of the past 3 years (2009, 2008, 2007)? (Circle the number(s) of ALL the kinds of fish that you fished for.)

1. Brook Trout
2. Brown Trout
3. Rainbow Trout
4. Lake Trout
5. Landlocked Salmon
6. Smelt
7. Walleye
8. Sauger
9. Largemouth Bass
10. Smallmouth Bass
11. Rock Bass
12. Pickerel
13. Northern Pike
14. Muskellunge
15. American Shad (Connecticut River)
16. Channel Catfish
17. Bullhead (Hornpout)
18. Yellow Perch
19. Crappie
20. Sunfish (Bluegill, Pumpkinseed)
21. White Perch
22. Drum (Sheepshead)
23. Carp
24. Gar
25. Whitefish (Lake Champlain)
26. Sucker
27. Burbot (Cusk)
28. Bowfin
29. Anything

3. What seasons did you fish in Vermont in any of the past 3 years, and what kinds of fish do you prefer to fish for during those seasons? (Please rank your top three choices by writing the species number from Question 2 in the appropriate box.)

	OPEN-WATER (spring, summer, fall)	**ICE-FISHING**
Check these boxes if fished in past 3 years →	☐	☐
Species Preference *(from list in Question 2)*:	Species #	Species #
Most Preferred	☐	☐
Second Most Preferred	☐	☐
Third Most Preferred	☐	☐
OR I Have No Preference *(Check this box.)*	☐	☐

4. Overall, how would you rate the quality of fishing in Vermont during the past 3 years?

☐ Poor ☐ Fair ☐ Good ☐ Excellent

5a. About how many days did you fish in Vermont in 2009?

_____ # days OPEN-WATER _____ # days ICE-FISHING

_____ I did not fish in Vermont in 2009 **(SKIP TO Question 6)**

5b. About how many days did you spend fishing for the following species in Vermont in 2009? (The total does not have to equal the total in Question 5a.)

	OPEN	**ICE**
a. Brook, Brown, or Rainbow Trout in small brooks or beaver ponds	_____	XXX
b. Brook, Brown, or Rainbow Trout in large streams or rivers	_____	XXX
c. Brook, Brown, or Rainbow Trout in ponds or lakes	_____	_____
d. Lake Trout	_____	_____
e. Landlocked Salmon	_____	_____
f. Walleye	_____	_____
g. Largemouth or Smallmouth Bass	_____	_____
h. Northern Pike or Pickerel	_____	_____
i. Muskellunge	_____	_____
j. American Shad in the Connecticut River	_____	XXX
k. Yellow Perch	_____	_____
l. Smelt	_____	_____
m. Panfish (Sunfish, Crappie, etc.)	_____	_____
n. Bullhead	_____	_____
o. Channel Catfish	_____	_____

BROOK, BROWN, OR RAINBOW TROUT STREAMS OR RIVERS

6. Did you fish for brook, brown, or rainbow trout in STREAMS or RIVERS in Vermont in any of the past 3 years?

_____ No → **SKIP to Question 13**

_____ Yes → **Continue below**

7. What tackle did you use most often to fish for brook, brown, or rainbow trout in STREAMS or RIVERS? (Check one.)

☐ Bait ☐ Flies ☐ Lures ☐ Lures with Bait

8. If there were no minimum length limits, what is the <u>smallest</u> length of each species that you would <u>keep</u> when fishing in STREAMS or RIVERS? (Circle one length for each species. If you do not keep a particular species, check Do Not Keep. If you do not fish for a species, check NA.)

	Inches					Do Not Keep	NA
a. Brook Trout	6 or less	8	10	12	14 or more	☐	☐
b. Brown Trout	6 or less	8	10	12	14 or more	☐	☐
c. Rainbow Trout	6 or less	8	10	12	14 or more	☐	☐

9. When fishing STREAMS or RIVERS, what is the <u>smallest</u> length of each species that you would consider a <u>good</u> or <u>quality</u> size fish? *(Circle one length for each species, or check no opinion. If you do not fish for a species, check NA.)*

	Inches					No Opinion	NA
a. Brook Trout	6 or less	8	10	12	14 or more	☐	☐
b. Brown Trout	6 or less	8	10	12	14 or more	☐	☐
c. Rainbow Trout	6 or less	8	10	12	14 or more	☐	☐

10. The current daily creel limit for trout in STREAMS or RIVERS is 12 trout of which 6 can be brown trout or rainbow trout. Do you agree with the present daily creel limits? If you disagree, please write in your recommended daily limit.

