

# **Survey of Angler Attitudes and Opinions Regarding Muskellunge Fishing and Management in Wisconsin**

**2010-11**



**Daniel Isermann and Kristin Floress  
College of Natural Resources  
University of Wisconsin-Stevens Point**

**Timothy Simonson  
Wisconsin Department of Natural Resources**

**This survey was funded by a grant from the Hugh Becker Foundation which was administered by Muskies, Inc.**



## **Objective**

Our primary objective was to assess current angler attitudes and opinions regarding muskellunge fishing and management in the state of Wisconsin. Similar surveys were conducted in 2000 and 1990 and we wanted to maintain the continuity of conducting the survey at approximately 10-year intervals. Many of the questions from the previous survey (2000) were maintained in order to ascertain temporal trends in angler opinions regarding certain topics. New questions were added to the survey to determine angler methods used to present live baits when fishing for muskellunge, frequency of guide use, willingness to purchase a musky stamp, and support for mandatory harvest reporting for muskies in Wisconsin.

## **Methods**

In February 2011, we sent notification packets to individuals in each of the following three categories: 1) resident anglers; 2) non-resident anglers and 3) members of Wisconsin musky clubs. Notification packets were sent to 1,500 resident anglers and 1,500 non-resident anglers that were selected at random from all anglers that had purchased a Wisconsin fishing license during 2010. Contact information for musky club members was provided by Muskies Inc., or by individual clubs. All members (N = 1,184) on the list that we were provided received a notification packet. Notification packets included a unique code that would allow the individual to access the survey at [surveymonkey.com](http://surveymonkey.com).

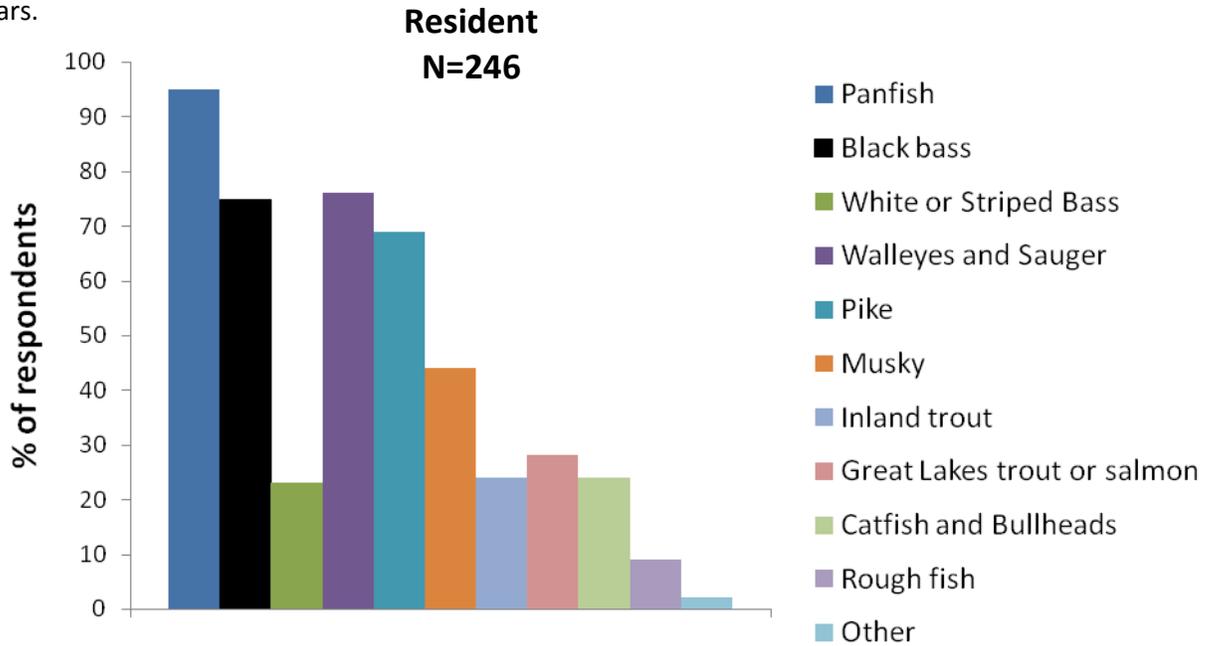
## **Results**

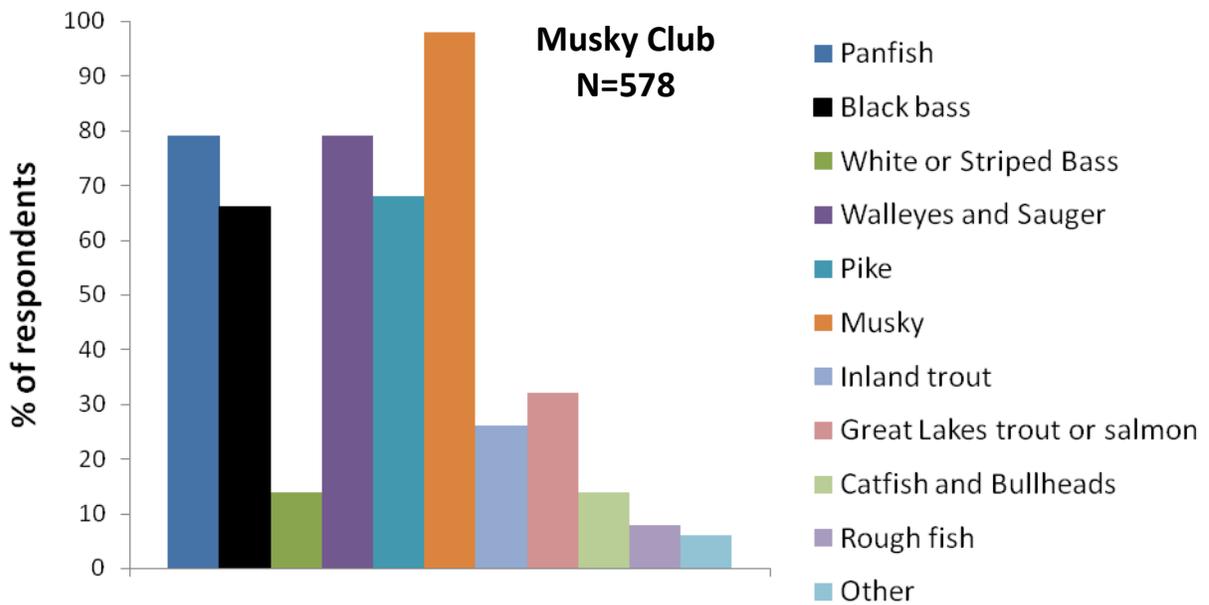
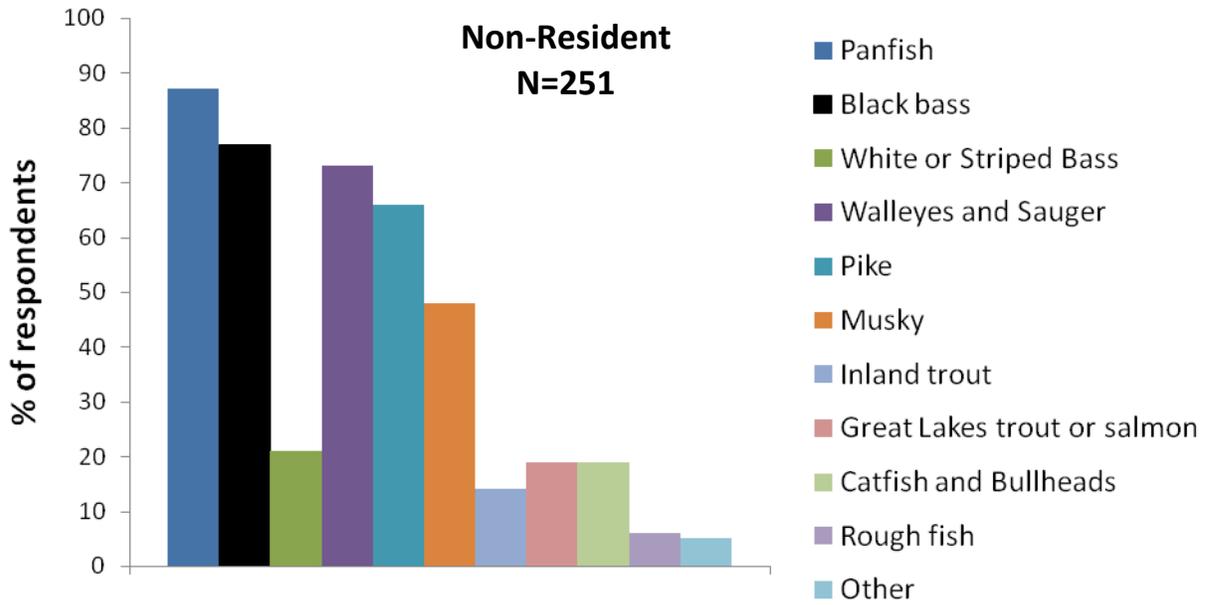
One hundred and sixty-six notification packets were returned as undeliverable: 66 residents, 84 non-residents, and 16 club anglers. We received completed surveys from 246 resident anglers (17% response rate), 251 non-resident anglers (18% response rate), and 578 musky club members (49% response rate). Results from individual questions are presented in sequential format on the following pages. In many cases respondents were not required to answer certain questions or they did not answer specific questions or answered them incorrectly. Consequently, the number of responses is reported for individual questions.

## SECTION I: FISHING PREFERENCES AND FREQUENCY

### 1) What types of fish have you fished for in the past five years?

- Less than half (44-48%) of licensed anglers (resident and nonresident) reported fishing for muskellunge in the last five years. Nearly all musky club anglers (98%) indicated they had fished for muskellunge in the last five years.

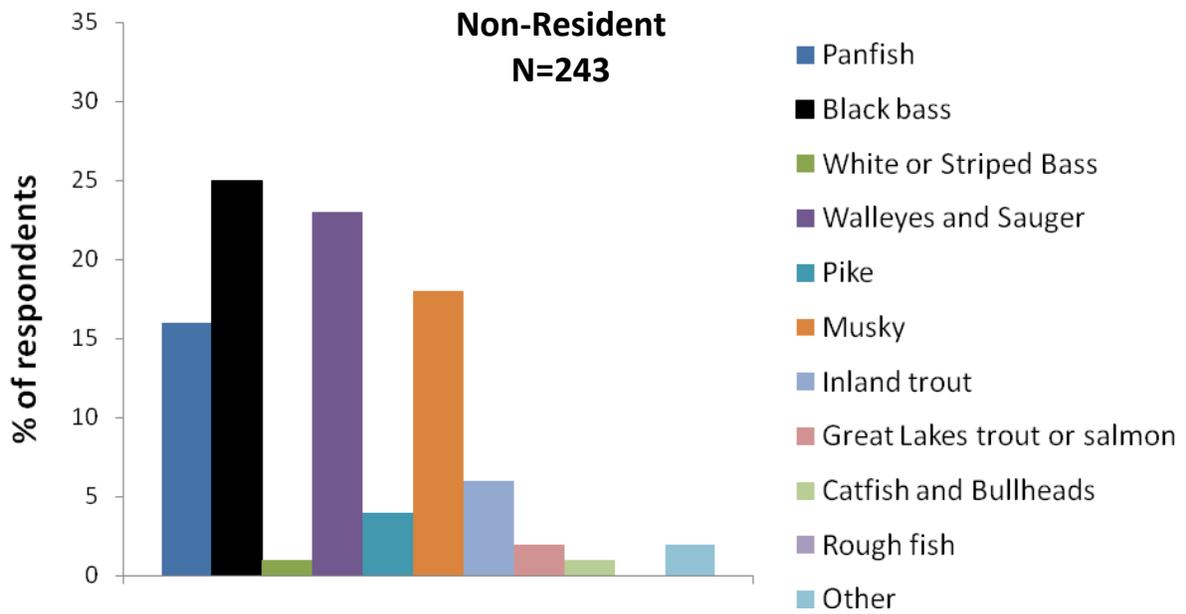
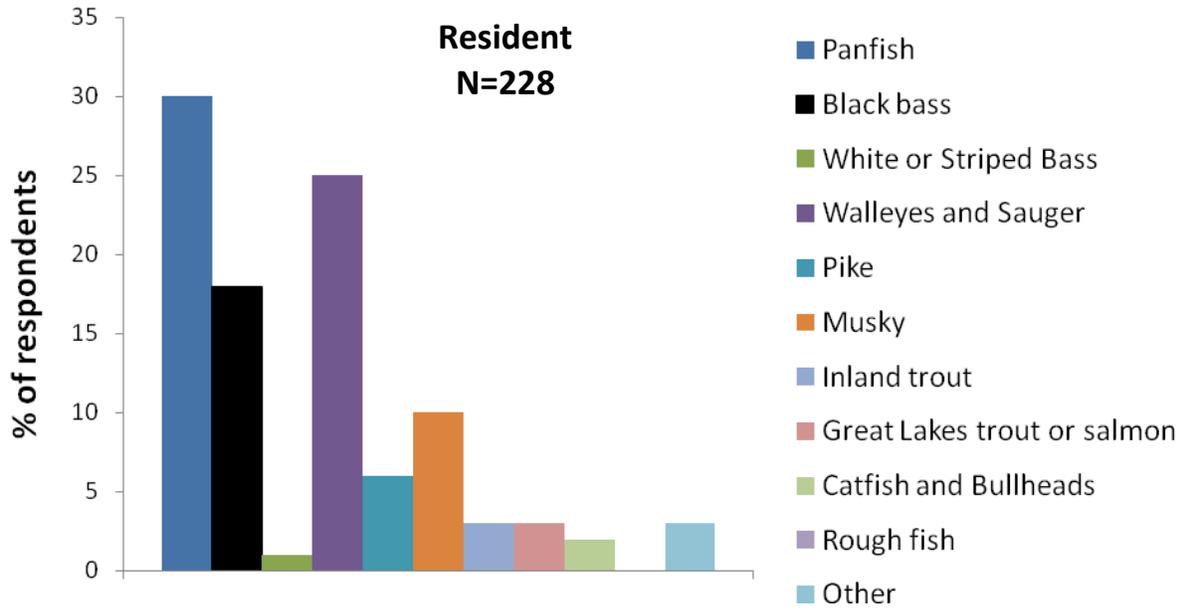




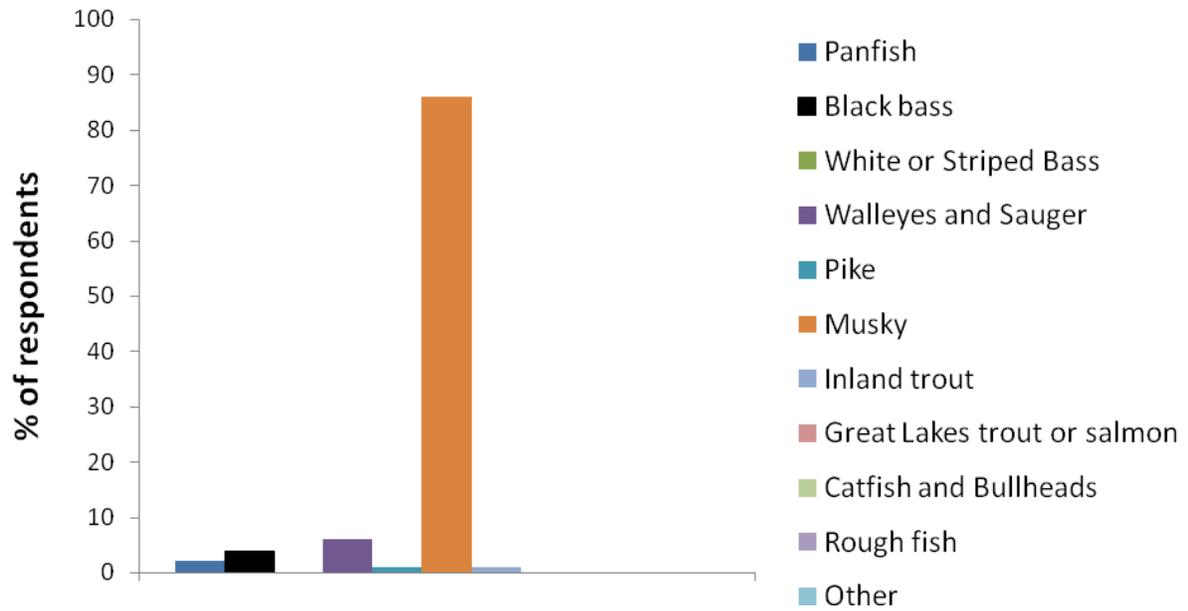
Other fish listed by anglers included burbot, sturgeon, whitefish, various marine species, and salmon or trout in locations other than the Great Lakes

**2) From Question 1, which is your favorite fish to fish for?**

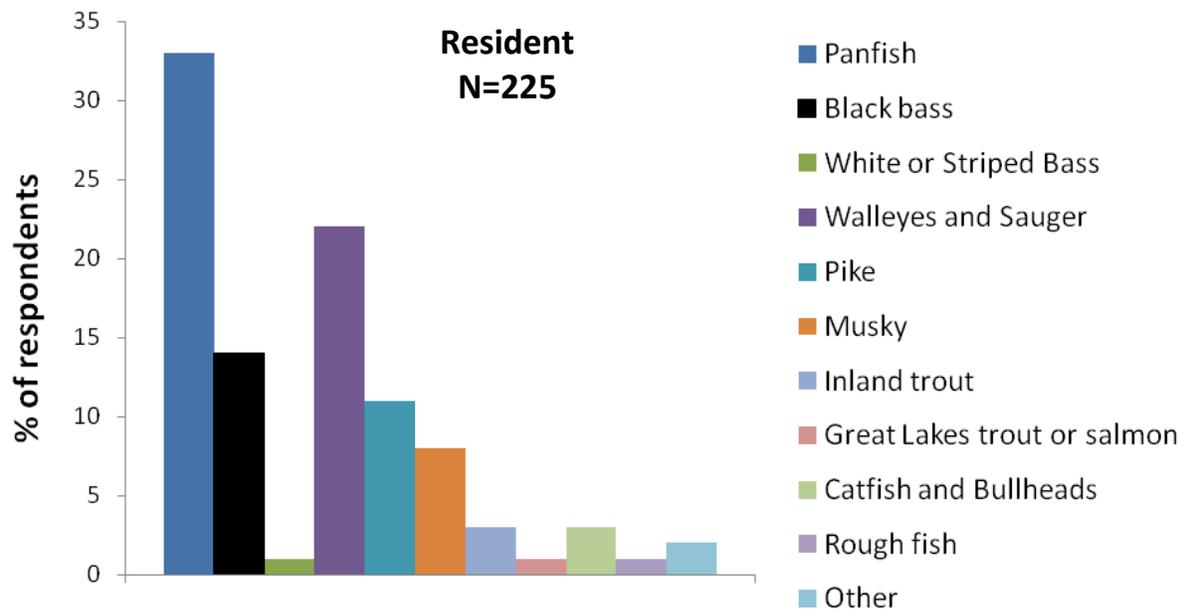
- More than 85% of musky club anglers reported that muskellunge were their favorite fish to fish for, compared to 10% for resident anglers and 18% for non-resident anglers.

