

TECHNICAL REPORT #01-12c

Submitted to:

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Report Prepared by:

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**MINNESOTA
AQUATIC NUISANCE SPECIES AND BOATING SURVEY:
RESULTS AND TECHNICAL REPORT**

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AQUATIC NUISANCE SPECIES AND BOATING SURVEY

OVERVIEW

The Aquatic Nuisance Species and Boating Survey was a mail survey of randomly selected boat owners in five states that was conducted by the Minnesota Center for Survey Research at the University of Minnesota. It was coordinated by the University of Minnesota Sea Grant Program and was funded by a grant to the National Sea Grant College Program from the U. S. National Oceanic and Atmospheric Administration, through an appropriation by Congress based on the National Invasive Species Act of 1996, and by the Vermont Department of Environmental Conservation. The National Sea Grant College Program is a unique partnership among universities, industries, and government that promotes better understanding and use of marine and Great Lakes water resources through research, education, and technology transfer.

The primary goals of this survey were: (1) to evaluate the effectiveness of aquatic nuisance species (ANS) boater education programs; (2) to determine the level of understanding about ANS; and (3) to design effective prevention programs for the public that would decrease the spread of ANS by changing boater behavior.

The survey that was developed included questions about awareness of state-specific ANS, importance of taking precautions to prevent the spread of those species, sources of ANS information, evaluating the effectiveness of specific actions aimed at getting boaters to take steps to prevent the spread of ANS, and boat use during the 2000 boating season. These and other questions focused on assessing the overall risk for spread of ANS by boaters based on their boating behavior. Additional questions asked about transport of boat(s) OUTSIDE the state where the boat was licensed, moving boat(s) along connected waterways or along the coast FROM waters that were known to be infested INTO uninfested waters, steps taken to prevent the transport of water or ANS from one waterbody to another, or reasons the boater did not take such precautions, likelihood of taking precautions in the future, whether ANS have caused problems for the boater or affected their recreational experience during the 2000 boating season, and willingness to spend additional money for a boat or fishing license.

Surveys were sent to 4,000 randomly selected registered boat owners in five states: California, Kansas, Minnesota, Ohio, and Vermont. Mailing and data collection were conducted from October 30, 2000 to June 1, 2001. Completed surveys were returned by 1,952 boat owners: 272 from California, 358 from Kansas, 496 from Minnesota, 389 from Ohio, and 437 from Vermont. The overall response rate was 53%, with response rates by state ranging from 66% for Minnesota to 38% for California.

GOALS

The primary goals of the Aquatic Nuisance Species and Boating Survey were: (1) to evaluate the effectiveness of ANS boater education programs; (2) to determine the level of understanding about ANS; and (3) to design effective prevention programs for the public that would decrease the spread of ANS by changing boater behavior. Additional goals were to gather information on ANS boater awareness in states that were representative of different regions of the country (freshwater, marine, inland, and coastal) with a range of boater education efforts and a variety of ANS infestations, and to develop a model survey that could be adapted for use by any state, provincial agency, or regional task force.

The survey data will be compared to data collected in Minnesota and Ohio in 1994 and to data collected in California in 1996. Finally, the survey will provide baseline data for Kansas and Vermont in 2000, allowing assessment of the current status of ANS boater education programs as well as future comparison of changes in boater awareness and behavior in those states.

STUDY DESIGN AND MANAGEMENT

The Aquatic Nuisance Species and Boating Survey was a mail survey of randomly selected boat owners in five states that was conducted by the Minnesota Center for Survey Research at the University of Minnesota. It was coordinated by the University of Minnesota Sea Grant Program and was funded by a grant to the National Sea Grant College Program from the U. S. National Oceanic and Atmospheric Administration, through an appropriation by Congress based on the National Invasive Species Act of 1996, and by the Vermont Department of Environmental Conservation.

The National Sea Grant College Program is a unique partnership among universities, industries, and government that promotes better understanding and use of marine and Great Lakes water resources through research, education, and technology transfer. Principal Investigators Jeffrey L. Gunderson, Associate Director, and Douglas A. Jensen, Exotic Species Information Center Coordinator, at the University of Minnesota Sea Grant Program were responsible for coordination of the project and oversight of the contract with the Minnesota Center for Survey Research.

The highest standards of quality survey research were employed in conducting this project. Administrative coordination of the project at MCSR was provided by the Director, Rossana Armson. She worked extensively with the Multi-State ANS Boater Survey Technical Planning Committee on questionnaire design, conducted the pretest and revised the survey instrument, and wrote the methodology report. The MCSR Project Manager, Stacey Modahl, was responsible for data collection, as well as coding and editing. The MCSR Data Manager, Anne Hoffman, was responsible for ensuring data accuracy and conversion of the raw ASCII data into an SPSS system file format for analysis. She also converted descriptive data into graphic form.

QUESTIONNAIRE DESIGN

In 1994, the Sea Grant College Program conducted the Exotic Species and Freshwater Boating Survey with licensed boat owners in Minnesota, Ohio, and Wisconsin. That survey was also conducted by MCSR under contract to the Minnesota Sea Grant Program (see MCSR Technical Report # 94-14). Using the 1994 survey as the starting point, development of the Aquatic Nuisance Species and Boating Survey began in December 1999. Survey design took place over the next nine months, primarily through monthly conference calls with the members of the Multi-State ANS Boater Survey Technical Planning Committee. Committee members (see Table 1) were ANS management and outreach experts representing each state that was surveyed. They devoted considerable time and effort to survey development, review, and design and were instrumental in the success of the project.

TABLE 1

**MULTI-STATE ANS BOATER SURVEY
TECHNICAL PLANNING COMMITTEE MEMBERS**

California:	Jodi Cassell	California Sea Grant College Program
	Kim Webb	U S Fish & Wildlife Service, Region 1
Kansas:	Linda Drees	U S Fish & Wildlife Service, Region 6
Minnesota:	Jeffrey Gunderson & Douglas Jensen	Minnesota Sea Grant College Program
	Jay Rendall & Michelle Bratager	Minnesota Dept of Natural Resources, Exotic Species Program
Ohio:	Karen Ricker	Ohio Sea Grant College Program
Vermont:	Mike Hauser	Vermont Dept of Environmental Conservation
Others:	James Athearn	U S Army Corps of Engineers, NW Region
	Ladd Johnson	University of Laval, Quebec Department of Biology

AQUATIC NUISANCE SPECIES & BOATING SURVEY

The survey pretest was sent to a random sample of 100 registered boaters from Kansas, Minnesota, and Ohio in September 2000. The survey instrument was extensively revised following the pretest, particularly concerning questions on transporting and mooring. Final survey revisions were resolved by Rossana Armson in consultation with members of the Survey Technical Planning Committee.

The survey that was developed included questions about awareness of state-specific ANS, importance of taking precautions to prevent the spread of those species, sources of ANS information, evaluating the effectiveness of specific actions aimed at getting boaters to take steps to prevent the spread of ANS, and boat use during the 2000 boating season (to include the length of time boat(s) were IN the water before being moved to a different waterbody, length of time boat(s) were OUT of the water before being put in a different waterbody than it was PREVIOUSLY used in, and distance between different bodies of water where the boat(s) were used). These and other questions focused on assessing the overall risk for spread of ANS by recreational boaters.

Additional questions asked about transport of boat(s) OUTSIDE the state where the boat was licensed, moving boat(s) along connected waterways or along the cost FROM waters that were known to be infested INTO uninfested waters, steps taken to prevent the transport of water or ANS from one waterbody to another, or reasons the boater did not take such precautions, likelihood of taking precautions in the future, whether ANS have caused problems for the boater or affected their recreational experience during the 2000 boating season, and willingness to spend additional money for a boat or fishing license.

The final survey questions sought background information on boat owners, such as type of radio station usually listened to, gender, state of residence, zip code, and year of birth, followed by an open-ended question requesting recommendations or other comments about the spread of ANS.

Each state's survey was identical except that the ANS listed in the first two questions were specific to each state. Survey technical planning committee members selected, in consultation with ANS experts in their respective states, the "top six" ANS being addressed through outreach and at risk for spread by recreational boaters (see Table 2). Please note that Vermont listed the "top seven" and California listed the "top eight".

The final survey was approved by Jeffrey Gunderson and Douglas Jensen prior to printing.

TABLE 2

ANS LISTED IN FIRST TWO QUESTIONS BY STATE

	<u>California</u>	<u>Kansas</u>	<u>Minnesota</u>	<u>Ohio</u>	<u>Vermont</u>
a.	Zebra mussels/ quagga mussels	Zebra mussels/ quagga mussels	Zebra mussels	Zebra mussels/ quagga mussels	Zebra mussels/ quagga mussels
b.	Eurasian watermilfoil	Eurasian watermilfoil	Eurasian watermilfoil	Eurasian watermilfoil	Eurasian watermilfoil
c.	Purple loosestrife	Purple loosestrife	Purple loosestrife	White perch	Purple loosestrife
d.	Hydrilla	Common carp	Spiny waterflea	Spiny waterflea	Water chestnut
e.	Chinese mitten crab	Asian carp (bighead, silver, & black carp)	Round goby	Round goby	Alewife
f.	Northern pike	White perch	Eurasian ruffe	Goldfish	Sea lamprey
g.	Giant salvinia	Other	Other	Other	Hydrilla
h.	Egeria densa				Other
i.	Other				

SAMPLING DESIGN

Surveys were sent to 4,000 randomly selected registered boat owners in five states: California, Kansas, Minnesota, Ohio, and Vermont (800 from each state). These states were chosen because they were interested in conducting a boater education evaluation, they represent different regions of the country (freshwater, marine, inland, and coastal), they represent a range of ANS boater education efforts, and they have a variety of ANS infestations.

Lists of registered boat owners for each state were provided to MCSR in EXCEL files. To identify the state of origin, each version of the survey was color-coded and given a unique series of identification numbers (see Table 3).

TABLE 3

ID NUMBERING AND PAPER COLOR BY STATE

<u>Version</u>	<u>ID Numbers</u>	<u>Paper Color</u>
California	1000's	Blue
Kansas	2000's	Goldenrod
Minnesota	3000's	Yellow
Ohio	4000's	Salmon
Vermont	5000's	Green

DATA COLLECTION PROCEDURES

The procedures used by MCSR for this mail survey were based on Mail and Telephone Surveys, by Don A. Dillman (John Wiley & Sons, Inc., 1978). Mailing and data collection for the Aquatic Nuisance Species and Boating Survey were conducted from October 30, 2000 to June 1, 2001.

Mailing Procedures

The first mailing was sent to 800 randomly selected boat owners from each state and included the following: (1) a cover letter from an organization in that state inviting participation in the survey; (2) a survey instrument; and (3) a self-addressed, stamped return envelope. Dates for each mailing are listed in Table 4. The California mailing occurred later than the other four states because of difficulty in acquiring the sample of registered boat owners for California.

TABLE 4

MAILING DATES BY STATE

<u>State</u>	<u>1st mailing</u>	<u>Postcard</u>	<u>3rd mailing</u>	<u>Final postcard</u>
California	February 2	February 9	February 23	March 9
Kansas	November 3	November 10	November 27	December 14
Minnesota	October 30	November 6	November 20	December 14
Ohio	October 30	November 6	November 20	December 14
Vermont	October 30	November 6	November 20	December 14

The second mailing consisted of a reminder postcard from Rossana Armson, MCSR Director, which was sent to all selected boat owners one week after the initial mailing. The postcard thanked individuals if they had already filled out the questionnaire, and asked them to take time to complete the survey if they had not already done so.