	Present daily limit	Agree	Disagree	Recommended daily limit	No Opinion
a. Brook Trout	12	☐	☐ →	_____	☐
b. Brown Trout	6	☐	☐ →	_____	☐
c. Rainbow Trout	6	☐	☐ →	_____	☐
d. Combination of above	12	☐	☐ →	_____	☐

11. Overall, how would you rate the quality of fishing for TROUT in STREAMS and RIVERS in Vermont during the past 3 years?

☐ Poor ☐ Fair ☐ Good ☐ Excellent

12. Special regulations can be used in certain waters to increase the number and/or size of fish available to be caught. Please check ALL the special regulations that you would support for trout fishing in some STREAMS or RIVERS.

_____ Catch and Release – All fish must be released
_____ Artificial lures and flies only
_____ Special length limits
_____ Lower creel limits
_____ I do not support the use of any special regulations
_____ No opinion

TROUT OR SALMON
PONDS OR LAKES (excluding Lake Champlain)

13. Did you fish for trout or salmon in PONDS or LAKES in Vermont in any of the past 3 years (excluding Lake Champlain)?

_____ No → **SKIP to Question 20**
_____ Yes → **Continue below**

14. If there were no minimum length limits, what is the <u>smallest</u> length of each species that you would <u>keep</u> when fishing in PONDS or LAKES? (Circle one length for each species. If you do not keep a particular species, check Do Not Keep. If you do not fish for a species, check NA.)

	Inches					Do Not Keep	NA
a. Brook Trout	6 or less	8	10	12	14 or more	☐	☐
b. Brown Trout	6 or less	8	10	12	14 or more	☐	☐
c. Rainbow Trout	6 or less	8	10	12	14 or more	☐	☐
d. Lake Trout	12 or less	15	18	21	24 or more	☐	☐
e. Landlocked Salmon	9 or less	12	15	18	21 or more	☐	☐

15. When fishing PONDS or LAKES, what is the <u>smallest</u> length of each species that you would consider a <u>good</u> or <u>quality</u> size fish? (Circle one length for each species, or check no opinion. If you do not fish for a species, check NA.)

	Inches					No Opinion	NA
a. Brook Trout	8 or less	10	12	14	16 or more	☐	☐
b. Brown Trout	10 or less	12	14	16	18 or more	☐	☐
c. Rainbow Trout	10 or less	12	14	16	18 or more	☐	☐
d. Lake Trout	15 or less	18	21	24	27 or more	☐	☐
e. Landlocked Salmon	12 or less	15	18	21	24 or more	☐	☐

16. The current daily creel limit for brook, brown, and rainbow trout in PONDS or LAKES are listed below for each species and for a combined trout catch. Do you agree with the present daily creel limits? If you disagree, please write in your recommended daily limit.

	Present daily limit	Agree	Disagree	Recommended daily limit	No Opinion
a. Brook Trout	6	☐	☐ →	_____	☐
b. Brown Trout	6	☐	☐ →	_____	☐
c. Rainbow Trout	6	☐	☐ →	_____	☐
d. Combined Limit	6	☐	☐ →	_____	☐

17. For the majority of lakes in Vermont <u>that offer lake trout fishing</u>, the current daily creel limit for lake trout, landlocked salmon, brook trout, brown trout, or rainbow trout is 2 fish of any one species or combination of species. Do you agree with the current limits? If you disagree, please write in your recommended daily limit.

	Present daily limit	Agree	Disagree	Recommended daily limit	No Opinion
a. Lake Trout	2	☐	☐ →	_____	☐
b. Landlocked Salmon	2	☐	☐ →	_____	☐
c. Brook Trout	2	☐	☐ →	_____	☐
d. Brown Trout	2	☐	☐ →	_____	☐
e. Rainbow Trout	2	☐	☐ →	_____	☐
f. Combination of above	2	☐	☐ →	_____	☐

18. Overall, how would you rate the quality of fishing for trout and salmon in PONDS and LAKES in Vermont during the past 3 years (excluding Lake Champlain)? (Check one box for each species/species group.)