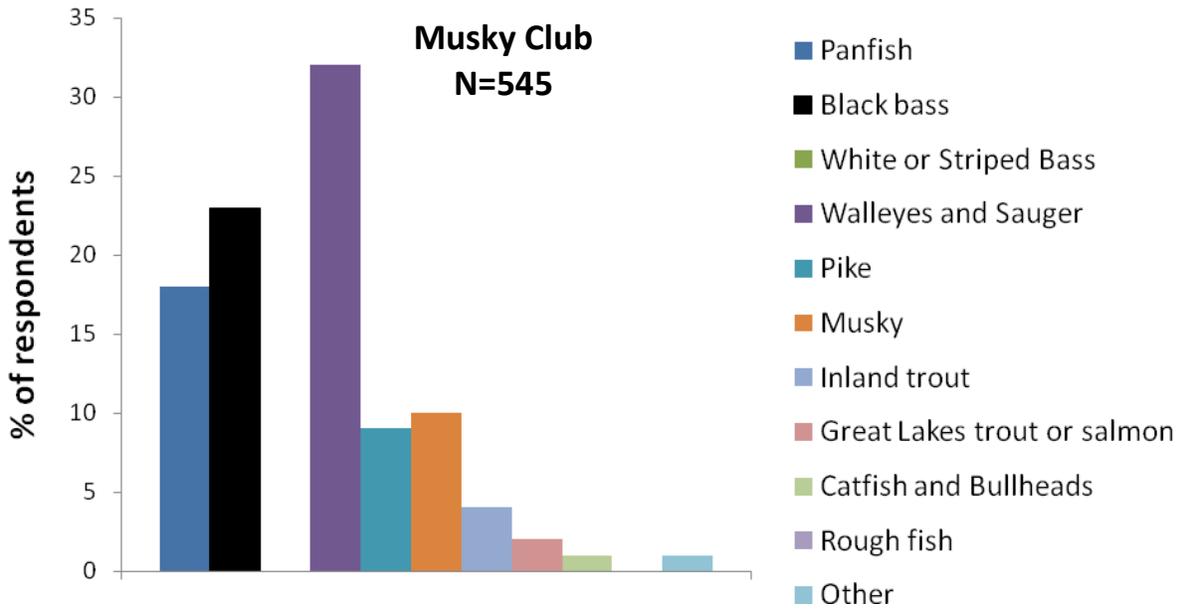
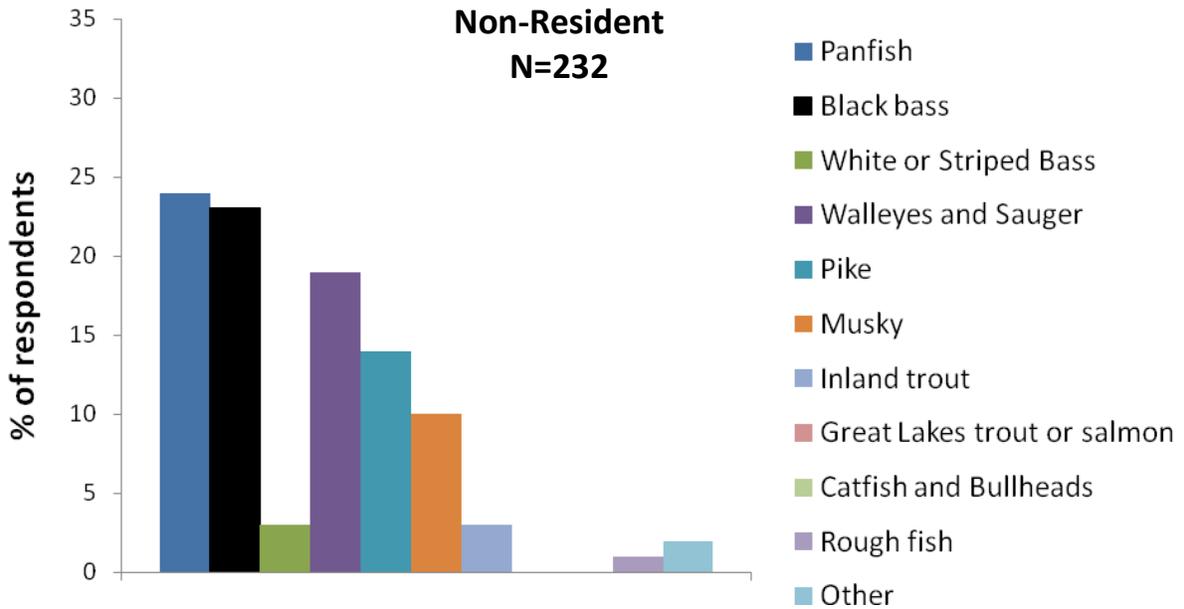


**Musky Club  
N=565**



**3) From Question 1, which is your second favorite fish to fish for?**



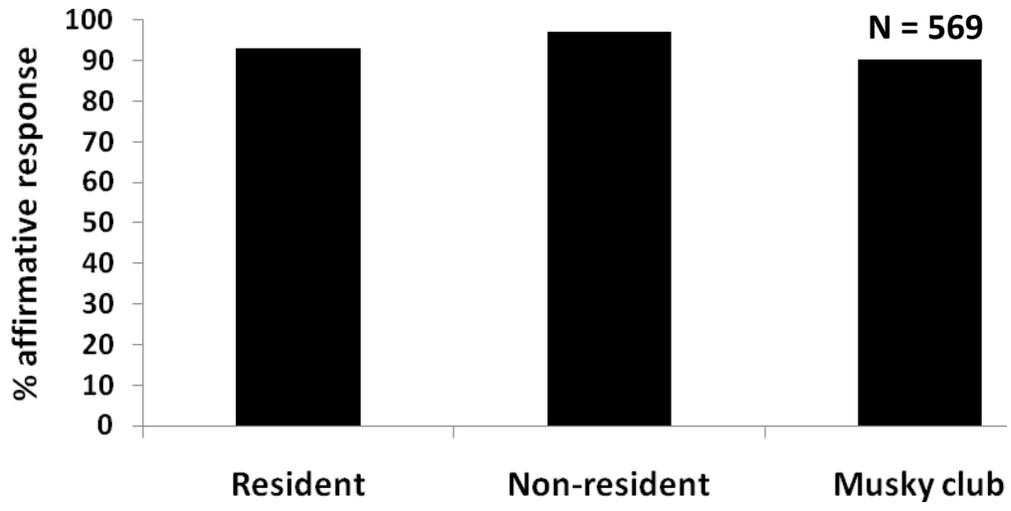


**4) Did you fish in Wisconsin or any other place during 2010?**

- More than 95% of respondents in all 3 angling groups reported fishing at least once during 2010.

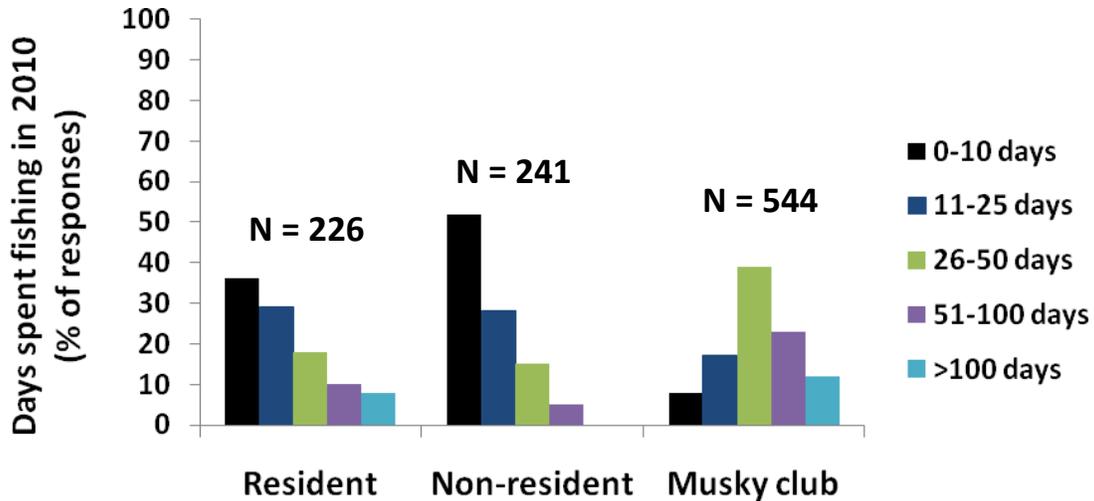
**N = 244**

**N = 250**



**5) Approximately how many different days during 2010 did you spend at least part of the day fishing in the state of Wisconsin?**

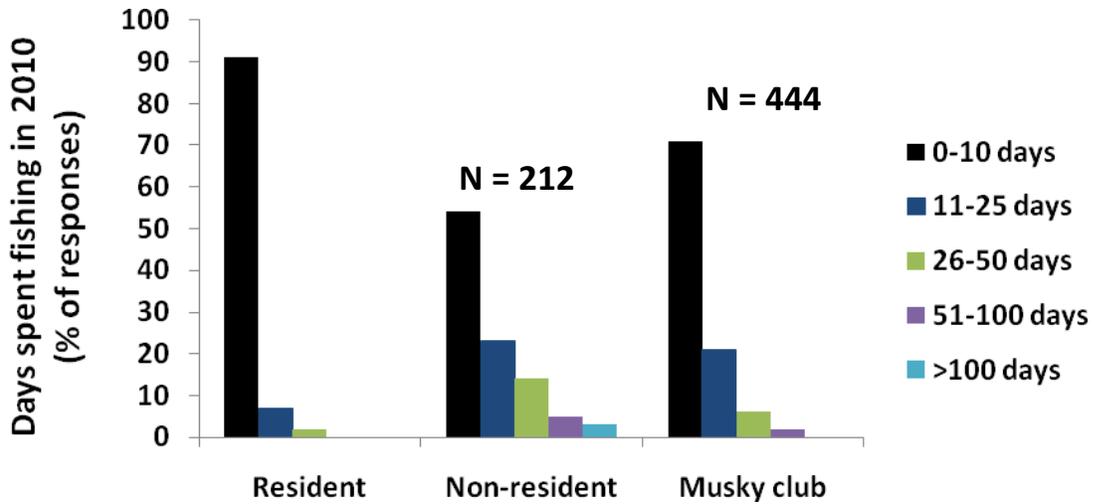
- Most resident and nonresident anglers reported fishing between 0 and 25 days in the state of Wisconsin in 2010, while most musky club anglers reported fishing more than 25 days in the state of Wisconsin.



**6) Approximately how many different days during 2010 did you spend at least part of the day fishing outside the state of Wisconsin?**

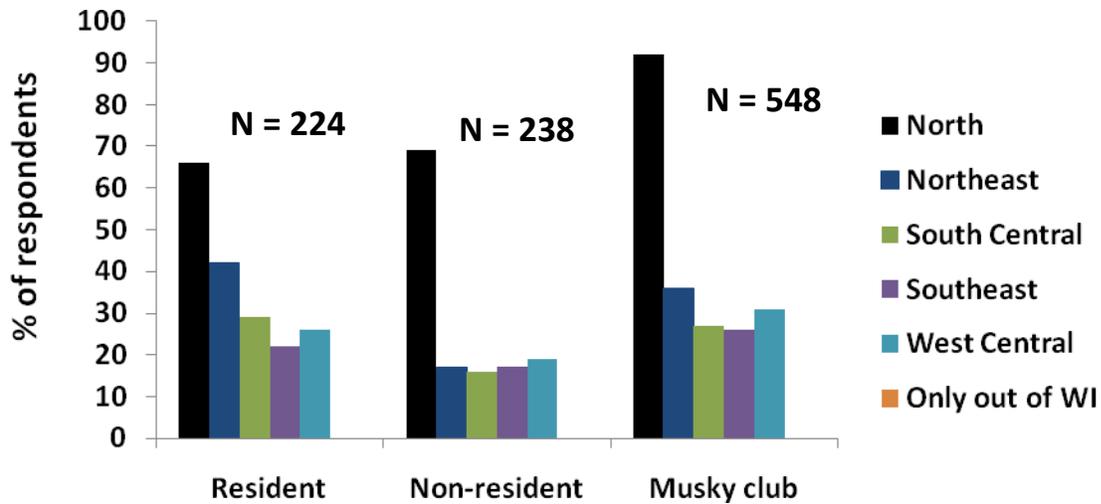
- The majority of anglers in all three groups reported fishing 0-10 days outside the state of Wisconsin in 2010.

**N = 151**

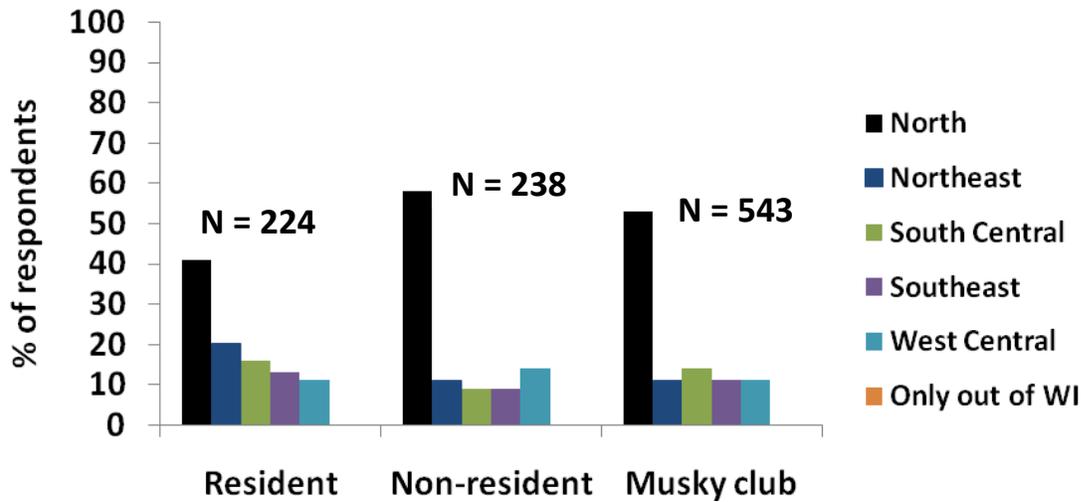


7) In which of the areas (i.e., DNR regions) did you fish in 2010? A map of Wisconsin depicting DNR regions was provided and respondents were asked to circle all regions that applied.

- Survey respondents reported fishing in all five DNR regions within the state; however, anglers in all three groups reported doing most of their fishing in the Northern Region.

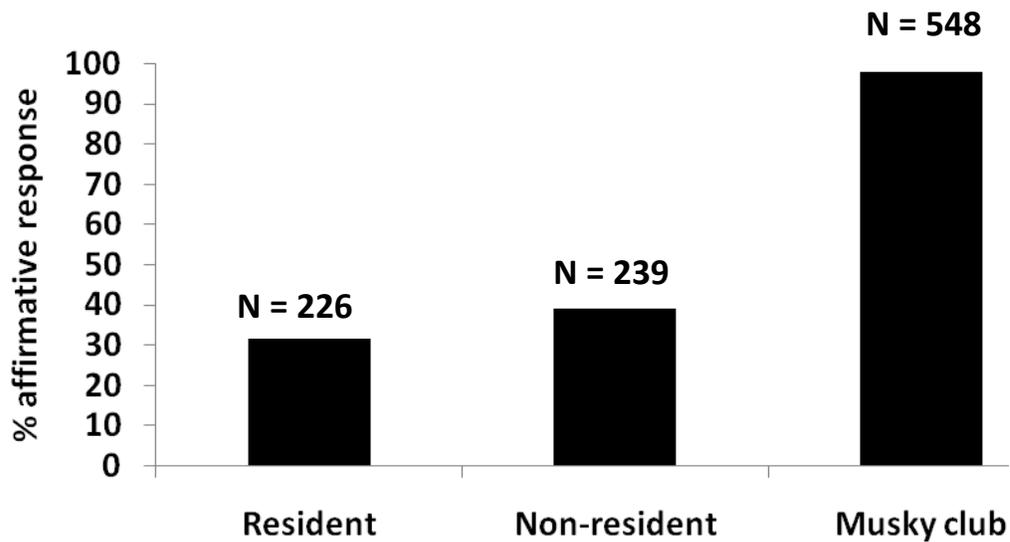


8) In which one area of those listed above did you fish most often?



9) During 2010, did you do any fishing in Wisconsin specifically for musky?

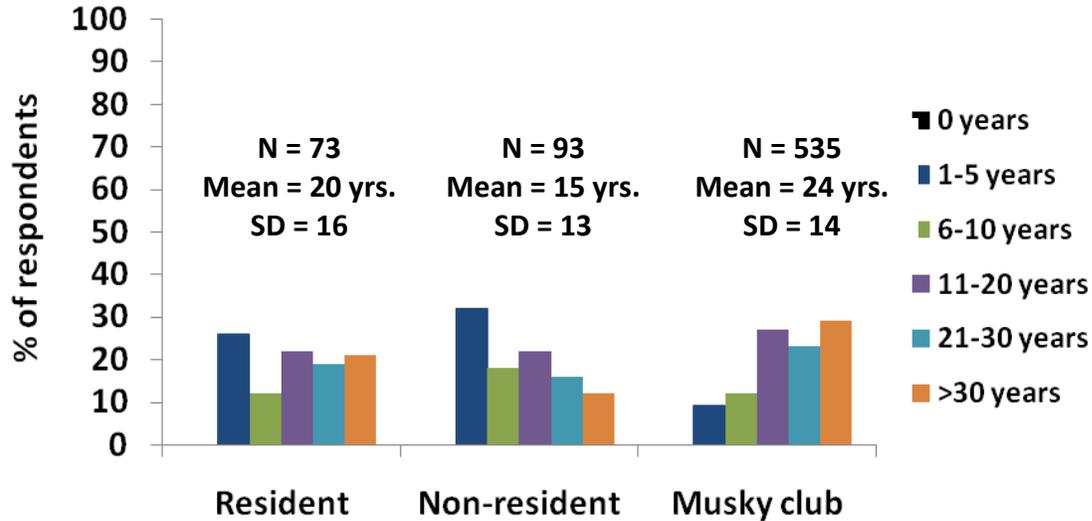
- Less than 40% (32-39%) of resident and nonresident anglers reported fishing for muskies in 2010, while 98% of musky club anglers fished for muskies in 2010.



SECTION II: MUSKELLUNGE FISHING IN WISCONSIN: FREQUENCY, RESULTS, AND EXPERIENCE

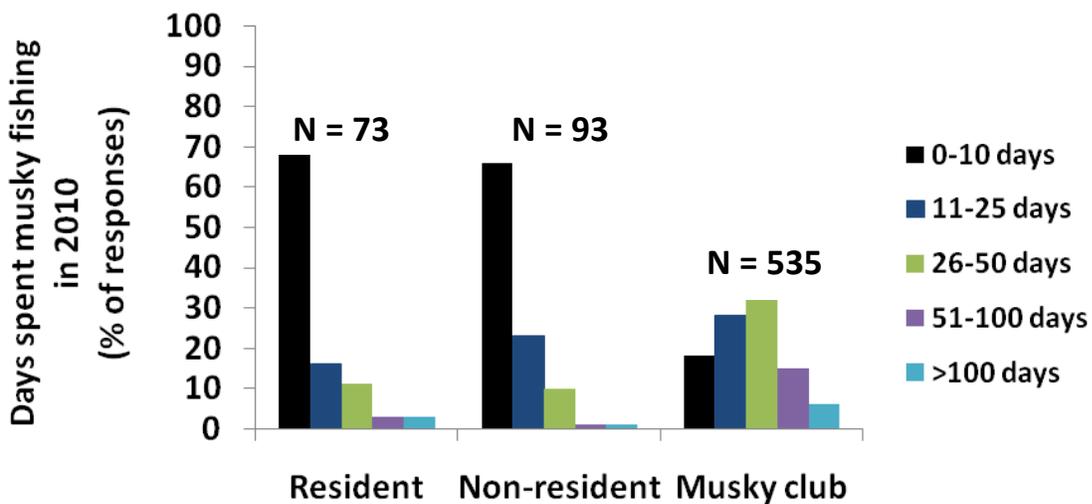
**10) About how many years have you been fishing for musky in Wisconsin?**

- On average, musky club anglers reported that they have been fishing for muskies in Wisconsin longer (mean = 24 years) than resident (mean= 20 years) and nonresident anglers (mean = 15 years).



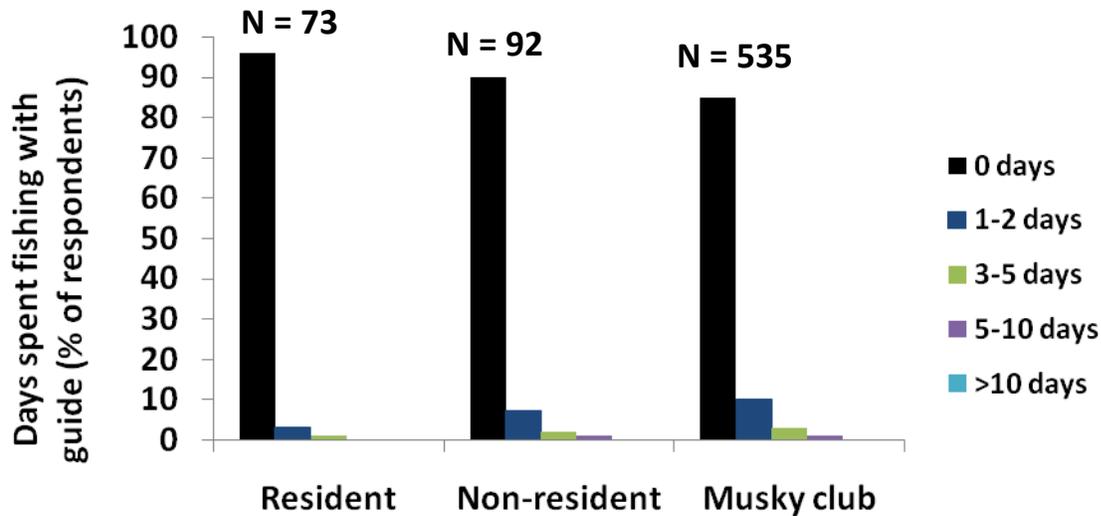
**11) Approximately how many different days during 2010 did you spend at least part of the day fishing for muskellunge in Wisconsin?**

- The majority of musky club anglers reported fishing for muskies on greater than 10 days during 2010, while resident and nonresident anglers generally spent 10 days or less fishing for muskies.



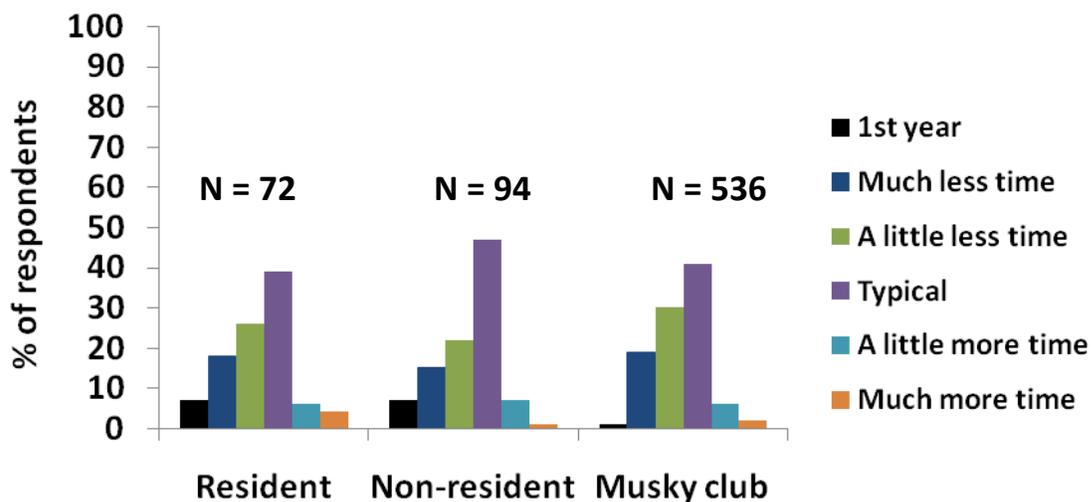
**12) Of those days spent fishing for musky, how many days did you pay to fish with a licensed guide?**

- For all three groups, most anglers (85-96%) did not musky fish with a licensed guide during 2010. Musky club members reported fishing with a licensed guide slightly more often (15% of respondents) than resident and nonresident anglers (4-10% of respondents). Most anglers that did fish with a guide did so on 5 days or less.



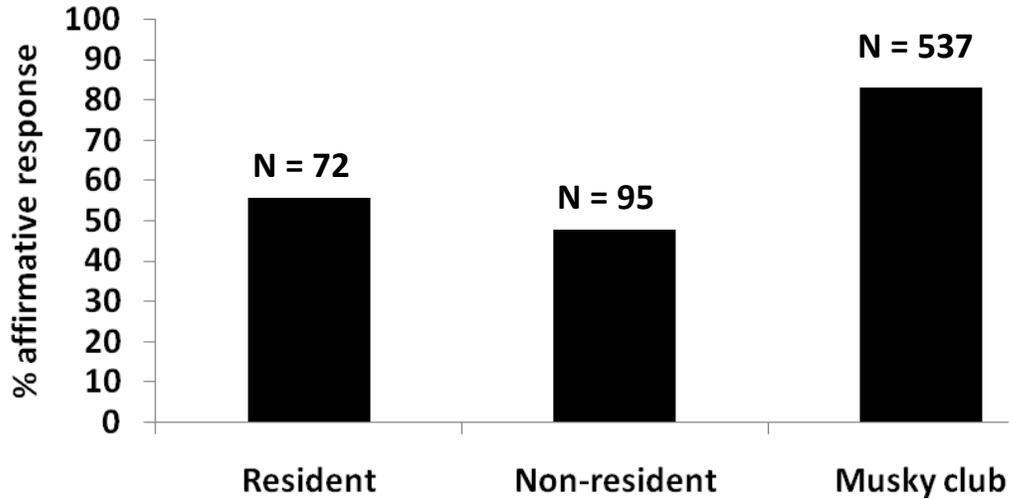
**13) During 2010, how much time did you spend fishing for muskies in Wisconsin when compared to a typical season for you?**

- Less than 10% of the survey respondents in all three angler groups indicated that 2010 was their first year of musky fishing. Between 39-47% of respondents in the three angler groups reported that 2010 was a typical year in terms of the amount of time they spent musky fishing, while 37-49% of respondents reported that they fished for muskies less in 2010 than during a typical season. Only 8-10% of anglers reported that they spent more time fishing for muskies in 2010 in comparison to a typical season.