Two weeks after the postcard, a third mailing was sent to all individuals who had not yet returned their survey. This mailing was identical procedurally to the first mailing and included a copy of the questionnaire, a reminder cover letter, and a self-addressed, stamped return envelope.

A final postcard was sent from Rossana Armson, MCSR Director, to all non-respondents two to three weeks after the third mailing. Because of an unusually low response rate in Ohio, a fifth mailing was sent on March 26, 2001 to all Ohio non-respondents with the following plea affixed as a label on the mailing envelope: **ASKING FOR HELP FROM OHIO BOAT OWNERS**

Copies of the cover letters and postcards are presented in Appendix B.

Mailing Supplies

Survey response rates are generally higher if the survey is sent by an organization that people can identify with their state. Attempts were made to identify an organization in each state that would provide assistance with administration of the survey. Identified organizations were asked to provide letterhead and mailing envelopes, along with the name of a person in that organization who would be the "sender" of the letter and survey. For surveys sent to California, Minnesota, and Ohio, the state's Sea Grant College Program served this role. For Vermont, the Center for Rural Studies at the University of Vermont reviewed the study materials and agreed to provide assistance. No organization, however, was identified in Kansas, so those surveys were mailed using MCSR mailing supplies and a letter from the MCSR Director.

Participating organizations collected surveys returned to them as nondeliverable mail and forwarded them to MCSR.

Supervision and Quality Control of the Mailings

All mailings were sent from MCSR and were completed under the supervision of the Director or the Project Manager. Quality checks were made prior to sealing the envelopes to ensure that the survey packets were complete and that the address labels and survey identification numbers matched.

Survey Returns

Returned surveys were counted to track sample status and response rate. Peak survey returns occurred within a few days after each mailing and illustrate the importance of multiple mailings to ensure a high response rate (see Figures 1 through 5).

FIGURE 1

CALIFORNIA AQUATIC NUISANCE SPECIES AND BOATING SURVEY
NUMBER OF COMPLETED SURVEYS BY DATE

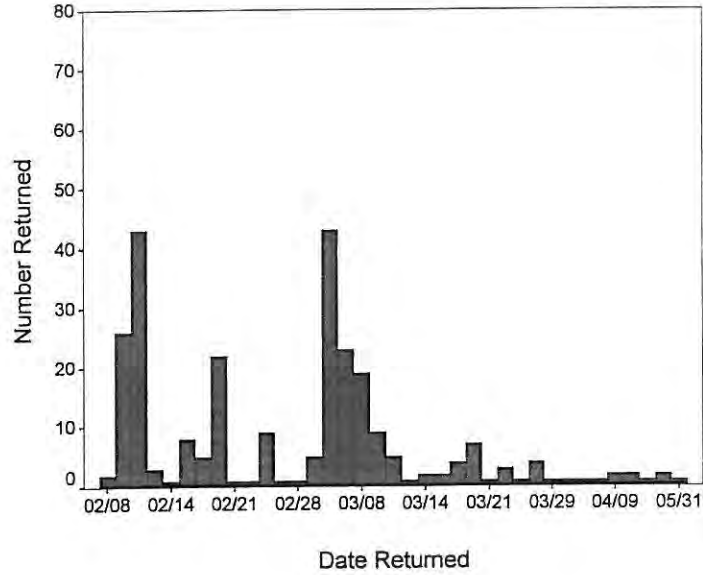


FIGURE 2

KANSAS AQUATIC NUISANCE SPECIES AND BOATING SURVEY
NUMBER OF COMPLETED SURVEYS BY DATE

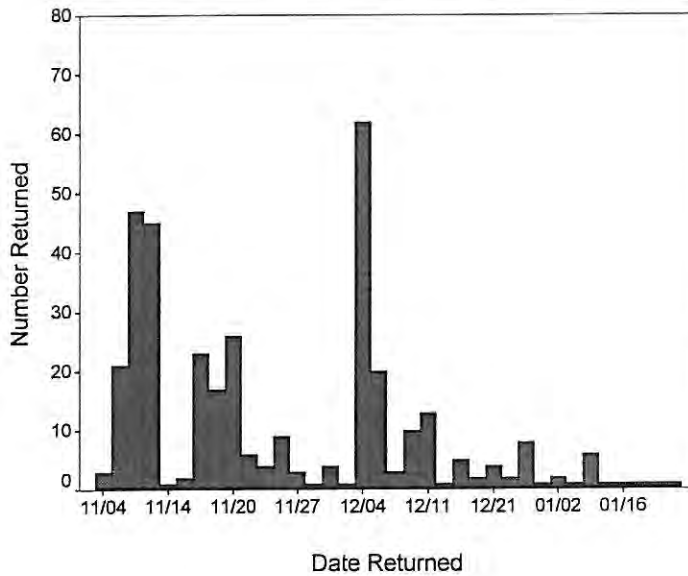


FIGURE 3

MINNESOTA AQUATIC NUISANCE SPECIES AND BOATING SURVEY
NUMBER OF COMPLETED SURVEYS BY DATE

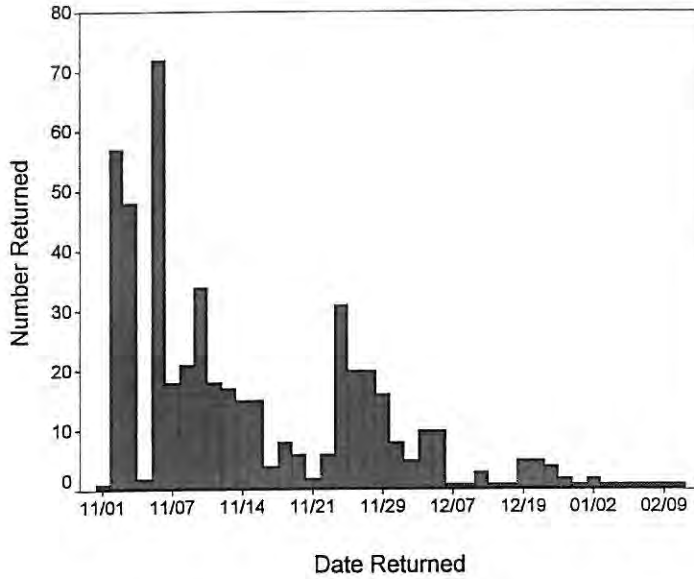


FIGURE 4

OHIO AQUATIC NUISANCE SPECIES AND BOATING SURVEY
NUMBER OF COMPLETED SURVEYS BY DATE

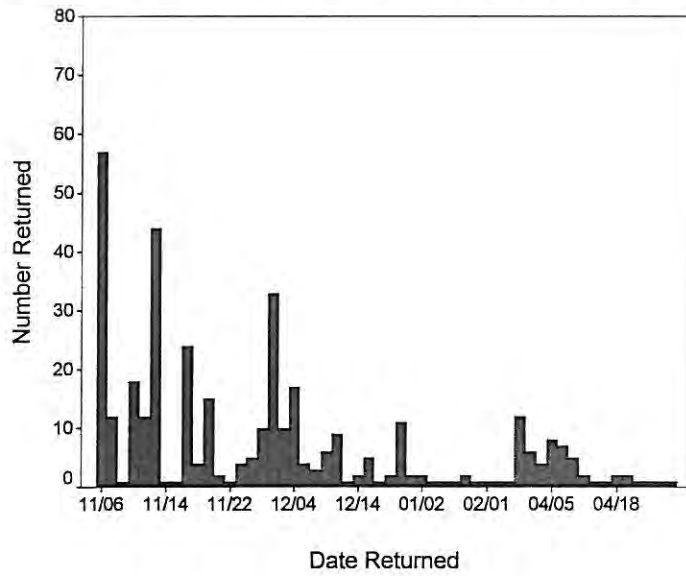
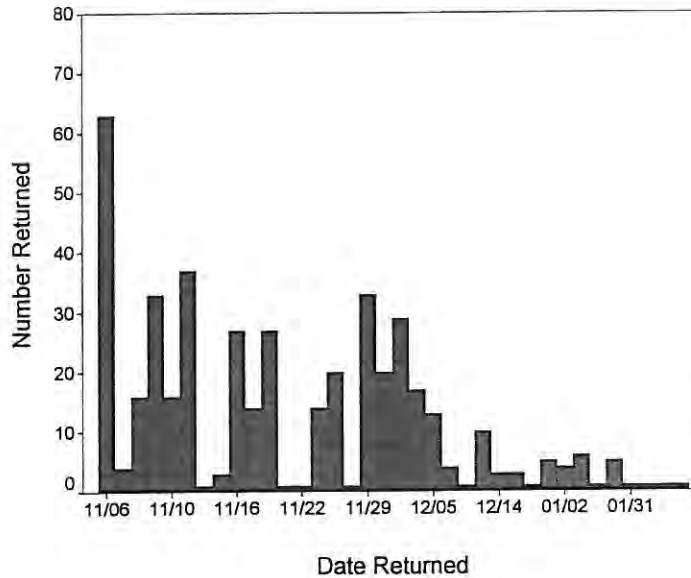


FIGURE 5

**VERMONT AQUATIC NUISANCE SPECIES AND BOATING SURVEY
NUMBER OF COMPLETED SURVEYS BY DATE**



MANAGEMENT OF THE DATA

Editing and Coding

Editing and coding included the completion of two major tasks. First, all surveys were checked for response clarity to eliminate dual responses when single-answer responses were sought, or to create a separate category for dual responses. Second, the coder/editor recorded responses to "other-specify" questions.

Editing and coding were done by three coder/editors who attended a training session to familiarize themselves with the survey instrument. Unclear or ambiguous responses were directed to the Project Manager for resolution. In addition, the Project Manager conducted quality control and reviewed coded/edited surveys throughout this phase.

Data Entry and Cleaning

After coding was completed, each version of the survey was key entered onto a data tape by a commercial data entry firm and computer data files were prepared. Once a complete file of each version of the survey was constructed, it was examined systematically to remove data entry errors. Data cleaning involved the use of a computer program to evaluate each case for variables with out-of-range values. In addition, the file was examined manually to identify cases with paradoxical or inappropriate responses.

COMPLETION STATUS

Completed surveys were returned by 1,952 boat owners: 272 from California, 358 from Kansas, 496 from Minnesota, 389 from Ohio, and 437 from Vermont (see Table 5). An additional 56 boat owners refused to participate, 1,657 surveys were not returned, and the remaining 335 were eliminated from the sample for the reasons listed below in Table 5. The overall response rate was 53%, with response rates by state ranging from 66% for Minnesota to 38% for California.

TABLE 5

FINAL SAMPLE STATUS OF THE
AQUATIC NUISANCE SPECIES AND BOATING SURVEY

	<u>CA</u>	<u>KS</u>	<u>MN</u>	<u>OH</u>	<u>VT</u>	<u>TOTAL</u>
Surveys returned	272	358	496	389	437	1,952
Refusals	8	18	13	9	8	56
Surveys not returned	432	352	240	319	314	1,657
Eliminated: Nondeliverable	80	60	35	67	11	253
No longer have boat	6	1	6	6	3	22
No longer use boat	1	8	7	5	5	26
Other (deceased, under 18, business)	1	3	3	5	22	34
	-----	-----	-----	-----	-----	-----
TOTAL SENT	800	800	800	800	800	4,000
RESPONSE RATES *	38%	49%	66%	54%	58%	53%

$$* \text{ RESPONSE RATE} = \frac{\text{Completed questionnaires}}{\text{Total sent - eliminated}}$$

READING THE QUESTIONNAIRE AND RESULTS

There are five versions of this technical report: one version for each state. They are identical in the text of the report, but state-specific in the Questionnaire and Results section and in the appendices.

