

Report

Survey Among Residents of Manitoba



Invasive
Species
Centre

DATE April 2018

PROJECT NUMBER 15273-005

Leger



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CONTEXT, OBJECTIVES AND METHODOLOGY

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Context and objectives:

Léger was commissioned by the Invasive Species Center to conduct a study among Manitobans about their perceptions and their level of knowledge of invasive species. More specifically, the elements addressed in this study are as follows:

- Participation in outdoor activities (fishing and other) in the province
- Knowledge and perceptions of invasive species in general
- Knowledge and perceptions of Asian carps
- Details about personal experiences with catching and disposing of Asian carps

Methodology:

In order to meet the research objectives, a Web survey was conducted from March 6th to 14th, 2018, among a representative sample of 1,001 respondents, aged 18 or older, and living in Manitoba.

Using data from Statistics Canada, results were weighted according to the age, gender and presence of minor children in the household, in order to ensure a representative sample of the entire population under review.

Notes:

- The numbers presented in this report have been rounded out and their sum in graphs and tables (based on the actual numbers before rounding) might not correspond to the manual addition of rounded numbers.
- Results presenting significant and relevant statistical differences are indicated in boxes next to the presentation of overall results.

PROFILE OF RESPONDENTS

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Base: All respondents (n=1,001)

Gender

| | |
|--------|-----|
| Male | 49% |
| Female | 51% |

Age

| | |
|-------------|-----|
| 18-34 | 30% |
| 35-54 | 33% |
| 55 or older | 37% |

Level of education

| | |
|--------------------------|-----|
| Elementary / High-school | 34% |
| College | 30% |
| University | 36% |

Minor children in the household

| | |
|-----|-----|
| Yes | 28% |
| No | 69% |

Status of employment

| | |
|----------|-----|
| Employed | 54% |
| Retired | 27% |
| Other | 17% |

Annual income

| | |
|-------------------------------|-----|
| Under \$40,000 | 24% |
| Between \$40,000 and \$59,999 | 19% |
| Between \$60,000 and \$79,999 | 17% |
| Between \$80,000 and \$99,999 | 12% |
| \$100,000 or more | 15% |

Note: For each of the profile categories, the complement to 100% corresponds to the answers "I don't know" and "Refusal".

DETAILED RESULTS

1. Participation in Outdoor Activities

KEY INSIGHTS

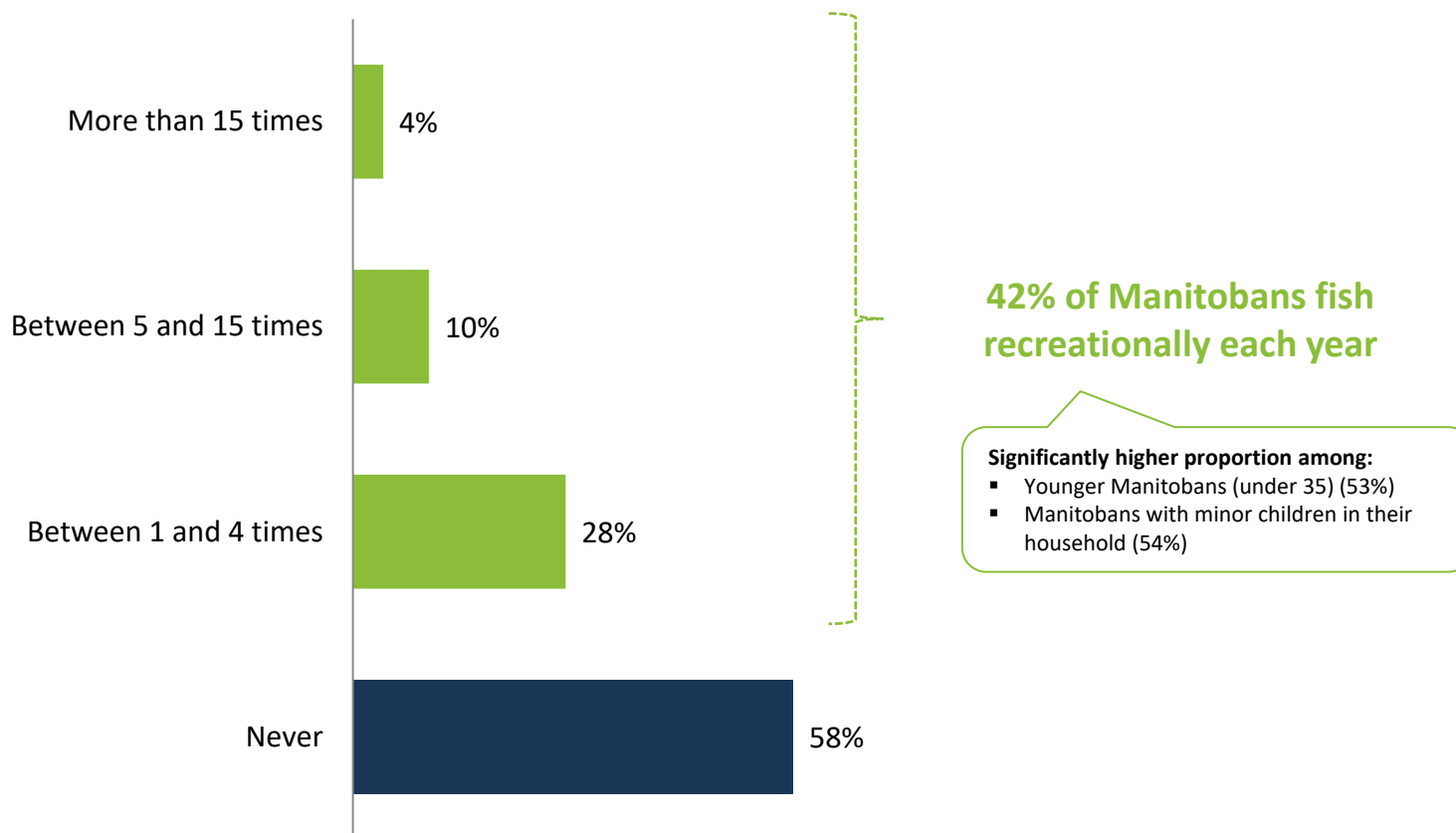
Popular activities among Manitobans

- More than four out of ten Manitobans (42%) declare they fish recreationally on an annual basis. Almost all of these people spend money on this activity (92%).
- Overall, 69% of people in the province practice at least one of the surveyed activities in Manitoba, be it swimming at the beach (54%), tent camping (33%), boating (27%), owning/renting a cottage (22%), canoeing/kayaking (21%), or waterskiing (7%).

FREQUENCY OF RECREATIONAL FISHING ANNUALLY

Q13. How often do you fish recreationally each year?

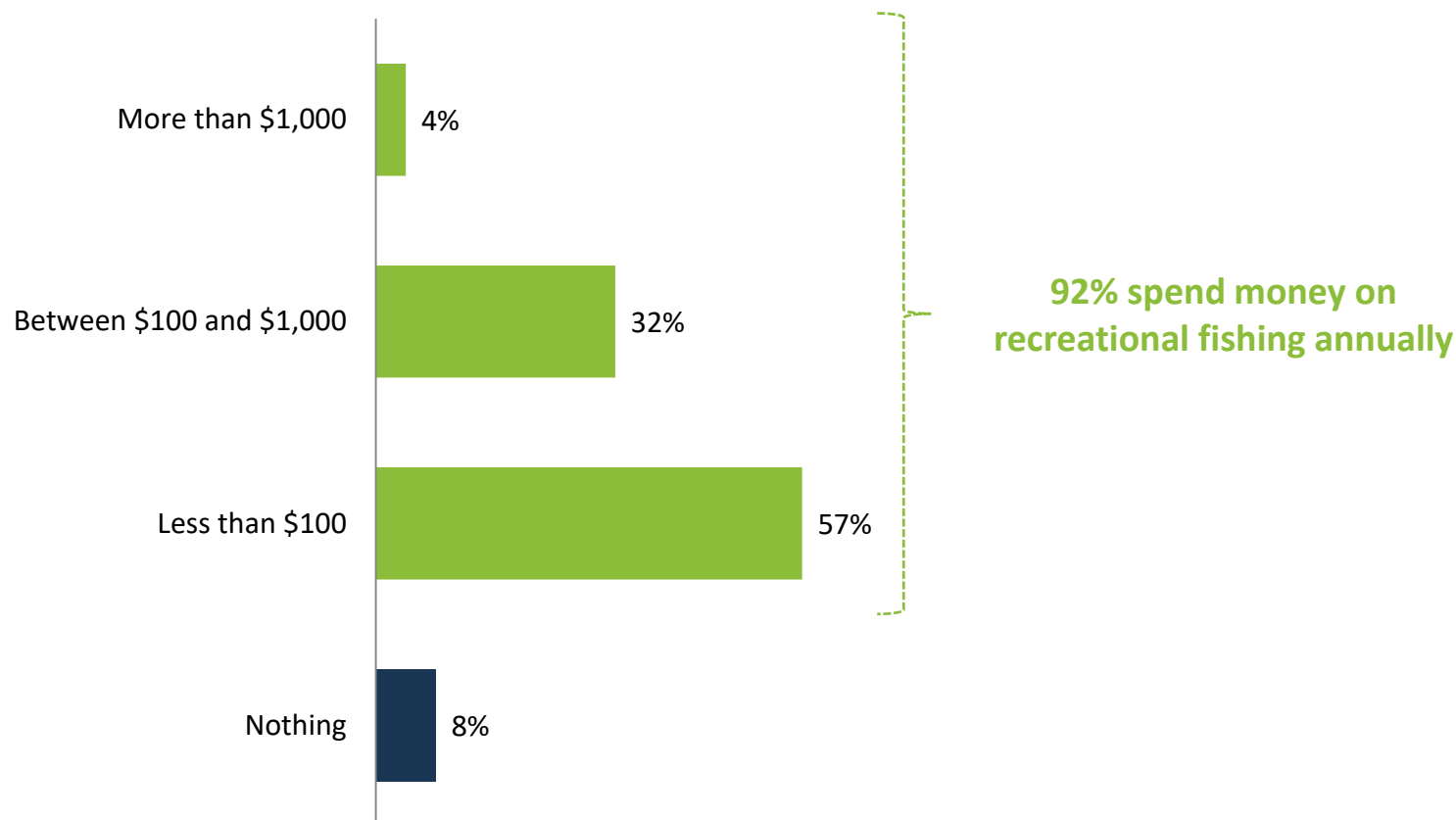
Base: All respondents (n=1,001)



ANNUAL EXPENDITURE ON RECREATIONAL FISHING

Q14. How much does your family spend on recreational fishing annually?

