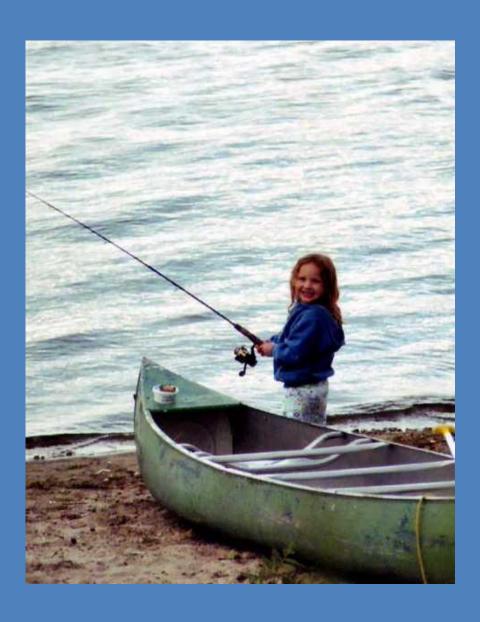
# LAKE CHAMPLAIN ANGLER STUDY

A study of the characteristics of Lake Champlain's licensed anglers.



Conducted by the Center for Rural Studies at the University of Vermont

# **Executive Summary**

#### Introduction

The 2013 Lake Champlain Anglers Study was developed by local stakeholders in their efforts to develop a greater understanding of the contributions Lake Champlain makes to our regional economy. The study provides information about Lake Champlain anglers' activities, visit patterns and spending characteristics- among other things. For example, 56% of respondents report that fishing is their primary reason for coming to the Lake Champlain area. Thirteen percent of Lake Champlain anglers that own property at or near the lake do so for fishing. And Lake Champlain anglers report fishing the lake or its tributaries an average of 46 times per year.

### **Project Background**

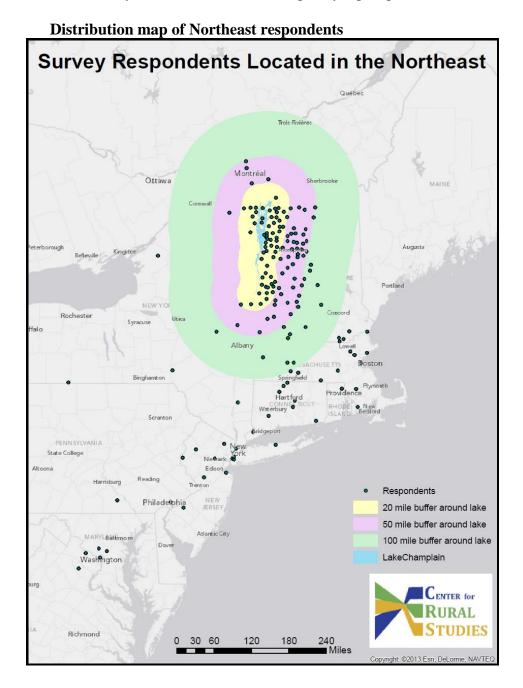
There are numerous challenges in attempting to capture all aspects of economic activity associated to Lake Champlain. Economic activity takes place in myriad forms ranging from overnight stays to spending on fuel and groceries, purchases of gifts, equipment and services and visits to parks, museums and attractions- for example. Because the lake borders New York, Vermont, and Quebec, visitors may access a range of goods and services and take part in activities within the political boundaries of two states and a Canadian Province.

These factors make it difficult to capture all lake-based economic activity in any one study. Acknowledging this challenge, a local stakeholder group opted to develop a research study with the University of Vermont's Center for Rural Studies that would focus on one specific group of relatively accessible Lake Champlain visitors: licensed anglers.

In fall 2013, the Center for Rural Studies contacted a random sample of licensed anglers from New York and Vermont. Within about three weeks 1,404 responses had been collected. Key findings include:

- Almost a third (31.4%) of respondents reported having fished Lake Champlain or its tributaries in the past year.
- Nearly 56% of those who had fished Lake Champlain reported that fishing was their primary reason for coming to the area.
- Thirteen percent of respondents that own a camp, timeshare or home near Lake Champlain identify "fishing the lake" as the primary reason for owning their property.
- Lake Champlain anglers reported fishing the lake or its tributaries, on average 46.5 times in 2012.
- The average angler reported spending \$88 on all expenses during a typical fishing day. This includes tourists and residents and their spending on durable (boats, equipment, etc.) and non-durable (food, bait, etc.) goods.
- 86.7% of respondents stated they would be "very likely" to fish on Lake Champlain again in the next year.