The Questionnaire and Results section of this report contains the response frequencies and percentages for each question in the survey for this specific state. The actual responses of all those who completed the survey are shown for each question. Percentage distributions also are presented; "valid" percentages were computed after eliminating those who refused to answer, did not know, or were not required to answer a particular question.

The question numbers were used as variable labels in the computer data files. This information is provided as documentation for those who wish to use a computer file and the SPSS software package to conduct more detailed data analyses.

MINNESOTA AQUATIC NUISANCE SPECIES AND BOATING SURVEY

Please circle the number which corresponds to the answer closest to your opinion or situation. ALL INDIVIDUAL RESPONSES WILL BE KEPT CONFIDENTIAL. For the purpose of this survey, BOATS are defined as canoes, kayaks, duck boats, sailboats, personal watercraft, fishing boats, and recreational watercraft.

- Q1. AQUATIC NUISANCE SPECIES are plants or animals that enter places where they have NOT always lived. They can be harmful to fish and wildlife, and to commercial and recreational water uses. How much information have you heard or read about each of the AQUATIC NUISANCE SPECIES listed below? *(Circle one answer for each item.)*

How much information have you heard/read about . . .

<u>Aquatic Nuisance Species</u>	<u>A Large Amount</u>	<u>A Moderate Amount</u>	<u>A Small Amount</u>	<u>None</u>	BLANK	Freq (%)
	1	2	3	4		
a. Zebra mussels	146 (30)	209 (42)	101 (20)	37 (8)	3	
b. Eurasian watermilfoil	251 (51)	155 (31)	53 (11)	36 (7)	1	
c. Purple loosestrife	63 (13)	100 (21)	117 (24)	205 (42)	11	
d. Spiny waterflea	9 (2)	18 (4)	99 (21)	355 (74)	15	
e. Round goby	6 (1)	33 (7)	88 (18)	356 (74)	13	
f. Eurasian ruffe	10 (2)	44 (9)	105 (22)	326 (67)	11	
g. Other (please specify)	3 (38)	2 (25)	3 (38)	0 (-)	488	

- Q2. In your opinion, how important is it that boaters and anglers take precautions to prevent the spread of each of the following aquatic nuisance species from one body of water to another? *(Circle one answer for each item.)*

Taking precautions to prevent the spread is . . .

<u>Aquatic Nuisance Species</u>	<u>Very Important</u>	<u>Somewhat Important</u>	<u>Not Very Important</u>	<u>Not at All Important</u>	<u>Don't Know</u>	BLANK	Freq (%)
	1	2	3	4	5		
a. Zebra mussels	427 (87)	36 (7)	5 (1)	2 (0)	23 (5)	3	
b. Eurasian watermilfoil	449 (91)	20 (4)	4 (1)	3 (1)	18 (4)	2	
c. Purple loosestrife	301 (62)	48 (10)	13 (3)	4 (1)	119 (24)	11	
d. Spiny waterflea	229 (48)	39 (8)	13 (3)	3 (1)	198 (41)	14	
e. Round goby	237 (49)	34 (7)	9 (2)	3 (1)	201 (42)	12	
f. Eurasian ruffe	241 (50)	34 (7)	8 (2)	5 (1)	195 (40)	13	
g. Other (please specify)	3 (50)	0 (-)	2 (33)	0 (-)	1 (17)	490	

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q3. Have you heard of or read about aquatic nuisance species from any of the following sources?
(Circle one answer for each source.)

MEDIA SOURCES		<u>Yes</u>	<u>No</u>	<u>Don't</u>	BLANK	Freq (%)
		1	2	3		
A.	Newspaper articles	426 (88)	39 (8)	21 (4)	10	
B.	Magazine or newsletter articles	348 (73)	95 (20)	36 (8)	17	
C.	Television news or programs	386 (81)	60 (13)	29 (6)	21	
D.	Radio news or programs	289 (62)	132 (28)	49 (10)	26	
E.	Television public service announcements	260 (56)	139 (30)	68 (15)	29	
F.	Radio public service announcements	193 (42)	197 (42)	75 (16)	31	
G.	Billboards	164 (35)	235 (50)	67 (14)	30	
H.	Internet web sites	36 (8)	348 (77)	70 (15)	42	
EVENTS						
I.	Conferences, presentations, or meetings	66 (14)	362 (77)	44 (9)	24	
J.	An educational exhibit or display	195 (41)	245 (52)	33 (7)	23	
K.	Fishing contests, fishing derbys, or sailboat regattas	106 (23)	321 (68)	42 (9)	27	
L.	A booth at a sport show, fishing show, or similar event	234 (50)	210 (44)	28 (6)	24	
FISHING OR BOATING SOURCES						
M.	Fishing or boating regulation pamphlets	419 (87)	45 (9)	16 (3)	16	
N.	Boat registration materials	335 (70)	81 (17)	59 (12)	21	
O.	Creel surveys or inspection-education programs on roads or at boat launches	217 (46)	219 (47)	31 (7)	29	
P.	Signs or information provided at a <u>marina</u> or <u>boat launch</u>	396 (83)	62 (13)	21 (4)	17	
Q.	Signs or information provided at a <u>bait shop</u>	217 (46)	205 (43)	53 (11)	21	
R.	A fishing, boating, sporting, or environmental organization	166 (36)	243 (52)	58 (12)	29	
OTHER SOURCES						
S.	Brochures, species identification cards, fact sheets, or other printed materials	226 (49)	192 (41)	46 (10)	32	
T.	Books	70 (15)	332 (72)	59 (13)	35	
U.	Educational videos	26 (6)	383 (83)	54 (12)	33	
V.	Hot line or information clearinghouse	7 (2)	395 (86)	58 (13)	36	
W.	Other (please specify) _____	11 (100)	0 (-)	0 (-)	485	

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q4. Of the sources of information that you circled in Question 3, which four were your BEST sources of information about aquatic nuisance species? *(Write the letter for each item you select in the spaces provided below.)*

____ _ (SEE APPENDIX A, PAGE A-2)

Q5. How effective would each of the following be in getting YOU to take steps to prevent the spread of aquatic nuisance species? *(Circle one number for each item.)* In the last column, please tell us which ones ALREADY led you to take action. *(Circle Yes or No for each item.)*

HOW EFFECTIVE WOULD THIS BE IN GETTING YOU TO TAKE ACTION . . .	Would be very effective	Would be somewhat effective	Would NOT be very effective	BLANK	This already led me to take action		
	1	2	3		Yes 1	No 2	BLANK
A. Talking with friends or acquaintances	196 (42)	230 (50)	35 (8)	35	228 (60)	155 (40)	113 (8)
B. A sense of personal responsibility	395 (83)	74 (16)	7 (2)	20	363 (88)	52 (12)	81 (6)
C. A desire to keep aquatic nuisance species out of our lakes or streams	409 (86)	58 (12)	6 (1)	23	345 (85)	59 (15)	92 (7)
D. A desire to prevent damage to my boat or equipment	266 (57)	145 (31)	57 (12)	28	211 (54)	176 (46)	109 (9)
E. Laws or regulations to prevent the transport of aquatic nuisance species	288 (61)	152 (32)	35 (7)	21	222 (58)	160 (42)	114 (10)
F. Enforcement checks on the road or at boat launches to catch violators	278 (58)	147 (31)	50 (10)	21	149 (40)	226 (60)	121 (10)
G. Fines that must be paid by violators	267 (57)	149 (32)	54 (12)	26	112 (30)	257 (70)	127 (10)
H. Media sources (newspapers and radio and TV news/programs)	238 (50)	210 (44)	25 (5)	23	206 (56)	164 (44)	126 (10)
I. Television or radio public service announcements	232 (49)	206 (44)	35 (7)	23	184 (50)	181 (50)	131 (11)
J. Billboards	151 (32)	229 (48)	92 (20)	24	102 (28)	260 (72)	134 (11)
K. Magazine or newsletter articles	189 (40)	230 (49)	50 (11)	27	163 (45)	196 (55)	137 (11)
L. Internet web sites	65 (14)	213 (47)	179 (39)	39	30 (9)	319 (91)	147 (12)
M. Fishing or boating regulation pamphlets	323 (68)	130 (27)	21 (4)	22	247 (66)	127 (34)	122 (10)
N. Conferences or workshops for boaters and anglers	99 (21)	236 (50)	132 (28)	29	46 (13)	316 (87)	134 (11)
O. Brochures, species identification cards, fact sheets, or other printed materials	228 (49)	202 (43)	38 (8)	28	152 (42)	210 (58)	134 (11)
P. Signs at marinas or boat launches	359 (76)	97 (21)	14 (3)	26	272 (72)	107 (28)	117 (10)
Q. Creel surveys or inspection-education programs on roads or at boat launches	194 (41)	205 (44)	70 (15)	27	119 (32)	247 (68)	130 (11)
R. Videos or other presentations to boating, lake, and sporting associations	124 (26)	243 (52)	102 (22)	27	48 (13)	310 (87)	138 (11)
S. Traveller information or low power radio broadcasts along roads	53 (11)	180 (39)	232 (50)	31	25 (7)	332 (93)	139 (11)
T. 100th Meridian Initiative to prevent Western spread of aquatic nuisance species	62 (15)	169 (42)	173 (43)	92	31 (10)	288 (90)	177 (15)

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q6. Of the items that you said "would be VERY EFFECTIVE" in Question 5, which would be MOST effective in getting you to take steps to prevent the spread of aquatic nuisance species? *(Write the letter for each item you select in the spaces provided below.)*

____ _ (SEE APPENDIX A, PAGE A-7)

The next questions are about your recreational use of ALL boat(s) during the 2000 boating season. Your answers will help us determine the movement of boats between waterbodies.

Q7. Did you USE a boat or boats during the 2000 boating season? *(Circle one.)*

<u>Freq</u>	<u>(%)</u>	
452	(91)	1. YES
44	(9)	2. NO (IF NO, SKIP TO QUESTION 18 ON PAGE 7)

Q8. What type of boat(s) did you use during 2000? *(Circle all that apply.)*

- 46 (10) a. Small sailboat (less than 20 feet)
- 7 (2) b. Large sailboat (20 feet or longer)
- 38 (8) c. Personal watercraft (jet ski)
- 42 (9) d. Duckboat/john boat
- 355 (80) e. Small powerboat (less than 20 feet)
- 69 (16) f. Large powerboat (20 feet or longer)
- 133 (30) g. Canoe or kayak
- 3 (1) h. Other type of boat (please specify) _____
- 46 (10) i. Pontoon boat (VOLUNTEERED)
- 17 (4) j. Small unpowered boat (VOLUNTEERED)
- 51 BLANK

Q9. Thinking about all boats you used during the 2000 boating season, about how long was the boat(s) IN the water before being moved to a different waterbody? Do NOT include time on a boat lift. *(Fill in the number of times during the 2000 boating season for each time period.)*

- 192 (43) a. I never moved ANY boat(s) to a different waterbody
- 169 (38) b. One day or less _____ times
- 82 (18) c. 2 to 4 days _____ times
- 38 (9) d. 5 to 14 days _____ times
- 15 (3) e. 15 to 30 days _____ times
- 28 (6) f. More than 30 days _____ times
- 52 BLANK (SEE APPENDIX A, PAGE A-12, FOR NUMBER OF TIMES)

Remember to write in the number of times

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q10. About how long was the boat(s) OUT of the water before you put it in a DIFFERENT waterbody than it was PREVIOUSLY used in? Include the amount of time on a trailer, on a boat lift, on a rack, or transported on a road. (Fill in the number of times during the 2000 boating season for each time period.)