Base: Respondents who fish recreationally on an annual basis (n=409)

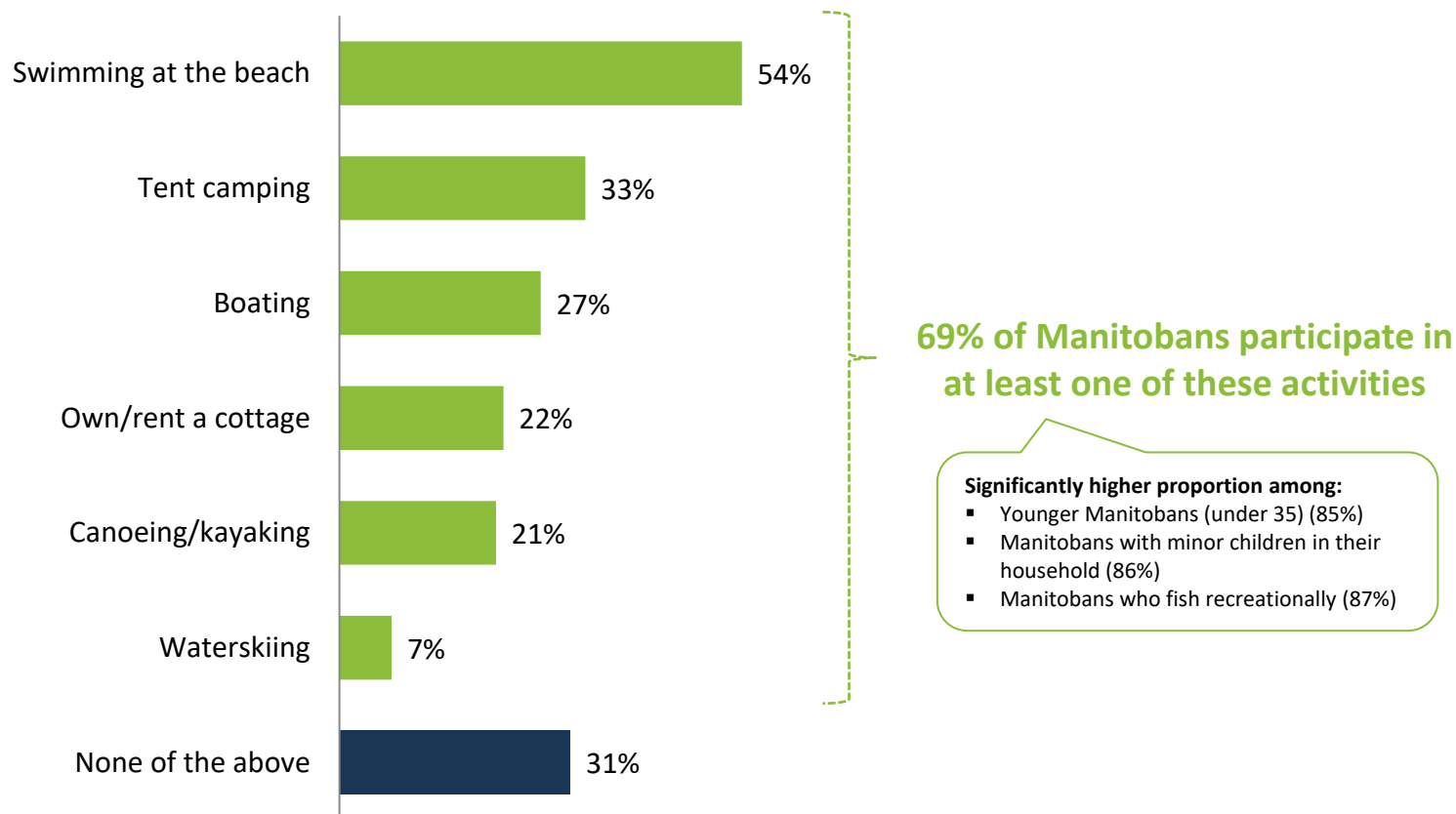


PARTICIPATION IN OUTDOOR ACTIVITIES IN MANITOBA

Q15. Do you participate in any of the following activities in Manitoba?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)



*Because respondents were able to give several answers, the total of mentions may exceed 100%.

2. Knowledge and Perceptions of Invasive Species

KEY INSIGHTS

Concerns about the environment and invasive species

- The vast majority of Manitobans are worried about pollution in lakes and rivers (88%). To a lesser degree, they are also worried about the impacts from climate change (73%), the impacts from invasive species (70%), carbon dioxide emissions (67%), overfishing of lakes and rivers (64%), agricultural land area being reduced (62%), and the amount of trees being logged from forests (61%). The lack of green space in urban areas (57%) is the issue they are the least worried about.

A threat taken seriously

- Six out of ten Manitobans (59%) correctly described invasive species as species whose introduction or spread to a new area threatens the environment, economy, or society.
- Manitobans agree that invasive species directly affect human health and societal well-being (72%). Surprisingly, a significant proportion of them agree to say that invasive species increase biodiversity in Canada's forests and lakes (30%), that Canada's cold climate kills 90% of the invasive species that try to survive here (29%), that invasive species have minimal environmental damages (18%), and that there is nothing the general public can do to help prevent the introduction and spread of invasive species (13%).
- Unanimously, Manitobans feel lakes, rivers and other water bodies should receive the highest protection against invasive species in Manitoba (63%).

An uneven knowledge of invasive species

- The majority of Manitobans ...
 - ... know at least one of the surveyed invasive species (83%), namely the zebra mussel (77%), the Asian long-horn beetle (41%), the emerald ash borer (41%), or the Asian carps (39%) among others.
 - ... consider at least one of the surveyed invasive species to be a threat to the province (77%).
 - ... would be able to recognize at least one of the surveyed invasive species (63%). The zebra mussel is the most recognizable species (54%); it is followed notably by the emerald ash borer (15%), the Asian long-horn beetle (14%) and the Asian carps (13%).

KEY INSIGHTS (CONT'D)

An uneven knowledge of invasive species (Cont'd)

- Of all the species that were surveyed, the zebra mussel is, by far, the one Manitobans know the most about (64%). Asian carps come third (10%).

Some efforts to communicate on the tools to report an aquatic invasive species in the province

- Seven out of ten Manitobans (73%) think reporting an aquatic invasive species in Manitoba is a legal requirement. However, a relatively high proportion (40%) don't know how they could proceed in such a situation. A third (34%) mentioned contacting their provincial government office, 13% calling a hotline, and 11% reporting it online.

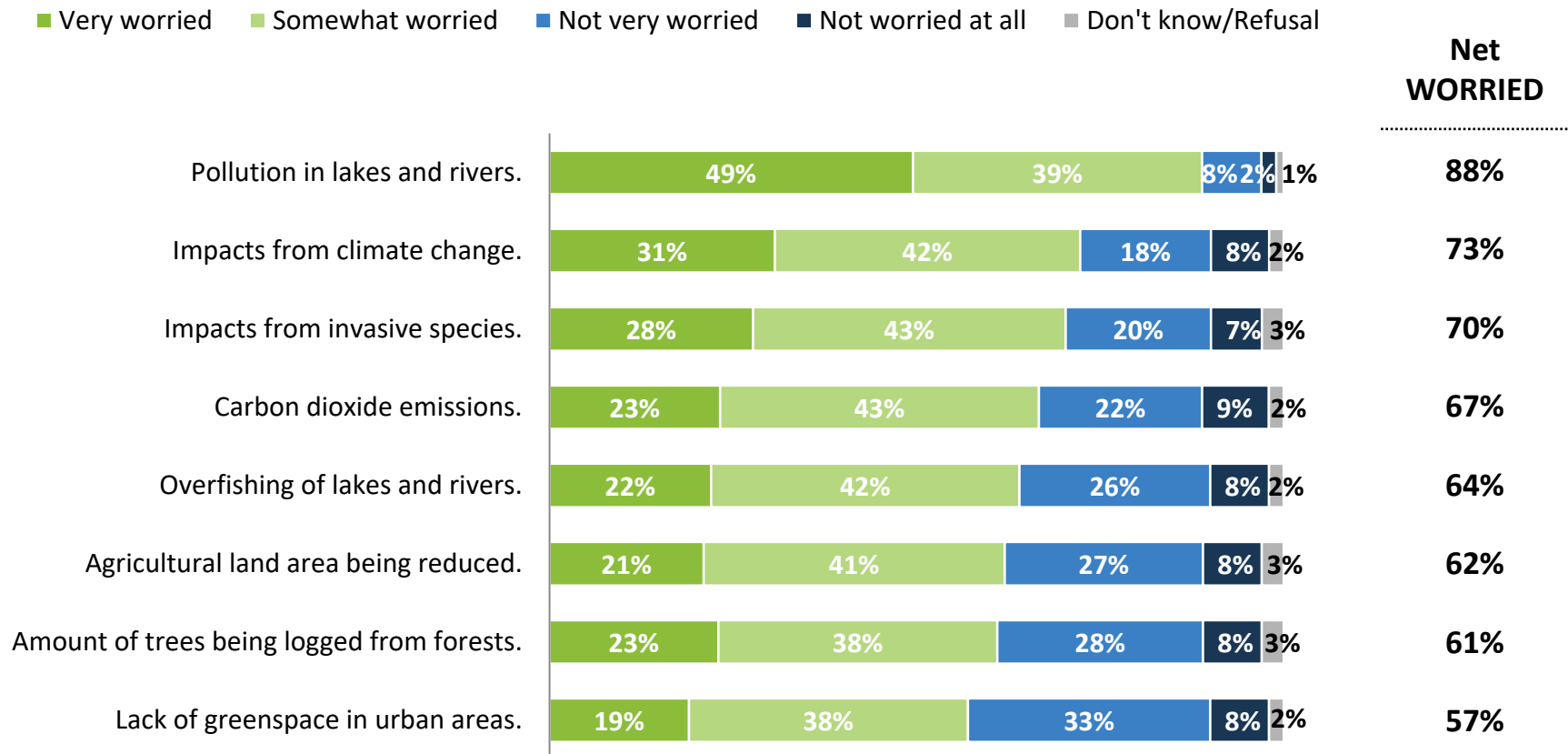
A willingness to contribute financially

- Overall, one out of two Manitobans (58%) would be willing to personally contribute financially to support aquatic invasive species prevention and management.