The impact of the "avid angler." During data analysis, it became apparent that one respondent group had a relatively large impact on the "average" results. Self-reported "avid anglers" generally reported much higher levels of spending and greater numbers of days spent fishing than other "non-avid" anglers. The analysis therefore pays special attention to the differences between "avid" anglers and those responding as "regular anglers" (who consider fishing a fun pastime on a regular basis), "occasional anglers" (who describe fishing as something done from time to time), and "one-time anglers" (who report fishing is rarely an activity of choice). Additional analysis is noted within the frequency report provided below.



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# **Frequency Report**

# **Angler Types and Frequencies**

This main section of this study assesses respondents' fishing habits and patterns, as well as their occasions for lake visits.

# Nearly one third of respondents fished the lake in the past year

Have you fished Lake Champlain or its Tributaries in the past year?	Frequency	Percent
Yes	441	31.4
No	963	68.6
Total	1404	100.0

<sup>-</sup> Specially-trained call center staff made up to three contact attempts on approximately 11,000 New York or Vermont licensed-angler phone numbers.

Those who didn't fish Lake Champlain most-often cited distance as a key reason

Is there a specific reason you did not fish Lake Champlain in the past year? (Categorized, open responses)	Frequency	Percent
No reason	48	5.3
Too far away, fish elsewhere/locally, different fishing type	586	65.0
No time	110	12.2
Infrequent or non-angler, one time/vacation angler	97	10.8
Water or fish quality concern/perception	21	2.3
Too expensive	17	1.9
No boat	9	1.0
Other reasons	13	1.4
Total	901	100.0

<sup>-</sup> Those that reported not having fished Lake Champlain in the past year were asked if there was a specific reason they had not. The overwhelming response was that the lake was too far away or that they fished closer to home.

- Given New York State's relatively large size, many New York respondents were located far from the Champlain Valley region.

More than half of anglers named fishing as their top draw to Lake Champlain

Was fishing the primary reason you came to the Lake Champlain area?	Frequency	Percent
Yes	243	55.6
No	194	44.4
Total	437	100.0

<sup>-</sup> The majority of respondents that had fished Lake Champlain in the past year stated that fishing was the primary reason they came to the area.

Existing connections to the region and lake characteristics most influence anglers' decisions to fish Lake Champlain

Of those for whom fishing <b>was</b> the primary reason:		
What drew you to come and fish Lake Champlain specifically?		
(Categorized, open responses)	Frequency	Percent
Ice fishing	8	3.4
Friend/family live close/have a camp/past history there	83	34.9
Fish (quality/size/variety), water (quality/size/boat access),	59	24.8
quality of the area	37	24.0
Specific fish types	40	16.8
A derby	20	8.4
Vacation, pleasure of fishing generally or invited	23	9.7
Other	5	2.1
Total	238	100.0

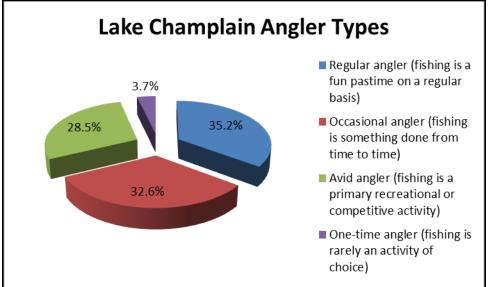
- Among those who came to Lake Champlain primarily to fish, 34.9% reported that having friends or family close by or past history in the area were factors that brought them here.
- Twenty-five percent of respondents (24.8%) mentioned characteristics of the fish, lake or area as factors contributing to their decision to come to specifically to Lake Champlain.
- Nearly 1 in 5 (17.8%) mentioned a specific type of fish as drawing them to Lake Champlain.