Freq (%)

- 197 (44) a. I never moved ANY boat(s) to a different waterbody
- 73 (16) b. One day or less _____ times
- 70 (16) c. 2 to 4 days _____ times
- 105 (24) d. 5 to 14 days _____ times
- 50 (11) e. 15 to 30 days _____ times
- 48 (11) f. More than 30 days _____ times
- 52 BLANK (SEE APPENDIX A, PAGE A-16, FOR NUMBER OF TIMES)

Remember to write in the number of times

Q11. If you moved any boat(s) to a different waterbody than it was previously used in, how far apart were the different bodies of water? (Fill in the number of times during the 2000 boating season for each distance category.)

- 194 (44) a. I never moved ANY boat(s) to a different waterbody
- 90 (20) b. Ten miles or less _____ times
- 114 (26) c. 11 to 50 miles _____ times
- 82 (19) d. 51 to 150 miles _____ times
- 61 (14) e. 151 to 500 miles _____ times
- 8 (2) f. More than 500 miles _____ times
- 58 BLANK (SEE APPENDIX A, PAGE A-20, FOR NUMBER OF TIMES)

Remember to write in the number of times

Q12. During the 2000 boating season, did you TRANSPORT (by truck, trailer, car top, etc.) any boat(s) to waters OUTSIDE the state where the boat is licensed? (Circle one.)

- 66 (15) 1. YES == =>
- 376 (85) 2. NO
- 54 BLANK

Q12a. How many different times did you transport boat(s) to another state or province in 2000? _____ times
(SEE APPENDIX A, PAGE A-24)

Q12b. Please list each state or province that you transported boat(s) to in 2000. _____
(SEE APPENDIX A, PAGE A-25)

Q13. During the 2000 boating season, did you move any boat(s) along connected waterways (such as rivers or canals) or along the coast FROM waters that you knew were infested with any of the aquatic nuisance species listed in Question 1 INTO uninfested waters? (Circle one.)

- 16 (4) 1. YES == =>
- 396 (90) 2. NO
- 28 (6) 3. DON'T KNOW
- 56 BLANK

Please list the names of the waterways that you went to and from in the boat(s):

Q13a. WENT TO (uninfested waters): _____
WENT FROM (infested waters): _____

Q13b. WHICH AQUATIC NUISANCE SPECIES: (SEE APPENDIX A, PAGE A-25)

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q14. Before you transport the boat(s), do you take any special steps to prevent the transport of water or aquatic nuisance species from one body of water to another? *(Circle one.)*

Freq (%)

266 (60) 1. YES

29 (7) 2. NO == =>
147 (33) 3. I never moved ANY boat(s) to a different waterbody
54 BLANK

(IF NO) If you do not take any special precautions, why not? *(Circle all that apply.)*

Freq (%)

0 (-) Q14a. I don't believe it will prevent the eventual spread of aquatic nuisance species
0 (-) Q14b. It's inconvenient, I don't have time to take precautions
9 (33) Q14c. I don't know exactly what I'm supposed to do
13 (48) Q14d. I didn't boat on infested waters
0 (-) Q14e. I don't believe aquatic nuisance species are a problem
2 (7) Q14f. Boat washing equipment was not readily available
8 (30) Q14g. Other (please specify) _____
469 BLANK

Q15. During 2000, did you boat on waters that you knew were infested with ANY of the aquatic nuisance species listed in Question 1 on the front page? *(Circle one.)*

138 (31) 1. YES == =>
236 (53) 2. NO
68 (15) 3. DON'T KNOW
54 BLANK

(IF YES) How did you know that the waters you boated on were infested with an aquatic nuisance species? *(Circle all that apply.)*

Freq (%)

112 (82) Q15a. Sign or poster at boat launch or marina
24 (18) Q15b. Brochure, fact sheet, or flyer
32 (24) Q15c. Fishing, boating, or waterfowl regulation pamphlet
3 (2) Q15d. Internet web site
18 (13) Q15e. Watercraft educator/inspector
47 (35) Q15f. Media sources (newspaper, radio, TV)
0 (-) Q15g. Hot line or information clearinghouse
40 (29) Q15h. Heard about it from a friend or relative
20 (15) Q15i. Other (please specify) _____
360 BLANK

Q16. If you do boat on infested waters, how likely is it that YOU will take precautions in the future to prevent the spread of aquatic nuisance species between bodies of water? *(Circle one.)*

361 (83) 1. Very likely
30 (7) 2. Somewhat likely
3 (1) 3. Not very likely
0 (-) 4. Not at all likely
43 (10) 5. I never boat on infested waters
59 BLANK

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Q17. After removing boat(s) from the water, how often do you do the following?
(Circle one answer for each item.)

<u>Steps Taken:</u>	<u>Almost</u>	<u>Some-</u>	<u>Never</u>	<u>Does</u>	BLANK	Freq (%)
	<u>Always</u> 1	<u>times</u> 2	<u>3</u>	<u>Not</u> <u>Apply</u> 4		
a. Conduct visual inspection of boats and equipment for aquatic plants and animals	350 (83)	38 (9)	9 (2)	23 (6)	76	
b. Drain water from boats, including live wells, bilge, and bait buckets	302 (73)	36 (9)	11 (3)	65 (16)	82	
c. Avoid release of unwanted live bait into the water	239 (58)	75 (18)	37 (9)	63 (15)	82	
d. Remove aquatic plants and animals from boats and equipment	331 (80)	33 (8)	9 (2)	41 (10)	82	
e. Flush motor's cooling system with tap water	33 (8)	52 (13)	225 (55)	97 (24)	89	
f. Rinse boat with high pressure and/or hot water	41 (10)	105 (26)	221 (54)	42 (10)	87	
g. Allow boat to dry for at least five days	180 (43)	127 (31)	59 (14)	49 (12)	81	
h. Other (please specify) _____	4 (67)	2 (33)	0 (-)	0 (-)	490	

Q18. Have aquatic nuisance species caused problems for you or affected your recreational experience during the 2000 boating season? (Circle one.)

Freq (%)

48 (10) 1. YES == =>

421 (87) 2. NO

15 (3) 3. DON'T KNOW

12 BLANK

Q18a. Please list all impacts, the aquatic nuisance species that were involved, and any associated costs you have experienced.

Freq (%)

46 (96) 1. Comment

2 (4) 2. No comment

448 BLANK

Q19. How much MORE would you be willing to spend for a boating or fishing license if the additional money was used to fund activities to prevent the spread of aquatic nuisance species and to reduce their harmful effects? (Circle one.)

- 62 (13) 1. \$1
- 61 (13) 2. \$2
- 58 (12) 3. \$3
- 108 (22) 4. \$4 to \$5
- 45 (9) 5. \$6 to \$10
- 37 (8) 6. More than \$10
- 111 (23) 7. Would NOT be willing to spend more
- 14 BLANK

MINNESOTA AQUATIC NUISANCE SPECIES & BOATING SURVEY

Please answer the following questions about yourself. This information will be used only to compare people's answers. It will not be used to identify you in any way.

Q20. What types of radio stations do you usually listen to? (Circle all that apply.)

<u>Freq</u>	<u>(%)</u>	
96	(20)	a. Classical music
214	(44)	b. Country music
163	(34)	c. Public radio
78	(16)	d. New/alternative rock music
273	(56)	e. Oldies/classic rock music
197	(41)	f. Talk radio
45	(9)	g. Other (please specify) _____
13		BLANK

Q21. Are you male or female? (Circle one.)

429	(88)	1. Male
61	(12)	2. Female
6		BLANK

Q22. In what state or province is your primary residence located?

(SEE APPENDIX A, PAGE A-26)

Q23. What is your zip code or postal code?

(SEE APPENDIX A, PAGE A-27)

Q24. In what year were you born?

(SEE APPENDIX A, PAGE A-34)

Q25. What recommendations or other comments would you like to make about the spread of aquatic nuisance species in your state's or province's waters?

165	(33)	1. Comment
331	(67)	2. No comment

Thank you for your time and cooperation.

Please return this questionnaire in the enclosed postage-paid envelope to:

Minnesota Center for Survey Research, University of Minnesota
2331 University Avenue SE, Suite 141
Minneapolis, Minnesota 55414-3067
(612) 627-4282

APPENDIX A
CONTINUOUS VARIABLES

<u>Variable</u>	<u>Description</u>	<u>Page</u>
Q4a to Q4d	Best sources of aquatic nuisance species info	A-2
Q4MULT	Best sources of aquatic nuisance species info – multiple response	A-6
Q6a to Q6d	Most effective get you take action	A-7
Q6MULT	Most effective get you take action - multiple response .	A-11
Q9b-2 to Q9f-2	# times boat in water (X) days before moved to different waterbody	A-12
Q10b-2 to Q10f-2	# times boat out of water (X) days before put into different waterbody	A-16
Q11b-2 to Q11f-2	# times moved boat to waterbodies (X) miles apart . . .	A-20
Q12a	# times transported boat to different state/province during 2000 boating season	A-24
Q12b	State/province boat transported to during 2000 boating season	A-25
Q13b-1 to Q13b-2	Species in infested waters moved boat from during 2000 boating season	A-25
Q22	Primary residence	A-26
Q23	Zip or postal code	A-27
Q24	Year born	A-34
DATE	Date survey returned	A-35

Q4A BEST SOURCES OF AQUATIC NUISANCE SPECIES INFO - 1

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Newspaper articles	137	27.6	39.4	39.4
2 B - Mag/newsltr articles	20	4.0	5.7	45.1
3 C - TV news/programs	37	7.5	10.6	55.7
4 D - Radio news/programs	13	2.6	3.7	59.5
5 E - TV pub svc anncmt	13	2.6	3.7	63.2
6 F - Radio pub svc anncmt	3	.6	.9	64.1
7 G - Billboards	4	.8	1.1	65.2
9 I - Conferences/mtgs	7	1.4	2.0	67.2
10 J - Educ exhibit/display	6	1.2	1.7	69.0
11 K - Fish contest/regatta	4	.8	1.1	70.1
12 L - Booth at sport show	6	1.2	1.7	71.8
13 M - Fish/boat reg pamphs	45	9.1	12.9	84.8
14 N - Boat registr materls	6	1.2	1.7	86.5
15 O - Creel surveys etc.	7	1.4	2.0	88.5
16 P - Inf at marina/launch	26	5.2	7.5	96.0
19 S - Printed materials	7	1.4	2.0	98.0
20 T - Books	1	.2	.3	98.3
21 U - Educational videos	1	.2	.3	98.6
23 W - Other	5	1.0	1.4	100.0
Total valid	348	70.2	100.0	
Missing System	148	29.8		
Total	496	100.0		