	Poor	Fair	Good	Excellent	No Opinion
a. Brook, Brown, and Rainbow Trout	☐	☐	☐	☐	☐
b. Lake Trout	☐	☐	☐	☐	☐
c. Landlocked Salmon	☐	☐	☐	☐	☐

19. Special regulations can be used in certain waters to increase the number and/or size of fish available to be caught. Please check ALL the special regulations that you would support in some PONDS or LAKES for the species listed.

	Brook, Brown, Rainbow Trout	Lake Trout	Landlocked Salmon
Catch and Release – All fish must be released	☐	☐	☐
Artificial lures and flies only	☐	☐	☐
Special length limits	☐	☐	☐
Lower creel limits	☐	☐	☐
I do not support the use of any special regulations	☐	☐	☐
No opinion	☐	☐	☐

WARMWATER GAME FISH AND PANFISH (excluding Lake Champlain)

20. Did you fish for walleye, bass, pike, yellow perch, sunfish, crappie, bullhead or smelt in Vermont in any of the past 3 years (excluding Lake Champlain)?

_____ No → **SKIP to Question 27**

_____ Yes → **Continue on next page**

21. If there were no minimum length limits, what is the <u>smallest</u> length of each species that you would <u>keep</u>? (Circle one length for each species. If you do not keep a particular species, check Do Not Keep. If you do not fish for a species, check NA.)

	Inches					Do Not Keep	NA
a. Walleye	9 or less	12	15	18	21 or more	☐	☐
b. Largemouth Bass	6 or less	8	10	12	14 or more	☐	☐
c. Smallmouth Bass	6 or less	8	10	12	14 or more	☐	☐
d. Northern Pike	16 or less	18	20	22	24 or more	☐	☐
e. Yellow Perch	6 or less	7	8	9	10 or more	☐	☐
f. Crappie	6 or less	7	8	9	10 or more	☐	☐

22. What is the <u>smallest</u> length of each species that you would consider a <u>good</u> or <u>quality</u> size fish? (Circle one length for each species, or check no opinion. If you do not fish for a species, check NA.)

	Inches					No Opinion	NA
a. Walleye	12 or less	15	18	21	24 or more	☐	☐
b. Largemouth Bass	10 or less	12	14	16	18 or more	☐	☐
c. Smallmouth Bass	10 or less	12	14	16	18 or more	☐	☐
d. Northern Pike	18 or less	22	26	30	34 or more	☐	☐
e. Yellow Perch	8 or less	9	10	11	12 or more	☐	☐
f. Crappie	8 or less	9	10	11	12 or more	☐	☐

23. Do you support ice fishing for largemouth and smallmouth bass on selected lakes and ponds (as currently allowed)?

☐ No ☐ Yes, somewhat ☐ Yes, strongly ☐ No opinion

24. The current daily creel limit for several warmwater gamefish and panfish are listed below. Do you agree with the current limits? If you disagree, please write in your recommended daily limit.

	Present daily limit	Agree	Disagree	Recommended daily limit	No Opinion
a. Walleye	3	☐	☐ →	_____	☐
b. Largemouth/ Smallmouth Bass	5	☐	☐ →	_____	☐
c. Northern Pike	5	☐	☐ →	_____	☐
d. Yellow Perch	50	☐	☐ →	_____	☐
e. Crappie	25	☐	☐ →	_____	☐
f. Sunfish	no limit	☐	☐ →	_____	☐
g. Smelt	no limit	☐	☐ →	_____	☐
h. Bullhead	no limit	☐	☐ →	_____	☐
i. White Perch	no limit	☐	☐ →	_____	☐

25. Overall, how would you rate the quality of fishing for warmwater gamefish and panfish in Vermont during the past 3 years (excluding Lake Champlain)? (Check one box for each species.)

	Poor	Fair	Good	Excellent	No Opinion
a. Walleye	☐	☐	☐	☐	☐
b. Largemouth Bass	☐	☐	☐	☐	☐
c. Smallmouth Bass	☐	☐	☐	☐	☐
d. Northern Pike	☐	☐	☐	☐	☐
e. Yellow Perch	☐	☐	☐	☐	☐
f. Crappie	☐	☐	☐	☐	☐

26. Special regulations can be used in certain waters to increase the number and/or size of fish available to be caught. Please check ALL the special regulations that you would support on some waters for the species listed.