Most of those not here primarily for fishing are current residents

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Of those for whom fishing <b>was not</b> the primary reason:  What was the primary reason you came to the Lake Champlain area?  (Categorized, open responses)	Frequency	Percent
Current resident	101	52.3
Vacation, camping, other activities	39	20.2
Visit family/friends or previously lived here	45	23.3
Has a camp/boat here	8	4.1
Total	193	100

<sup>-</sup> Respondents that did not primarily come to the Lake Champlain area to fish were most often current residents fishing close to home, on vacation, visiting family or friends, or had previously lived here, among other reasons.





What type of angler would you consider yourself to be?	Frequency	Percent
A regular angler (fishing is a fun pastime on a regular basis)	152	35.2
An occasional angler (fishing is something you do from time to time)	141	32.6
An avid angler (fishing is a primary rec. and/or competitive	123	28.5
activity)	123	20.5
A one-time angler (fishing is rarely an activity of choice)	16	3.7
Total	432	100.0

<sup>-</sup> Responses were fairly-evenly distributed between "regular", "occasional" and "avid" identifying anglers. Only 3.7% of respondents counted themselves as "one-time" anglers.

- Analysis revealed that "avid" anglers reported significantly greater numbers of days fishing Lake Champlain, and also higher spending. Additional analysis of "avid" anglers as compared to all other anglers is included below for selected questions.

## Most anglers travel about 10 miles to fish

Approximately how many miles do you travel in order to fish on Lake Champlain?		
Mean (Average)	Mode (Most Frequent)	Sum (Total)
69 miles	10 miles	29,477 miles

<sup>-</sup> Respondents most frequently reported traveling about 10 miles to fish on the lake. This aligns with findings that most anglers seek fishing opportunities located near their homes.

Most fishing parties are between 2-3 people

On a typical fishing trip to Lake Champlain in the past year, how many people, including yourself, were in your party?	Frequency	Percent
1	28	6.5
2 (This is the Mode, Most Frequent)	135	31.1
3	122	28.1
4 (3.8 is the Mean, Average)	73	16.8
5	28	6.5
6	16	3.7
7	7	1.6
8	4	.9
9	1	.2
10	3	.7
12	8	1.8
14	1	.2
15 or more	8	1.7
Total	434	100.0

<sup>-</sup> The average fishing party consisted of 3.8 people, while 2 to 3 people in a party were more common.

Most respondents come for day trips

Which statement best describes your typical accommodations while fishing at Lake Champlain in the past year?	Frequency	Percent
I am a year-round resident that returns home when I'm done.	282	64.8
I stay with friends or relatives.	46	10.6
I stay at a hotel, resort or B&B.	22	5.1
I own a vacation house, camp or timeshare.	20	4.6
I stay at a State Park campground.	19	4.4
I rent a vacation house or camp.	18	4.1
I stay at a private campground.	16	3.7
I stay on a boat on Lake Champlain or its immediate tributaries.	12	2.8
Total	435	100.0

<sup>-</sup> The majority of respondents (64.8%) come to Lake Champlain as a day trip. About 11% stay with friends or relatives while here, while others utilize a range of overnight options.

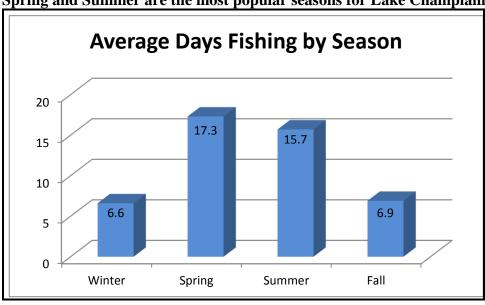
Other accommodations.
I don't need accommodations
On campers on the ice
Rent a camper

One in 8 anglers who own or rent lake property, do so primarily for fishing

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Of those who are year round or have a timeshare, camp, etc.: Is the main reason you own property at or near Lake Champlain so that you can fish there?	Frequency	Percent
Yes	37	13.0
No	247	87.0
Total	284	100.0

<sup>-</sup> Thirteen percent of licensed anglers that own property near Lake Champlain said they own this property primarily so they can fish the lake.