Q4B BEST SOURCES OF AQUATIC NUISANCE SPECIES INFO - 2

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Newspaper articles	20	4.0	6.0	6.0
2 B - Mag/newsltr articles	52	10.5	15.7	21.8
3 C - TV news/programs	40	8.1	12.1	33.8
4 D - Radio news/programs	13	2.6	3.9	37.8
5 E - TV pub svc anncmt	23	4.6	6.9	44.7
6 F - Radio pub svc anncmt	5	1.0	1.5	46.2
7 G - Billboards	6	1.2	1.8	48.0
9 I - Conferences/mtgs	8	1.6	2.4	50.5
10 J - Educ exhibit/display	15	3.0	4.5	55.0
11 K - Fish contest/regatta	3	.6	.9	55.9
12 L - Booth at sport show	14	2.8	4.2	60.1
13 M - Fish/boat reg pamphs	46	9.3	13.9	74.0
14 N - Boat registr materls	23	4.6	6.9	81.0
15 O - Creel surveys etc.	8	1.6	2.4	83.4
16 P - Inf at marina/launch	44	8.9	13.3	96.7
17 Q - Inf at bait shop	3	.6	.9	97.6
18 R - Fishing,etc organztn	3	.6	.9	98.5
19 S - Printed materials	4	.8	1.2	99.7
20 T - Books	1	.2	.3	100.0
Total valid	331	66.7	100.0	
Missing System	165	33.3		
Total	496	100.0		

Q4C BEST SOURCES OF AQUATIC NUISANCE SPECIES INFO - 3

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Newspaper articles	15	3.0	4.6	4.6
2 B - Mag/newsltr articles	14	2.8	4.3	9.0
3 C - TV news/programs	39	7.9	12.0	21.0
4 D - Radio news/programs	16	3.2	4.9	25.9
5 E - TV pub svc anncmt	18	3.6	5.6	31.5
6 F - Radio pub svc anncmt	7	1.4	2.2	33.6
7 G - Billboards	5	1.0	1.5	35.2
8 H - Internet web sites	3	.6	.9	36.1
9 I - Conferences/mtgs	4	.8	1.2	37.3
10 J - Educ exhibit/display	6	1.2	1.9	39.2
11 K - Fish contest/regatta	6	1.2	1.9	41.0
12 L - Booth at sport show	14	2.8	4.3	45.4
13 M - Fish/boat reg pamphs	66	13.3	20.4	65.7
14 N - Boat registr materls	24	4.8	7.4	73.1
15 O - Creel surveys etc.	13	2.6	4.0	77.2
16 P - Inf at marina/launch	56	11.3	17.3	94.4
17 Q - Inf at bait shop	8	1.6	2.5	96.9
18 R - Fishing,etc organztn	4	.8	1.2	98.1
19 S - Printed materials	5	1.0	1.5	99.7
20 T - Books	1	.2	.3	100.0
Total valid	324	65.3	100.0	
Missing System	172	34.7		
Total	496	100.0		

Q4D BEST SOURCES OF AQUATIC NUISANCE SPECIES INFO - 4

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Newspaper articles	19	3.8	6.2	6.2
2 B - Mag/newsltr articles	16	3.2	5.2	11.5
3 C - TV news/programs	11	2.2	3.6	15.1
4 D - Radio news/programs	12	2.4	3.9	19.0
5 E - TV pub svc anncmt	19	3.8	6.2	25.2
6 F - Radio pub svc anncmt	10	2.0	3.3	28.5
7 G - Billboards	9	1.8	3.0	31.5
8 H - Internet web sites	1	.2	.3	31.8
9 I - Conferences/mtgs	2	.4	.7	32.5
10 J - Educ exhibit/display	6	1.2	2.0	34.4
11 K - Fish contest/regatta	1	.2	.3	34.8
12 L - Booth at sport show	16	3.2	5.2	40.0
13 M - Fish/boat reg pamphs	24	4.8	7.9	47.9
14 N - Boat registr materls	25	5.0	8.2	56.1
15 O - Creel surveys etc.	10	2.0	3.3	59.3
16 P - Inf at marina/launch	60	12.1	19.7	79.0
17 Q - Inf at bait shop	18	3.6	5.9	84.9
18 R - Fishing,etc organztn	11	2.2	3.6	88.5
19 S - Printed materials	26	5.2	8.5	97.0
20 T - Books	5	1.0	1.6	98.7
21 U - Educational videos	1	.2	.3	99.0
22 V - Hotline/info clrhse	1	.2	.3	99.3
23 W - Other	2	.4	.7	100.0
Total valid	305	61.5	100.0	
Missing System	191	38.5		
Total	496	100.0		

**Q4MULT BEST SOURCES OF AQUATIC NUISANCE SPECIES INFO -
MULTIPLE RESPONSE**

Category label	Code	Count	Pct of Responses	Pct of Cases
A - Newspaper articles	1	191	14.6	54.9
B - Mag/newsltr articles	2	102	7.8	29.3
C - TV news/programs	3	127	9.7	36.5
D - Radio news/programs	4	54	4.1	15.5
E - TV pub svc anncmt	5	73	5.6	21.0
F - Radio pub svc anncmt	6	25	1.9	7.2
G - Billboards	7	24	1.8	6.9
H - Internet web sites	8	4	.3	1.1
I - Conferences/mtgs	9	21	1.6	6.0
J - Educ exhibit/display	10	33	2.5	9.5
K - Fish contest/regatta	11	14	1.1	4.0
L - Booth at sport show	12	50	3.8	14.4
M - Fish/boat reg pamphs	13	181	13.8	52.0
N - Boat registr materls	14	78	6.0	22.4
O - Creel surveys etc.	15	38	2.9	10.9
P - Inf at marina/launch	16	186	14.2	53.4
Q - Inf at bait shop	17	29	2.2	8.3
R - Fishing,etc organztn	18	18	1.4	5.2
S - Printed materials	19	42	3.2	12.1
T - Books	20	8	.6	2.3
U - Educational videos	21	2	.2	.6
V - Hotline/info clrhse	22	1	.1	.3
W - Other	23	7	.5	2.0
		-----	-----	-----
	Total responses	1308	100.0	375.9

148 missing cases; 348 valid cases

Q6A MOST EFFECTIVE GET YOU TAKE ACTION - 1

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Talk with others	52	10.5	12.5	12.5
2 B - Personal responsblty	170	34.3	40.8	53.2
3 C - Keep ANS out of waters	60	12.1	14.4	67.6
4 D - Prevent boat damage	10	2.0	2.4	70.0
5 E - Laws/regulations	36	7.3	8.6	78.7
6 F - Enforcement checks	14	2.8	3.4	82.0
7 G - Fines	15	3.0	3.6	85.6
8 H - Media sources	12	2.4	2.9	88.5
9 I - TV/radio pub svc msg	8	1.6	1.9	90.4
11 K - Mag/newsltr articles	1	.2	.2	90.6
12 L - Internet web sites	2	.4	.5	91.1
13 M - Regulation pamphlets	14	2.8	3.4	94.5
15 O - Printed materials	3	.6	.7	95.2
16 P - Inf at marina/launch	19	3.8	4.6	99.8
17 Q - Creel surveys etc.	1	.2	.2	100.0
Total valid	417	84.1	100.0	
Missing System	79	15.9		
Total	496	100.0		

Q6B MOST EFFECTIVE GET YOU TAKE ACTION - 2

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Talk with others	8	1.6	2.0	2.0
2 B - Personal responsblty	59	11.9	14.6	16.5
3 C - Keep ANS out of waters	130	26.2	32.1	48.6
4 D - Prevent boat damage	27	5.4	6.7	55.3
5 E - Laws/regulations	39	7.9	9.6	64.9
6 F - Enforcement checks	42	8.5	10.4	75.3
7 G - Fines	18	3.6	4.4	79.8
8 H - Media sources	7	1.4	1.7	81.5
9 I - TV/radio pub svc msg	11	2.2	2.7	84.2
10 J - Billboards	9	1.8	2.2	86.4
11 K - Mag/newsltr articles	5	1.0	1.2	87.7
13 M - Regulation pamphlets	14	2.8	3.5	91.1
15 O - Printed materials	7	1.4	1.7	92.8
16 P - Inf at marina/launch	23	4.6	5.7	98.5
17 Q - Creel surveys etc.	4	.8	1.0	99.5
18 R - Sporting assoc	2	.4	.5	100.0
Total valid	405	81.7	100.0	
Missing System	91	18.3		
Total	496	100.0		

Q6C MOST EFFECTIVE GET YOU TAKE ACTION - 3

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Talk with others	6	1.2	1.5	1.5
2 B - Personal responsblty	11	2.2	2.8	4.3
3 C - Keep ANS out of waters	43	8.7	10.9	15.2
4 D - Prevent boat damage	37	7.5	9.4	24.6
5 E - Laws/regulations	44	8.9	11.1	35.7
6 F - Enforcement checks	49	9.9	12.4	48.1
7 G - Fines	36	7.3	9.1	57.2
8 H - Media sources	30	6.0	7.6	64.8
9 I - TV/radio pub svc msg	14	2.8	3.5	68.4
10 J - Billboards	10	2.0	2.5	70.9
11 K - Mag/newsltr articles	14	2.8	3.5	74.4
12 L - Internet web sites	1	.2	.3	74.7
13 M - Regulation pamphlets	38	7.7	9.6	84.3
14 N - Conferences/wrkshops	1	.2	.3	84.6
15 O - Printed materials	18	3.6	4.6	89.1
16 P - Inf at marina/launch	34	6.9	8.6	97.7
17 Q - Creel surveys etc.	7	1.4	1.8	99.5
18 R - Sporting assoc	2	.4	.5	100.0
Total valid	395	79.6	100.0	
Missing System	101	20.4		
Total	496	100.0		

Q6D MOST EFFECTIVE GET YOU TAKE ACTION - 4

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 A - Talk with others	5	1.0	1.4	1.4
2 B - Personal responsblty	13	2.6	3.6	5.0
3 C - Keep ANS out of waters	12	2.4	3.3	8.4
4 D - Prevent boat damage	18	3.6	5.0	13.4
5 E - Laws/regulations	30	6.0	8.4	21.7
6 F - Enforcement checks	32	6.5	8.9	30.6
7 G - Fines	39	7.9	10.9	41.5
8 H - Media sources	15	3.0	4.2	45.7
9 I - TV/radio pub svc msg	21	4.2	5.8	51.5
10 J - Billboards	7	1.4	1.9	53.5
11 K - Mag/newsltr articles	9	1.8	2.5	56.0
13 M - Regulation pamphlets	48	9.7	13.4	69.4
14 N - Conferences/wrkshops	2	.4	.6	69.9
15 O - Printed materials	18	3.6	5.0	74.9
16 P - Inf at marina/launch	69	13.9	19.2	94.2
17 Q - Creel surveys etc.	12	2.4	3.3	97.5
18 R - Sporting assoc	6	1.2	1.7	99.2
19 S - Traveller info	2	.4	.6	99.7
20 T - 100th Merid Initiatv	1	.2	.3	100.0
Total valid	359	72.4	100.0	
Missing System	137	27.6		
Total	496	100.0		