CONCERN WITH VARIOUS ENVIRONMENTAL ISSUES IN MANITOBA

Q1. Personally, how worried are you about each of the following issues in Manitoba:

Base: All respondents (n=1,001)



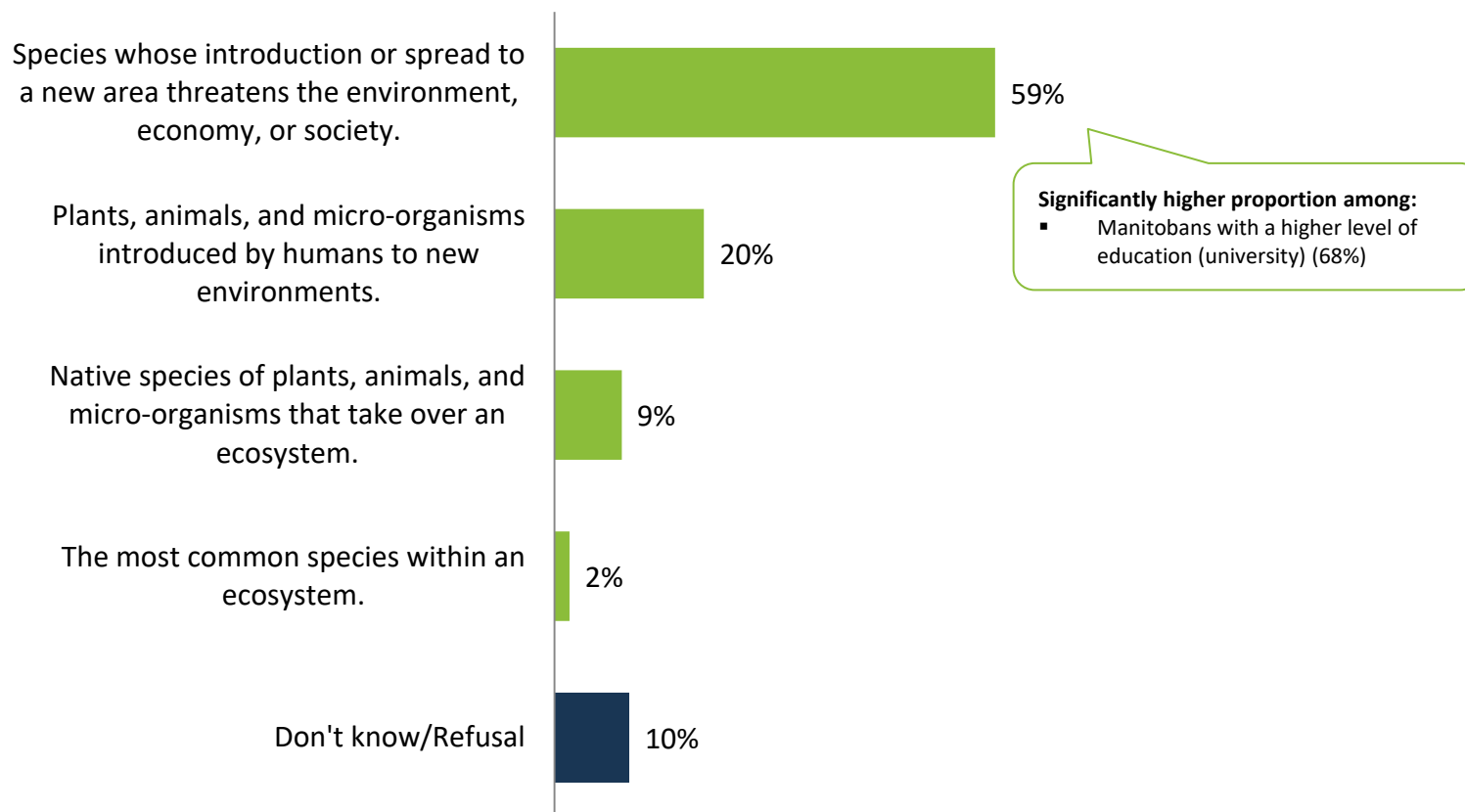
Overall, significantly higher proportions among:

- Women
- Manitobans who fish recreationally
- Manitobans who practice outdoor activities

BEST DESCRIPTION OF INVASIVE SPECIES IN MANITOBA

Q2. According to you, which of the following statements best describes invasive species in Manitoba?

Base: All respondents (n=1,001)

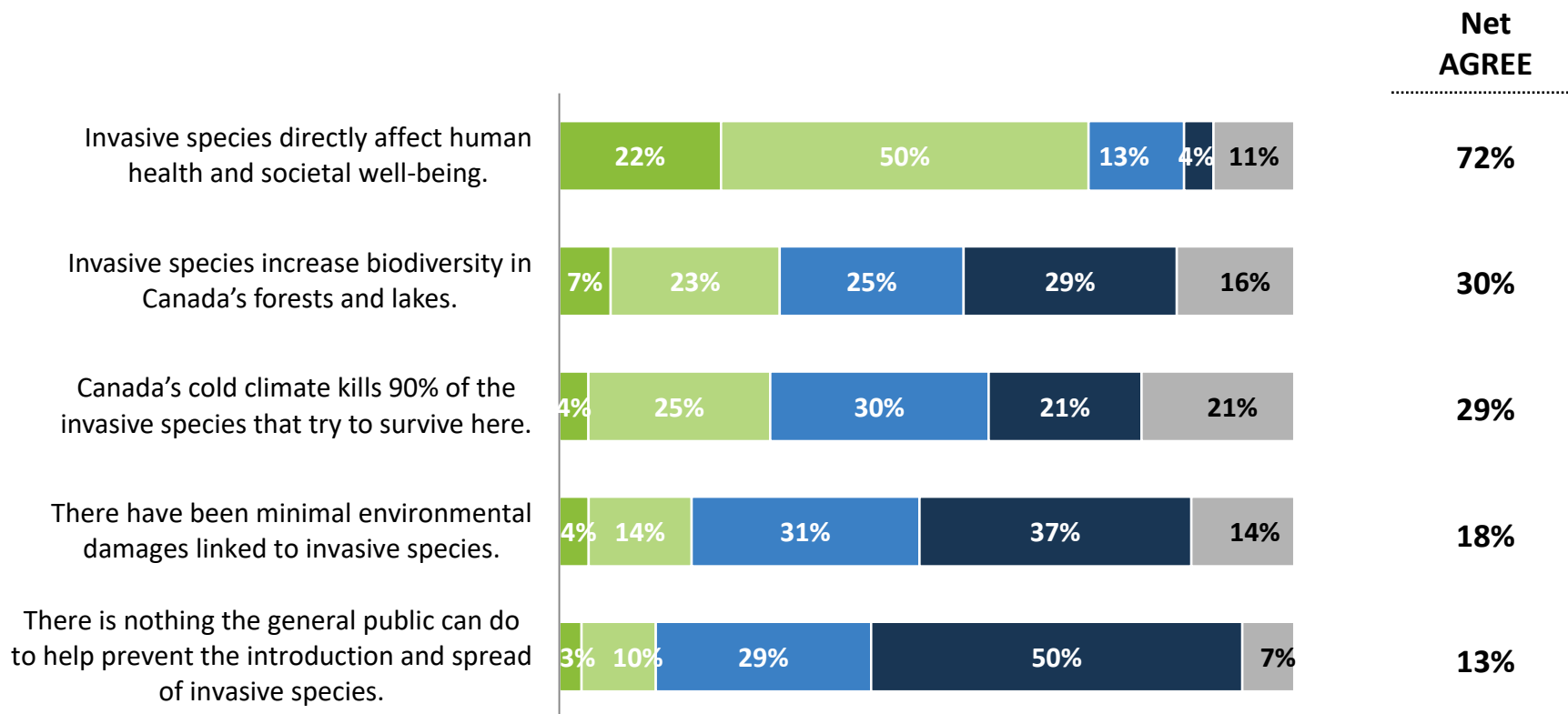


LEVEL OF AGREEMENT WITH VARIOUS STATEMENTS ABOUT INVASIVE SPECIES

Q3. To what extent do you agree or disagree with the following statements about invasive species.

Base: All respondents (n=1,001)

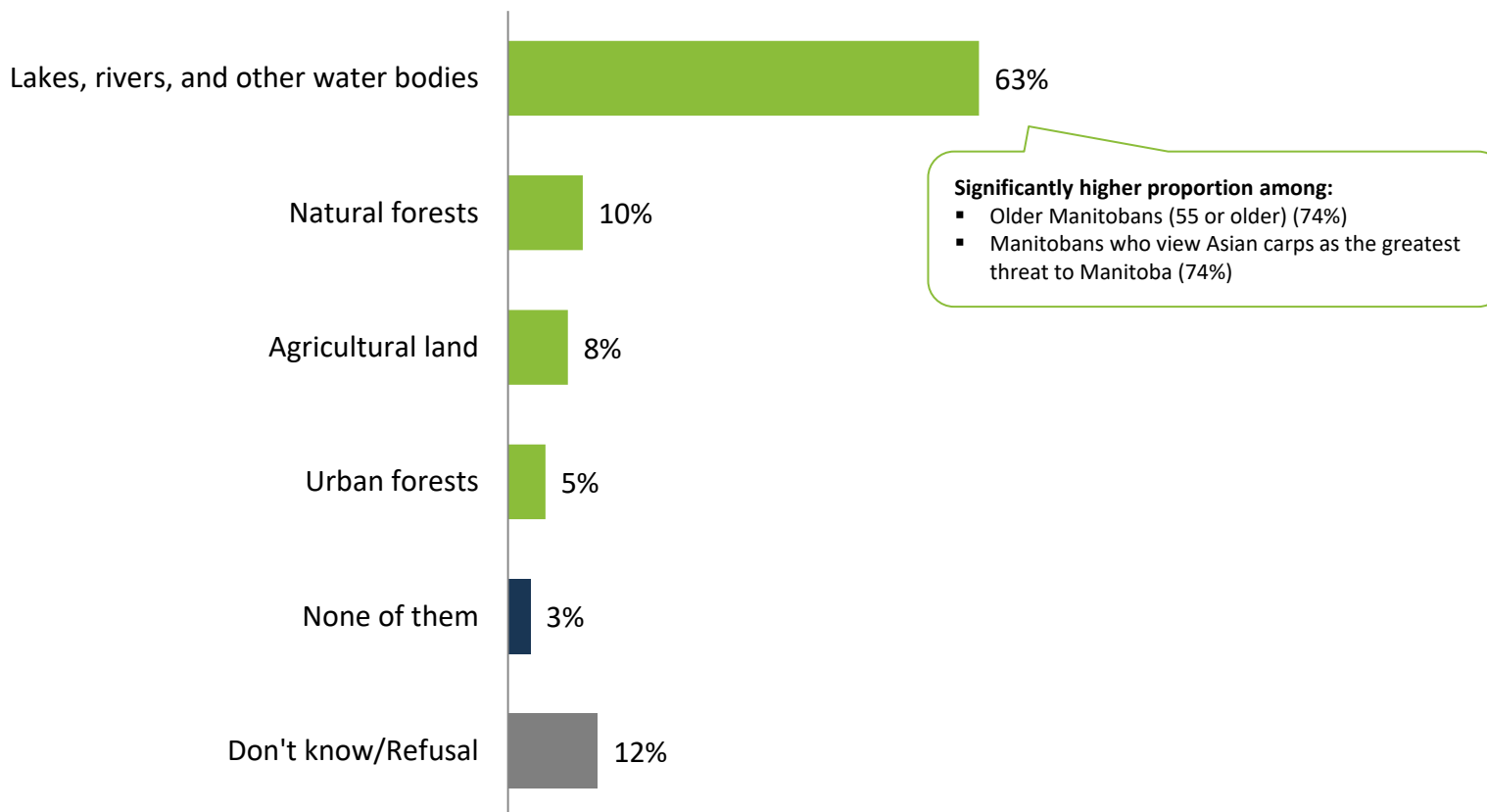
Strongly agree Somewhat agree Somewhat disagree Strongly disagree Don't know/Refusal



HABITATS THAT SHOULD RECEIVE THE HIGHEST PROTECTION AGAINST INVASIVE SPECIES IN MANITOBA

Q8. Which of the following habitats do you feel should receive the highest protection against invasive species in Manitoba?