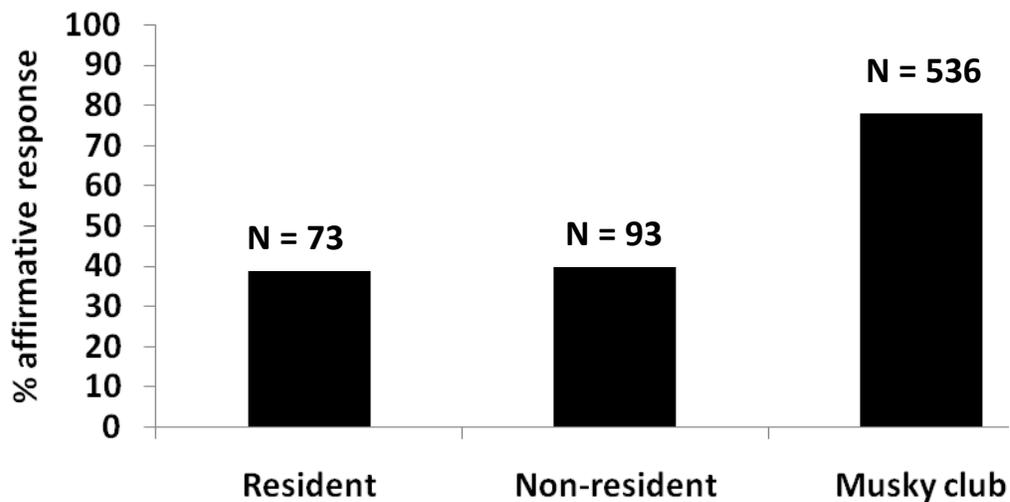
**14) Did you catch a musky in Wisconsin during 2010?**

- 48-56% of resident and nonresident anglers that fished for musky in Wisconsin during 2010 reported catching a musky, compared to 83% of musky club anglers.



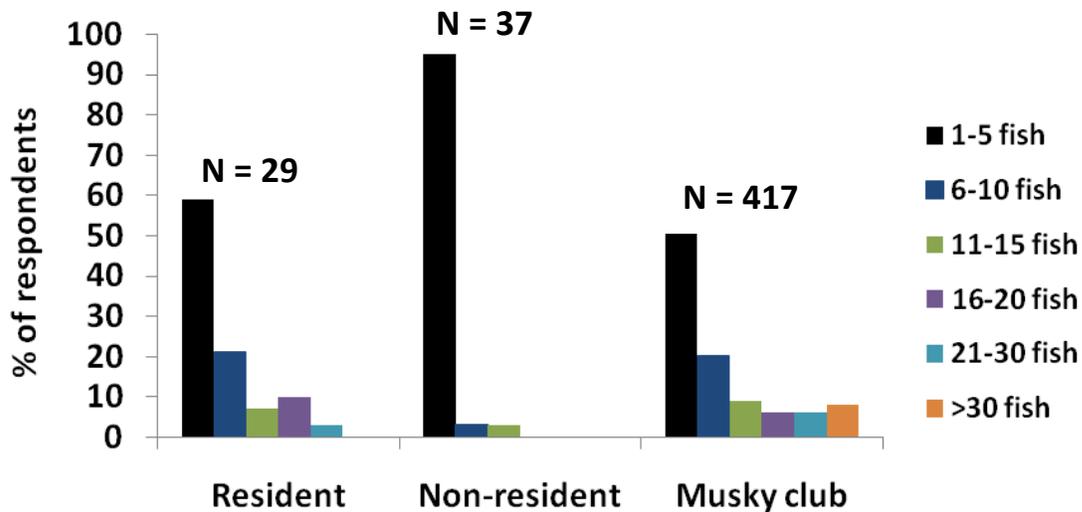
**15) During 2010, did you catch a musky over 32 inches in the state of Wisconsin?**

- 40% of resident and nonresident anglers that fished for musky in Wisconsin during 2010 reported catching a musky  $\geq$  32 inches in length, compared to 77% of musky club anglers.



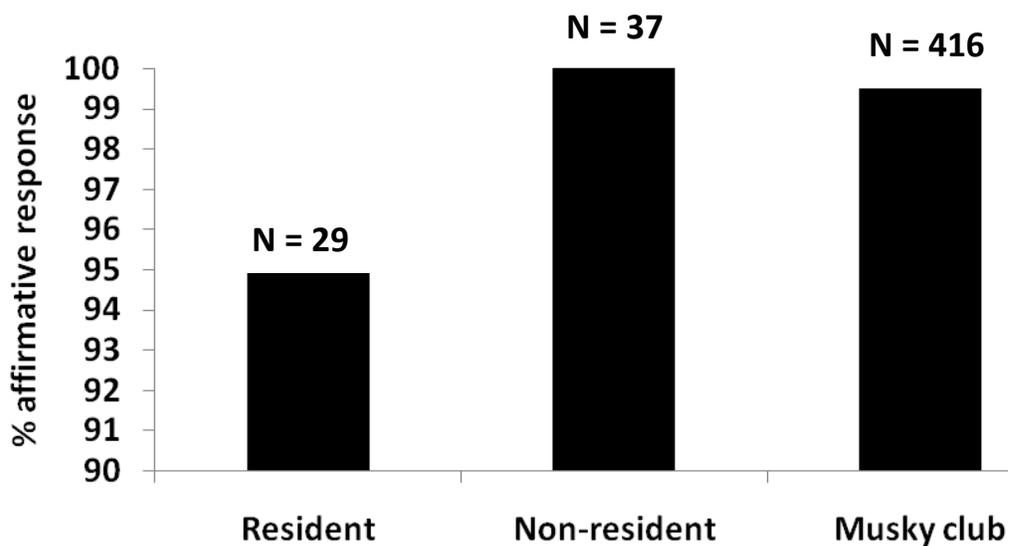
**16) How many muskies larger than 32 inches did you catch in Wisconsin during 2010?**

- More than half of the respondents within each angling group (51-95%) reported catching 5 or fewer muskies  $\geq 32$  inches in length. Musky club anglers reported catching more fish  $\geq 32$  inches TL than resident and nonresident anglers.



17) Of those muskies larger than 32 inches that you caught in Wisconsin during 2010, about how many did you release? We converted responses to this question into release rates (%) for each respondent based on the number of muskies larger than 32 inches they reported catching in question 15. We then calculated mean release rates for each category of anglers.

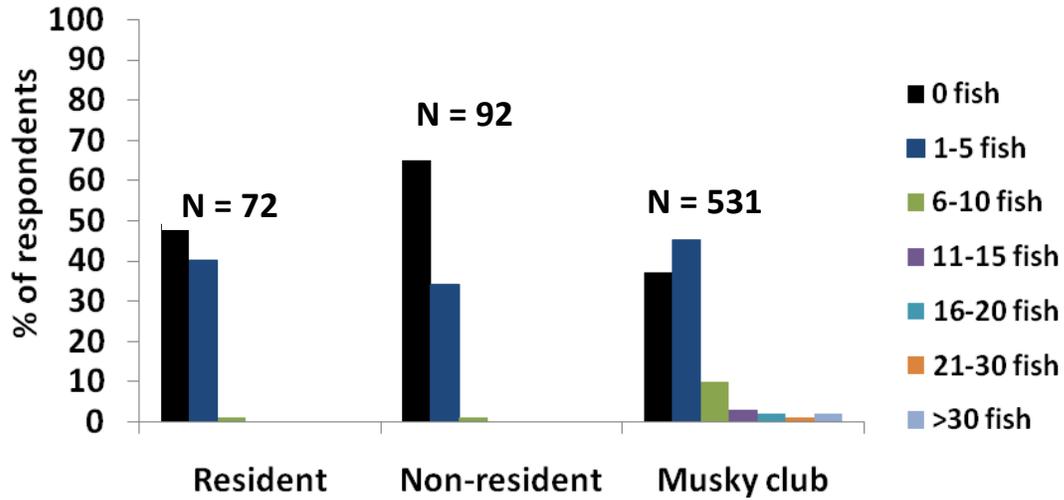
- Respondents in all three angler groups released  $\geq 95\%$  of the muskies  $\geq$  they caught during 2010.



**Of the 416 musky club anglers that responded to this question only 3 anglers reported keeping fish. One musky angler did not release 2 of the 50 fish caught over 32" in 2010. One musky club angler reported keeping all 10 fish he or she caught during 2010 and another angler reported keeping all 4 fish they caught during 2010. These could have been incorrectly entered by the respondents. One resident angler reported keeping 2 of the 3 muskellunge they caught in 2010.**

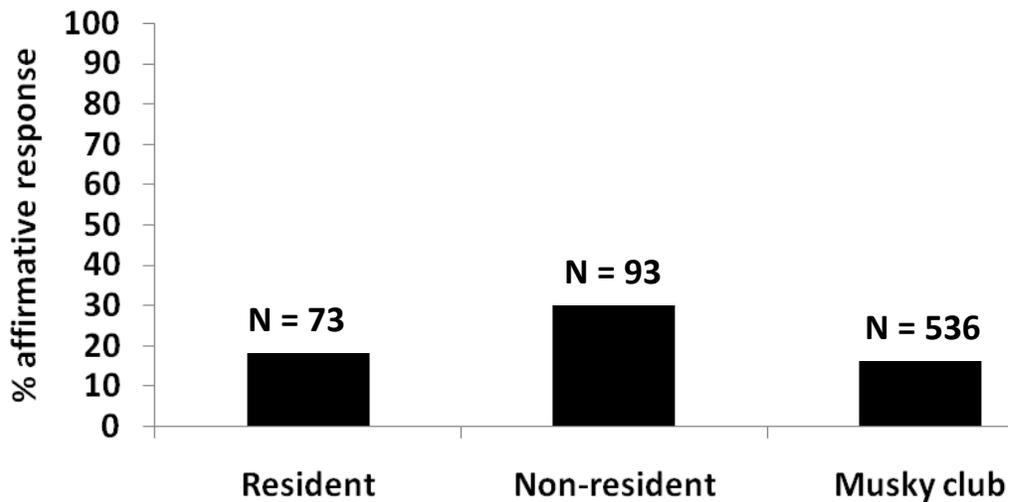
**18) Approximately how many muskies less than 32 inches did you catch in Wisconsin during 2010?**

- Respondents in all three angler groups reported catching  $\leq 5$  fish that were less than 32 inches in length during 2010.

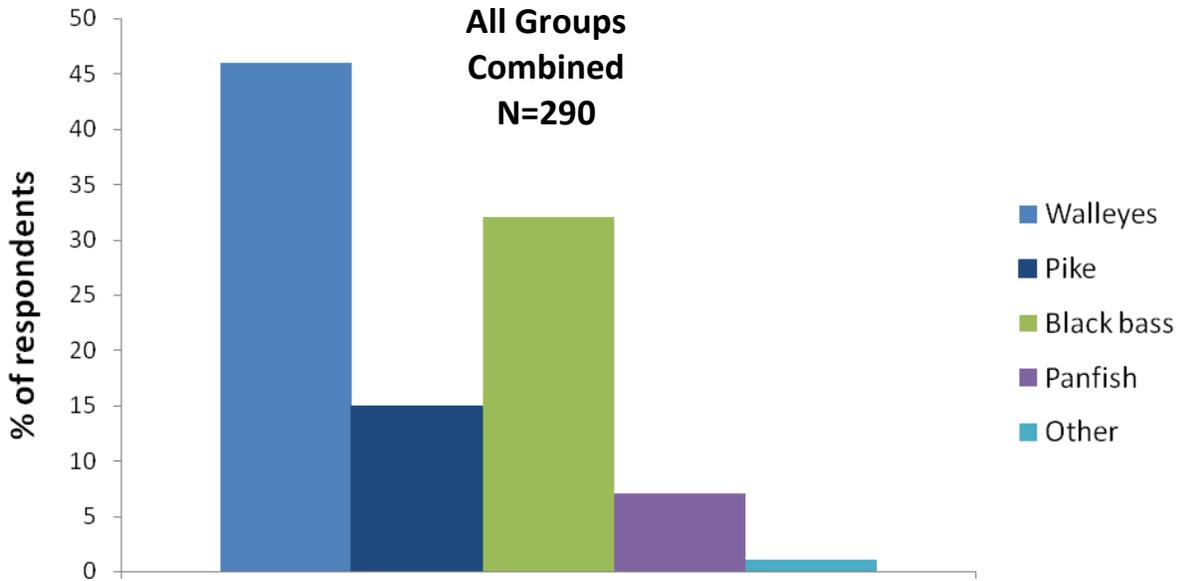


**19) Did you catch any muskies in Wisconsin during 2010 while fishing for other types of fish?**

- Between 19 and 32% of survey respondents reported catching a musky while fishing for another type of fish; most of these fish (46%) were caught while fishing for walleyes.

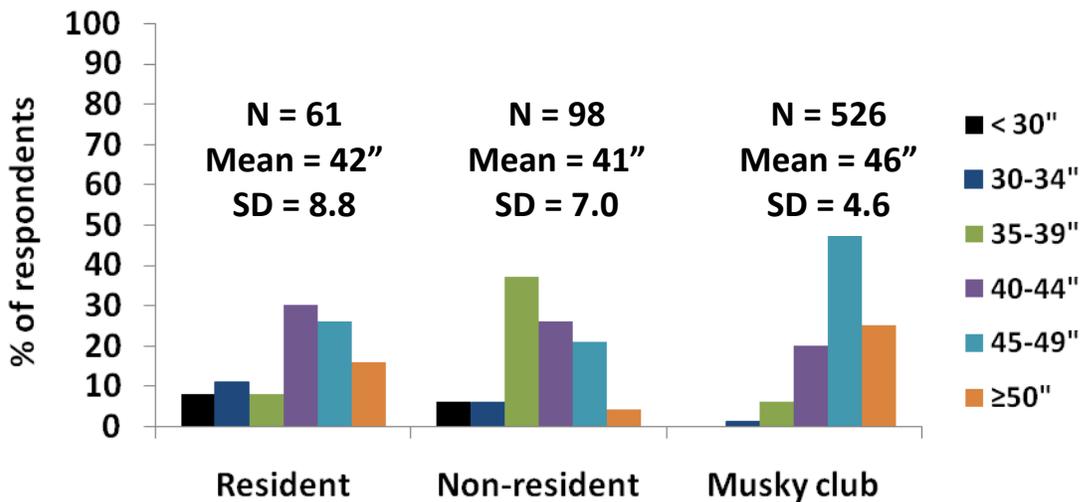


20) What type(s) of fish were you fishing for when you caught a musky?



21) Approximately how many inches long was the largest musky you have ever caught in Wisconsin?

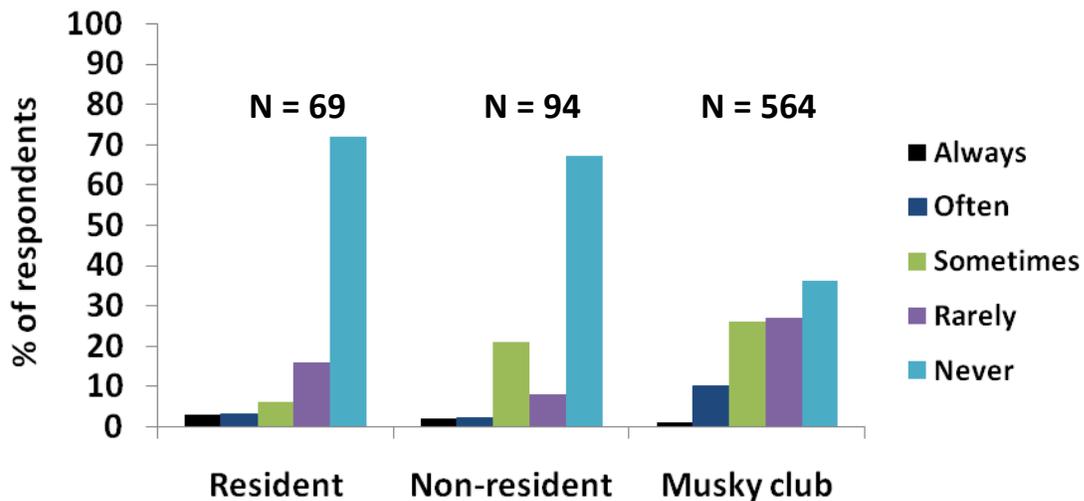
- More than half (57-75%) of resident and nonresident anglers reported that the largest musky they have caught in Wisconsin was <45 inches in length, while 73% of musky club anglers reported that their largest Wisconsin musky was  $\geq 45$  inches in length. On average, the largest muskellunge caught by resident and nonresident anglers were 41 and 42 inches in length, respectively, while the mean length for musky club anglers' largest Wisconsin musky was 46 inches.



### SECTION III: MUSKELLUNGE FISHING IN WISCONSIN: TROLLING AND LIVE BAIT

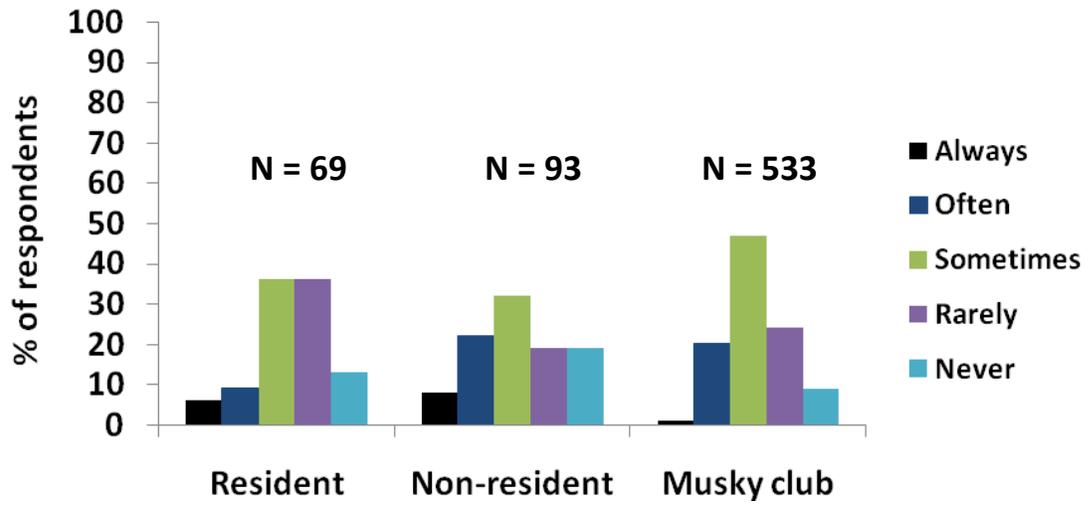
#### 22) How often do you motor troll for muskies in the state of Wisconsin?

- While trolling was used more often by musky club anglers, the majority of respondents in all three angler groups indicated that they rarely or never trolled to catch muskies in Wisconsin. However, if trolling were legal on all Wisconsin lakes survey respondents indicated that they would troll more often when fishing for muskies.



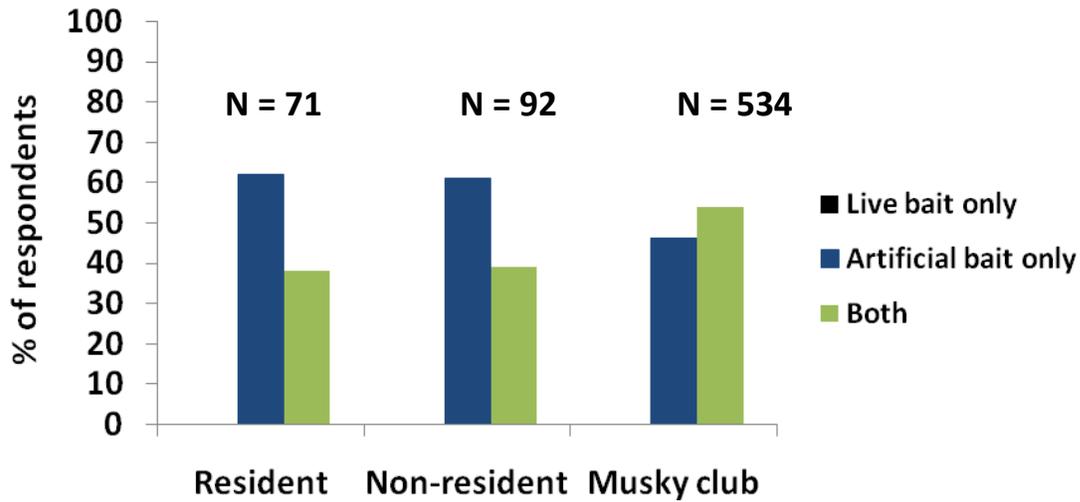
#### 23) If motor trolling for muskies was legalized on all musky waters in Wisconsin, how often would you do it?

- Survey respondents indicated that they would troll more often when fishing for muskies if trolling were legal on all Wisconsin musky waters.