**Q6MULT MOST EFFECTIVE GET YOU TAKE ACTION -
MULTIPLE RESPONSE**

Category label	Code	Count	Pct of Responses	Pct of Cases
A - Talk with others	1	71	4.5	17.0
B - Personal responsblty	2	253	16.1	60.7
C - Keep ANS out of waters	3	245	15.5	58.8
D - Prevent boat damage	4	92	5.8	22.1
E - Laws/regulations	5	149	9.5	35.7
F - Enforcement checks	6	137	8.7	32.9
G - Fines	7	108	6.9	25.9
H - Media sources	8	64	4.1	15.3
I - TV/radio pub svc msg	9	54	3.4	12.9
J - Billboards	10	26	1.6	6.2
K - Mag/newsltr articles	11	29	1.8	7.0
L - Internet web sites	12	3	.2	.7
M - Regulation pamphlets	13	114	7.2	27.3
N - Conferences/wrkshops	14	3	.2	.7
O - Printed materials	15	46	2.9	11.0
P - Inf at marina/launch	16	145	9.2	34.8
Q - Creel surveys etc.	17	24	1.5	5.8
R - Sporting assoc	18	10	.6	2.4
S - Traveller info	19	2	.1	.5
T - 100th Merid Initiatv	20	1	.1	.2
		-----	-----	-----
	Total responses	1576	100.0	377.9

79 missing cases; 417 valid cases

Q9B2 # TIMES BOAT IN WATER 1 DAY OR LESS BEFORE MOVED TO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	14	2.8	8.4	8.4
2	14	2.8	8.4	16.9
3	9	1.8	5.4	22.3
4	20	4.0	12.0	34.3
5	15	3.0	9.0	43.4
6	11	2.2	6.6	50.0
7	2	.4	1.2	51.2
8	7	1.4	4.2	55.4
10	15	3.0	9.0	64.5
12	3	.6	1.8	66.3
13	2	.4	1.2	67.5
15	10	2.0	6.0	73.5
18	1	.2	.6	74.1
20	22	4.4	13.3	87.3
24	1	.2	.6	88.0
25	3	.6	1.8	89.8
28	1	.2	.6	90.4
30	8	1.6	4.8	95.2
35	1	.2	.6	95.8
40	3	.6	1.8	97.6
50	2	.4	1.2	98.8
75	1	.2	.6	99.4
90	1	.2	.6	100.0
Total valid	166	33.5	100.0	
Missing System	330	66.5		
Total	496	100.0		

Q9C2 # TIMES BOAT IN WATER 2 - 4 DAYS BEFORE MOVED TO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	20	4.0	25.0	25.0
2	22	4.4	27.5	52.5
3	10	2.0	12.5	65.0
4	12	2.4	15.0	80.0
5	2	.4	2.5	82.5
6	5	1.0	6.3	88.8
8	4	.8	5.0	93.8
10	2	.4	2.5	96.3
15	2	.4	2.5	98.8
20	1	.2	1.3	100.0
Total valid	80	16.1	100.0	
Missing System	416	83.9		
Total	496	100.0		

Q9D2 # TIMES BOAT IN WATER 5 - 14 DAYS BEFORE MOVED TO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	19	3.8	52.8	52.8
2	5	1.0	13.9	66.7
3	2	.4	5.6	72.2
4	2	.4	5.6	77.8
5	1	.2	2.8	80.6
6	2	.4	5.6	86.1
8	2	.4	5.6	91.7
10	2	.4	5.6	97.2
12	1	.2	2.8	100.0
Total valid	36	7.3	100.0	
Missing System	460	92.7		
Total	496	100.0		

Q9E2 # TIMES BOAT IN WATER 15 - 30 DAYS BEFORE MOVED TO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	3	.6	23.1	23.1
2	5	1.0	38.5	61.5
3	2	.4	15.4	76.9
4	1	.2	7.7	84.6
5	1	.2	7.7	92.3
24	1	.2	7.7	100.0
Total valid	13	2.6	100.0	
Missing System	483	97.4		
Total	496	100.0		

**Q9F2 # TIMES BOAT IN WATER MORE THAN 30 DAYS BEFORE
MOVED TO DIFFERENT WATERBODY**

	Value	Frequency	Percent	Valid Percent	Cumulative Percent
	1	11	2.2	50.0	50.0
	2	8	1.6	36.4	86.4
	3	1	.2	4.5	90.9
	4	1	.2	4.5	95.5
	7	1	.2	4.5	100.0
Total valid		22	4.4	100.0	
Missing System		474	95.6		
Total		496	100.0		

Q10B2

TIMES BOAT OUT OF WATER 1 DAY OR LESS BEFORE
PUT INTO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	13	2.6	18.1	18.1
2	14	2.8	19.4	37.5
3	5	1.0	6.9	44.4
4	8	1.6	11.1	55.6
5	8	1.6	11.1	66.7
6	4	.8	5.6	72.2
10	8	1.6	11.1	83.3
12	3	.6	4.2	87.5
13	1	.2	1.4	88.9
14	1	.2	1.4	90.3
20	3	.6	4.2	94.4
30	1	.2	1.4	95.8
35	1	.2	1.4	97.2
75	1	.2	1.4	98.6
90	1	.2	1.4	100.0
Total valid	72	14.5	100.0	
Missing System	424	85.5		
Total	496	100.0		

Q10C2

TIMES BOAT OUT OF WATER 2 - 4 DAYS BEFORE PUT INTO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	10	2.0	14.5	14.5
2	15	3.0	21.7	36.2
3	4	.8	5.8	42.0
4	6	1.2	8.7	50.7
5	6	1.2	8.7	59.4
6	3	.6	4.3	63.8
10	8	1.6	11.6	75.4
12	2	.4	2.9	78.3
13	1	.2	1.4	79.7
15	2	.4	2.9	82.6
20	3	.6	4.3	87.0
25	2	.4	2.9	89.9
28	1	.2	1.4	91.3
30	4	.8	5.8	97.1
50	2	.4	2.9	100.0
Total valid	69	13.9	100.0	
Missing System	427	86.1		
Total	496	100.0		

Q10D2

TIMES BOAT OUT OF WATER 5 - 14 DAYS BEFORE PUT INTO DIFFERENT WATERBODY

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	1.6	7.9	7.9
2	16	3.2	15.8	23.8
3	4	.8	4.0	27.7
4	8	1.6	7.9	35.6
5	10	2.0	9.9	45.5
6	10	2.0	9.9	55.4
7	2	.4	2.0	57.4
8	4	.8	4.0	61.4
9	2	.4	2.0	63.4
10	13	2.6	12.9	76.2
14	2	.4	2.0	78.2
15	8	1.6	7.9	86.1
17	1	.2	1.0	87.1
20	8	1.6	7.9	95.0
25	2	.4	2.0	97.0
30	3	.6	3.0	100.0
Total valid	101	20.4	100.0	
Missing System	395	79.6		
Total	496	100.0		

Q10E2

**# TIMES BOAT OUT OF WATER 15 - 30 DAYS BEFORE
PUT INTO DIFFERENT WATERBODY**

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	1.6	16.0	16.0
2	16	3.2	32.0	48.0
3	10	2.0	20.0	68.0
4	7	1.4	14.0	82.0
5	3	.6	6.0	88.0
6	2	.4	4.0	92.0
9	1	.2	2.0	94.0
10	2	.4	4.0	98.0
18	1	.2	2.0	100.0
Total valid	50	10.1	100.0	
Missing System	446	89.9		
Total	496	100.0		

Q10F2

**# TIMES BOAT OUT OF WATER MORE THAN 30 DAYS
BEFORE PUT INTO DIFFERENT WATERBODY**

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	22	4.4	48.9	48.9
2	11	2.2	24.4	73.3
3	5	1.0	11.1	84.4
4	3	.6	6.7	91.1
5	1	.2	2.2	93.3
6	1	.2	2.2	95.6
8	1	.2	2.2	97.8
10	1	.2	2.2	100.0
Total valid	45	9.1	100.0	
Missing System	451	90.9		
Total	496	100.0		

Q11B2

TIMES MOVED BOAT TO WATERBODIES 10 MILES OR
LESS APART

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	15	3.0	17.0	17.0
2	13	2.6	14.8	31.8
3	7	1.4	8.0	39.8
4	7	1.4	8.0	47.7
5	11	2.2	12.5	60.2
6	8	1.6	9.1	69.3
7	2	.4	2.3	71.6
10	5	1.0	5.7	77.3
12	1	.2	1.1	78.4
15	4	.8	4.5	83.0
16	1	.2	1.1	84.1
17	1	.2	1.1	85.2
20	5	1.0	5.7	90.9
25	3	.6	3.4	94.3
28	1	.2	1.1	95.5
30	1	.2	1.1	96.6
45	1	.2	1.1	97.7
49	1	.2	1.1	98.9
50	1	.2	1.1	100.0
Total valid	88	17.7	100.0	
Missing System	408	82.3		
Total	496	100.0		

Q11C2

TIMES MOVED BOAT TO WATERBODIES 11 TO 50
MILES APART

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	18	3.6	16.2	16.2
2	18	3.6	16.2	32.4
3	16	3.2	14.4	46.8
4	7	1.4	6.3	53.2
5	10	2.0	9.0	62.2
6	6	1.2	5.4	67.6
7	1	.2	.9	68.5
8	2	.4	1.8	70.3
10	7	1.4	6.3	76.6
11	1	.2	.9	77.5
12	2	.4	1.8	79.3
13	1	.2	.9	80.2
14	2	.4	1.8	82.0
15	4	.8	3.6	85.6
16	1	.2	.9	86.5
18	1	.2	.9	87.4
19	1	.2	.9	88.3
20	6	1.2	5.4	93.7
22	1	.2	.9	94.6
25	2	.4	1.8	96.4
30	4	.8	3.6	100.0
Total valid	111	22.4	100.0	
Missing System	385	77.6		
Total	496	100.0		

Q11D2

TIMES MOVED BOAT TO WATERBODIES 51 TO 150
MILES APART

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	26	5.2	32.5	32.5
2	19	3.8	23.8	56.3
3	11	2.2	13.8	70.0
4	6	1.2	7.5	77.5
5	6	1.2	7.5	85.0
8	2	.4	2.5	87.5
10	4	.8	5.0	92.5
13	1	.2	1.3	93.8
15	3	.6	3.8	97.5
20	1	.2	1.3	98.8
75	1	.2	1.3	100.0
Total valid	80	16.1	100.0	
Missing System	416	83.9		
Total	496	100.0		

Q11E2 # TIMES MOVED BOAT TO WATERBODIES 151 TO 500 MILES APART

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	21	4.2	36.2	36.2
2	19	3.8	32.8	69.0
3	6	1.2	10.3	79.3
4	4	.8	6.9	86.2
5	2	.4	3.4	89.7
6	4	.8	6.9	96.6
8	1	.2	1.7	98.3
10	1	.2	1.7	100.0
Total valid	58	11.7	100.0	
Missing System	438	88.3		
Total	496	100.0		

Q11F2 # TIMES MOVED BOAT TO WATERBODIES MORE THAN 500 MILES APART

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	4	.8	57.1	57.1
2	3	.6	42.9	100.0
Total valid	7	1.4	100.0	
Missing System	489	98.6		
Total	496	100.0		

Q12A # TIMES TRANSPORTED BOAT TO DIFFERENT STATE/PROVINCE DURING 2000 BOATING SEASON

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	30	6.0	45.5	45.5
2	17	3.4	25.8	71.2
3	4	.8	6.1	77.3
4	6	1.2	9.1	86.4
5	1	.2	1.5	87.9
6	2	.4	3.0	90.9
10	2	.4	3.0	93.9
12	1	.2	1.5	95.5
15	1	.2	1.5	97.0
20	1	.2	1.5	98.5
50	1	.2	1.5	100.0
Total valid	66	13.3	100.0	
Missing System	430	86.7		
Total	496	100.0		