	Largemouth or Smallmouth Bass	Walleye	Northern Pike
Catch and Release – All fish must be released	☐	☐	☐
Artificial lures and flies only	☐	☐	☐
Special length limits	☐	☐	☐
Lower creel limits	☐	☐	☐
I do not support the use of any special regulations	☐	☐	☐
No opinion	☐	☐	☐

FISHING ON LAKE CHAMPLAIN

27. Did you fish on Lake Champlain during either the open water or ice fishing seasons in any of the past 3 years?

_____ No → **SKIP to Question 35**
_____ Yes → **Continue below**

28. About how many days did you spend fishing on Lake Champlain for the following species during the 2009 open-water and ice-fishing seasons? (If you did not fish on Lake Champlain in 2009, skip to Question 29.)

	OPEN	ICE
a. Brown Trout	_____	_____
b. Steelhead/Rainbow Trout	_____	_____
c. Lake Trout	_____	_____
d. Landlocked Salmon	_____	_____
e. Walleye	_____	_____
f. Largemouth/Smallmouth Bass	_____	XXX
g. Northern Pike	_____	_____
h. Crappie	_____	_____
i. Yellow Perch	_____	_____
j. Sunfish	_____	_____
k. Smelt	_____	_____
l. Bullhead	_____	_____
m. White Perch	_____	_____
n. Muskellunge	_____	_____
o. Channel Catfish	_____	_____

29. The current minimum length limits for several species in Lake Champlain are listed below. Do you agree with the current limits? If you disagree, please write in your recommended length limit.

	Present length limit	Agree	Disagree	Recommended length limit	No Opinion
a. Brown/ Rainbow Trout	12”	☐	☐ →	_____	☐
b. Lake Trout	15”	☐	☐ →	_____	☐
c. Landlocked Salmon	15”	☐	☐ →	_____	☐
d. Walleye	18”	☐	☐ →	_____	☐
e. Largemouth Bass	10”	☐	☐ →	_____	☐
f. Smallmouth Bass	10”	☐	☐ →	_____	☐
g. Northern Pike	20”	☐	☐ →	_____	☐
h. Crappie	8”	☐	☐ →	_____	☐

30. The current daily creel limit for several fish species in Lake Champlain are listed below. Do you agree with the current limits? If you disagree, please write in your recommended daily limit.

	Present daily limit	Agree	Disagree	Recommended daily limit	No Opinion
a. Brown / Rainbow Trout	3	☐	☐ →	_____	☐
b. Lake Trout	3	☐	☐ →	_____	☐
c. Landlocked Salmon	2	☐	☐ →	_____	☐
d. Walleye	3	☐	☐ →	_____	☐
e. Largemouth/ Smallmouth Bass	5	☐	☐ →	_____	☐
f. Northern Pike	5	☐	☐ →	_____	☐
g. Crappie	25	☐	☐ →	_____	☐
h. Yellow Perch	no limit	☐	☐ →	_____	☐
i. Sunfish	no limit	☐	☐ →	_____	☐
j. Smelt	no limit	☐	☐ →	_____	☐
k. Bullhead	no limit	☐	☐ →	_____	☐
l. White Perch	no limit	☐	☐ →	_____	☐

31. Overall, how would you rate the quality of fishing for the following species in Lake Champlain during the past 3 years? (Check one box for each species.)

	Poor	Fair	Good	Excellent	No Opinion
a. Brown Trout	☐	☐	☐	☐	☐
b. Steelhead / Rainbow Trout	☐	☐	☐	☐	☐
c. Lake Trout	☐	☐	☐	☐	☐
d. Landlocked Salmon	☐	☐	☐	☐	☐
e. Walleye	☐	☐	☐	☐	☐
f. Largemouth Bass	☐	☐	☐	☐	☐
g. Smallmouth Bass	☐	☐	☐	☐	☐
h. Northern Pike	☐	☐	☐	☐	☐
i. Crappie	☐	☐	☐	☐	☐
j. Yellow perch	☐	☐	☐	☐	☐
k. Sunfish	☐	☐	☐	☐	☐
l. Bullhead	☐	☐	☐	☐	☐
m. White Perch	☐	☐	☐	☐	☐

32. Do you support ice fishing for largemouth and smallmouth bass on Lake Champlain (currently it is not allowed)?

☐ No ☐ Yes, somewhat ☐ Yes, strongly ☐ No opinion

33. Current regulations on Lake Champlain allow the use of 2 lines when fishing during the OPEN-WATER season and 15 lines (tip-ups or handlines) during the ICE-FISHING season. Do you agree with the number of lines allowed in each season? If you disagree, please write in your recommended number of lines.