Spring and Summer are the most popular seasons for Lake Champlain anglers



Average number of days spent fishing by fishing type and season (calculation includes none).	Ice fishing the Lake	Ice fishing tributaries	Boat fishing the Lake	Boat fishing tributaries	Wading/shore fishing the Lake	Wading/shore fishing tributaries
Winter (January, February, March)	4.5	0.6	0.4	0.2	0.5	0.4
Spring (April, May, June)	NA	NA	6.4	2.6	4.8	3.5
Summer (July, August, September)	NA	NA	6.5	2.1	4.1	3.0
Fall (October, November, December)	NA	NA	2.3	1.0	1.9	1.7

Most Lake Champlain anglers prefer to fish by boat

Percent respondents reporting having fished at least one day by fishing type and season	Ice fishing the Lake	Ice fishing tributaries	Boat fishing the Lake	Boat fishing tributaries	Wading/shore fishing the Lake	Wading/shore fishing tributaries
Winter (January, February, March)	36.9	6.5	6.0	2.8	4.8	3.7
Spring (April, May, June)	NA	NA	59.3	31.0	44.3	31.7
Summer (July, August, September)	NA	NA	58.5	24.4	38.9	27.3
Fall (October, November, December)	NA	NA	27.5	11.3	22.2	18.1

<sup>-</sup> Boat fishing on the lake is the most prevalent type of fishing (59.3% Spring and 58.5% Summer) followed by wading or shore fishing the lake (44.3% Spring and 38.9% Summer).

The average Lake Champlain angler spent **46.5 days** fishing the Lake and its tributaries.

All anglers besides "avid" anglers reported spending an average of **29 days** fishing the Lake and its tributaries.

Most anglers take care to prevent invasive species spread

When fishing Lake Champlain:  Have you ever taken steps to ensure against the spread of water-borne invasive species such as cleaning or replacing your gear, removing organic materials, or any other measures?	Frequency	Percent
Yes	370	85.3
No	64	14.7
Total	434	100.0

<sup>-</sup> Over 85% of respondents reported having taken steps against the spread of invasive species at some point or other.

<sup>&</sup>quot;Avid" anglers reported spending an average of 89 days fishing the Lake and its tributaries.

# Slightly more anglers seek specific fish species

Did you fish for any type of fish or for a specific type or types of fish?	Frequency	Percent
Any type of fish	182	41.6
Specific fish	255	58.4
Total	437	100.0

<sup>-</sup> There was approximately a 60/40 split between those respondents who fish for a specific species of fish (58.4%), and those who fish for any species (41.6%).

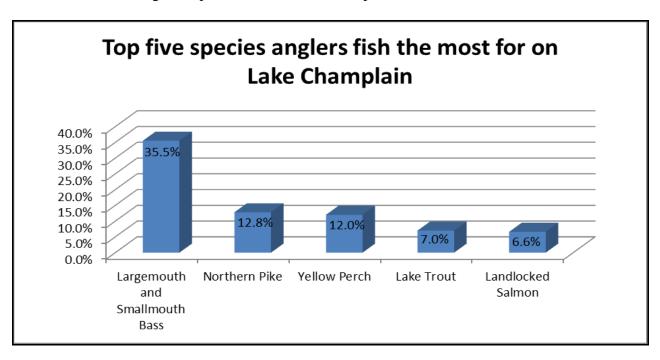
Largemouth or Smallmouth Bass & Northern Pike are the most commonly sought species

Of those who reported fishing for a specific type of fish: Select all types of fish you fished for on Lake Champlain in the past year.	Frequency	Percent
Largemouth/Smallmouth Bass	164	15.4
Northern Pike	115	10.8
Yellow Perch	88	8.3
Lake Trout	73	6.9
Brown Trout	62	5.8
Walleye	60	5.6
Steelhead/Rainbow Trout	57	5.4
White Perch	54	5.1
Rock Bass	47	4.4
Landlocked Salmon	47	4.4
Pumpkinseed/Bluegill Sunfish	42	4.0
Crappie	40	3.8
Bullhead (Bullpout)	39	3.7
Channel Catfish	39	3.7
Chain Pickerel	27	2.5
Bowfin	26	2.4
Muskellunge	13	1.2
Smelt	13	1.2
Carp	12	1.1
Freshwater Drum (Sheepshead)	11	1.0
Gar	9	0.8
Burbot (Ling, Cusk)	7	0.7
Suckers	7	0.7
Other:	6	0.6
Whitefish/Cisco	5	0.5
Total	1063	100.0

<sup>-</sup> Overall, the distribution of targeted species is quite broad; of those who fish for specific species, just over 15% report fishing for Bass, while almost 11% fish for Northern Pike.