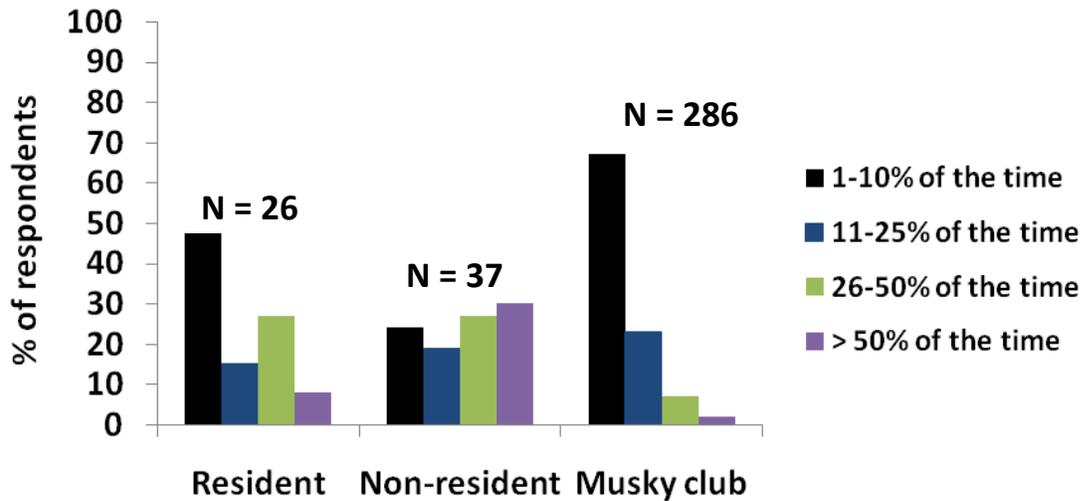
**24) What lures and live bait did you use while fishing for musky in Wisconsin during 2010?**

- Only one survey respondent reported fishing for muskies in Wisconsin with live bait only. More than 60% (61-62%) of resident and nonresident anglers reported only using artificial baits when fishing for muskies in Wisconsin compared to 46% of musky club anglers. More than half (54%) of musky club anglers reported using both live and artificial baits when fishing for muskies in Wisconsin, compared to 38 to 39% of resident and nonresident anglers, respectively.



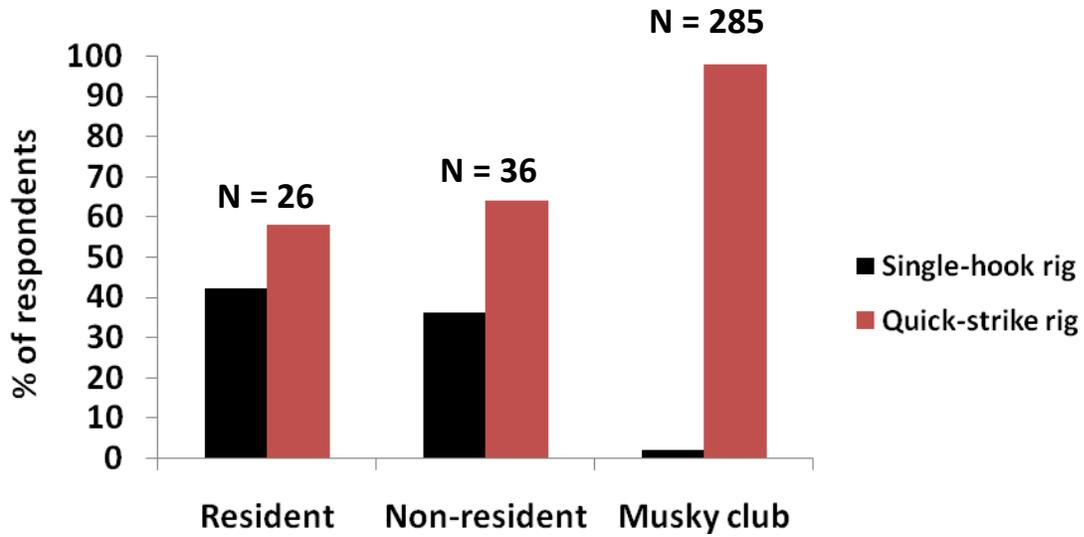
## 25) How often do you use live bait to fish for musky in Wisconsin?

- Live bait use was more prevalent among nonresident anglers, where 57% of respondents indicated they used live bait 25% or more of the time they were fishing for muskies in Wisconsin. Live bait use was least prevalent among musky club anglers, where 90% of respondents reported using live bait less than 25% of the time they were fishing for muskies. Sixty-five percent of resident anglers reported using live bait less than 25% of the time they were fishing for muskies in Wisconsin. These percentages reflect responses for only those anglers who reported using live bait when fishing for muskies.



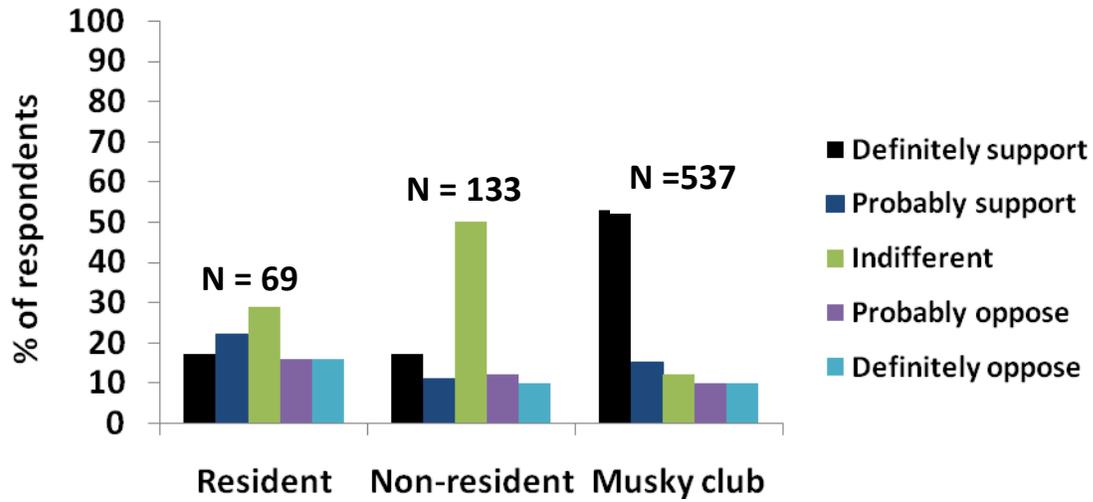
**26) When fishing with live bait for muskies, which of the following do you use most often?**

- Almost all (98%) musky club anglers reported using quick-strike rigs when fishing live bait compared to 58-64% of resident and nonresident anglers. These percentages reflect responses for only those anglers who reported using live bait when fishing for muskies.



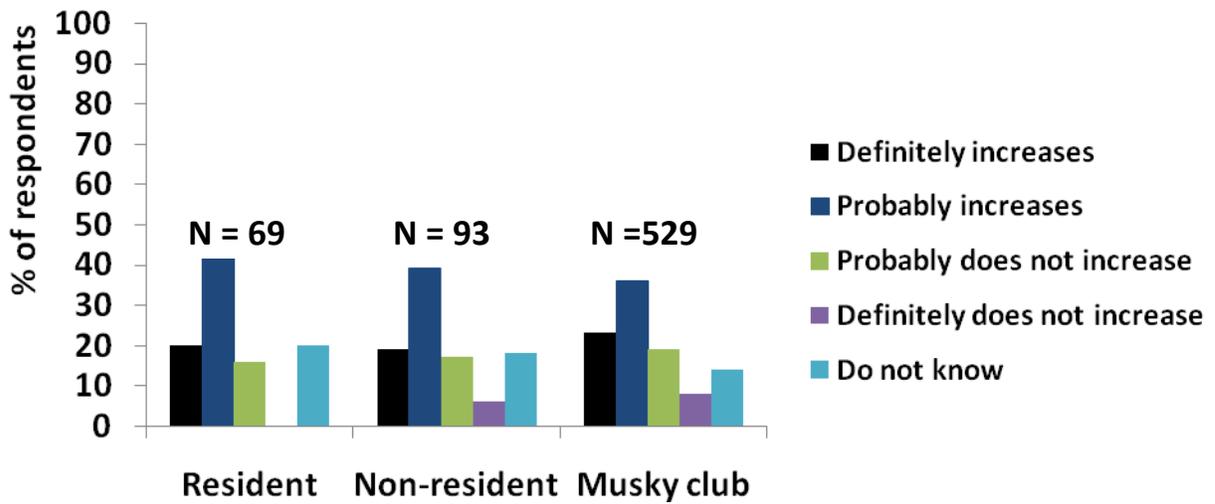
**27) Would you support or oppose eliminating the use of live bait on single hooks for muskies?**

- Between 20 and 32% of respondents in the three angler groups indicated that they would probably or definitely oppose a statewide ban on the use of live bait for musky fishing. More than half (53%) of musky club anglers indicated they would definitely support a ban on live bait compared to 17% of resident and nonresident anglers. Between 11 and 22% of respondents in the three angler groups indicated they would probably support a live bait ban for musky fishing and between 12 and 50% of anglers indicated they were indifferent on the issue.



28) There is some concern that fishing for muskies with live bait results in high mortality (from becoming deeply hooked). What effect do you think fishing with live bait has on the mortality of muskies?

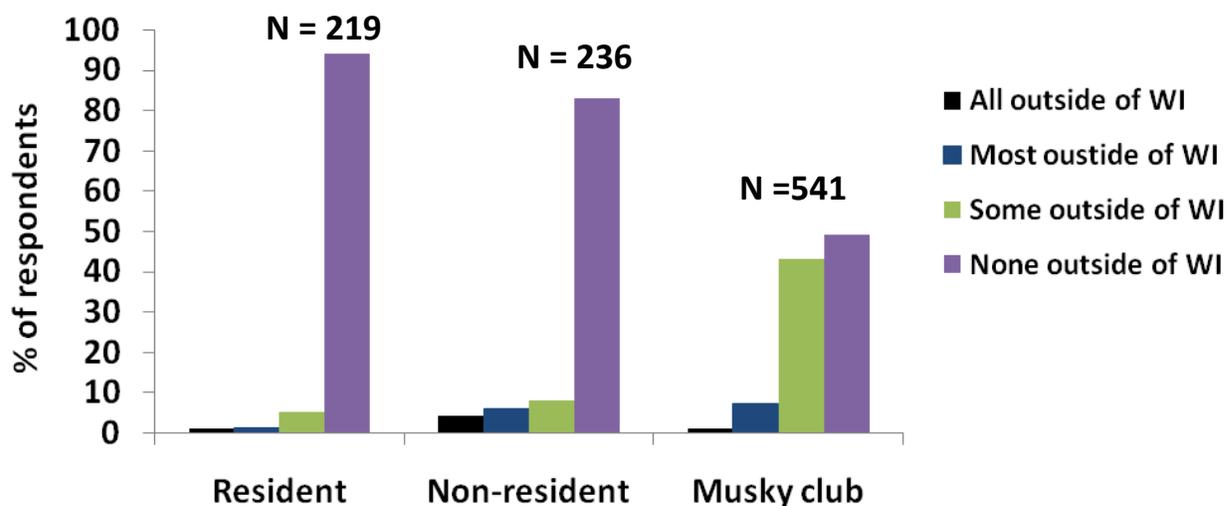
- Between 19 and 23% of respondents in the three angler groups indicated that they believed use of live bait definitely increased mortality rate of muskies, while 36-43% believed that live bait use probably increased musky mortality. Between 16-19% of anglers indicated that use of live bait probably did not increase the mortality of muskies and less than 10% of the anglers in each group indicated that live bait use definitely did not increase musky mortality. Between 14-22% anglers indicated they did not know whether use of live bait affected musky mortality.



## SECTION IV: MUSKELLUNGE FISHING OUTSIDE OF WISCONSIN

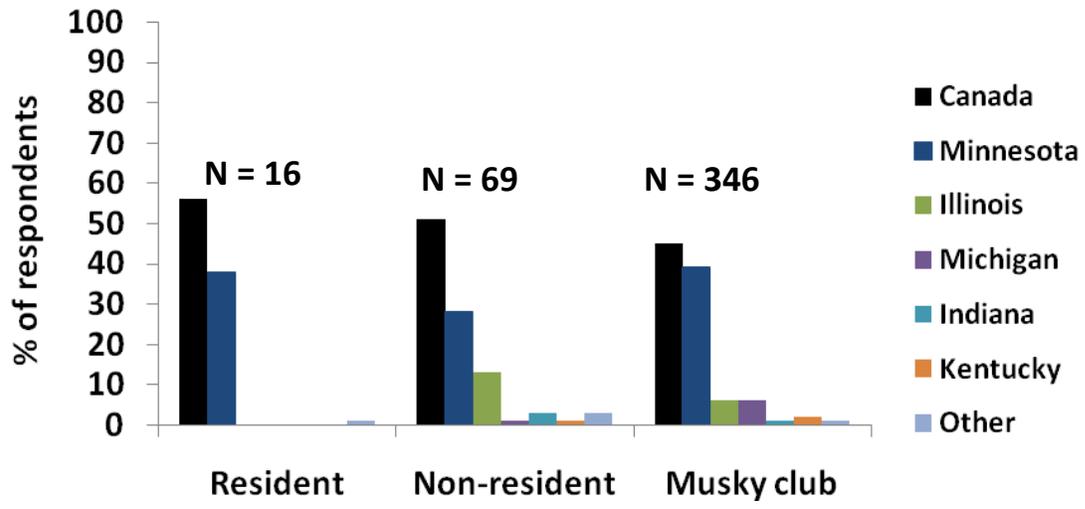
### 29) During 2010, did you do any fishing specifically for musky outside of Wisconsin?

- Musky club anglers were more likely to fish for muskies outside of Wisconsin than resident and nonresident anglers. More than 80% (83-94%) of resident and nonresident anglers reported that they did not fish for muskies outside of Wisconsin compared to only 48% of musky club anglers.



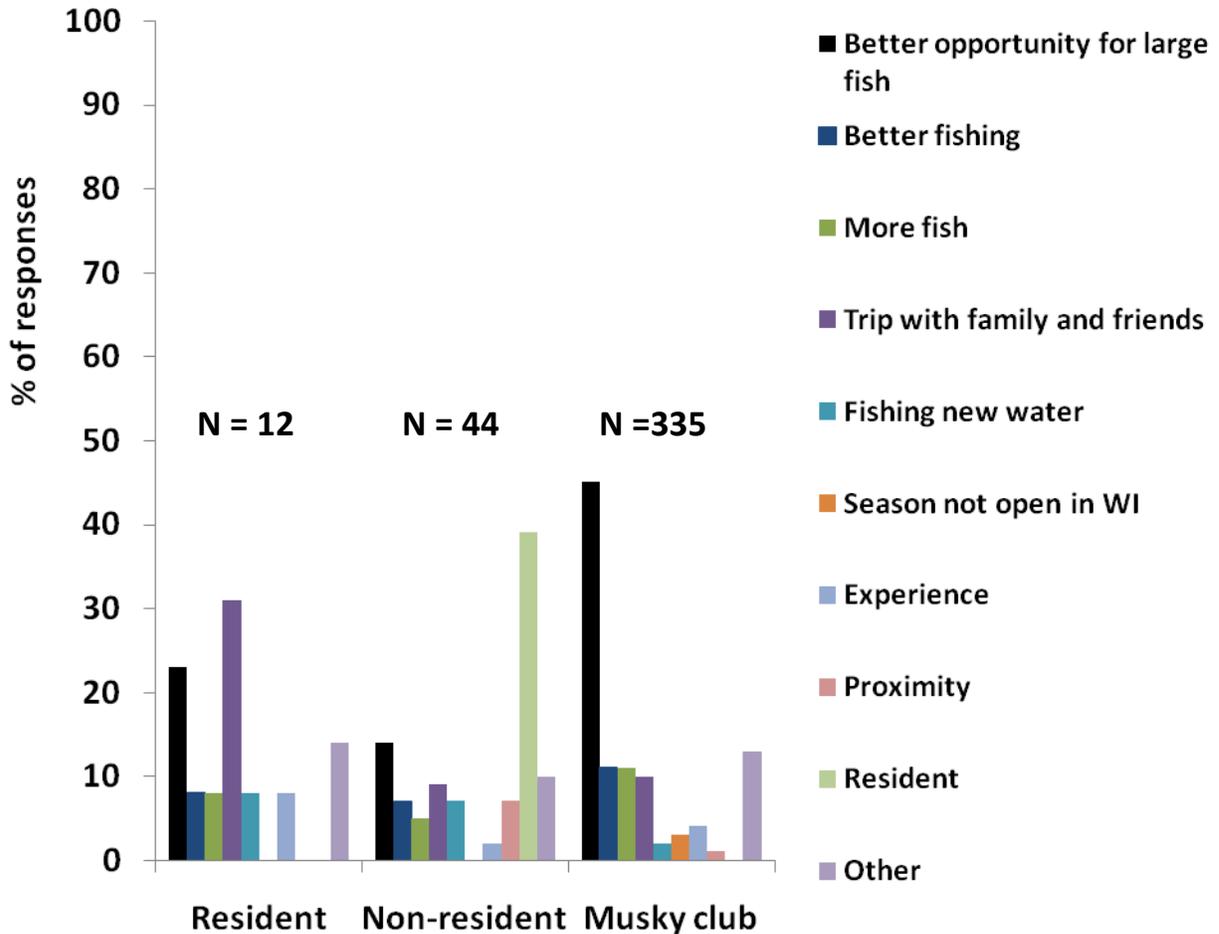
### 30) In which state(s) or province(s) outside of Wisconsin did you fish for musky during 2010?

- The most popular destinations for anglers that fished for muskies outside of Wisconsin were Canada (primarily the province of Ontario) and Minnesota (> 75% of all destinations reported by survey respondents).



31) What is the primary reason you traveled outside the state of Wisconsin to fish for musky during 2010? Answers to this open-ended question were categorized into the general response categories presented in the graph below.

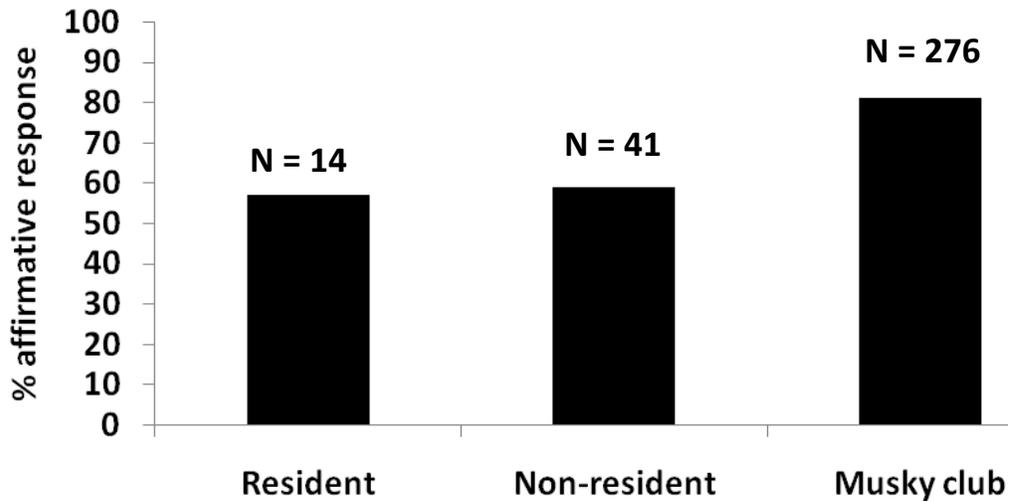
- The most common reasons provided for musky fishing outside of Wisconsin were: increased opportunity for bigger fish (14-45% of responses among angler groups), trips with family or friends (9-31% of responses), more muskies or higher success (5-11% of responses), and better musky fishing opportunities (7-10% of responses).



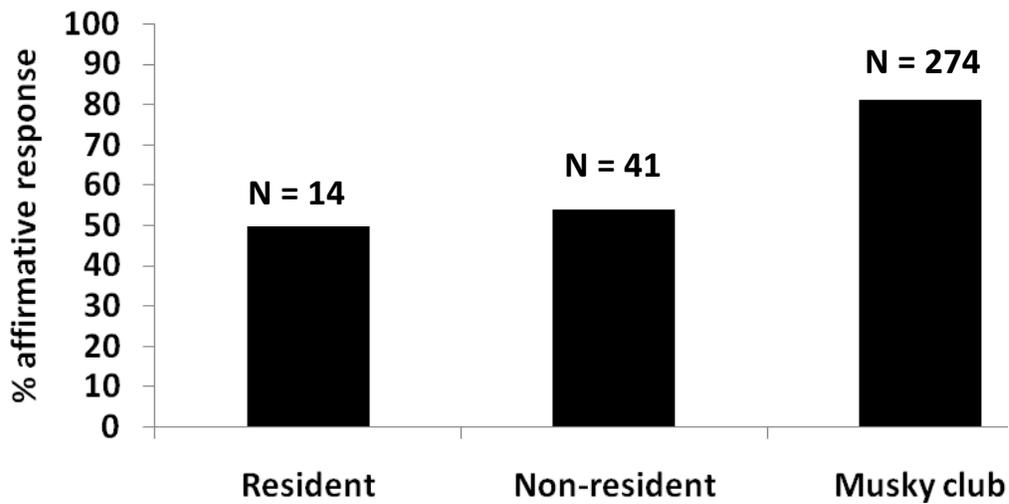
Responses in the Other Category included: better musky management, higher size limits, less fishing pressure, trolling is allowed, cabin ownership, musky club outings, tournaments, tradition, and several others.

**32) Did you catch any muskies outside of Wisconsin during 2010?**

- More than half (57-81%) of respondents in each angler group that fished for muskies outside of Wisconsin reported catching at least 1 musky in a state or province other than Wisconsin. Similarly, more than half (50-80%) of respondents in each angler group that fished for muskies outside of Wisconsin reported catching at least 1 musky longer than 32 inches in a state or province other than Wisconsin.