**Q12B STATE/PROVINCE BOAT TRANSPORTED TO DURING 2000
BOATING SEASON**

Value	Frequency	Percent	Valid Percent	Cumulative Percent
16 Iowa	1	.2	2.1	2.1
23 Michigan	1	.2	2.1	4.3
35 North Dakota	3	.6	6.4	10.6
42 South Dakota	3	.6	6.4	17.0
45 Utah	1	.2	2.1	19.1
50 Wisconsin	19	3.8	40.4	59.6
58 Manitoba	1	.2	2.1	61.7
59 Ontario	13	2.6	27.7	89.4
62 Canada	2	.4	4.3	93.6
77 Multiple	3	.6	6.4	100.0
Total valid	47	9.5	100.0	
Missing System	449	90.5		
Total	496	100.0		

**Q13B1 SPECIES IN INFESTED WATERS MOVED BOAT FROM
DURING 2000 BOATING SEASON - 1**

Value	Frequency	Percent	Valid Percent	Cumulative Percent
7 Eurasian watermilfoil	9	1.8	69.2	69.2
19 Zebra mussels	4	.8	30.8	100.0
Total valid	13	2.6	100.0	
Missing System	483	97.4		
Total	496	100.0		

**Q13B2 SPECIES IN INFESTED WATERS MOVED BOAT FROM
DURING 2000 BOATING SEASON - 2**

Value	Frequency	Percent
Missing System	496	100.0

Q22 PRIMARY RESIDENCE

Value	Frequency	Percent	Valid Percent	Cumulative Percent
4 Arkansas	1	.2	.2	.2
10 Florida	2	.4	.4	.6
14 Illinois	2	.4	.4	1.0
16 Iowa	2	.4	.4	1.4
21 Maryland	1	.2	.2	1.6
24 Minnesota	467	94.2	95.9	97.5
26 Missouri	1	.2	.2	97.7
28 Nebraska	1	.2	.2	97.9
29 Nevada	1	.2	.2	98.2
35 North Dakota	5	1.0	1.0	99.2
36 Ohio	1	.2	.2	99.4
44 Texas	1	.2	.2	99.6
50 Wisconsin	2	.4	.4	100.0
Total valid	487	98.2	100.0	
Missing System	9	1.8		
Total	496	100.0		

Q23

ZIP OR POSTAL CODE

Value	Frequency	Percent	Valid Percent	Cumulative Percent
20815	1	.2	.2	.2
33928	1	.2	.2	.4
34222	1	.2	.2	.6
43212	1	.2	.2	.8
50638	1	.2	.2	1.0
52203	1	.2	.2	1.2
53575	1	.2	.2	1.4
54455	1	.2	.2	1.6
54843	1	.2	.2	1.9
55001	1	.2	.2	2.1
55005	2	.4	.4	2.5
55008	2	.4	.4	2.9
55009	1	.2	.2	3.1
55011	3	.6	.6	3.7
55013	1	.2	.2	3.9
55014	2	.4	.4	4.3
55016	4	.8	.8	5.2
55018	1	.2	.2	5.4
55021	3	.6	.6	6.0
55024	2	.4	.4	6.4
55025	3	.6	.6	7.0
55026	1	.2	.2	7.2
55033	4	.8	.8	8.0
55037	3	.6	.6	8.7
55038	1	.2	.2	8.9
55041	1	.2	.2	9.1
55042	2	.4	.4	9.5
55043	1	.2	.2	9.7
55044	1	.2	.2	9.9
55045	3	.6	.6	10.5
55047	1	.2	.2	10.7
55051	1	.2	.2	10.9
55057	1	.2	.2	11.1
55060	2	.4	.4	11.5
55066	2	.4	.4	12.0
55068	2	.4	.4	12.4
55070	2	.4	.4	12.8
55071	2	.4	.4	13.2
55073	2	.4	.4	13.6
55075	1	.2	.2	13.8

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
55076	1	.2	.2	14.0
55079	1	.2	.2	14.2
55082	5	1.0	1.0	15.3
55089	1	.2	.2	15.5
55090	1	.2	.2	15.7
55092	2	.4	.4	16.1
55105	1	.2	.2	16.3
55106	3	.6	.6	16.9
55109	1	.2	.2	17.1
55110	5	1.0	1.0	18.1
55112	3	.6	.6	18.8
55113	2	.4	.4	19.2
55116	1	.2	.2	19.4
55117	2	.4	.4	19.8
55118	2	.4	.4	20.2
55119	1	.2	.2	20.4
55120	1	.2	.2	20.6
55121	1	.2	.2	20.8
55122	3	.6	.6	21.4
55123	3	.6	.6	22.1
55124	2	.4	.4	22.5
55125	2	.4	.4	22.9
55126	4	.8	.8	23.7
55127	3	.6	.6	24.3
55303	2	.4	.4	24.7
55304	7	1.4	1.4	26.2
55305	3	.6	.6	26.8
55306	3	.6	.6	27.4
55308	1	.2	.2	27.6
55309	1	.2	.2	27.8
55311	1	.2	.2	28.0
55313	2	.4	.4	28.5
55316	1	.2	.2	28.7
55318	1	.2	.2	28.9
55319	2	.4	.4	29.3
55321	1	.2	.2	29.5
55325	2	.4	.4	29.9
55330	4	.8	.8	30.7
55331	2	.4	.4	31.1
55337	5	1.0	1.0	32.2

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
55344	1	.2	.2	32.4
55345	3	.6	.6	33.0
55346	1	.2	.2	33.2
55347	1	.2	.2	33.4
55349	1	.2	.2	33.6
55350	3	.6	.6	34.2
55353	1	.2	.2	34.4
55355	1	.2	.2	34.6
55358	1	.2	.2	34.8
55359	1	.2	.2	35.1
55362	1	.2	.2	35.3
55364	6	1.2	1.2	36.5
55369	1	.2	.2	36.7
55371	1	.2	.2	36.9
55374	2	.4	.4	37.3
55376	2	.4	.4	37.7
55378	1	.2	.2	37.9
55379	3	.6	.6	38.6
55382	1	.2	.2	38.8
55388	1	.2	.2	39.0
55391	1	.2	.2	39.2
55398	2	.4	.4	39.6
55406	1	.2	.2	39.8
55408	1	.2	.2	40.0
55409	2	.4	.4	40.4
55414	1	.2	.2	40.6
55416	2	.4	.4	41.0
55417	2	.4	.4	41.4
55418	3	.6	.6	42.1
55420	2	.4	.4	42.5
55421	2	.4	.4	42.9
55422	3	.6	.6	43.5
55423	4	.8	.8	44.3
55424	1	.2	.2	44.5
55425	1	.2	.2	44.7
55426	3	.6	.6	45.4
55427	1	.2	.2	45.6
55428	1	.2	.2	45.8
55429	2	.4	.4	46.2
55430	1	.2	.2	46.4

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
55432	3	.6	.6	47.0
55433	5	1.0	1.0	48.0
55434	4	.8	.8	48.9
55435	1	.2	.2	49.1
55437	4	.8	.8	49.9
55438	2	.4	.4	50.3
55439	1	.2	.2	50.5
55441	3	.6	.6	51.1
55442	1	.2	.2	51.3
55443	4	.8	.8	52.2
55444	5	1.0	1.0	53.2
55445	1	.2	.2	53.4
55447	2	.4	.4	53.8
55448	3	.6	.6	54.4
55614	1	.2	.2	54.6
55619	1	.2	.2	54.8
55705	2	.4	.4	55.3
55706	2	.4	.4	55.7
55709	2	.4	.4	56.1
55719	1	.2	.2	56.3
55723	1	.2	.2	56.5
55724	1	.2	.2	56.7
55731	3	.6	.6	57.3
55732	1	.2	.2	57.5
55733	2	.4	.4	57.9
55744	5	1.0	1.0	59.0
55746	2	.4	.4	59.4
55748	1	.2	.2	59.6
55750	1	.2	.2	59.8
55767	1	.2	.2	60.0
55769	1	.2	.2	60.2
55783	1	.2	.2	60.4
55786	1	.2	.2	60.6
55787	1	.2	.2	60.8
55790	1	.2	.2	61.0
55792	1	.2	.2	61.2
55803	1	.2	.2	61.4
55804	4	.8	.8	62.3
55806	2	.4	.4	62.7
55808	1	.2	.2	62.9

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
55810	2	.4	.4	63.3
55811	4	.8	.8	64.1
55901	3	.6	.6	64.7
55904	2	.4	.4	65.2
55906	1	.2	.2	65.4
55912	1	.2	.2	65.6
55944	1	.2	.2	65.8
55945	1	.2	.2	66.0
55947	5	1.0	1.0	67.0
55955	1	.2	.2	67.2
55956	1	.2	.2	67.4
55960	1	.2	.2	67.6
55987	5	1.0	1.0	68.7
55991	2	.4	.4	69.1
56001	5	1.0	1.0	70.1
56007	3	.6	.6	70.7
56011	2	.4	.4	71.1
56027	1	.2	.2	71.3
56048	2	.4	.4	71.8
56055	1	.2	.2	72.0
56069	1	.2	.2	72.2
56071	1	.2	.2	72.4
56073	1	.2	.2	72.6
56081	1	.2	.2	72.8
56097	1	.2	.2	73.0
56098	1	.2	.2	73.2
56128	1	.2	.2	73.4
56143	2	.4	.4	73.8
56201	3	.6	.6	74.4
56208	1	.2	.2	74.6
56215	1	.2	.2	74.8
56222	1	.2	.2	75.1
56251	1	.2	.2	75.3
56258	1	.2	.2	75.5
56267	1	.2	.2	75.7
56270	2	.4	.4	76.1
56278	1	.2	.2	76.3
56283	1	.2	.2	76.5
56301	1	.2	.2	76.7
56303	3	.6	.6	77.3

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
56308	4	.8	.8	78.1
56310	2	.4	.4	78.6
56320	1	.2	.2	78.8
56332	1	.2	.2	79.0
56334	2	.4	.4	79.4
56342	3	.6	.6	80.0
56345	3	.6	.6	80.6
56347	1	.2	.2	80.8
56354	2	.4	.4	81.2
56362	2	.4	.4	81.6
56367	1	.2	.2	81.9
56377	2	.4	.4	82.3
56378	5	1.0	1.0	83.3
56379	2	.4	.4	83.7
56385	1	.2	.2	83.9
56401	3	.6	.6	84.5
56431	4	.8	.8	85.4
56436	1	.2	.2	85.6
56441	1	.2	.2	85.8
56449	1	.2	.2	86.0
56461	1	.2	.2	86.2
56464	1	.2	.2	86.4
56467	2	.4	.4	86.8
56468	1	.2	.2	87.0
56470	1	.2	.2	87.2
56473	1	.2	.2	87.4
56474	1	.2	.2	87.6
56479	1	.2	.2	87.8
56501	1	.2	.2	88.0
56510	1	.2	.2	88.2
56515	1	.2	.2	88.5
56528	1	.2	.2	88.7
56529	1	.2	.2	88.9
56537	3	.6	.6	89.5
56544	1	.2	.2	89.7
56547	1	.2	.2	89.9
56549	1	.2	.2	90.1
56557	1	.2	.2	90.3
56560	3	.6	.6	90.9
56572	2	.4	.4	91.3