Of those who selected a specific fish:  Which of these did you fish the most for on Lake Champlain in the past year?	Frequency	Percent
Largemouth and Smallmouth Bass	86	35.5
Northern Pike	31	12.8
Yellow Perch	29	12
Lake Trout	17	7
Landlocked Salmon	16	6.6
Rock Bass	11	4.5
Channel Catfish	11	4.5
Walleye	9	3.7
Brown Trout	8	3.3
White Perch	8	3.3
Crappie	5	2.1
Steelhead	4	1.7
Bullhead (Bullpout)	4	1.7
Pumpkinseed and Bluegill Sunfish	2	0.8
Bowfin	1	0.4
Total	242	100.0

<sup>-</sup> When asked to identify the species they spent the most time fishing for on Lake Champlain, 35.5% of licensed anglers reported Bass and 12.8% reported Pike.



# **Associated Activities and Spending Patterns**

The purpose of this section of the study was to better understand the patterns of anglers' activities while visiting Lake Champlain, as well as their overall spending on associated activities and items.

Most anglers choose a wide variety of activities beyond fishing

Please tell me:		Percent of	Percent of
Which of the following activities you took part in while	Frequency	all	all
at Lake Champlain in the past year.		activities	respondents
Wildlife viewing	253	13.1	57.4
Visiting restaurants, etc.	242	12.6	54.9
Hiking or walking	216	11.2	49
Visiting state parks or wildlife management areas	211	10.9	47.8
Swimming/water skiing/tubing	209	10.8	47.4
Recreational boating (for leisure)	202	10.5	45.8
Sight-seeing	199	10.3	45.1
Shopping	156	8.1	35.4
Visiting historic sites, museums or arts or science centers	113	5.9	25.6
Bicycling	88	4.6	20
Other:	38	2	8.6
Total	1927	100.0	N = 441

Note: Respondents could select multiple activities--which is why the total number in this response is greater than the number of respondents.

- Responses among categories are well-distributed, reflecting a variety of additional activities.
- Approximately half of all respondents reported taking part in all but a few activities.
- Nearly 55% of respondents patronize restaurants while fishing Lake Champlain, and over 35% report doing some shopping while fishing at the lake.

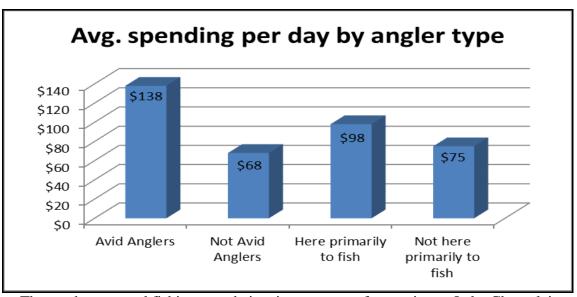
Hunting is the most popular self-reported, "other activity"

Trunting is the most popular sen-reported; other activity	
Other activities	Frequency
Baseball game	1
Camp bonfires/socializing, picnic	2
Camping	8
Drive-in movies	1
Fixing the camp/mowing lawn	1
Golf, tennis, marathon	4
Hunting (duck), trapping, frogging	14
Motorcycling	1
Photography	1
Scuba Diving	2
Snow skiing, boarding, shoeing	3

Anglers who come specifically to fish spend more - especially "avid anglers"

Angiers who come specifically to fish spend more – especially	aviu aligieis	
Estimated amount anglers spend on each item on a typical day at Lake Champlain.	Average (Mean)	By 46.5 days- (The Avg. number of reported angling days)
Fishing or water-sport equipment such as boat parts, bait, tackle, tubes, skis, life-vests, waders, etc.	18	837
Guide or Charter Services	2	93
Non-fishing or water sport apparel such as street clothes, shoes, etc.	5	232.5
Keepsakes or gifts including jewelry, artwork, or other mementos	2	93
Overnight lodging	5	232.5
Marina or Docking Fees	2	93
Tournament Fees	10	465
Entry fees to parks, museums and/or other points of interest	3	139.5
Vehicle or boat fuel	17	790.5
Groceries	9	418.5
Non-fishing or water sport equipment related to other activities you do while in the area	5	232.5
Restaurants	9	418.5
Boat, trailer, truck or related equipment rentals	1	46.5
TOTAL	88	4092

- All respondents reported spending an average of \$88 on all expenses during a typical fishing day. This includes spending on durable (boats, equipment, etc.) and non-durable (food, bait, etc.) goods.