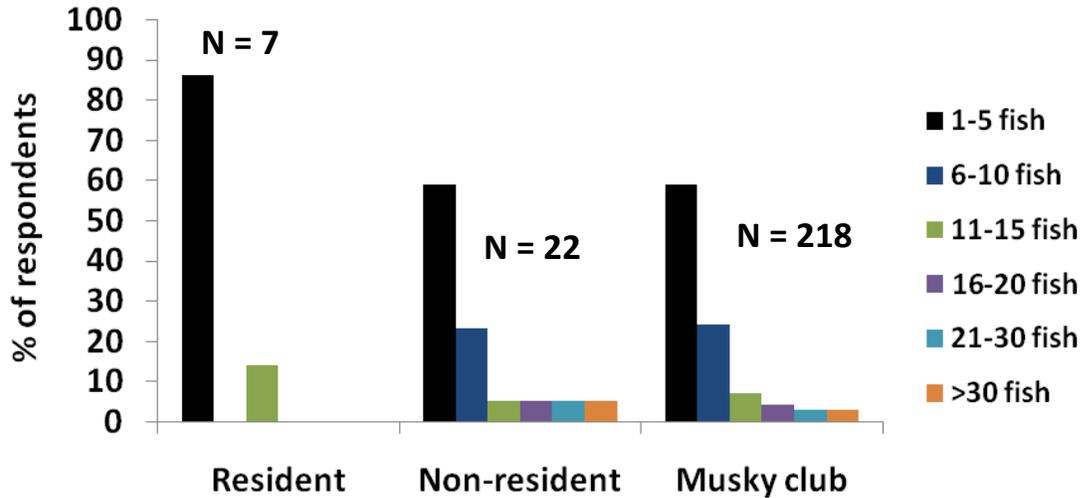


**33) Did you catch any muskies larger than 32 inches outside of Wisconsin in 2010?**



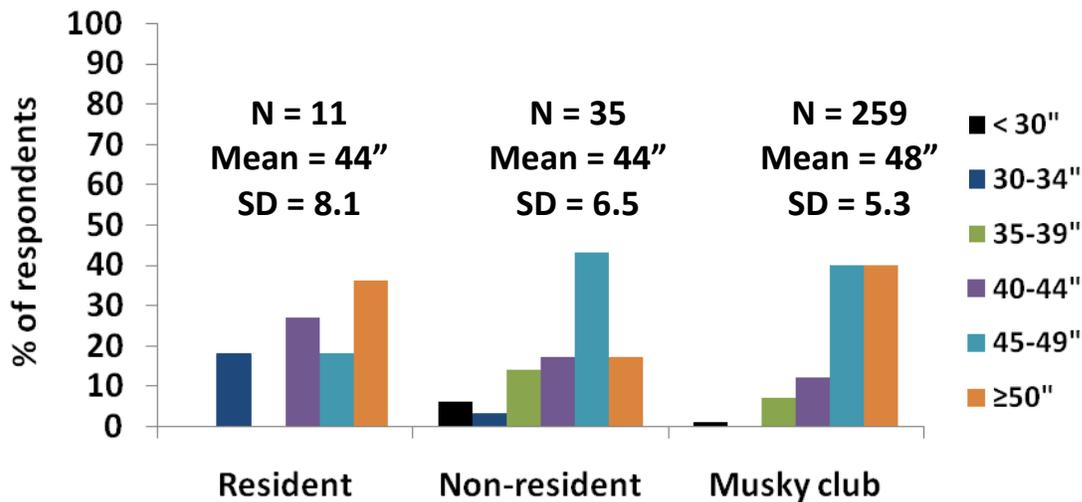
**34) How many muskies larger than 32 inches did you catch during 2010 outside of Wisconsin?**

- More than half (59-80%) of respondents in each angler group that fished for muskies outside of Wisconsin reported catching between 1 and 5 muskies longer than 32 inches outside of Wisconsin.



**35) How many inches was the largest musky you have ever caught outside of Wisconsin?**

- More than half (55-80%) of the respondents in each angler group reported the largest musky they have caught outside of Wisconsin was  $\geq 45$  inches in length. On average, the largest muskellunge caught by resident and nonresident anglers outside of Wisconsin was 44 inches in length, while the mean length for musky club anglers' largest musky outside of Wisconsin was 48 inches.

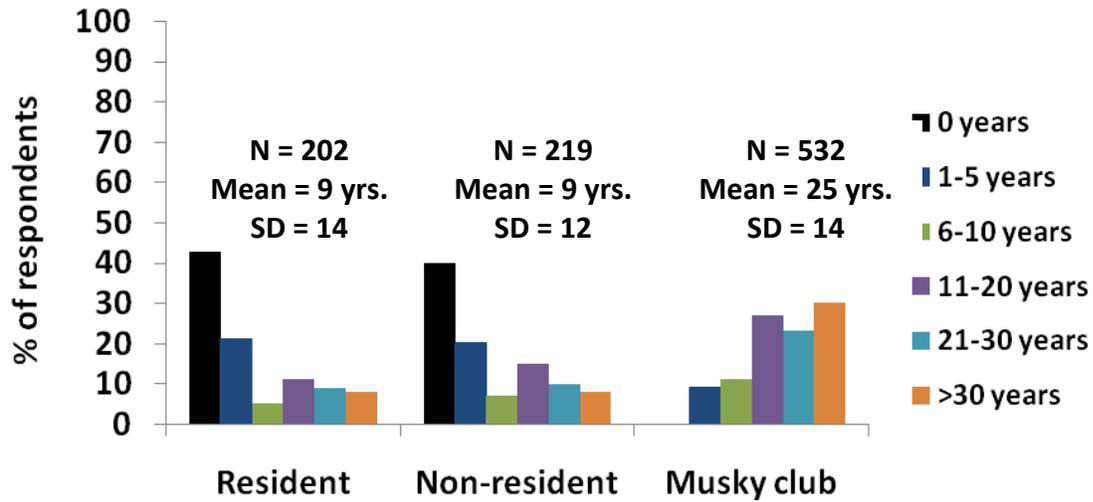




## SECTION IV: MUSKELLUNGE FISHING EXPERIENCE, OPINIONS, AND INFORMATION SOURCES

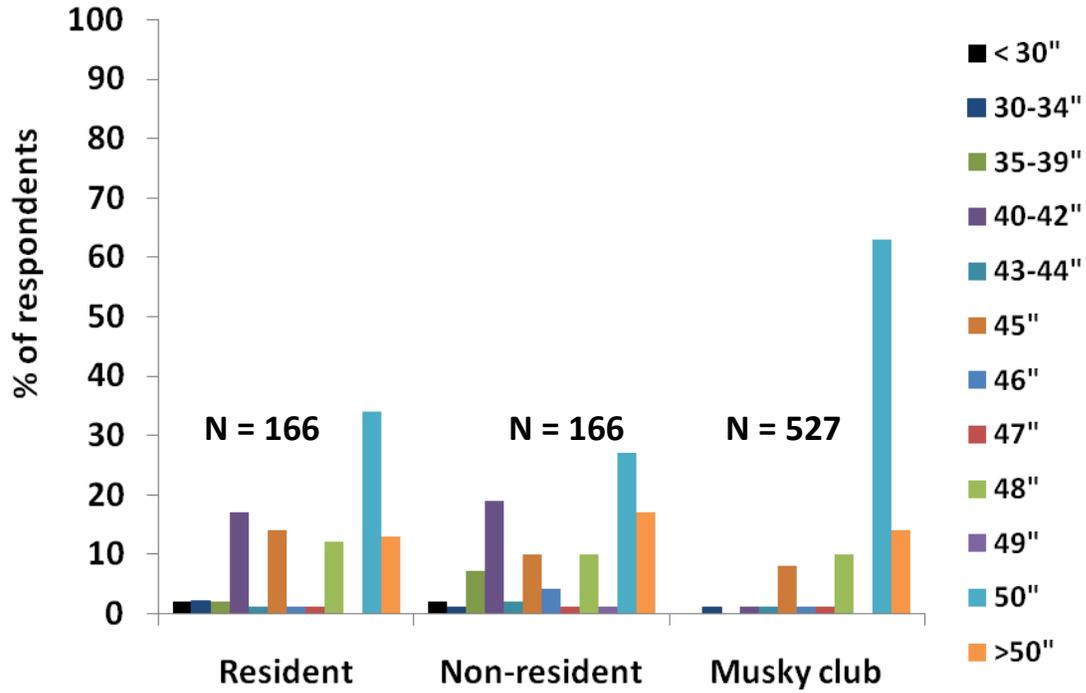
### 36) About how many years have you been musky fishing?

- On average, musky club anglers reported more years of musky fishing (mean = 25 years) than resident (mean= 9 years) and nonresident anglers (mean = 9 years).



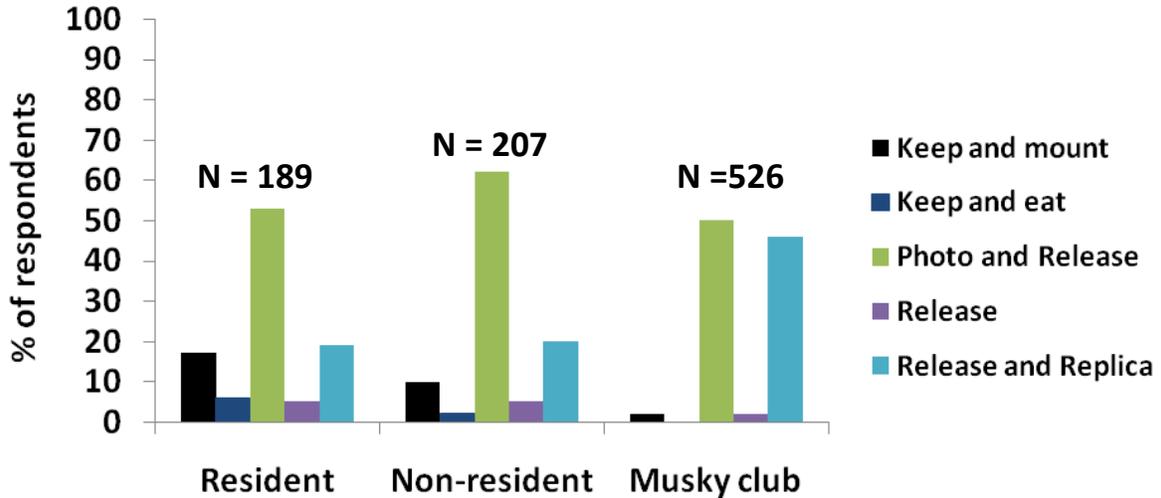
**37) How many inches long would a musky have to be for you to call it a “trophy”?**

- Between 44-47% of resident and nonresident anglers considered a musky  $\geq 50$  inches in length to be a trophy fish compared to 77% of musky club anglers.



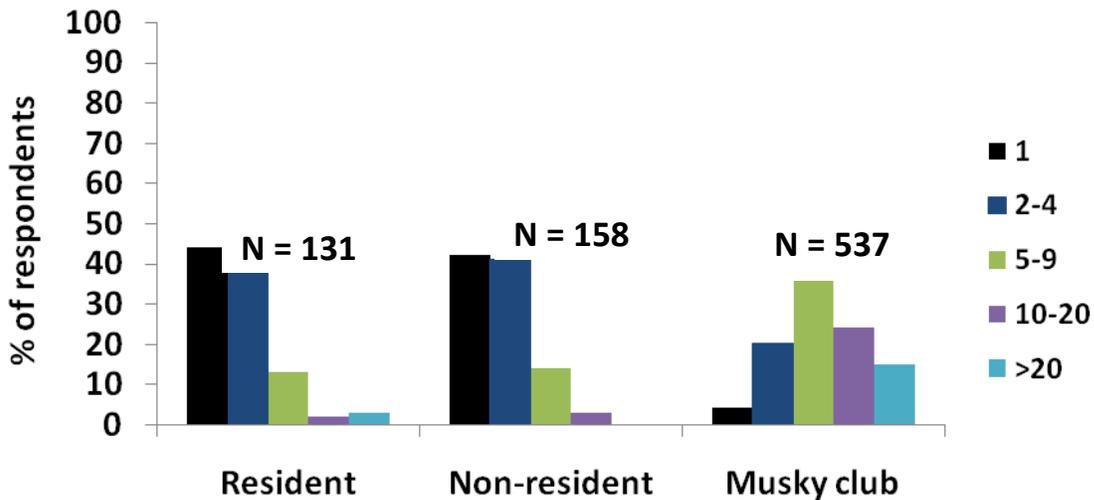
**38) Suppose you landed a trophy musky of legal size. What do you think you would do with that trophy musky?**

- More than 75% of all survey respondents indicated they would release a trophy muskellunge if they caught it. Between 12 and 23% of resident and nonresident anglers reported they would keep a trophy musky if they caught it compared to only 2% of musky club anglers.



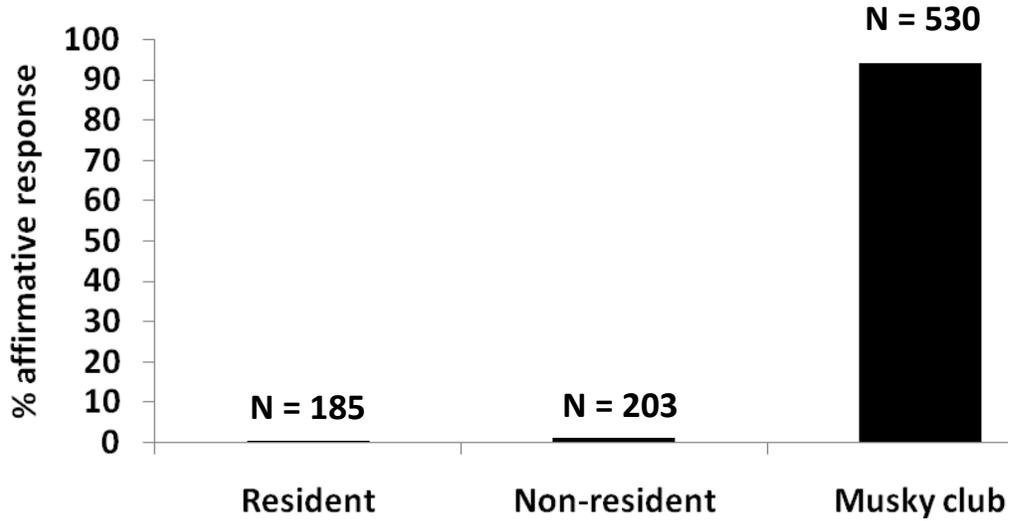
**39) In how many different bodies of water did you fish for muskies during the last two years?**

- Most resident and non-resident anglers reported musky fishing in  $\leq 4$  water bodies during the last two years, while the majority of musky club anglers reported musky fishing in  $\geq 5$  water bodies over the same time span.



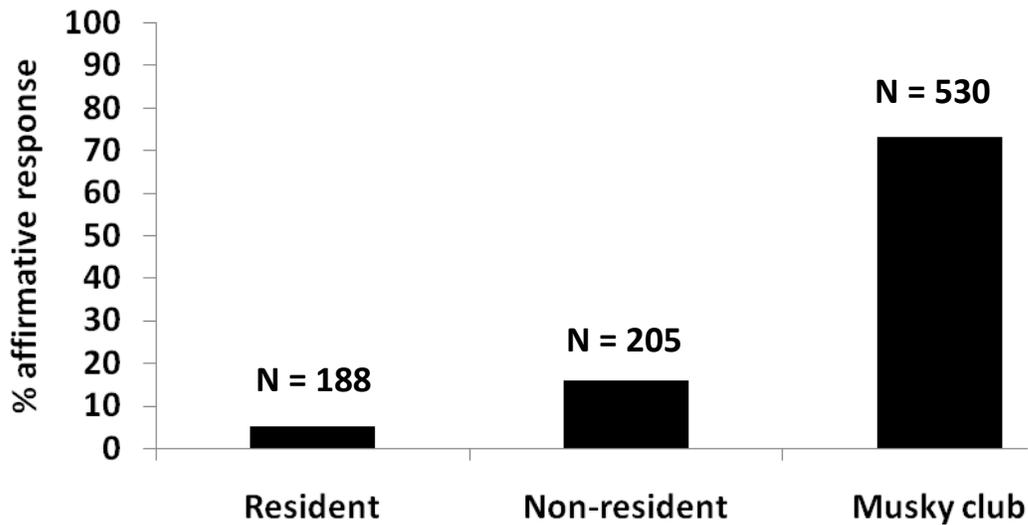
**40) Do you belong to a dues paying musky fishing musky club?**

- Less than 5% of resident and nonresident anglers indicated they were members of a dues paying musky club. Nearly all (94%) of the musky club anglers indicated they were members of a dues paying musky club.



**41) Is musky fishing your favorite outdoor activity?**

- Less than 5% of resident and 16% of nonresident anglers indicated that musky fishing was their favorite outdoor activity compared to 73% of musky club anglers.



**42) How often do you use each of the following sources of information on musky fishing?**

**Resident Anglers**

- Resident anglers reported that they did not use any of the sources of information on a frequent basis, but 15% or more of resident anglers reported that they sometimes used other magazines, the DNR website, other websites and radio or television shows for information on musky fishing. Greater than 75% of all resident anglers reported never using DNR records, the DNR Muskellunge Waters booklet, or speaking with a DNR fish manager to obtain information on musky fishing.

<b>Source</b>	<b>Never (%)</b>	<b>Rarely (%)</b>	<b>Sometimes (%)</b>	<b>Often (%)</b>	<b>Responses (N)</b>
Magazines only about musky fishing	69	16	14	2	181
Other magazines	58	19	20	3	179
DNR website	68	15	16	1	188
Other website	69	14	15	1	176
Fishing club I belong to	91	6	1	2	171
Speaking with local guide	75	16	9	1	173
Radio or television shows	57	19	22	3	178
Newspapers	69	18	11	2	176
Videos on musky fishing	79	12	10	0	177
DNR survey/stocking records	77	11	11	1	177
DNR Muskellunge Waters booklet	82	9	8	2	174
Speaking with DNR fish manager	87	10	3	0	173

### Non-resident Anglers

- More than 10% of non-resident anglers reported that they frequently used magazines only about musky fishing and other websites for musky fishing information. Fifteen percent or more of non-resident anglers reported that they sometimes used magazines only about musky fishing, other magazines, and radio and television shows for information about musky fishing. Greater than 75% of non-resident anglers reported never using the DNR Muskellunge Waters booklet or speaking with a DNR fish manager for obtaining information on musky fishing and 69% of nonresidents reported that they never used DNR surveys or stocking records.

Source	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Responses (N)
Magazines only about musky fishing	57	16	16	11	197
Other magazines	49	24	22	6	195
DNR website	65	20	11	4	188
Other website	65	14	11	11	190
Fishing club I belong to	91	5	1	2	185
Speaking with local guide	64	19	14	4	187
Radio or television shows	47	18	26	9	194
Newspapers	61	26	12	1	186
Videos on musky fishing	68	16	11	5	187
DNR survey/stocking records	69	17	12	3	189
DNR Muskellunge Waters booklet	81	13	6	0	188
Speaking with DNR fish manager	84	12	4	0	186

## Musky Club Anglers

- More than 20% of musky club anglers reported that they frequently used magazines only about musky fishing, other websites, the fishing club they belong to, and radio or television shows for musky fishing information. More than 20% of musky club anglers reported using all of the sources of information at least some of time. Musky club anglers utilized DNR records, the DNR Muskellunge Waters booklet or speaking with a DNR fish manager for obtaining information on musky fishing far more frequently than resident and non-resident anglers, but more than 50% of respondents reported using these DNR-based sources rarely or not at all.

Source	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Responses (N)
Magazines only about musky fishing	2	5	30	64	533
Other magazines	9	25	51	15	503
DNR website	26	36	30	7	502
Other website	15	19	34	32	502
Fishing club I belong to	9	10	40	41	516
Speaking with local guide	17	31	36	16	513
Radio or television shows	8	20	45	27	522
Newspapers	24	41	28	7	506
Videos on musky fishing	12	34	39	15	509
DNR survey/stocking records	17	29	41	13	511
DNR Muskellunge Waters booklet	33	29	29	9	504
Speaking with DNR fish manager	37	38	21	4	508

## SECTION V: FAVORITE MUSKY WATER IN WISCONSIN

43) We would like to know a little about your favorite place to fish for musky in Wisconsin. This may be a body of water where you have caught many fish, one large fish, or that you like for another reason. If you have several such places, please pick just one. What is it about this place that makes it your favorite for musky fishing? Check all that apply.

- Among resident and non-resident anglers the three most frequent responses to this question were good fishing for other species as well as muskies, the natural/scenic beauty of the water body, and a traditional location to visit. The top three responses for musky club anglers were reputation or potential the water has for big muskies, big musky caught there in the past, and many muskies larger than 32 inches caught there in the past.