Q23 ZIP OR POSTAL CODE (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
56573	1	.2	.2	91.5
56576	2	.4	.4	92.0
56601	5	1.0	1.0	93.0
56619	1	.2	.2	93.2
56621	1	.2	.2	93.4
56623	2	.4	.4	93.8
56644	1	.2	.2	94.0
56649	2	.4	.4	94.4
56651	1	.2	.2	94.6
56652	1	.2	.2	94.8
56660	1	.2	.2	95.1
56669	1	.2	.2	95.3
56672	1	.2	.2	95.5
56680	1	.2	.2	95.7
56701	2	.4	.4	96.1
56716	1	.2	.2	96.3
56726	1	.2	.2	96.5
56733	1	.2	.2	96.7
56756	1	.2	.2	96.9
56763	1	.2	.2	97.1
58102	2	.4	.4	97.5
58201	2	.4	.4	97.9
58237	1	.2	.2	98.1
60016	1	.2	.2	98.4
60107	1	.2	.2	98.6
64113	1	.2	.2	98.8
65470	1	.2	.2	99.0
68508	1	.2	.2	99.2
72262	1	.2	.2	99.4
78154	1	.2	.2	99.6
89005	1	.2	.2	99.8
89123	1	.2	.2	100.0
Total valid	485	97.8	100.0	
Missing System	11	2.2		
Total	496	100.0		

Q24

YEAR BORN

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1916	2	.4	.4	.4
1917	3	.6	.6	1.0
1918	1	.2	.2	1.3
1920	5	1.0	1.0	2.3
1921	3	.6	.6	2.9
1922	3	.6	.6	3.5
1923	9	1.8	1.9	5.4
1924	4	.8	.8	6.3
1925	3	.6	.6	6.9
1926	2	.4	.4	7.3
1927	5	1.0	1.0	8.3
1928	5	1.0	1.0	9.4
1929	7	1.4	1.5	10.8
1930	12	2.4	2.5	13.3
1931	5	1.0	1.0	14.4
1932	8	1.6	1.7	16.0
1933	9	1.8	1.9	17.9
1934	14	2.8	2.9	20.8
1935	7	1.4	1.5	22.3
1936	5	1.0	1.0	23.3
1937	19	3.8	4.0	27.3
1938	10	2.0	2.1	29.4
1939	13	2.6	2.7	32.1
1940	8	1.6	1.7	33.8
1941	8	1.6	1.7	35.4
1942	10	2.0	2.1	37.5
1943	12	2.4	2.5	40.0
1944	11	2.2	2.3	42.3
1945	10	2.0	2.1	44.4
1946	13	2.6	2.7	47.1
1947	12	2.4	2.5	49.6
1948	14	2.8	2.9	52.5
1949	13	2.6	2.7	55.2
1950	10	2.0	2.1	57.3
1951	10	2.0	2.1	59.4
1952	16	3.2	3.3	62.7
1953	11	2.2	2.3	65.0
1954	17	3.4	3.5	68.5
1955	9	1.8	1.9	70.4
1956	16	3.2	3.3	73.8

Q24 YEAR BORN (continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1957	12	2.4	2.5	76.3
1958	10	2.0	2.1	78.3
1959	9	1.8	1.9	80.2
1960	8	1.6	1.7	81.9
1961	9	1.8	1.9	83.8
1962	10	2.0	2.1	85.8
1963	16	3.2	3.3	89.2
1964	8	1.6	1.7	90.8
1965	8	1.6	1.7	92.5
1966	5	1.0	1.0	93.5
1967	5	1.0	1.0	94.6
1968	6	1.2	1.3	95.8
1969	6	1.2	1.3	97.1
1970	2	.4	.4	97.5
1971	1	.2	.2	97.7
1972	6	1.2	1.3	99.0
1973	1	.2	.2	99.2
1979	1	.2	.2	99.4
1980	1	.2	.2	99.6
1981	2	.4	.4	100.0
Total valid	480	96.8	100.0	
Missing System	16	3.2		
Total	496	100.0		

DATE DATE SURVEY RETURNED

Value	Frequency	Percent	Valid Percent	Cumulative Percent
11/01/00	1	.2	.2	.2
11/02/00	57	11.5	11.5	11.7
11/03/00	48	9.7	9.7	21.4
11/04/00	2	.4	.4	21.8
11/06/00	72	14.5	14.5	36.3
11/07/00	18	3.6	3.6	39.9

DATE	DATE SURVEY RETURNED (continued)			
Value	Frequency	Percent	Valid Percent	Cumulative Percent
11/08/00	21	4.2	4.2	44.2
11/09/00	34	6.9	6.9	51.0
11/10/00	18	3.6	3.6	54.6
11/13/00	17	3.4	3.4	58.1
11/14/00	15	3.0	3.0	61.1
11/15/00	15	3.0	3.0	64.1
11/16/00	4	.8	.8	64.9
11/17/00	8	1.6	1.6	66.5
11/20/00	6	1.2	1.2	67.7
11/21/00	2	.4	.4	68.1
11/22/00	6	1.2	1.2	69.4
11/24/00	31	6.3	6.3	75.6
11/27/00	20	4.0	4.0	79.6
11/28/00	20	4.0	4.0	83.7
11/29/00	16	3.2	3.2	86.9
11/30/00	8	1.6	1.6	88.5
12/01/00	5	1.0	1.0	89.5
12/04/00	10	2.0	2.0	91.5
12/05/00	10	2.0	2.0	93.5
12/07/00	1	.2	.2	93.8
12/08/00	1	.2	.2	94.0
12/11/00	3	.6	.6	94.6
12/14/00	1	.2	.2	94.8
12/18/00	1	.2	.2	95.0
12/19/00	5	1.0	1.0	96.0
12/20/00	5	1.0	1.0	97.0
12/22/00	4	.8	.8	97.8
12/27/00	2	.4	.4	98.2
12/29/00	1	.2	.2	98.4
01/02/01	2	.4	.4	98.8
01/03/01	1	.2	.2	99.0
01/05/01	1	.2	.2	99.2
01/19/01	1	.2	.2	99.4
01/23/01	1	.2	.2	99.6
02/09/01	1	.2	.2	99.8
05/18/01	1	.2	.2	100.0
Total	496	100.0	100.0	

APPENDIX B
COVER LETTERS AND POSTCARD TEXT

<u>Description</u>	<u>Page</u>
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Follow-up Letter - November 20, 2000	B-4
Final Postcard Text	B-5

Minnesota Sea Grant College Program
Office of Vice President for Research and
Dean of the Graduate School

2305 East 5th Street
Duluth, MN 55812-1445

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October 30, 2000

Dear Minnesota Boater,

Lakes and streams in Minnesota provide some of the best recreational opportunities available in the region. However, many natural resources, including game fish, water quality, and habitat, are affected by pollution and other environmental changes.

One particular change that has become more of a problem in recent years is aquatic nuisance species in marine and freshwaters. These are plants or animals that enter habitats where they are not native, where they have not always lived, grown, and reproduced. Aquatic nuisance species can be introduced in a number of ways. For example, some of these invaders hitch a ride in the ballast water of ocean-going vessels and find a new home in Great Lakes or coastal ports.


Because the presence of aquatic nuisance species is a national issue, many state and regional agencies have been studying their presence in marine and freshwaters. The results of this research will be used to evaluate how well various public and private organizations are educating the public about aquatic nuisance species and to assist these organizations in the design of educational programs and materials.

You are one of a small number of boaters who are being asked to provide opinions about water-transported aquatic nuisance plant and animal species. Your name was drawn in a random sample of Minnesota's licensed boat owners. In order for the results to truly represent the thinking of all boaters, it is important that each questionnaire be completed and returned. The questionnaire can be completed by any adult in your household.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

If you have any questions about this study, please write or call Rossana Armson at the University of Minnesota at (612) 627-4282 between 9:00 a.m. and 4:00 p.m. on weekdays, central standard time. Collect calls will be accepted. She would be happy to answer your questions. Thank you for your assistance.

Sincerely,



Jeffrey L. Gunderson
Director

P. S. Five states are participating in this effort: California, Kansas, Minnesota, Ohio, and Vermont. You will be returning your questionnaire directly to the University of Minnesota Center for Survey Research because they are coordinating the mailings.

Last week a questionnaire seeking your opinion about aquatic nuisance species and boating practices was mailed to you. We are very interested in your opinions about the impact of aquatic nuisance species on your state's streams, lakes, and rivers. Your name was drawn in a random sample of boaters in your state.

If you have already completed and returned the questionnaire, please accept our sincere thanks! If not, please answer the questions and return it today. Because the survey has been sent to only a small sample of boaters in your state, it is extremely important that your opinions be included, if the results are to accurately represent the opinions of all boaters.

If you did not receive the survey, or it has been misplaced, please call me collect at (612) 627-4282 between 9:00 a.m. and 4:00 p.m. I will send you another one right away.

Sincerely,

Rossana Armson, MCSR Director
University of Minnesota
2331 University Avenue SE, Suite 141
Minneapolis, Minnesota 55414-3067

Minnesota Sea Grant College Program 2305 East 5th Street
 Office of Vice President for Research and Duluth, MN 55812-1445
 Dean of the Graduate School #####
 ##### Fax: 218-726-6556 #####

November 20, 2000

Dear Minnesota Boater,

About three weeks ago, I wrote to you seeking your opinion about aquatic nuisance species and boating practices. As of today, we have not yet received your completed questionnaire.

This survey has been undertaken to evaluate how well various public and private organizations are educating the public about aquatic nuisance species and to assist these organizations in the design of educational programs and materials.

I am writing to you again because of the significance each questionnaire has to the usefulness of this study. Your name was drawn through a scientific sampling process in which every licensed boat owner in Minnesota had an equal chance of being selected. In order for the results of this study to be truly representative of the opinions of all Minnesota boat owners, it is important that each questionnaire be completed and returned.

As mentioned in my previous letter, the survey can be completed by any adult in the household. The University of Minnesota's Center for Survey Research is assisting us with this project and you will be returning the survey directly to them, in the envelope provided.

In the event that your survey has been misplaced, a replacement is enclosed. If you have any questions about the survey, Rossana Armson at the Minnesota Center for Survey Research would be happy to help you. Please write or call her collect at (612) 627-4282 between 9:00 a.m. and 4:00 p.m. weekdays, central standard time.

Your cooperation is greatly appreciated.

Sincerely,



Jeffrey L. Gunderson
Director

PLEASE SEND US YOUR COMPLETED SURVEY!

I am writing to you about a boating survey that was recently sent to you. You were one of the boat owners who was selected to participate, but we have not yet received your completed survey.

Because the survey was sent to only a few boat owners, it is extremely important that your opinions be included in the results. We really want to hear from you, even if you didn't boat in 2000. **Your input is important!**

If you have not yet returned your completed survey, please do it as soon as possible. If your survey has been misplaced, please call me collect at (612) 627-4282 between 9:00 a.m. and 4:00 p.m. I will send you another one right away. Your name and address will be deleted from our mailing list when your survey is received. Thank you for your participation.

Sincerely,

Rossana Armson, MCSR Director
University of Minnesota
2331 Univ Avenue SE, Suite 141, Mpls MN 55414