Base: All respondents (n=1,001)

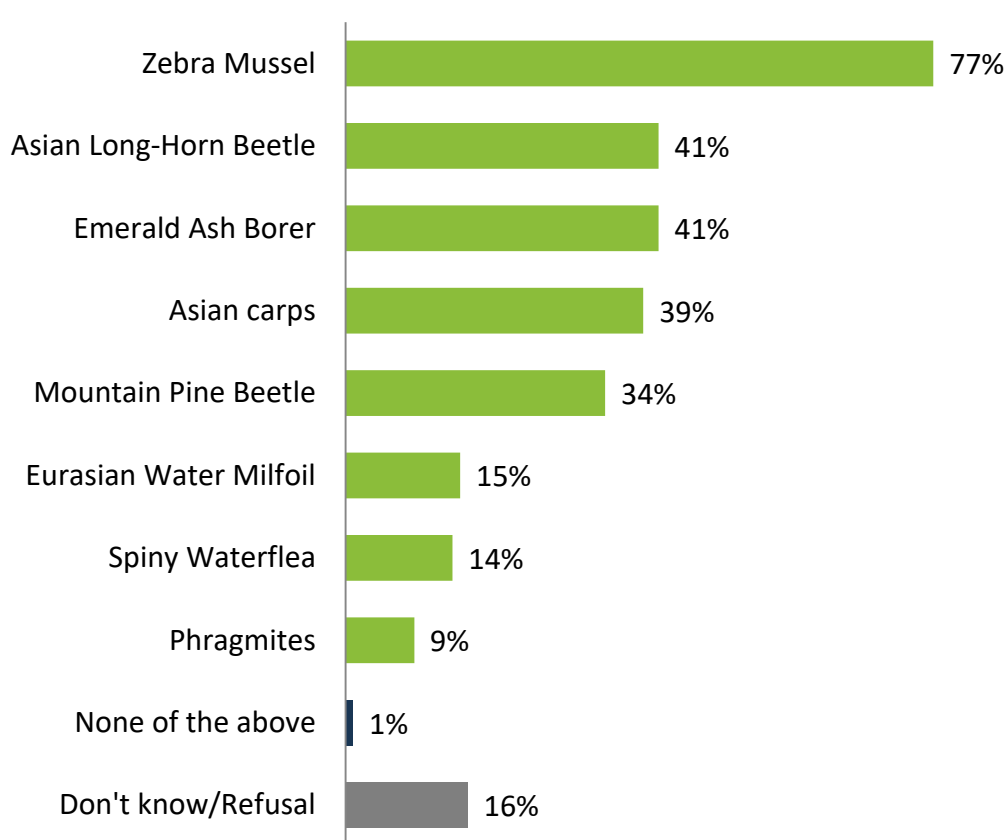


KNOWLEDGE OF INVASIVE SPECIES

Q4. According to you, which of the following are invasive species?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)



83% of Manitobans mentioned at least one species

Significantly higher proportion among:

- Manitobans who are retired (93%)
- Manitobans who had seen, read or heard about Asian carps before the survey (95%)

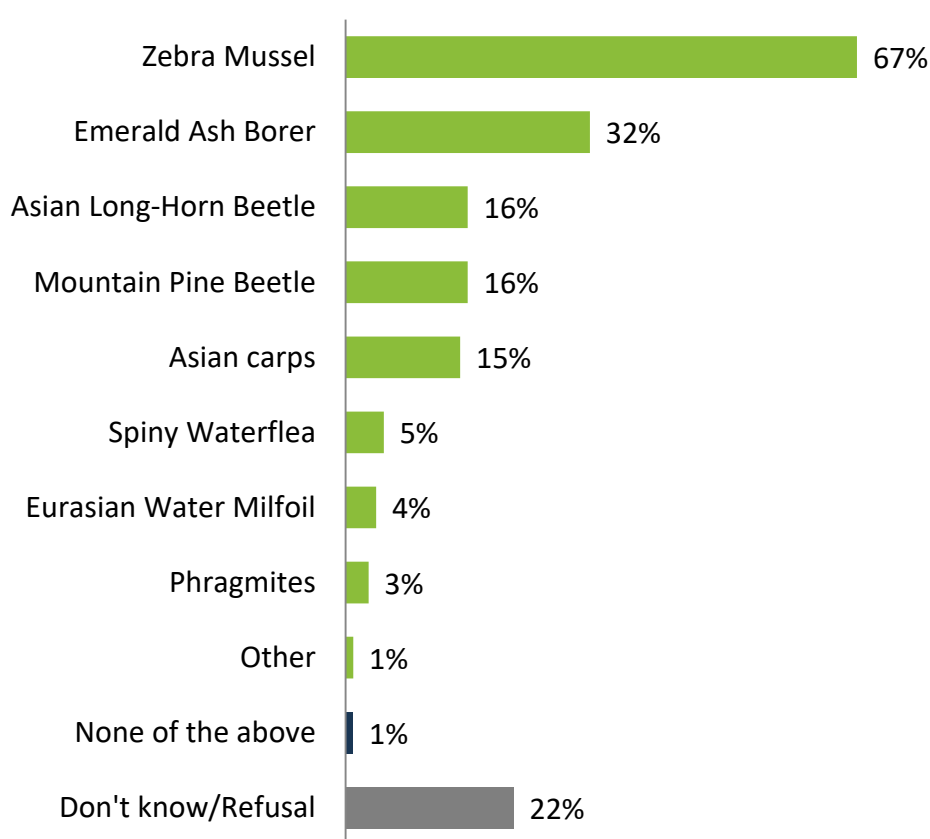
*Because respondents were able to give several answers, the total of mentions may exceed 100%.

GREATEST THREATS TO MANITOBA

Q5. According to you, which of the following are the greatest threats to Manitoba?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)



77% of Manitobans consider at least one of these species to be a threat to the province

- Significantly higher proportion among:**
- Older Manitobans (65 or older) (87%)
 - Manitobans who had seen, read or heard about Asian carps before the survey (91%)

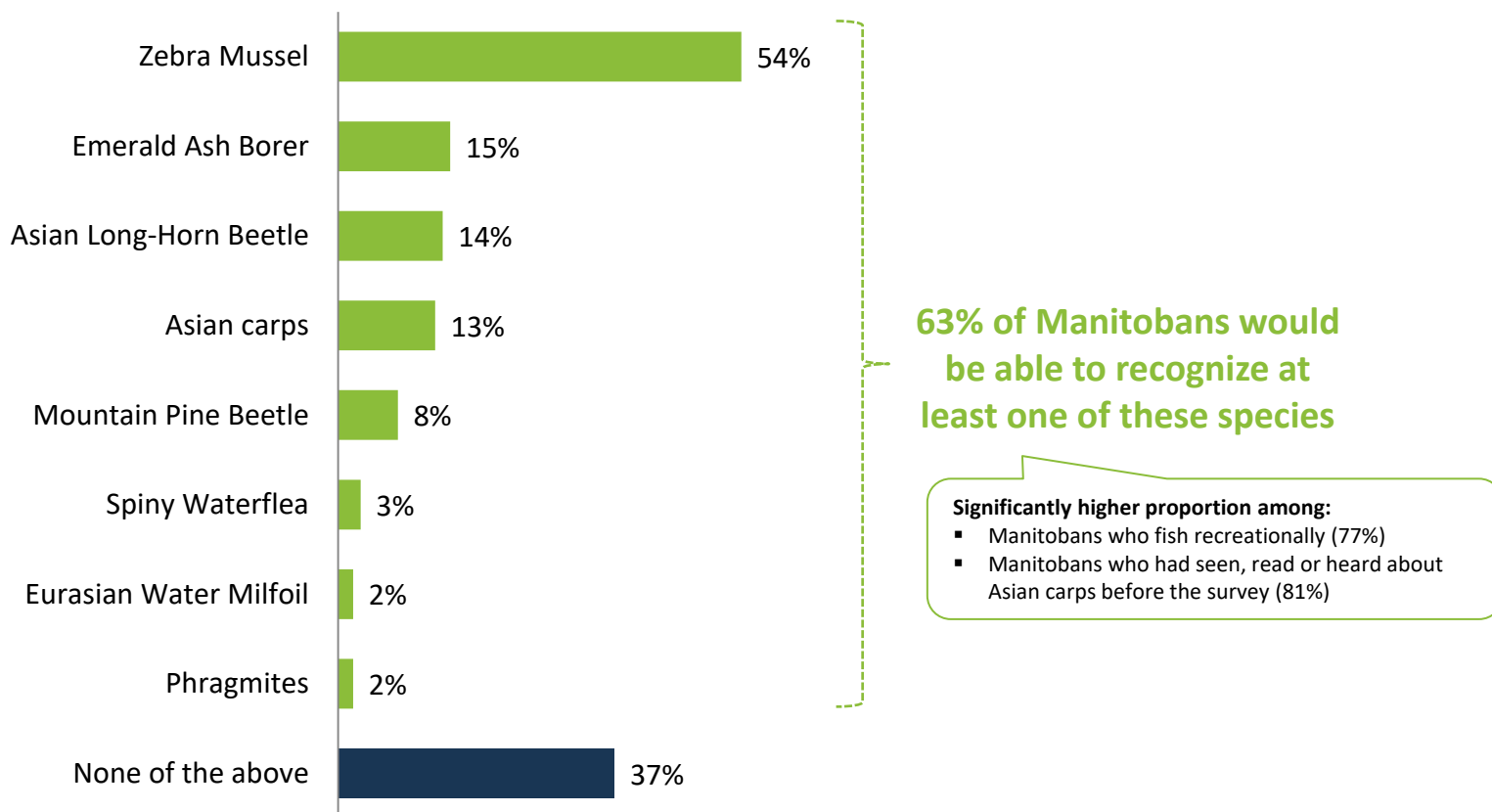
*Because respondents were able to give several answers, the total of mentions may exceed 100%.