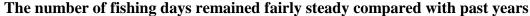


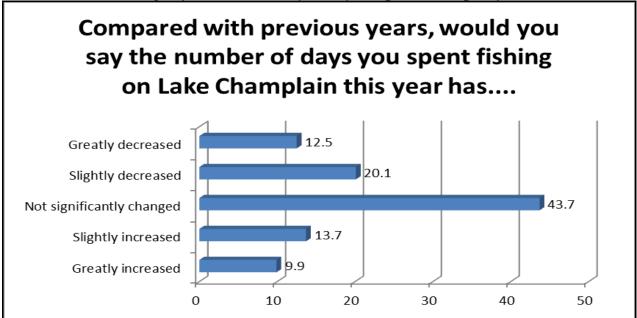
- Those who reported fishing was their primary reason for coming to Lake Champlain spend more (\$98/day on average), than those who did not come primarily to fish (\$75/day on average).

- "Avid" anglers reported spending an average of \$138 per day on all durable and non-durable purchases while all other types of anglers reported spending about half that amount (\$68/day).

# **Intentions for Future Visits**

This section of the study focused on understanding if and why respondents planned to return to the lake for subsequent fishing visits.





Compared with previous years, would you say the number of days you spent fishing on Lake Champlain this year has	Frequency	Percent
Greatly increased	42	9.9
Slightly increased	58	13.7
Not significantly changed	185	43.7
Slightly decreased	85	20.1
Greatly decreased	53	12.5
Total	423	100.0

- Nearly 44% of respondents reported the number of days spent fishing Lake Champlain had not changed significantly compared to previous years.
- Nearly one-third reported either a slight or great decrease in the number of days spent fishing the lake.
- Over 23% of respondents reported a slight or great increase in the number of days they spent on the Lake.

# Most anglers are "very likely" to fish on Lake Champlain again

Triose unglers are very interf to hish on Earlie Champain again		
What is the likelihood you will fish again on Lake Champlain in the next year?	Frequency	Percent
Very Likely	372	86.7
Somewhat Likely	25	5.8
Unsure, Don't Know	20	4.7
Somewhat Unlikely	5	1.2
Very Unlikely	7	1.6
Total	429	100.0

<sup>-</sup> Nearly 87% of respondents stated it was "very likely" they would fish again on Lake Champlain in the next year.

- Only 1.6% stated they were "very unlikely" to fish the Lake in the next year.

# Those who don't plan to return to fish did not cite the lake as a reason

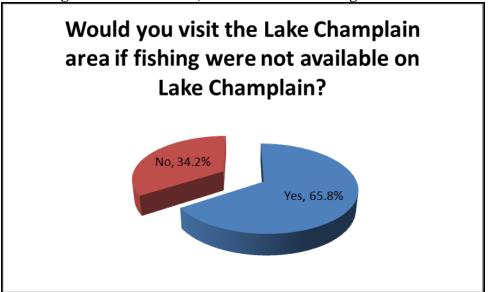
Those who don't plan to return to hish did not cite the lake as a reason				
Of those who responded somewhat or very unlikely:				
What is the main reason you are unlikely to fish Lake Champlain in the next year?				
Because of Triple E and West Nile disease				
Cleanliness				
I am moving				
I am unaware when the opportunity will happen				
I do not know if we will have our reunion there next year				
I live in Colorado right now				
Other places to visit/vacation- (3 responses)				
There are lots of other places to fish that are much closer				

# Those who were "unsure" if they would be back cited a variety of reasons

Of those who responded unsure:
Why are you unsure about whether or not you will fish Lake Champlain in the next year?
Because I have a baby on the way
Because I might sell the boat
Can't get a ride
Have a camp on another lake
Health issues
Unplanned at this time- (6 responses)
Work/schedule/available time conflict- (5 responses)
It depends on whether I have enough money to go
Lack of quality trout
Possibly moving to Florida
The weather, my health, the economy, and personal issues

- Only 1 respondent that reported being "unsure" if they would return to the lake reported a lake-specific reason ("Lack of quality trout").