### % of all responses in each angler group

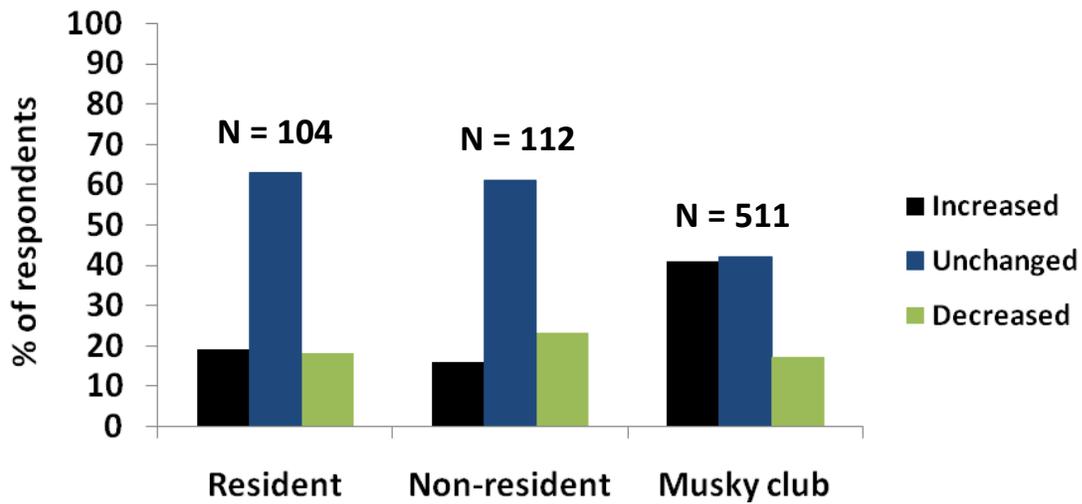
Reasons	Resident (N = 496)*	Nonresident (N = 600)*	Musky club N = (2,713)*
Big musky I have caught there in the past	5	6	11
Many muskies larger than 32 inches I have caught there in the past	6	5	10
The number of muskies (legal and nonlegal) I have caught there in the past	6	4	8
Reputation or potential the water has for big muskies	7	9	12
Reputation or potential the water has for producing lots of muskies	5	7	7
Good fishing for other species as well as muskies	14	14	7
Natural/scenic beauty of the water	9	11	9
Own recreational property nearby	4	7	4
Good facilities (e.g., landings, resorts, or taverns nearby)	4	5	6
Permanent residence is nearby	6	2	6
Friends live nearby	4	5	2
Uncrowded by other anglers	7	7	5
Uncrowded with other recreationists	6	5	5
Traditional spot for me to go	8	9	6
Special regulations (motor trolling, high size limits)	1	1	3
Other	6	6	1

- **Sample sizes represent the total number of responses for each reason for each individual angler group.**

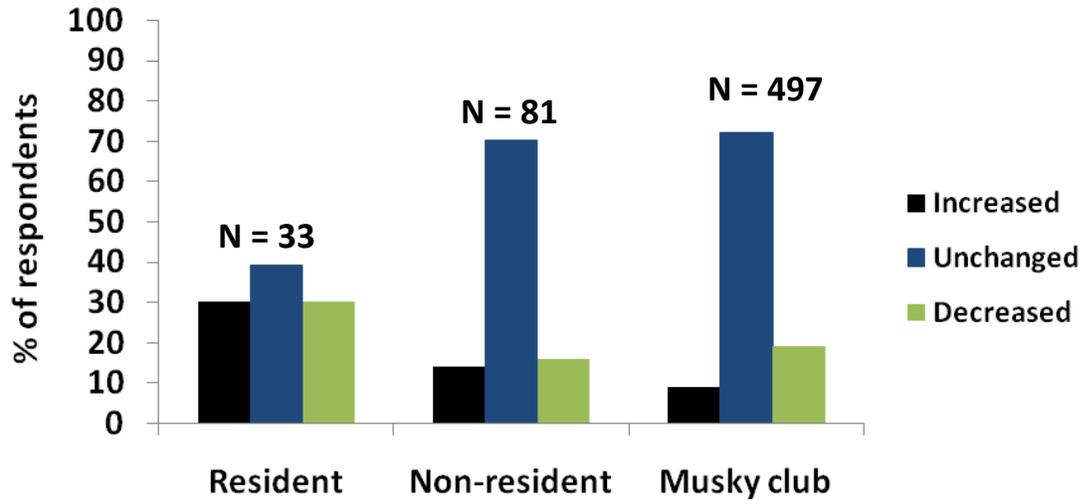
**44) Within the following categories what changes have you noticed in the last few years at your favorite musky water?**

- More than 40% of musky club anglers reported that the number of muskies larger than 32 inches and the average size of muskies have improved in their favorite water body, while less than 25% of resident and non-resident anglers believed this was true. Greater than 40% of respondents in all 3 angler groups indicated that fishing pressure for muskies has increased on their favorite body of water. More than 70% of the all respondents believe that the amount of good musky habitat in their favorite lakes was unchanged. More than 40% of musky club anglers reported that release rates of muskellunge have increased on their favorite water body, while less than 30% of resident and non-resident believed this was true. More than half of the anglers in each group reported that the number of northern pike in their favorite lake has not changed.

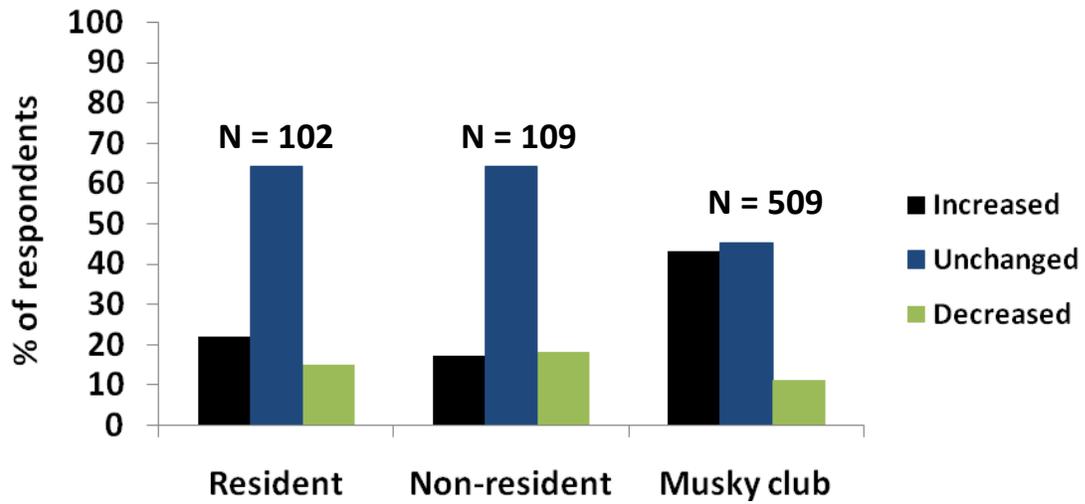
**a) Number of muskies larger than 32 inches**



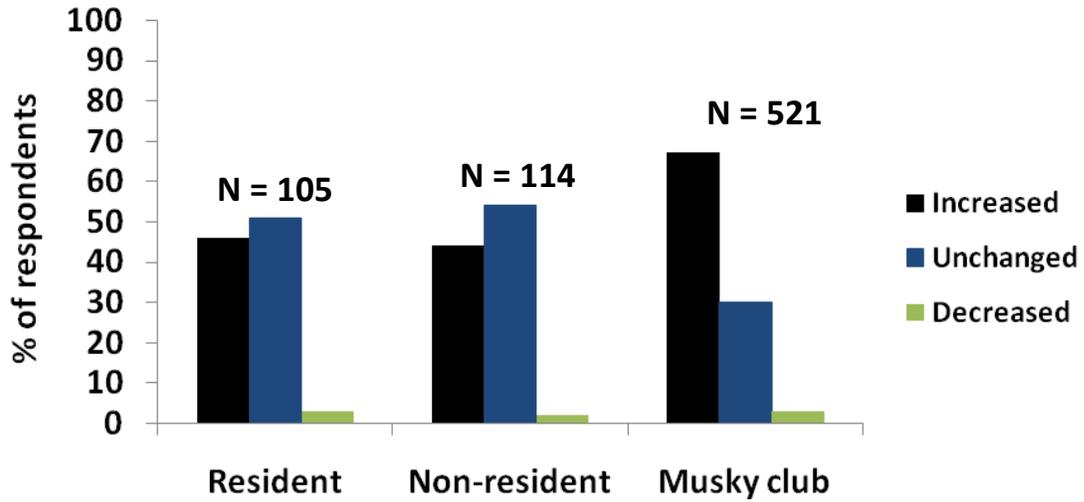
b) Number of muskies smaller than 32 inches



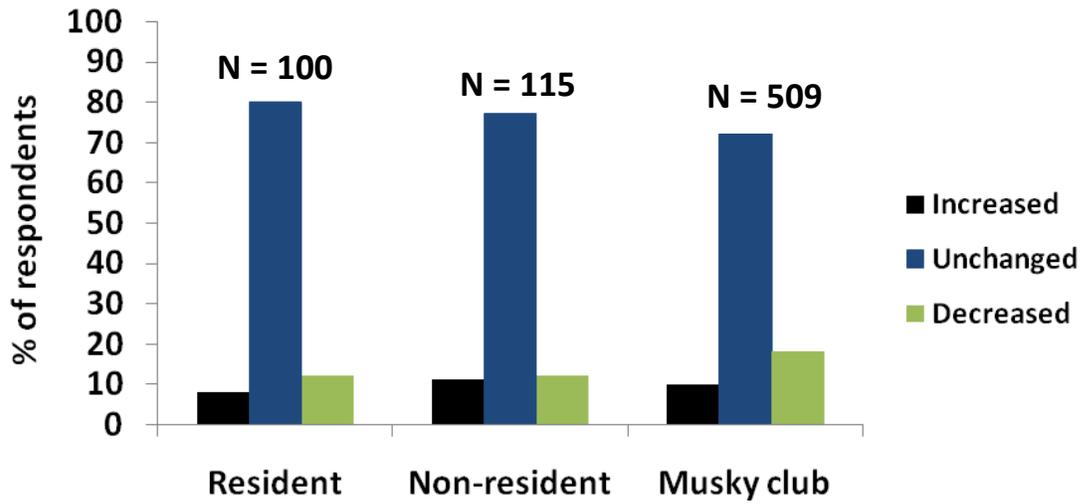
c) Average size of muskies



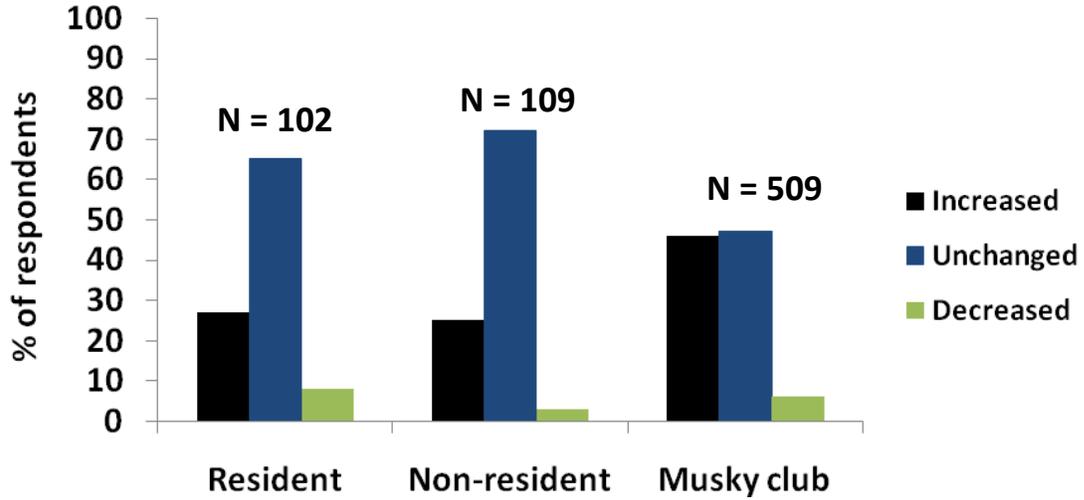
d) Fishing pressure from other musky anglers



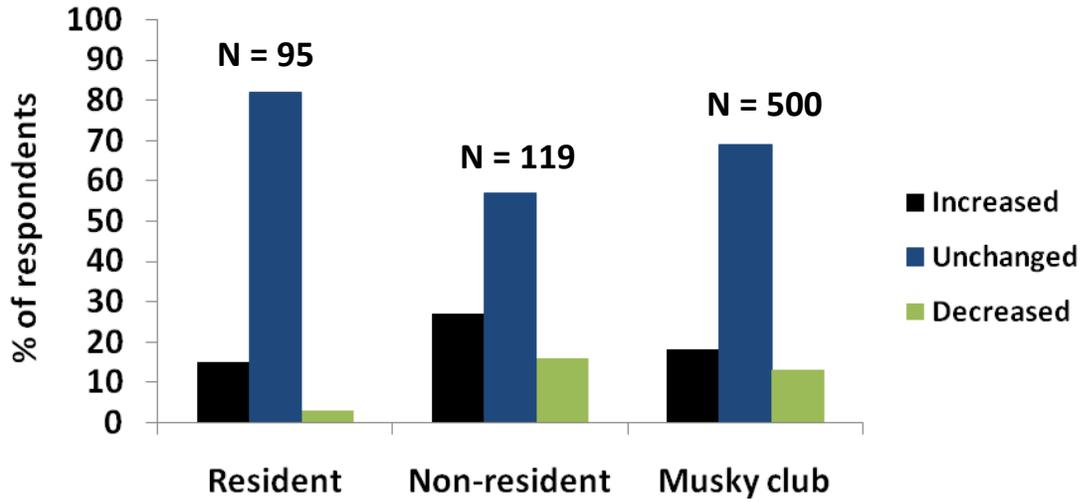
e) Amount of good musky habitat



f) Percentage of muskies larger than 32 inches released by other anglers



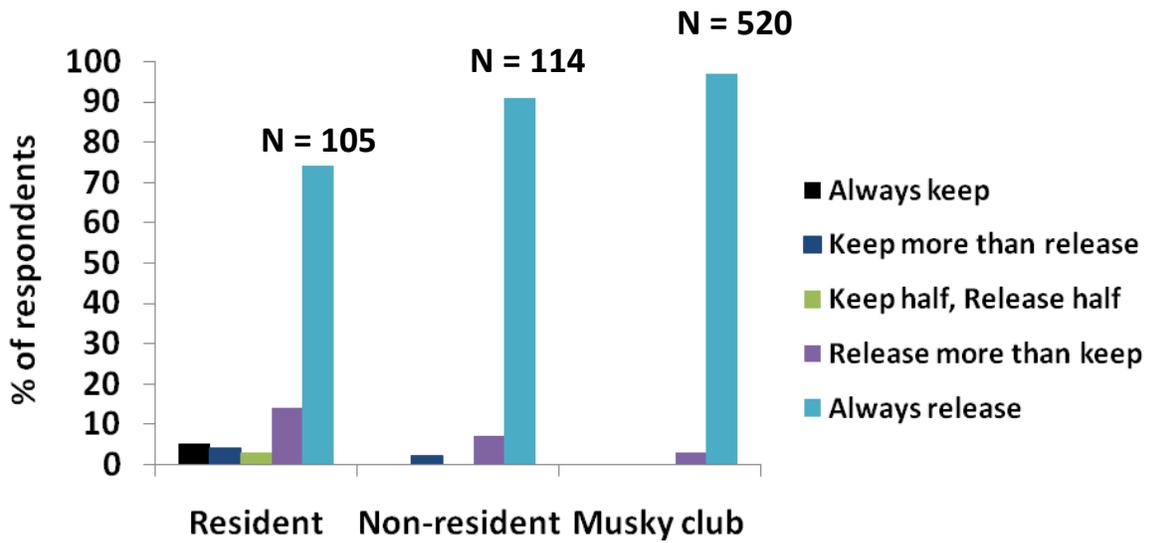
g) Number of northern pike in the water



## SECTION VI: CATCH AND RELEASE

45) Which of the following best describes your current preference of keeping or releasing legal-sized muskies that you catch?

- More than 90% of non-resident anglers and musky club anglers indicated that they prefer to release all of the legal-sized muskies that they catch, compared to only 74% of resident anglers.



#### 46) How do the following factors affect your decision to keep or release a musky of legal size?

- A low probability of survival was listed by more than 40% of the respondents in all 3 angler groups as a factor that would increase the probability they would keep a fish. More than 50% of respondents in all 3 angler groups indicated they would be more likely to keep a fish if it had a low probability of survival and it was a fish they would consider a trophy. More than 15% of resident (27%) and non-resident anglers (19%) indicated they would be more likely to keep a fish if it was of trophy size compared to only 4% of musky club anglers. Fifteen percent of resident anglers indicated that would be more likely to keep a musky if they or their family or friends really like to eat musky. Ten percent or fewer anglers in all three groups listed any of the other factors as reasons they would be more likely to keep a muskellunge.

#### Resident Anglers

Factor	More likely to keep (%)	More likely to release (%)	Does not affect my decision (%)	Responses (N)
Appears the fish will not survive	62	16	22	145
Trophy fish	27	41	32	143
Appears the fish will not survive and it is a trophy fish	72	7	21	141
Have not caught a legal musky before or in a long time	8	39	53	137
There seems to be many muskies in the water body	7	37	57	138
If I, my friends or family really like to eat musky	15	24	61	140
Fish might have toxins	5	52	43	139
Fish the lake often	4	45	51	138
Water doesn't get pressure from other anglers	4	40	55	137
Water is stocked	10	32	57	136
Musky is bigger than I usually catch	13	32	55	138

### Non-Resident Anglers

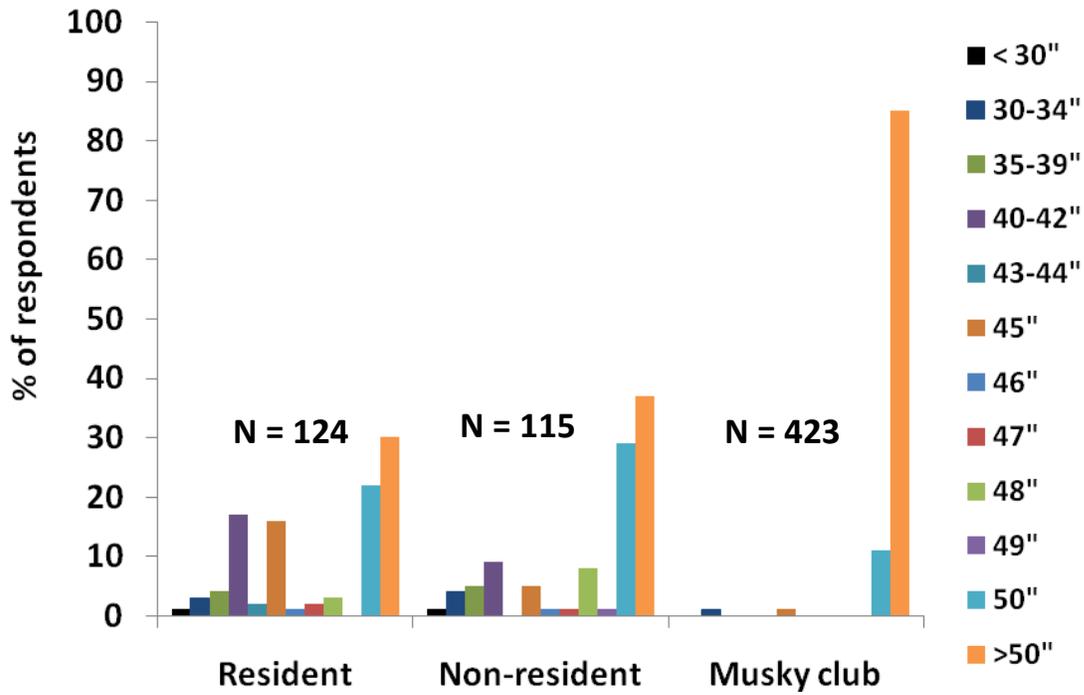
Factor	More likely to keep (%)	More likely to release (%)	Does not affect my decision (%)	Responses (N)
Appears the fish will not survive	56	12	32	154
Trophy fish	19	39	42	149
Appears the fish will not survive and it is a trophy fish	59	14	27	147
Have not caught a legal musky before or in a long time	11	36	53	147
There seems to be many muskies in the water body	7	34	59	146
If I, my friends or family really like to eat musky	10	30	60	147
Fish might have toxins	5	46	49	148
Fish the lake often	3	45	52	146
Water doesn't get pressure from other anglers	4	39	56	147
Water is stocked	8	33	60	146
Musky is bigger than I usually catch	9	36	55	147

### Musky Club Anglers

Factor	More likely to keep (%)	More likely to release (%)	Does not affect my decision (%)	Responses (N)
Appears the fish will not survive	41	16	43	524
Trophy fish	4	39	57	526
Appears the fish will not survive and it is a trophy fish	53	14	33	522
Have not caught a legal musky before or in a long time	0	29	71	519
There seems to be many muskies in the water body	1	28	71	523
If I, my friends or family really like to eat musky	2	27	71	521
Fish might have toxins	2	30	68	521
Fish the lake often	0	31	69	523
Water doesn't get pressure from other anglers	0	29	70	522
Water is stocked	0	30	69	524
Musky is bigger than I usually catch	1	31	69	524

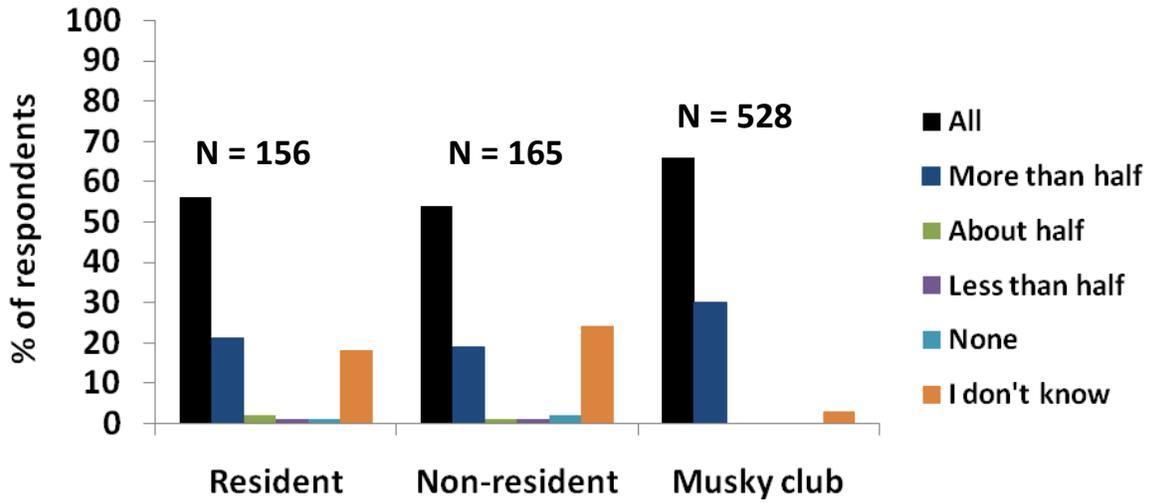
**47) How big does a musky have to be for you to keep it?**

- Almost all (96%) of musky club anglers and more than half (52-66%) of resident and non-resident anglers indicated a musky would have to be  $\geq 50$  inches before they would keep it. Few anglers in any group ( $\leq 10\%$ ) indicated they would keep fish less than 40 inches in length.