ABILITY TO RECOGNIZE VARIOUS INVASIVE SPECIES

Q6. Among the following, which invasive species would you be able to recognize if you were to see one?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)



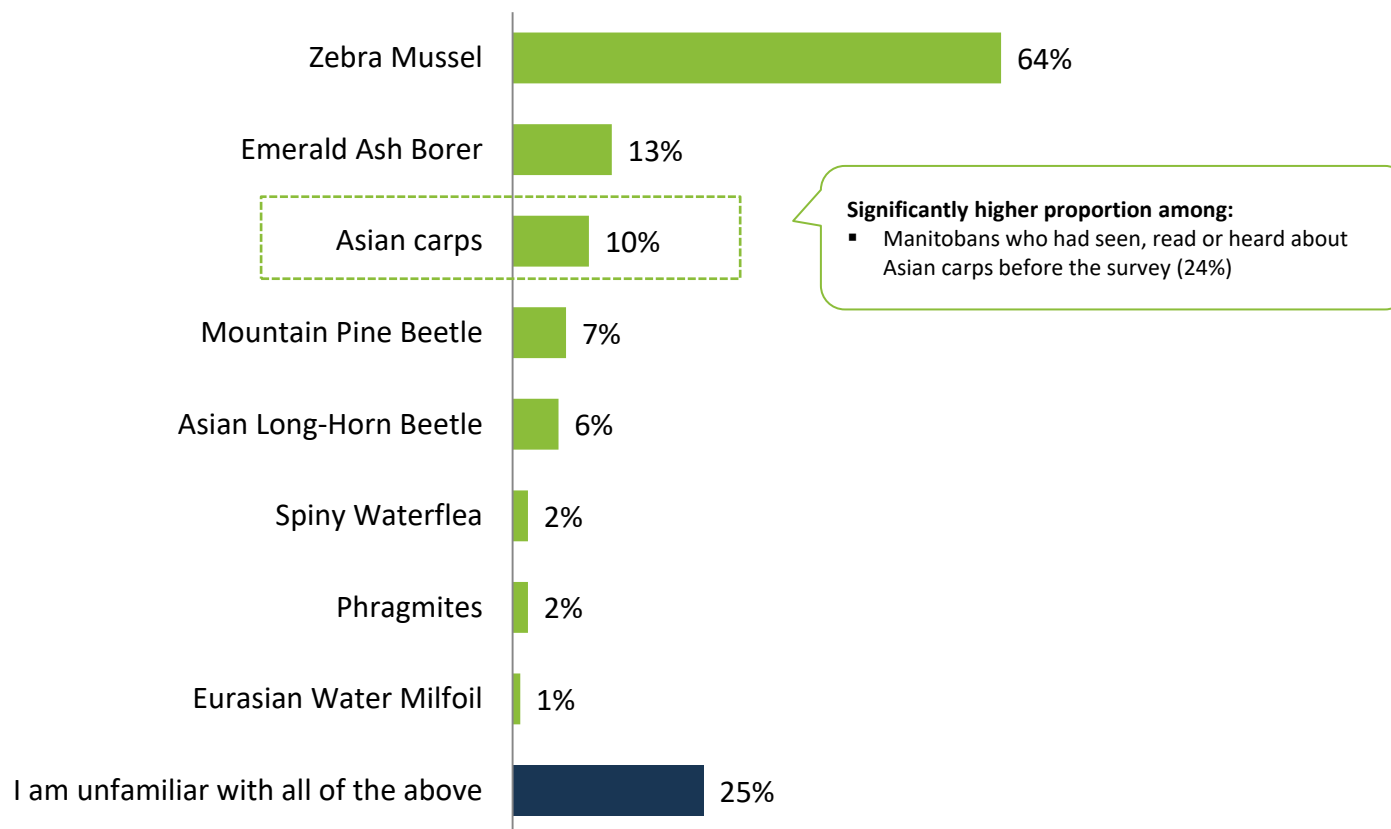
*Because respondents were able to give several answers, the total of mentions may exceed 100%.

KNOWLEDGE ABOUT DIFFERENT INVASIVE SPECIES

Q7. Among the following, which invasive species do you know the most about?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)

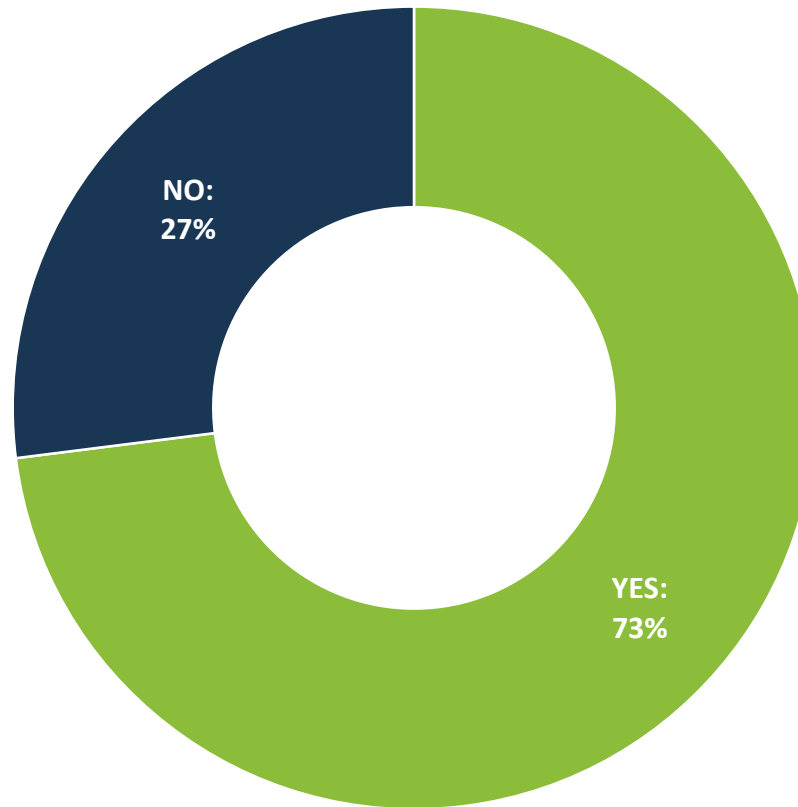


*Because respondents were able to give several answers, the total of mentions may exceed 100%.

LEGAL OBLIGATION TO REPORT AN AQUATIC INVASIVE SPECIES IN MANITOBA

Q10. Is it a legal requirement to report an aquatic invasive species in Manitoba?

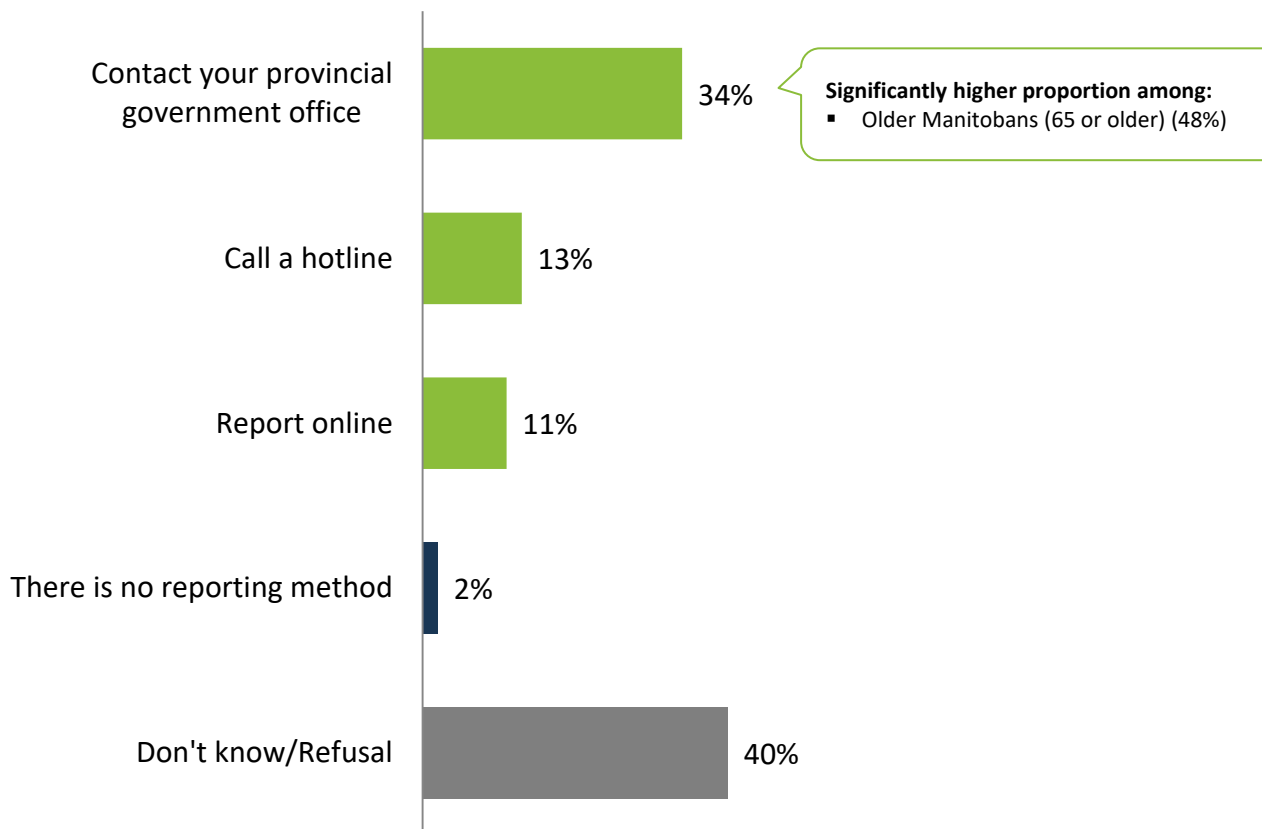
Base: All respondents (n=1,001)



WAYS OF REPORTING AN AQUATIC INVASIVE SPECIES SIGHTING

Q11. How can you report an aquatic invasive species sighting?

Base: All respondents (n=1,001)

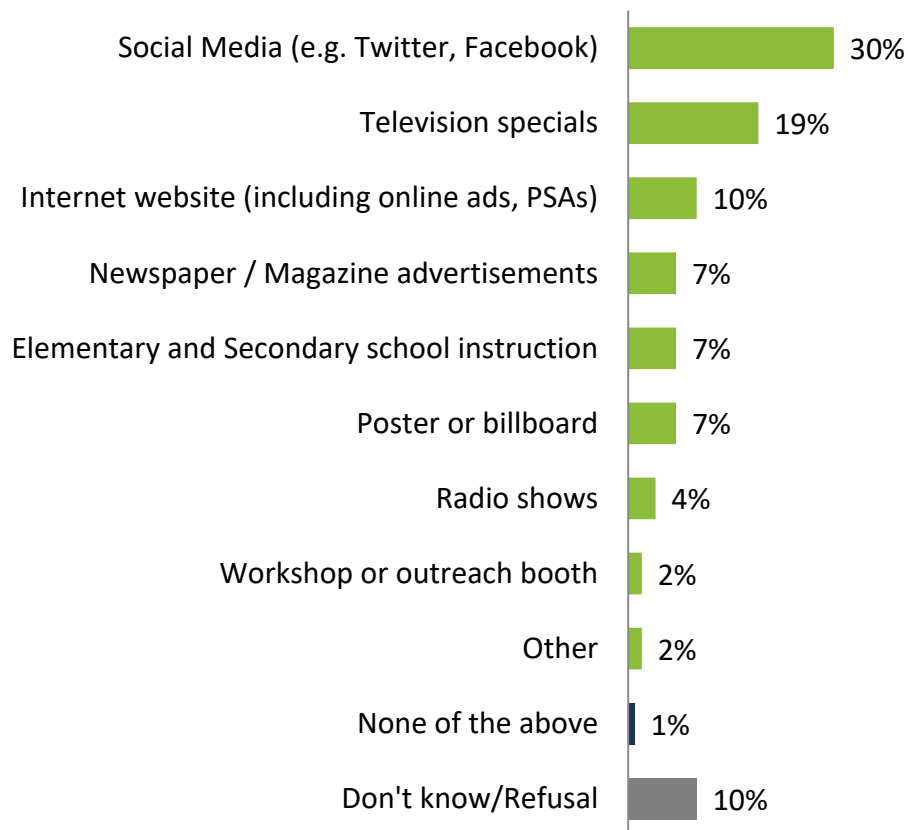


BEST WAY TO INFORM PEOPLE ABOUT AQUATIC INVASIVE SPECIES

Q16. According to you, what is the best way to inform people about aquatic invasive species?