	Present number	Agree	Disagree	Recommended number	No Opinion
a. OPEN-WATER	2	☐	☐ →	_____	☐
b. ICE-FISHING	15	☐	☐ →	_____	☐

34. The fishing season for WALLEYE in Lake Champlain is from the 1st Saturday in May to the following March 15th. What is your opinion about the length of the season? (Check all that apply.)

_____ Just right _____ Open Earlier _____ No Opinion
_____ Close Earlier _____ Open Later
_____ Close Later _____ Open Year-round

OPINIONS AND INFORMATION ABOUT FISHING

35. How important to you is it that Vermont provides the following programs?

	Not Important	Somewhat Important	Very Important	No Opinion
a. Manage strictly for wild trout (no stocking):				
in some streams and rivers	☐	☐	☐	☐
in some lakes and ponds	☐	☐	☐	☐
b. Stocking Brook, Brown, and Rainbow Trout to be caught within the same season (put-and-take):				
in some streams and rivers	☐	☐	☐	☐
in some lakes and ponds	☐	☐	☐	☐

36. Current regulations allow the use of 2 lines when fishing PONDS or LAKES 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? If you disagree, please write in your recommended number of lines.

	Present number	Agree	Disagree	Recommended number	No Opinion
a. OPEN-WATER	2	☐	☐ →	_____	☐
b. ICE-FISHING	8	☐	☐ →	_____	☐

37. Where did you get information about fishing in Vermont in 2009? Please check all that apply, then circle the one source you are most likely to use in 2010.

_____ Fishing Regulations Guide from the Vermont Department of Fish and Wildlife
_____ Other pamphlets or documents from the Vermont Department of Fish and Wildlife
_____ Website of the Vermont Department of Fish and Wildlife
_____ Other websites
_____ Direct contact with Vermont Department of Fish and Wildlife personnel
_____ Newspaper
_____ Magazine
_____ TV or Radio
_____ Bait and tackle shops
_____ Guides or charterboat operators
_____ Newsletters from fishing clubs
_____ Friends

38. What is your opinion of the following issues in Vermont? (Check one category for each issue.)

	Not a Problem	Minor Problem	Moderate Problem	Serious Problem	No Opinion
a. Conflict between open-water and ice-fishing	☐	☐	☐	☐	☐
b. Conflict between fishing and other recreational uses (e.g., skiing, boating)	☐	☐	☐	☐	☐
c. Shooting and spearing of Northern Pike in Lake Champlain as currently permitted	☐	☐	☐	☐	☐
d. Commercial sale of angler-caught:					
perch	☐	☐	☐	☐	☐
crappie	☐	☐	☐	☐	☐
sunfish	☐	☐	☐	☐	☐
e. Fishing derbies / tournaments (other than "kids" derbies)	☐	☐	☐	☐	☐
f. Your ability to understand Vermont fishing regulations	☐	☐	☐	☐	☐
g. Access to fishing areas	☐	☐	☐	☐	☐
h. Contaminant levels in fish	☐	☐	☐	☐	☐
i. Crowding at fishing areas	☐	☐	☐	☐	☐
j. Recently adopted baitfish regulations	☐	☐	☐	☐	☐

39. Overall, how would you rate the present quality of fishing access areas in Vermont?

☐ Poor ☐ Fair ☐ Good ☐ Excellent

40. The Vermont Department of Fish and Wildlife strives to construct boat launches and fishing access sites that meet the needs of anglers. How important to you is it that these sites have the following:

	Not Important	Somewhat Important	Important	Very Important	No Opinion
a. Boat ramps	☐	☐	☐	☐	☐
b. Docks	☐	☐	☐	☐	☐
c. Fishing piers or other shore fishing opportunities	☐	☐	☐	☐	☐
d. Portable toilets	☐	☐	☐	☐	☐
e. Bulletin boards with information	☐	☐	☐	☐	☐

Please use the space below for any additional comments you may wish to make. (Attach additional sheets if needed).

Thank you for your time and effort!

To return this questionnaire, simply seal it with the white removable seal, and drop it in the mail (return postage has been provided).