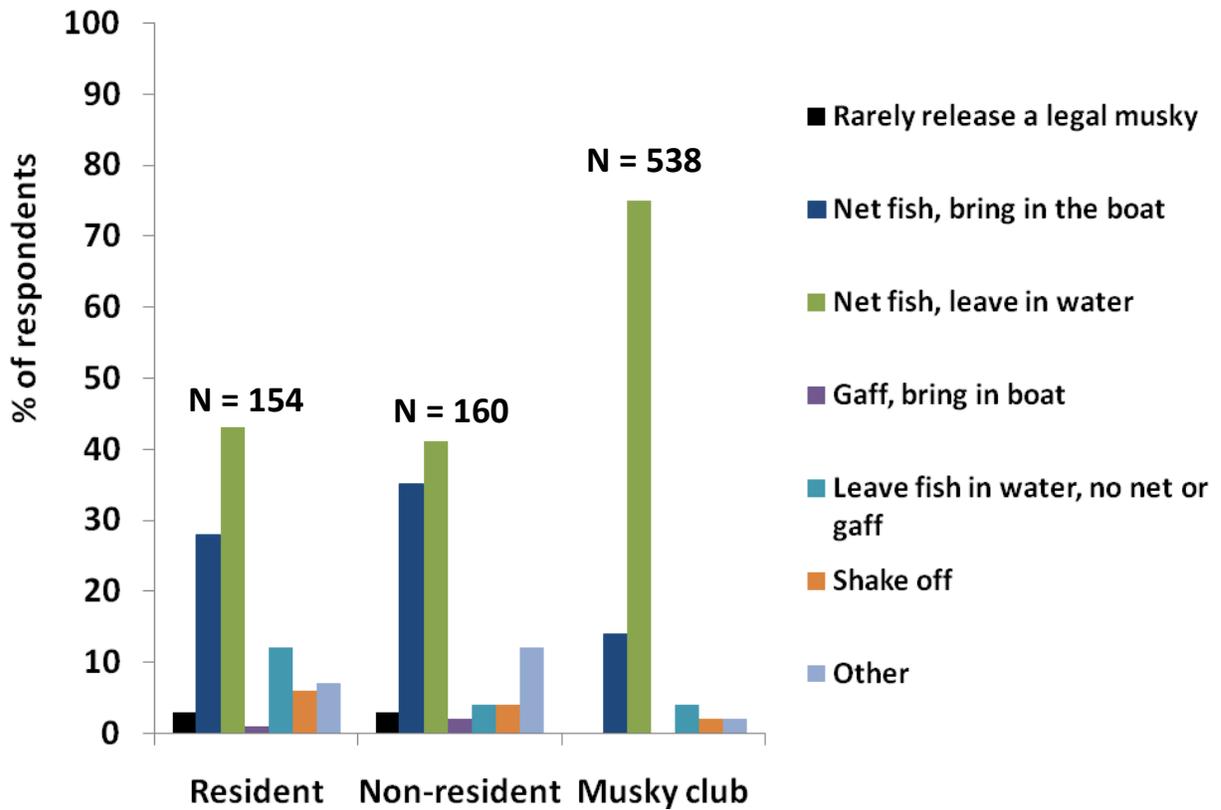
**48) How many of the muskies that you release do you believe survive?**

- More than half of the respondents in each angler group (54-66%) believe that all of the muskies they release survive and between 19 and 30% believe that more than half of their released muskies survive.



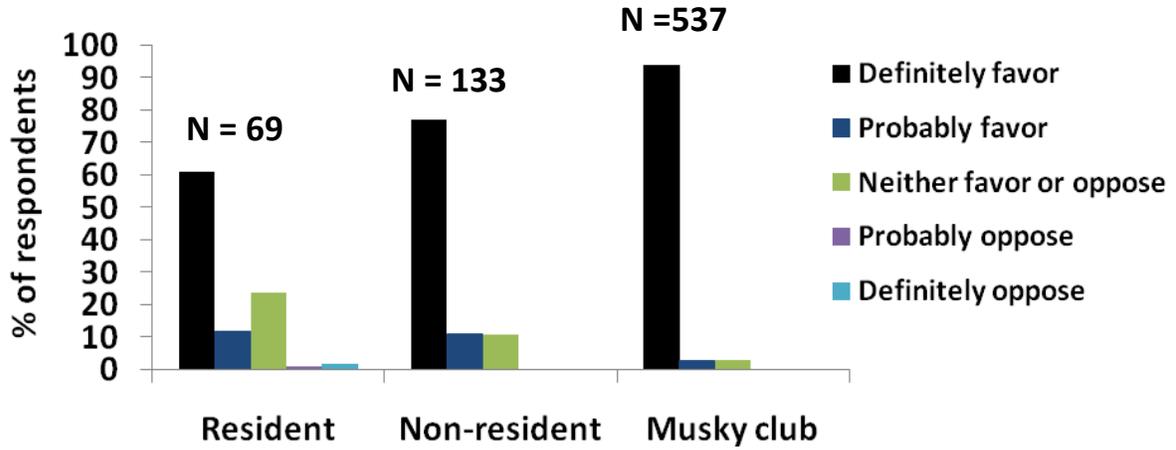
49) How do you usually land a musky that you intend to release?

- The most common method of landing a musky is to net the fish and leave it in the water, although this practice was far more prevalent among musky club anglers (75% of respondents) compared to resident (41% of respondents) and non-resident anglers (43% of respondents). More than 25% of resident (28%) and non-resident anglers (35%) indicated that they net the fish and bring it in the boat.



**50) In general, do you favor or oppose the idea of other anglers releasing legal muskies?**

- More than 60% (73-97%) of respondents in all 3 angler groups indicated they would definitely or probably favor the idea of other anglers releasing muskies of legal size. Twenty-four percent of resident anglers and 11% of nonresident anglers indicated that they neither favor nor oppose other anglers releasing muskies of legal size.



**51) The issues below have been mentioned as potential problems in musky fishing. How much of a problem do you think each is where you usually go musky fishing?**

**Resident Anglers**

- Based on the percentage of resident anglers choosing “big problem” as a response, the three biggest problems were: 1) Native American treaty rights, 2) conflicts with speed boats, jet skis, etc., and 3) high fishing pressure.

<b>Potential problem</b>	<b>Not a problem (%)</b>	<b>Somewhat of a problem (%)</b>	<b>Big problem (%)</b>	<b>Not sure (%)</b>	<b>Responses (N)</b>
Illegal harvest of muskies	31	23	17	29	150
Overharvest of muskies	27	30	17	26	149
Accidental injury to released fish	23	39	13	25	147
Too many muskies in lake-slow growth	47	18	5	30	148
Competition with northern pike	35	23	10	32	147
Problems identifying musky	51	24	7	18	148
Habitat loss	42	24	16	18	148
High fishing pressure	30	30	18	22	148
Bag limits are too liberal	46	21	11	22	149
Size limits are too liberal	43	20	15	22	143
Not enough stocking	30	24	17	29	148
Poor natural reproduction	25	31	14	30	147
Decline in water quality	30	30	16	24	145
Native American treaty rights	22	17	37	23	149
Advancements in fishing technology	43	24	10	23	144
Fishing tournaments	37	27	17	19	147
Conflicts with speed boats, jet skis, etc.	20	31	32	17	147
Conflicts with other user groups (e.g., other anglers, lake assoc.)	50	22	6	21	145

## Non-Resident Anglers

- Based on the percentage of non-resident anglers choosing “big problem” as a response, the two biggest problems were: 1) Native American treaty rights and 2) conflicts with speed boats. Three potential problems were listed as a big problem by 22% of non-resident anglers (3<sup>rd</sup> highest percentage of responses): high fishing pressure, not enough stocking, and overharvest of muskies.

Potential problem	Not a problem (%)	Somewhat of a problem (%)	Big problem (%)	Not sure (%)	Responses (N)
Illegal harvest of muskies	28	22	17	33	158
Overharvest of muskies	27	27	22	24	157
Accidental injury to released fish	13	48	14	25	157
Too many muskies in lake-slow growth	49	18	4	29	156
Competition with northern pike	31	33	10	27	156
Problems identifying musky	51	20	8	21	156
Habitat loss	36	22	20	22	155
High fishing pressure	19	39	22	20	157
Bag limits are too liberal	44	22	7	27	155
Size limits are too liberal	43	21	11	25	150
Not enough stocking	23	30	22	26	158
Poor natural reproduction	13	32	17	38	155
Decline in water quality	21	33	17	29	156
Native American treaty rights	22	16	35	26	158
Advancements in fishing technology	38	27	6	29	154
Fishing tournaments	28	38	10	24	156
Conflicts with speed boats, jet skis, etc.	21	30	30	19	156
Conflicts with other user groups (e.g., other anglers, lake assoc.)	49	24	7	20	158

### Musky Club Anglers

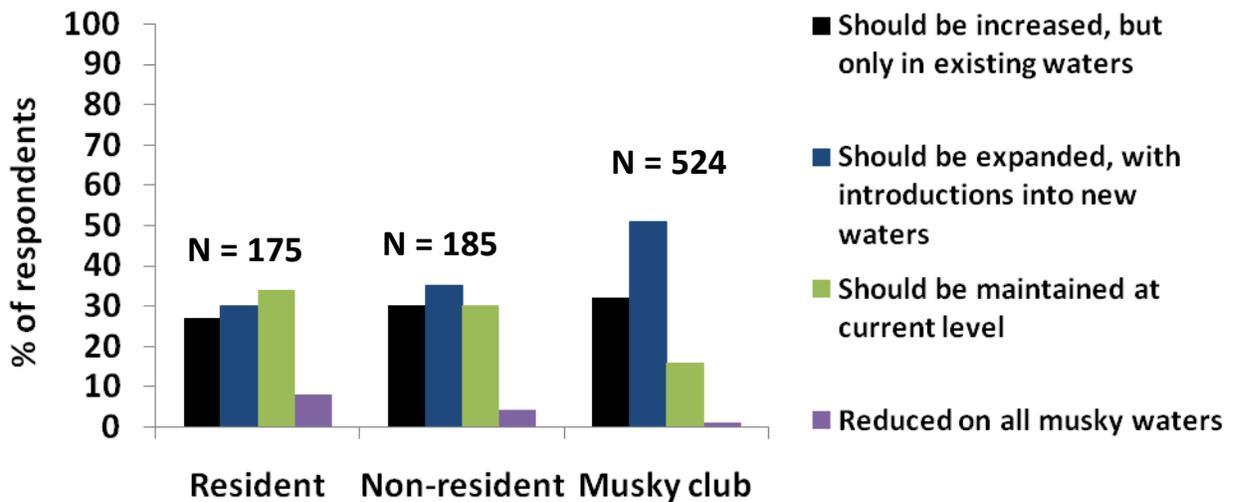
- Based on the percentage of musky club anglers choosing “big problem” as a response, the three biggest problems were: 1) Native American treaty rights; 2) size limits are too liberal and 3) poor natural reproduction. More than 25% of musky club anglers also listed the following as big problems facing musky fishing: overharvest of muskies, bag limits are too liberal, and conflicts with speed boats, jet skis, etc.

Potential problem	Not a problem (%)	Somewhat of a problem (%)	Big problem (%)	Not sure (%)	Responses (N)
Illegal harvest of muskies	36	37	11	15	525
Overharvest of muskies	21	41	30	8	524
Accidental injury to released fish	13	58	21	8	523
Too many muskies in lake-slow growth	49	18	4	29	526
Competition with northern pike	42	35	14	9	526
Problems identifying musky	45	42	8	5	525
Habitat loss	44	30	23	3	525
High fishing pressure	20	54	22	4	523
Bag limits are too liberal	43	21	30	7	524
Size limits are too liberal	21	26	49	4	482
Not enough stocking	26	39	24	11	252
Poor natural reproduction	12	43	35	10	523
Decline in water quality	32	40	17	11	522
Native American treaty rights	17	22	55	6	526
Advancements in fishing technology	53	34	6	7	524
Fishing tournaments	51	32	14	4	522
Conflicts with speed boats, jet skis, etc.	19	43	34	4	523
Conflicts with other user groups (e.g., other anglers, lake assoc.)	59	30	7	4	523

## SECTION VII: MUSKY MANAGEMENT

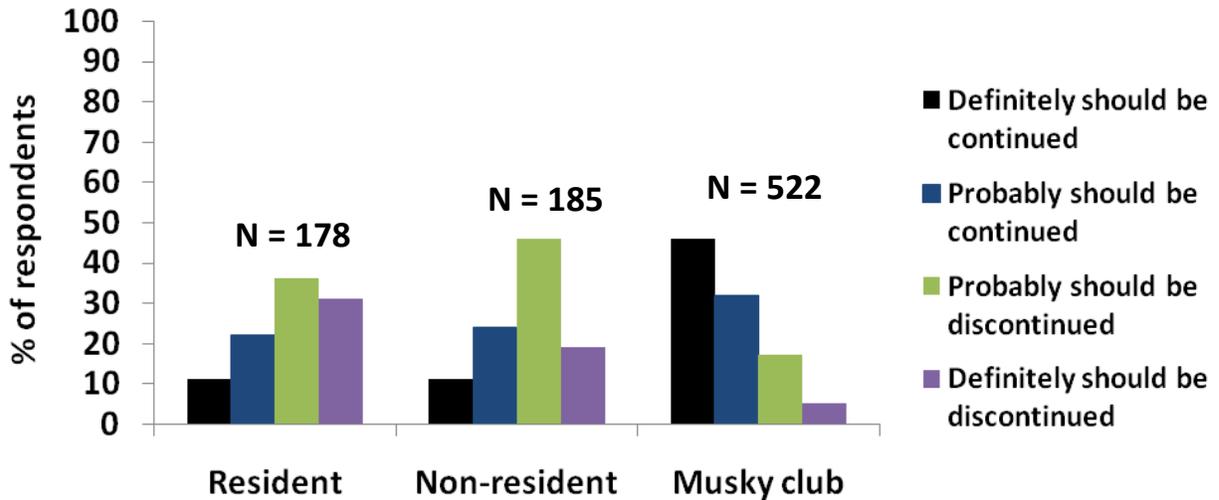
52) Muskies occur in over 700 lakes in Wisconsin and stocking of muskies takes place in more than 20 percent of these lakes. We'd like to know your opinion about the current status of musky stocking.

- The majority of musky club anglers believe that musky stocking should be increased on existing waters (32%) or expanded to new waters (51%) within the state of Wisconsin. More than half of resident and non-resident anglers supported either increased stocking on existing waters or expansion of stocking into new waters. Between 30 and 34% of resident and nonresident anglers indicated that musky stocking should be maintained at its current level, compared to only 16% of musky club anglers.



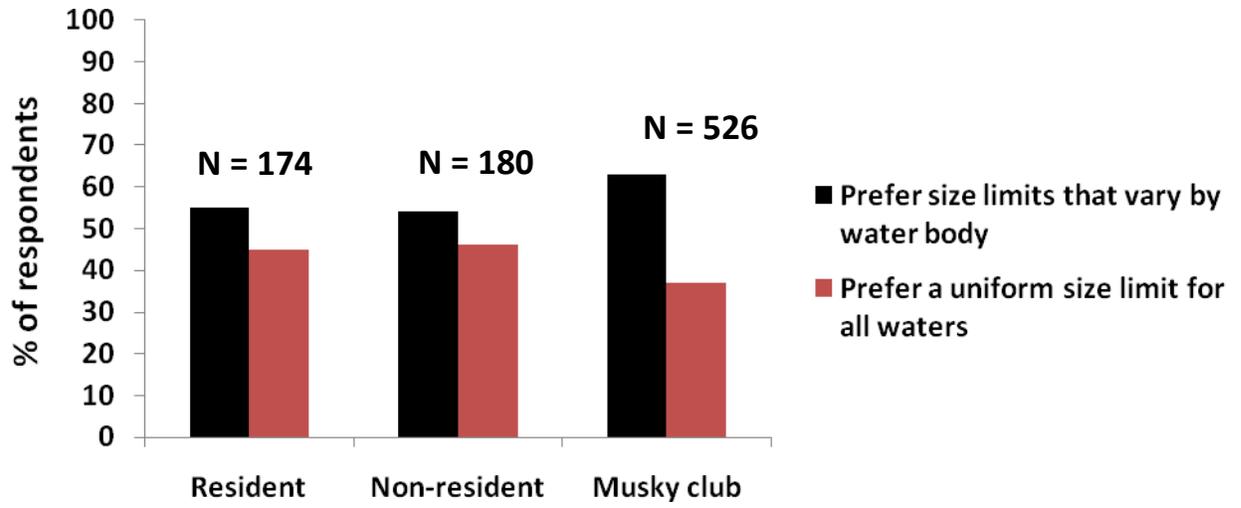
**53) If a body of water cannot support a musky fishery through natural reproduction, should musky stocking be continued in that water?**

- While between 65 and 67% of resident and non-resident anglers indicated that stocking should probably or definitely be discontinued in this situation, 78% of musky club anglers believe that stocking definitely or probably should be continued under the same conditions.



**54) Wisconsin currently has minimum size limits ranging from 28 inches to 50 inches. Would you prefer size limits that vary by individual water bodies based on their biological potential for musky growth OR would you prefer some type of uniform size limit for all waters?**

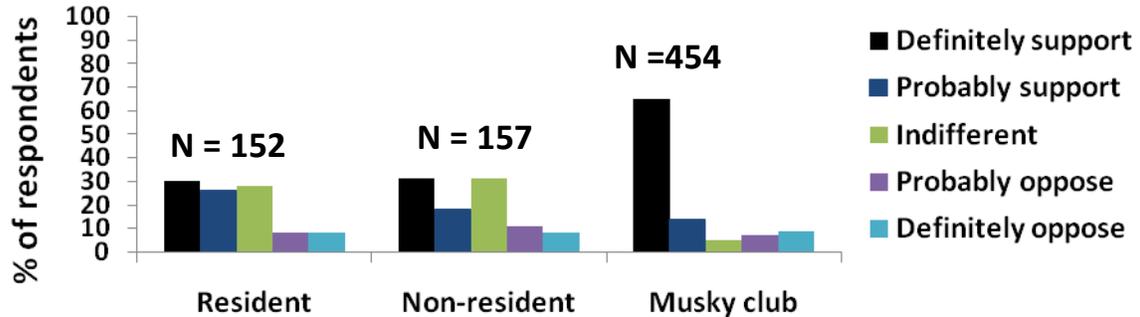
- Resident and non-resident anglers were almost evenly split in their response to this question, while 63% of musky club anglers preferred size limits that vary by water body.



**55) Would you support or oppose raising the size limit for muskies to 40, 45, or 50 inches in most musky waters in Wisconsin?**

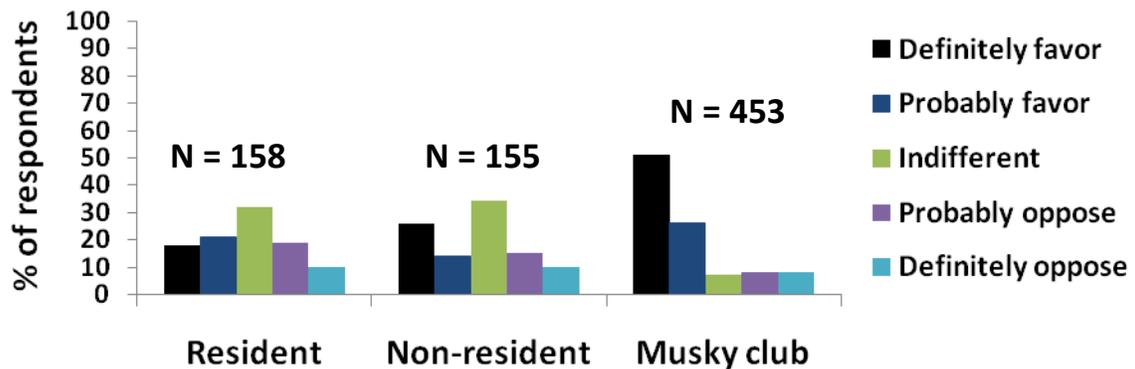
**40 inches in most musky waters:**

- Between 49 and 56% of resident and nonresident anglers indicated they would definitely or probably support a 40 inch size limit on most musky waters in Wisconsin, although between 28 and 31% of respondents were indifferent to this size limit change. Seventy-nine percent of musky club anglers indicate they would probably or definitely support raising the size limit to 40 inches for most musky waters in Wisconsin.



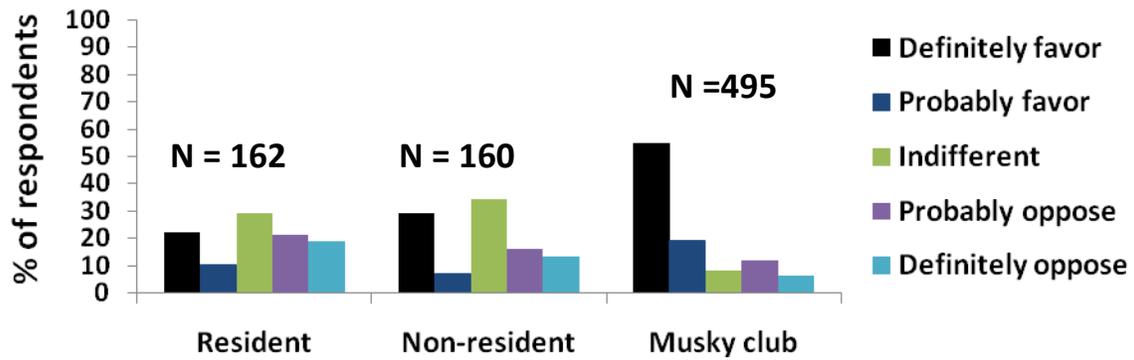
**45 inches in most musky waters:**

- Less than half (39-40%) of resident and nonresident anglers indicated they would definitely or probably support a 45 inch size limit on most musky waters in Wisconsin, and between 32 and 34% of respondents were indifferent to this size limit change. Seventy-seven percent of musky club anglers indicate they would probably or definitely support raising the size limit to 45 inches for most musky waters in Wisconsin.



**50 inches in most musky waters:**

- Less than 40% of resident and nonresident anglers indicated they would definitely or probably support a 50 inch size limit on most musky waters in Wisconsin, and between 29 and 34% of respondents were indifferent to this size limit change. Seventy-four percent of musky club anglers indicate they would probably or definitely support raising the size limit to 50 inches for most musky waters in Wisconsin.



**56) In general, why might you oppose raising the size limit on muskies to 40 inches? Check all that apply.**

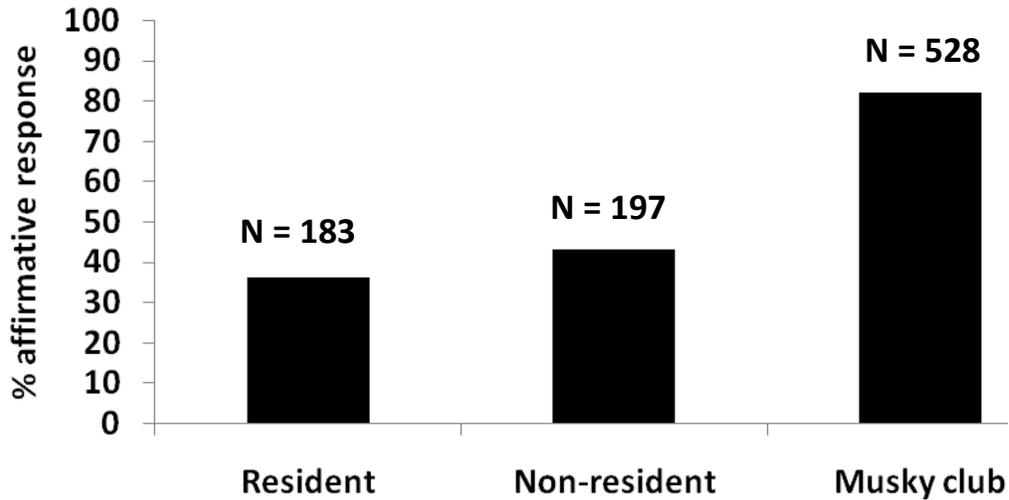
- The most prevalent reasons for opposition were that anglers thought musky fishing should be catch and release only, anglers thought the length limit should be higher than 40 inches, and anglers thought Native Americans might spear fish before the reaching length limit.