SEVERAL MENTIONS POSSIBLE*

Base: All respondents (n=1,001)

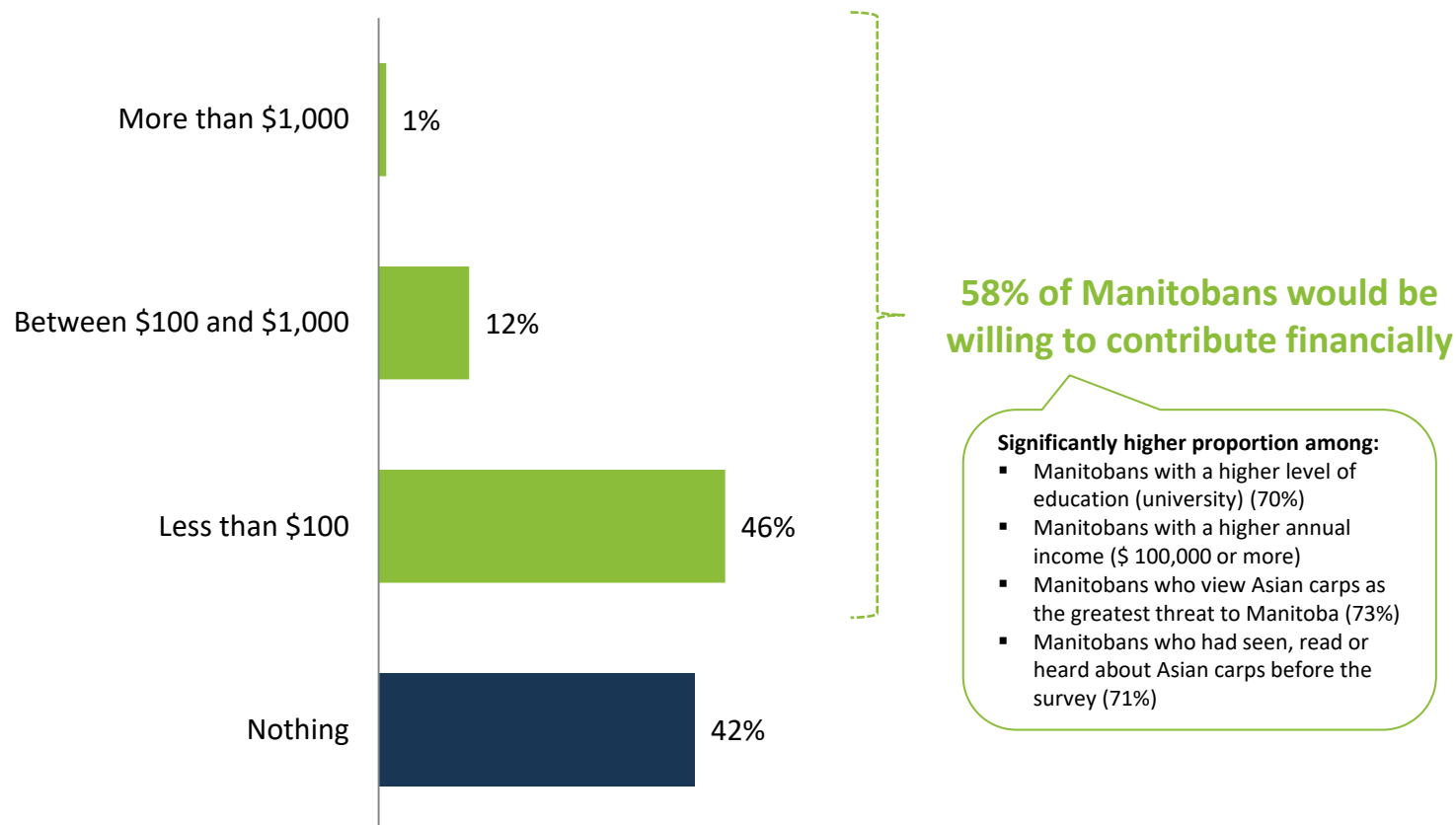


*Because respondents were able to give several answers, the total of mentions may exceed 100%.

WILLINGNESS TO CONTRIBUTE FINANCIALLY TO SUPPORT AQUATIC INVASIVE SPECIES PREVENTION AND MANAGEMENT

Q12. How much would you, personally, be willing to contribute financially to support aquatic invasive species prevention and management?

Base: All respondents (n=1,001)



3. Knowledge and Perceptions of Asian Carps

KEY INSIGHTS

A certain lack of knowledge about Asian carps

- In Manitoba, 12% of people had seen the Asiancarp.ca website logo before, be it online (7%), at an event (3%), on a billboard (3%), or elsewhere (1%).
- Almost four out of ten Manitobans (37%) had seen, read or heard about Asian carps before the survey, mainly on television shows or in the news (53%). However, their knowledge of the species remains limited. Among those who knew about Asian carps beforehand, almost two-thirds (64%) do not know how many species are included in the term “Asian carps”, and six out of ten (59%) cannot identify a species of Asian carps.
- According to Manitobans who had heard about Asian carps, they are present in Lake Michigan (26%), Lake Erie (25%), Lake Ontario (25%), Lake Superior (23%), Red River (18%), and Lake Huron (17%); They made their way to Canada mainly through canals and connected waters (53%), and they are a threat to the rivers they invade notably because they eat native fish food sources (65%).

A good knowledge of the threat posed by Asian carps

- Despite the lack of knowledge of the Asian carps themselves, Manitobans who had heard about Asian carps agree that if they enter Canadian waters, they will destroy the ecosystem (83%). To a lesser degree, they also agree that Canada should spend more money on Asian carp prevention (79%), and that Asian carps are a serious threat to Canada economically (73%). Four out of ten (43%) are pessimistic and believe Asian carps will enter Canadian waters regardless of prevention efforts.
- A relatively low proportion of Canadians who had heard about Asian carps agree that Asian carps invasion into Canadian waters will have no impact on their life (17%), that they will have more fish to catch (11%), that Asian carps are not a threat to Manitoba (10%), that Canada should not worry about a fish that has not established a population in its waters yet (9%), that Asian carps will not affect other fish populations (9%), or that they cannot survive in Manitoba (6%).

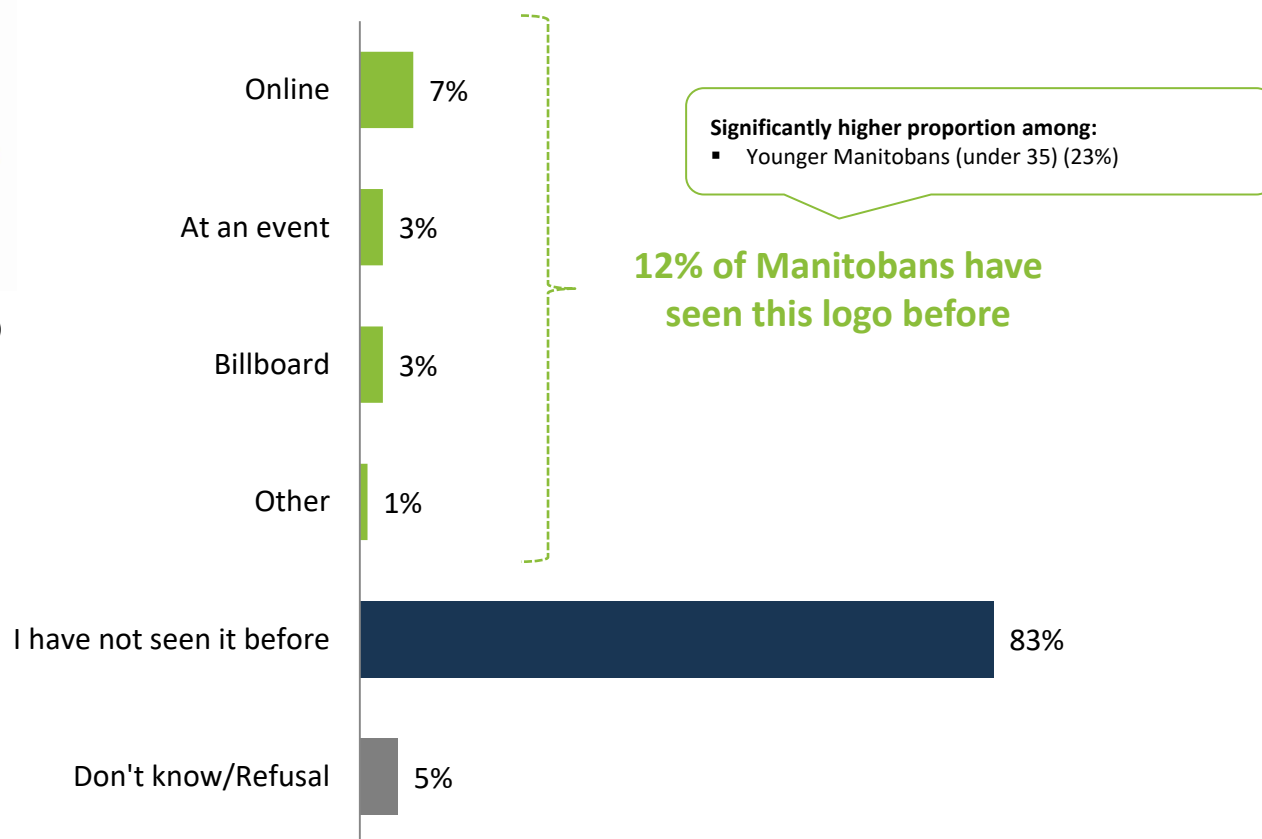
AWARENESS OF THE ASIANCARP.CA WEBSITE LOGO

Q9. Where have you seen this logo before?