If fishing were not available, about one third of anglers "would not return"



Hypothetically-speaking: Would you visit the Lake Champlain area if fishing were not available	Frequency	Percent
on Lake Champlain?		
Yes	98	65.8
No	51	34.2
Total	149	100.0

<sup>-</sup> Just over a third of Lake Champlain anglers (34.2%) reported they would not return if fishing were not available on the lake.

<sup>-</sup> This response rate correlates closely to the 28.5% of respondents that identified themselves as "avid anglers."

### **Demographics**

A limited amount of demographic information was collected during interviews.

And what is your: <i>Gender</i> .	Frequency	Percent
Female	74	17.7
Male	345	82.3
Total	419	100.0

2012 total household income before taxes.	Frequency	Percent	Census Percent- VT	Census Percent- NY
\$34,999 or less	89	24.1	32.2	32.9
Between \$35,000 - \$49,999	76	20.5	14.6	12.0
Between \$50,000 - \$74,999	65	17.6	20.1	17.0
Between \$75,000 - \$99,999	63	17.0	13.7	11.8
Between \$100,000 - \$149,999	43	11.6	12.5	13.8
Between \$150,000 - \$199,999	17	4.6	3.5	5.9
\$200,000 or more	17	4.6	3.4	6.6
Total	370	100.0	100.0	100.0

- Respondent's household incomes were generally in line with those of the overall population in VT and NY.

#### **Open Comments**

When prompted to provide additional comments or pose questions, anglers gave the following responses. Most common topics were: Water quality/runoff issues, fish availability, weeds/algae, invasive species, local regulations, and boat ramp maintenance.

#### Additional questions or comments regarding this research.

Is there anything they can do to prevent the algae in the lake? 2) Is there anything they can do to treat the Triple E virus? 3) Would like to see some more work be done to some of the launches which are not in good shape.

Concern about invasive species that have gotten into the lake. The quality of the lake downhill. We clean our gear to prevent the spread of stuff. Bait has gone up a lot, and the bass tournaments bring in lots of money but the runoff has deteriorated the quality of the lake. Fish quality has really gone down. Record run-off is a big concern now also.

During the winter fishing was poor because silverfish were frozen at the top and the fish weren't hungry. Zebra mussels have tripled in quantity. Lots of seaweed. I wouldn't want to swim or take my boat in certain areas.

FWS has been doing a great job since the flood. And I like it when you stock the river.

I always use the "law" book they provide to refresh my memory.

I don't know what they are doing at the hatcheries but the bass is bigger than it has been in years. Hope they keep it up.

I enjoy fishing on Lake Champlain and have no complaints.

I think they need to clean up the lake again from the weeds and stuff. This cuts down on the amount of fish we can catch.

I would like to see the trash picked up more often. There's trash at my normal fishing spot sometimes.

I'd like to be allowed to keep the bass when ice fishing.

Is there any way to control the seaweed on Lake Champlain? Do you do boat inspections before they enter the water?

It might be interesting to ask a question about whether anglers sell the fish they catch on Lake Champlain, and how much money they make.

It seems like there are no big bass in the lake because of the tournaments being held. Every time there is, there are lots of dead fish wash up on the shores, and this has to stop.

It was one of the best trips I have taken and I have no complaints.

Lake Champlain does a great job and stocking fish.

Lake Champlain should be a slot limit for Bass.

Lower the price for out of state fishing licenses, improve local boat ramps, advertise tourism more. Must improve the eco system. Not enough food for the fish to grow and develop.

Of all the other local states in the area Vermont is the only one that does not allow felt bottom boots, if the intent is to draw out-of-state anglers then they need to allow that option. It is upsetting that I have to have special boots or have to have my felt bottom boots specially cleaned. I would fish there more often if this wasn't such an issue.