**% of total responses in each angler group**

Reason for Opposition	Resident Anglers	Non-resident anglers	Musky club anglers
Increased pressure on lakes with higher limit	4	3	1
Believe anglers should be able to keep fish < 40"	4	3	1
Illegal harvest of fish < 40 inches	9	9	5
Fishing regulations too complicated	11	9	4
Don't think change will improve musky fishing quality	8	7	4
Musky fishing quality already good, no need for change	5	6	3
Change in size limit might hurt fishing for other species	8	8	2
People might lose interest in musky fishing	5	4	2
Native Americans might spear fish before reaching limit	12	11	13
I think the size limit should be higher than 40 inches	10	9	26
I think musky fishing should be catch and release only	6	13	21
None of these apply to me	17	18	19
Total responses	318	337	798

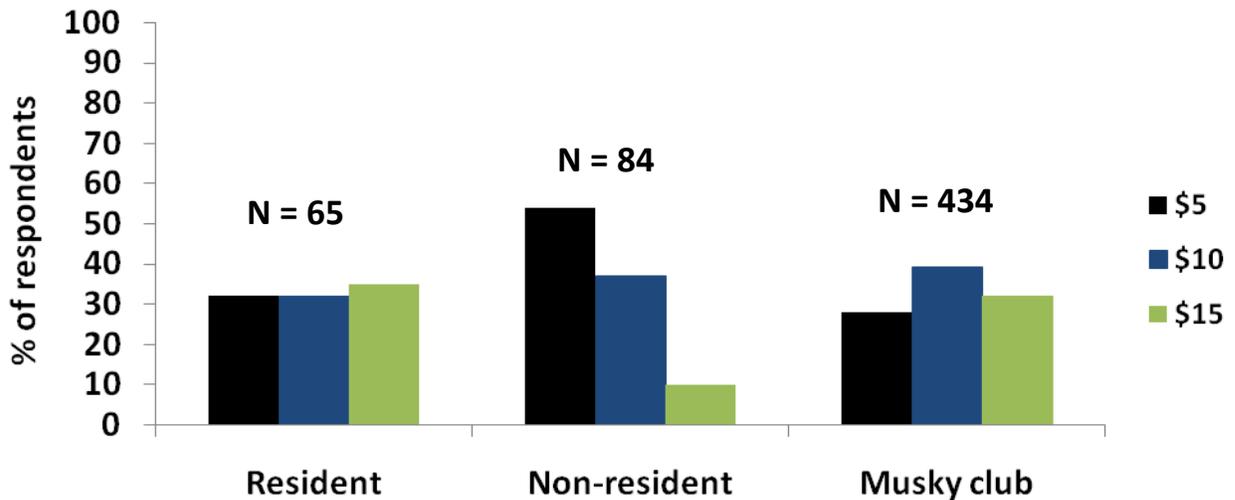
**57) Would you be willing to purchase a musky stamp in order to fish for muskies if the money directly benefitted the DNR musky program?**

- 82% of musky club anglers indicated they would be willing to purchase a stamp to fish for musky in Wisconsin, compared to only 36-43% of resident and non-resident anglers.



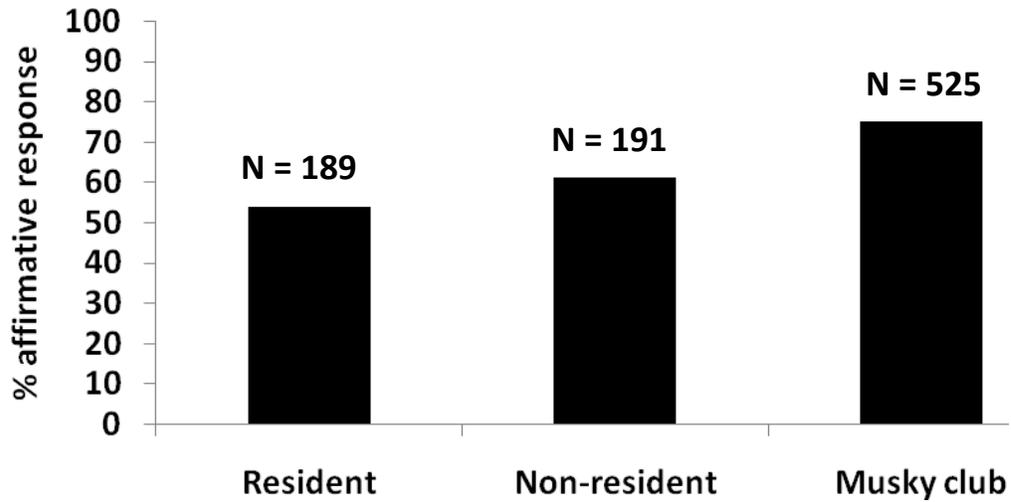
**58) How much would you be willing to pay for a musky stamp?**

- Resident anglers did not clearly favor any of the 3 price levels included in the question. Few nonresident anglers were willing to pay \$15 for a musky stamp and more than half (54%) indicated they would be willing to pay \$5. Musky club anglers did not clearly favor any price level, however 39% indicated they would be willing to pay \$10 and 32% were willing to pay \$15 for a stamp.



59) Estimating musky harvest is difficult for biologists, and a mandatory reporting system would provide a better means of estimating musky harvest in the state of Wisconsin. Would you support mandatory reporting of muskies that are harvested in Wisconsin?

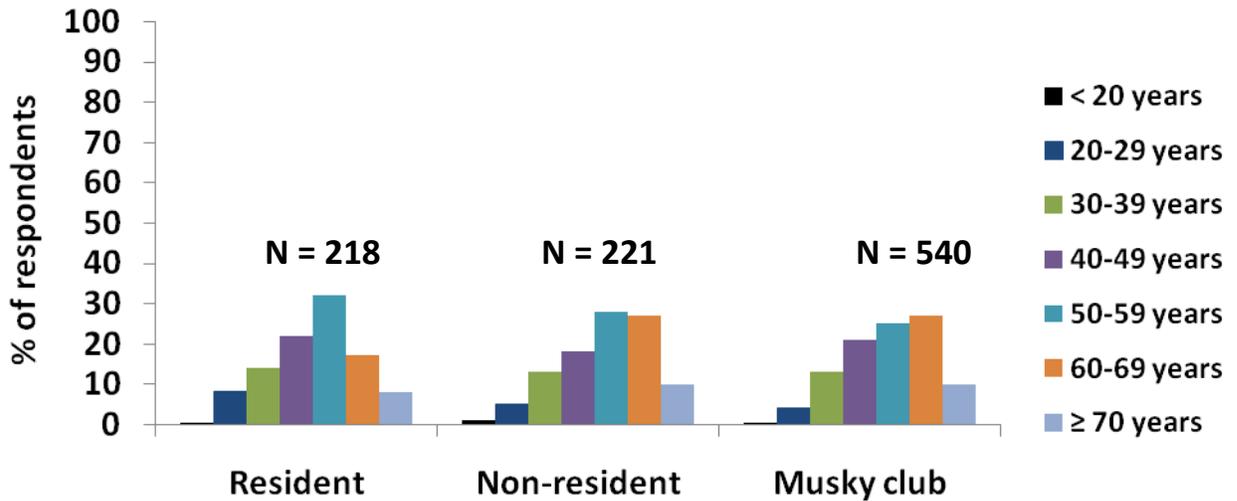
- More than half of the respondents in each angling group (54-75%) indicated they would support mandatory reporting of musky harvest in the state of Wisconsin.



## SECTION VIII: ANGLER DEMOGRAPHICS

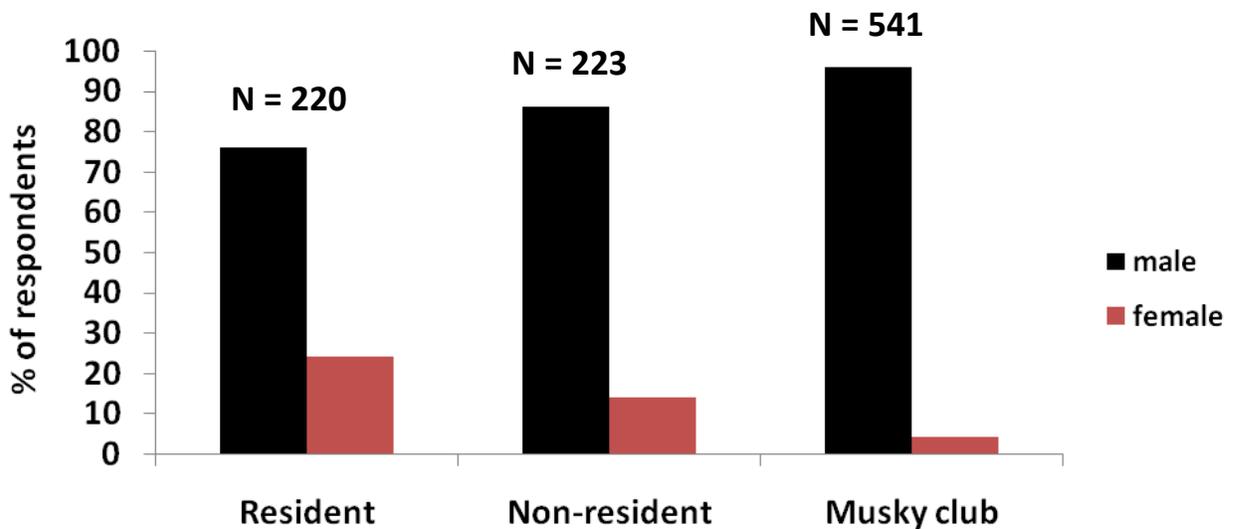
### 60) Age

- More than half (57-65%) of the respondents in all three angler groups were  $\geq 50$  years of age and less than 10% of all respondents were less than 30 years of age.



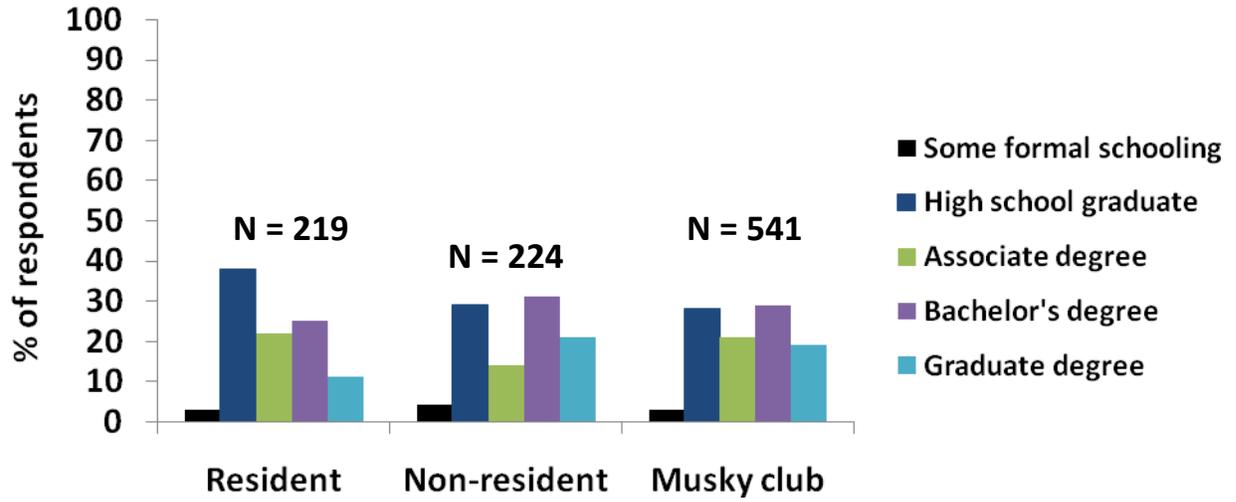
### 61) Gender

- More than 75% of the respondents in all three angler groups were male (76-96%). Almost all of the musky club anglers were male (96%).



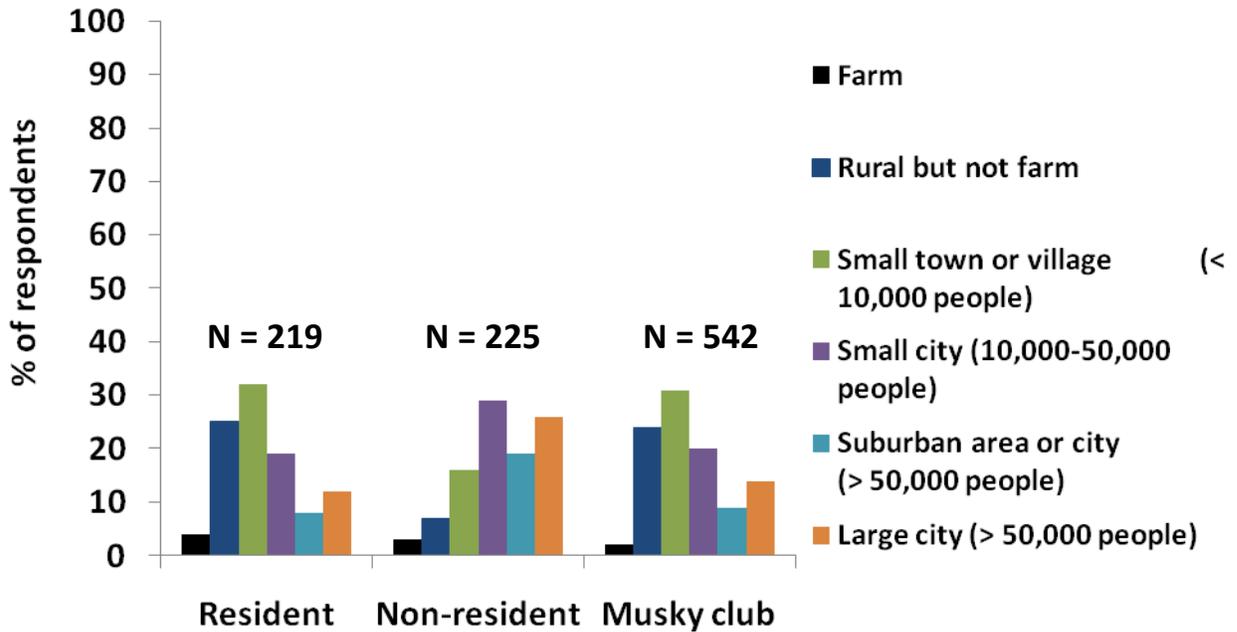
## 62) Education

- 58-69% of the respondents in the three angler groups had received a degree beyond a high school diploma.



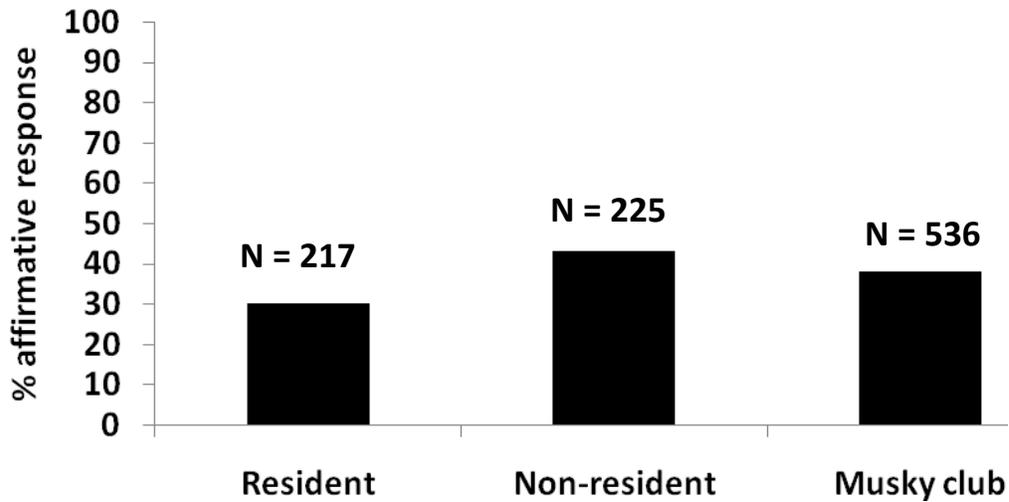
### 63) Location of permanent residence

- The majority of resident and musky club anglers (57-61%) indicated they were from rural areas or small towns of < 10,000 people and only 20-23% were from suburban areas or large cities exceeding 50,000 people. Conversely, almost half (45%) of nonresident anglers were from suburban areas or large cities exceeding 50,000 people and less than 30% were from rural areas or small towns of < 10,000 people.



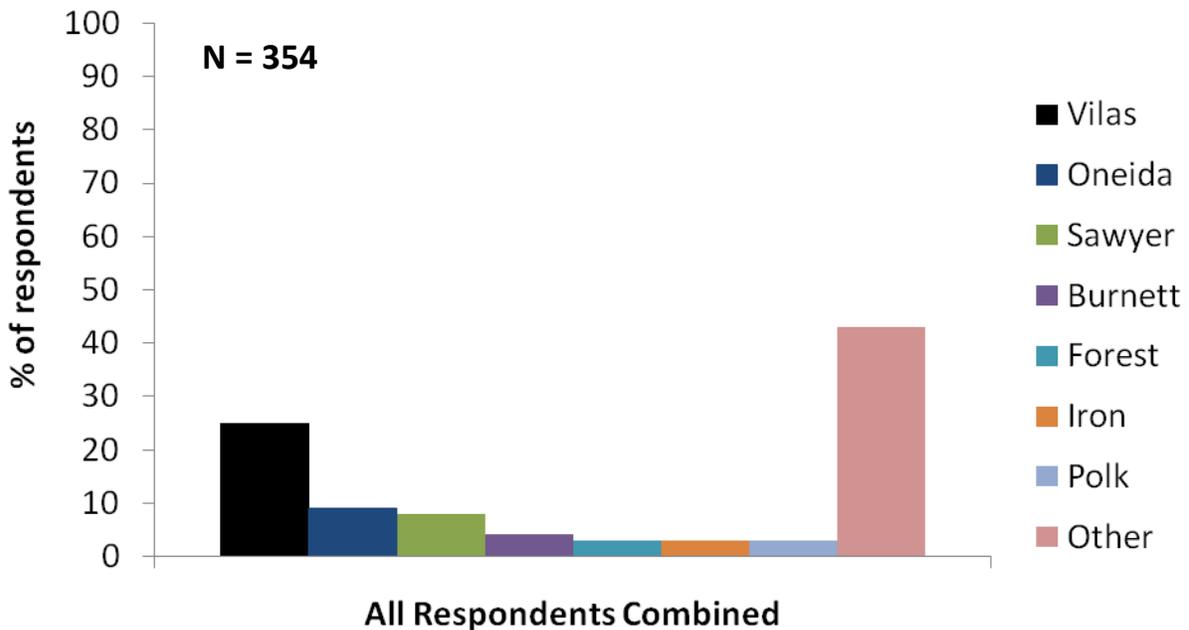
### 64) Do you or your family own vacation property or a second home in Wisconsin?

- Between 30 and 43% of respondents owned a vacation property or second home in Wisconsin.



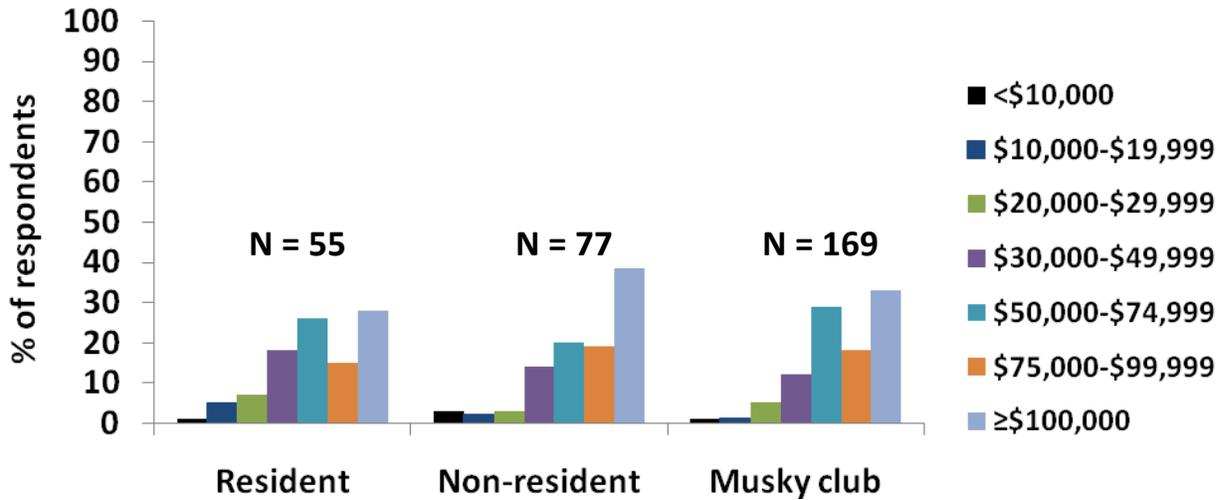
**65) In which county do you or your family own vacation property or a second home in Wisconsin?**

- The top five counties (i.e.,  $\geq 3\%$  of all respondents) for locations of vacation properties or second homes were Vilas, Oneida, Sawyer, Burnett, Forest, Iron, Polk, and Rusk.



**66) Family income**

- Between 69-80% of all survey respondents reported annual household incomes exceeding \$50,000.



**67) During the last five years how often have you attended the Conservation Congress Spring Hearings on hunting and fishing held during April in each county?**

- Reported attendance to the Conservation Congress Spring Hearings was highest among musky club anglers, where at least half of the respondents reported attending at least once in the last five years and 11% of respondents reported attending every year. In general, resident anglers responding to this question rarely attended the hearings and 81% reported never attending. Not surprisingly, 99% of nonresident anglers reported never attending the hearings.