Base: All respondents (n=1,001)



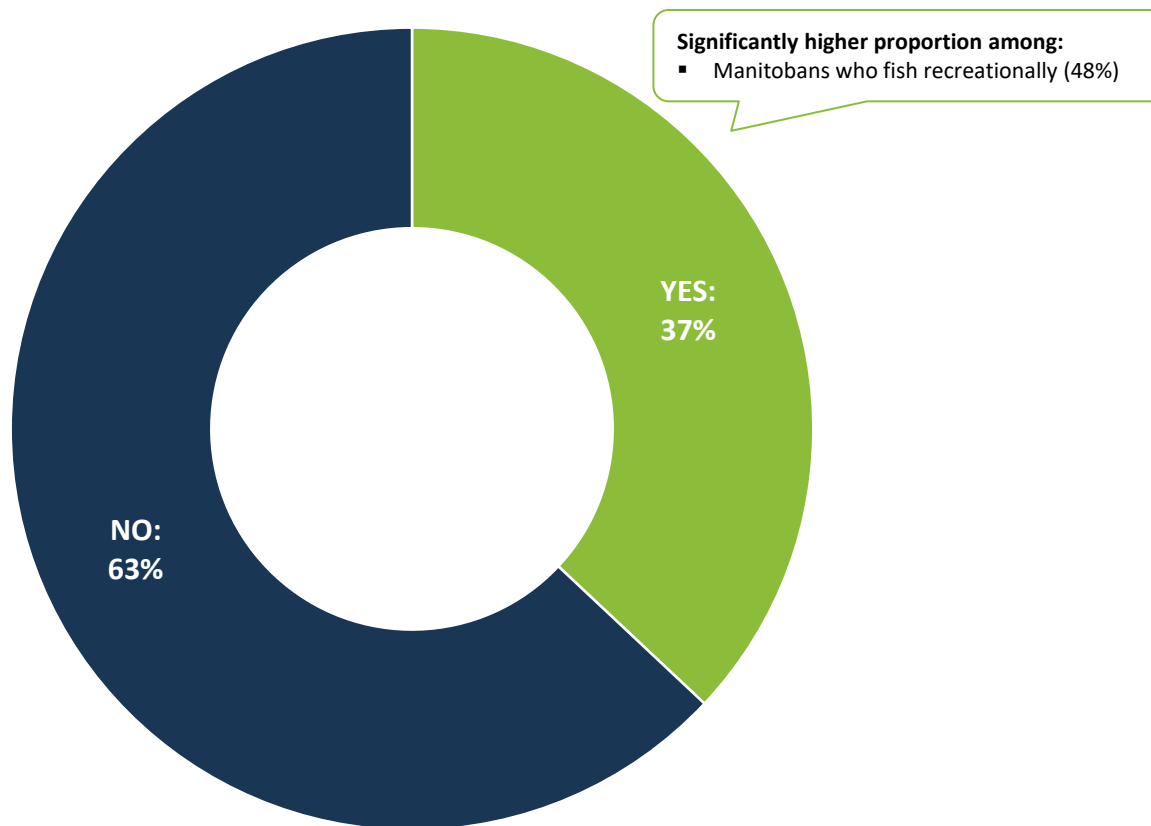
(This logo was shown to respondents)



AWARENESS OF ASIAN CARPS

Q17. Before today, had you ever heard, read or seen anything about Asian carps?

Base: All respondents (n=1,001)

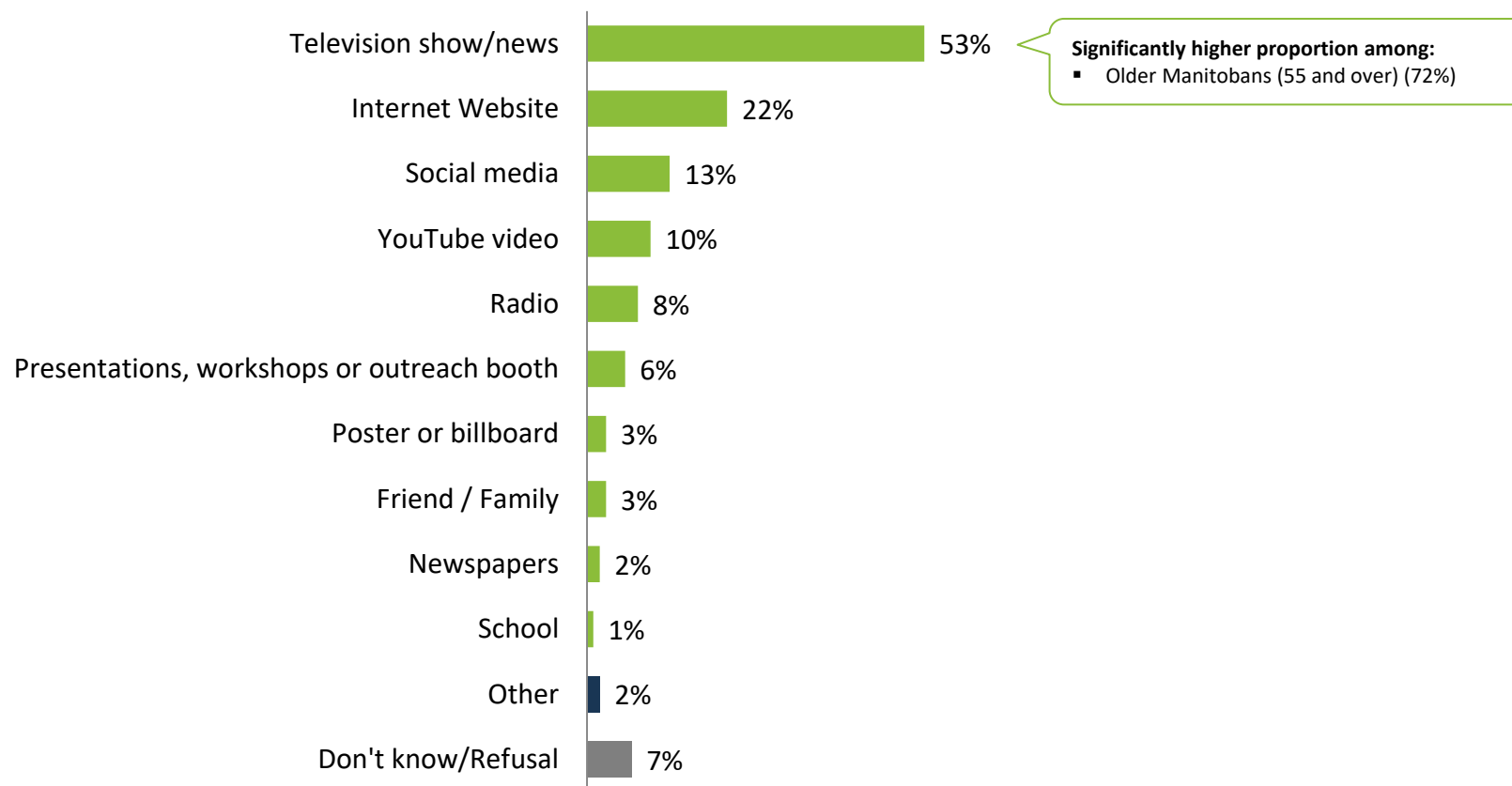


SOURCES OF AWARENESS OF ASIAN CARPS

Q18. Where did you see, read, or hear about Asian carps?

SEVERAL MENTIONS POSSIBLE*

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)

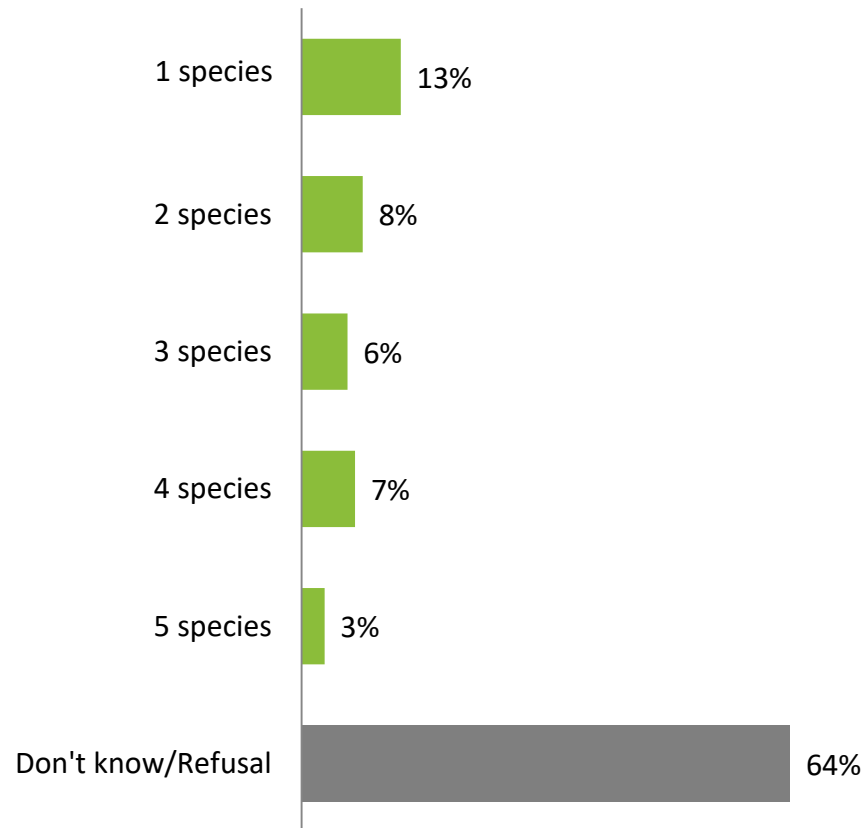


*Because respondents were able to give several answers, the total of mentions may exceed 100%.

KNOWLEDGE OF THE NUMBER OF SPECIES INCLUDED IN THE TERM “ASIAN CARPS”

Q19. According to you, how many species are included in the term 'Asian carp'?

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)