Our state access needs to be better, boat launches need updated and better taken care of as well as taking care of the lake. New York is doing their part in taking care of the lake. But if Vermont would step up and start taking better care of the lake they would get more residents there to fish again.

Please clean up milfoil from the southern area of the lake. It seems as if the Northern area of the lake is cleaned up often but not the southern areas.

State of Vermont the boating ramps and parking are awful; compared to the New York side.

Take better care of boat accesses.

The bass fishing has declined. There are too many bass fishing tournaments.

The bass tournaments bring big boats to shallow areas and they are flying through there. I saw like 30 dead fish.

The lake is narrow near me (southern end) and it's very cloudy because of the boats.

The license fees are getting expensive. I would like to see what the health of the fishery for bass is for Lake Champlain.

The people who fish on the tributaries are probably different than people who take their boats out on the lake.

Too much debris in the lake even though they have received funds to clean it up.

Visit more if comparable fishing to Lake Ontario.

What is being done about the Lamprey Eel situation? Some years it seems as if the eels are under control and other years every fish I catch has eel marks.

Why does my fishing license cost more than my hunting license?

## **Angler Impacts Analysis**

There is great interest in utilizing the results of this study as the foundation for quantifying the total impact of Lake Champlain anglers on the regional economy. The researchers, at the request of the project stakeholders, are happy to make additional calculations outside the parameters of this study, though it must be noted that these calculations should not be considered exact- by any means. The researchers have taken steps to provide conservative estimates along each step of this assumptive process. These steps are clearly described.

According to the 2013 angler study, 31.4% of primarily Vermont-licensed respondents reported fishing Lake Champlain in 2012. If we apply this statistic to the 2012 population of approximately 119,000 licensed Vermont anglers (half of the "lifetime" licensee population was removed from the total (650), as were all duplications), we might conclude that approximately 37,000 (37,366) licensed VT anglers fished Lake Champlain at some point in 2012.

Assuming that approximately 37,000 licensed VT anglers fished Lake Champlain in 2012, we can apply the calculated average number of days and average expenditure per angler to this number to begin calculating estimated totals.

Due to the upward-skewing effect of self-reported "avid" anglers, the researchers have opted to utilize calculations that have removed self-reported "avid" angler data from the averages.

All anglers besides "avid" anglers reported spending an average of 29 days fishing the Lake and its tributaries. If 37,000 VT licensed anglers reported spending an average of 29 days fishing the Lake, then they spent a total of 1,073,000 days on Lake Champlain or its tributaries in 2012.

"Non-avid" VT licensed anglers reported spending an average of \$68/day on all durable and non-durable expenses while fishing Lake Champlain or its tributaries. Multiplying this number by the total number of days spent fishing results in an estimated total of \$72,964,000 in licensed Lake Champlain angler spending in 2012.

# Methodology

The sampling frame for this study was comprised of anglers licensed by either Vermont or New York states in 2012. Random samples of valid licensees were pulled from the licensee databases of each state. Potential respondents were contacted using the telephone numbers they provided when obtaining their license. Calling took place between September 25<sup>th</sup> and October 17<sup>th</sup> on weekdays and weekends between the hours of 8am and 8pm. A total of 1,404 valid responses were completed for the study. Of these, 31.4% (441) respondents reported having fished Lake Champlain or its tributaries within the past year.

### **Outreach Overview**

#### **Vermont Outreach Statistics**

- Approximately 7,200 phone numbers were called.
- 16.9% of those who answered the phone responded to the survey.

#### New York Outreach Statistics

- Approximately 3,589 phone numbers were called.
- 2.3% of those that answered the phone responded to the survey.

## **Study Limitations**

The study utilized random samples of licensed VT and NY anglers. New York's large geographical size and proximity to numerous large bodies of water made it difficult to obtain responses from NY-licensed anglers who had fished Lake Champlain. These study results are primarily composed of VT-licensed angler's responses.

Collaboration with partners from the Province of Québec was suggested at the onset of this study, but was not possible due to complexity and limited scope of the project. The Québecois certainly represent a sizable component of Lake Champlain based tourism/anglers, so future research should attempt to capture this segment's contribution to economic activity.