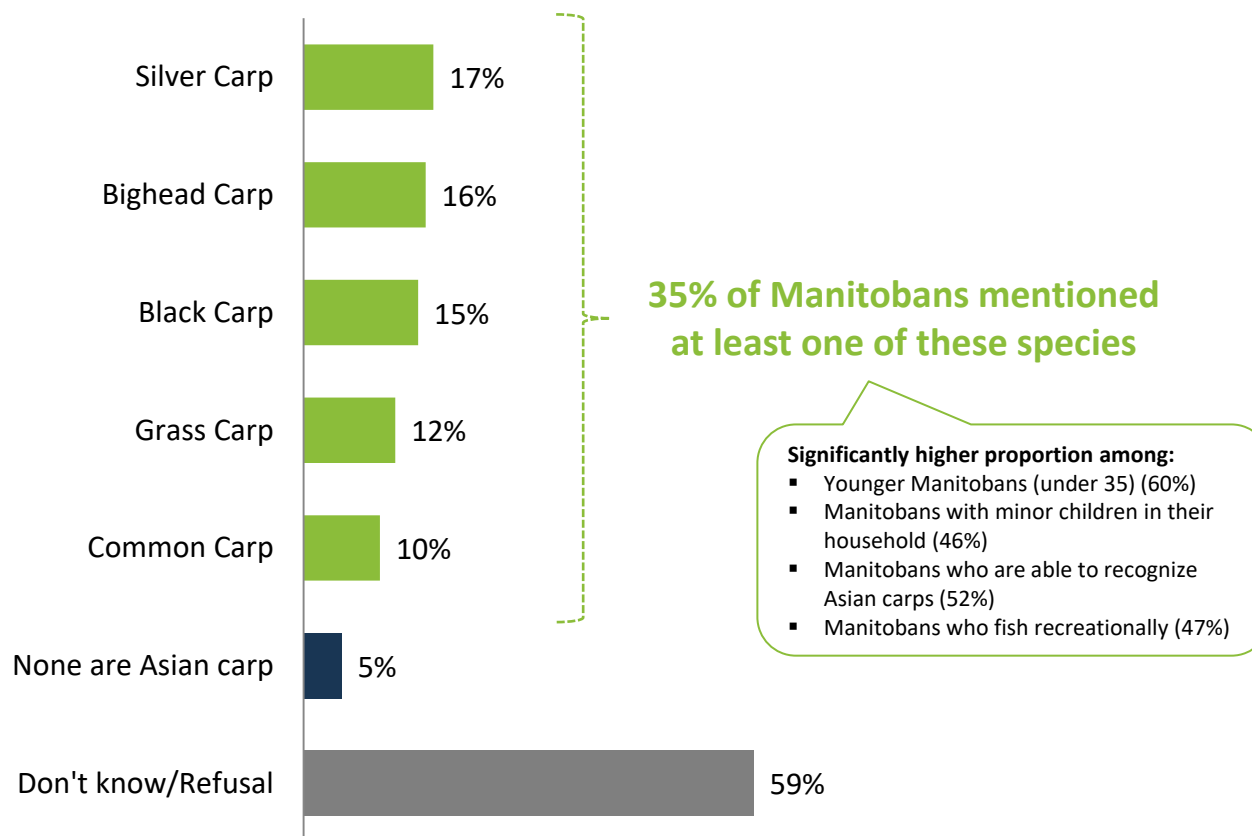


KNOWLEDGE OF ASIAN CARP SPECIES

Q21. According to you, which of the following is a species of Asian carp?

SEVERAL MENTIONS POSSIBLE*

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)



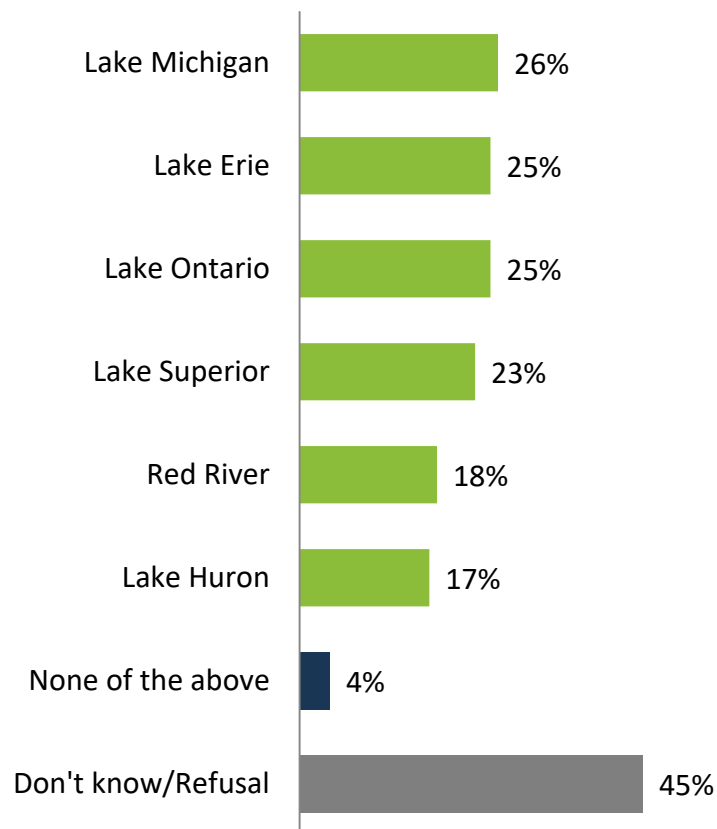
*Because respondents were able to give several answers, the total of mentions may exceed 100%.

KNOWLEDGE OF THE CANADIAN WATER BODIES ASIAN CARPS ARE CURRENTLY ESTABLISHED IN

Q20. According to you, in which of the following Canadian water bodies are Asian carps currently established?

SEVERAL MENTIONS POSSIBLE*

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)



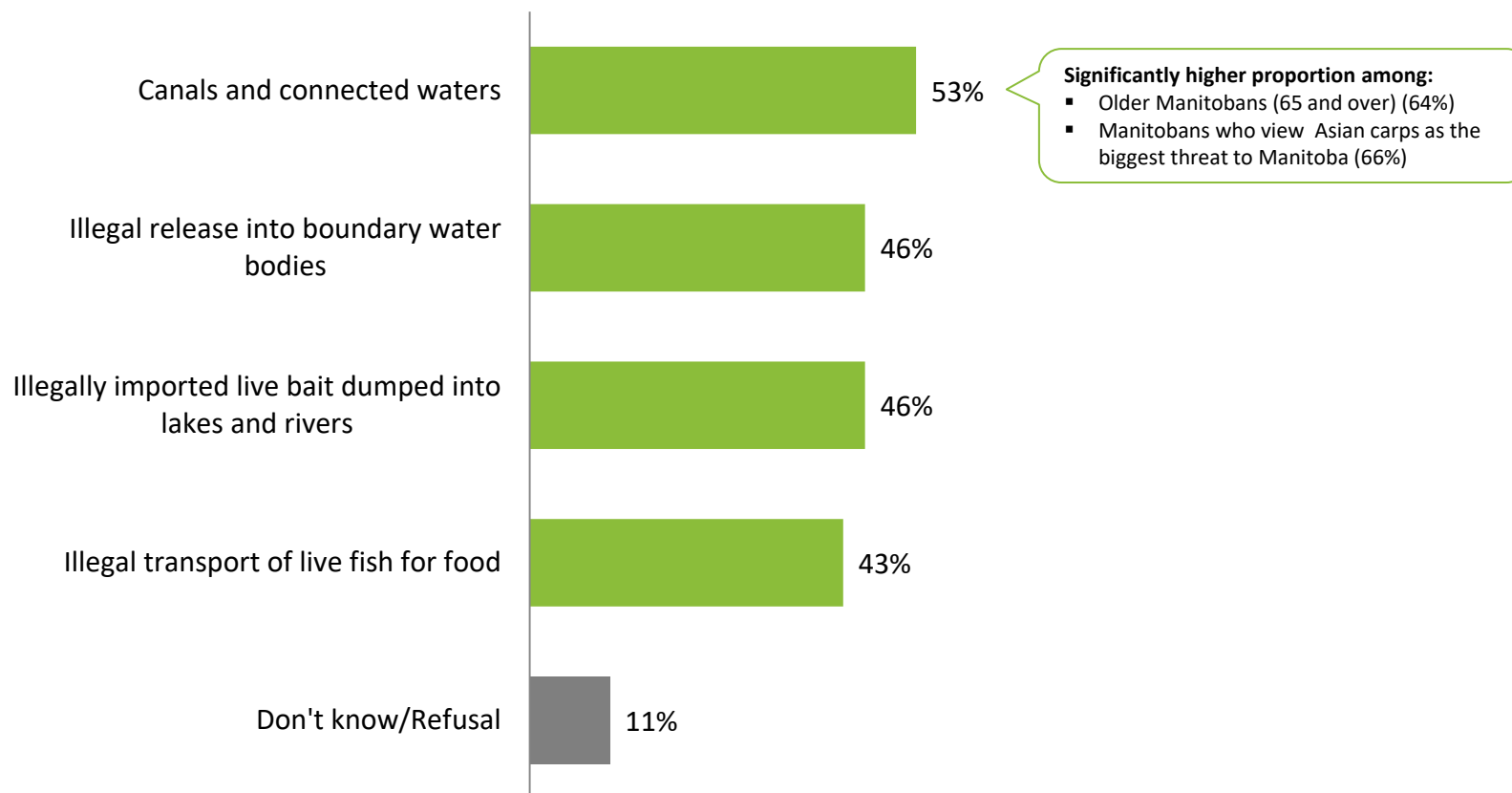
*Because respondents were able to give several answers, the total of mentions may exceed 100%.

KNOWN WAYS OF ENTRY OF ASIAN CARPS IN CANADA

Q24. According to you, how can Asian carps enter Canada?

SEVERAL MENTIONS POSSIBLE*

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)

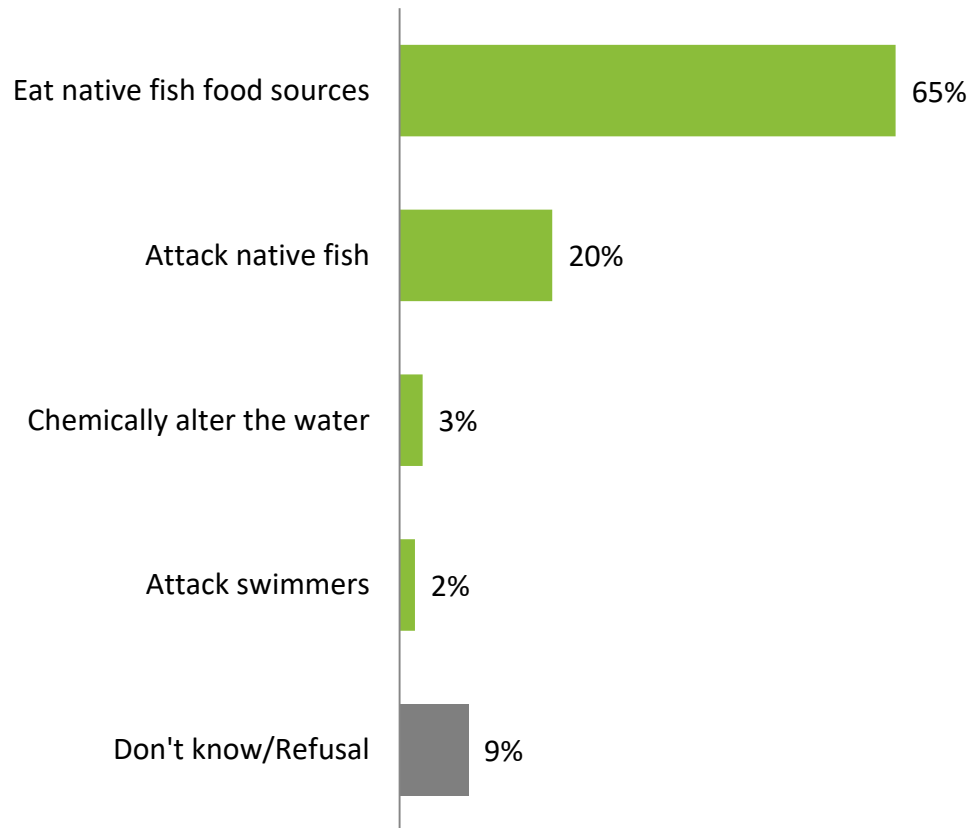


*Because respondents were able to give several answers, the total of mentions may exceed 100%.

THREAT ASIAN CARPS PRESENT IN LAKES AND RIVERS THEY INVADE

Q23. Among the following, what threat do Asian carps present in lakes and rivers that they invade?

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)

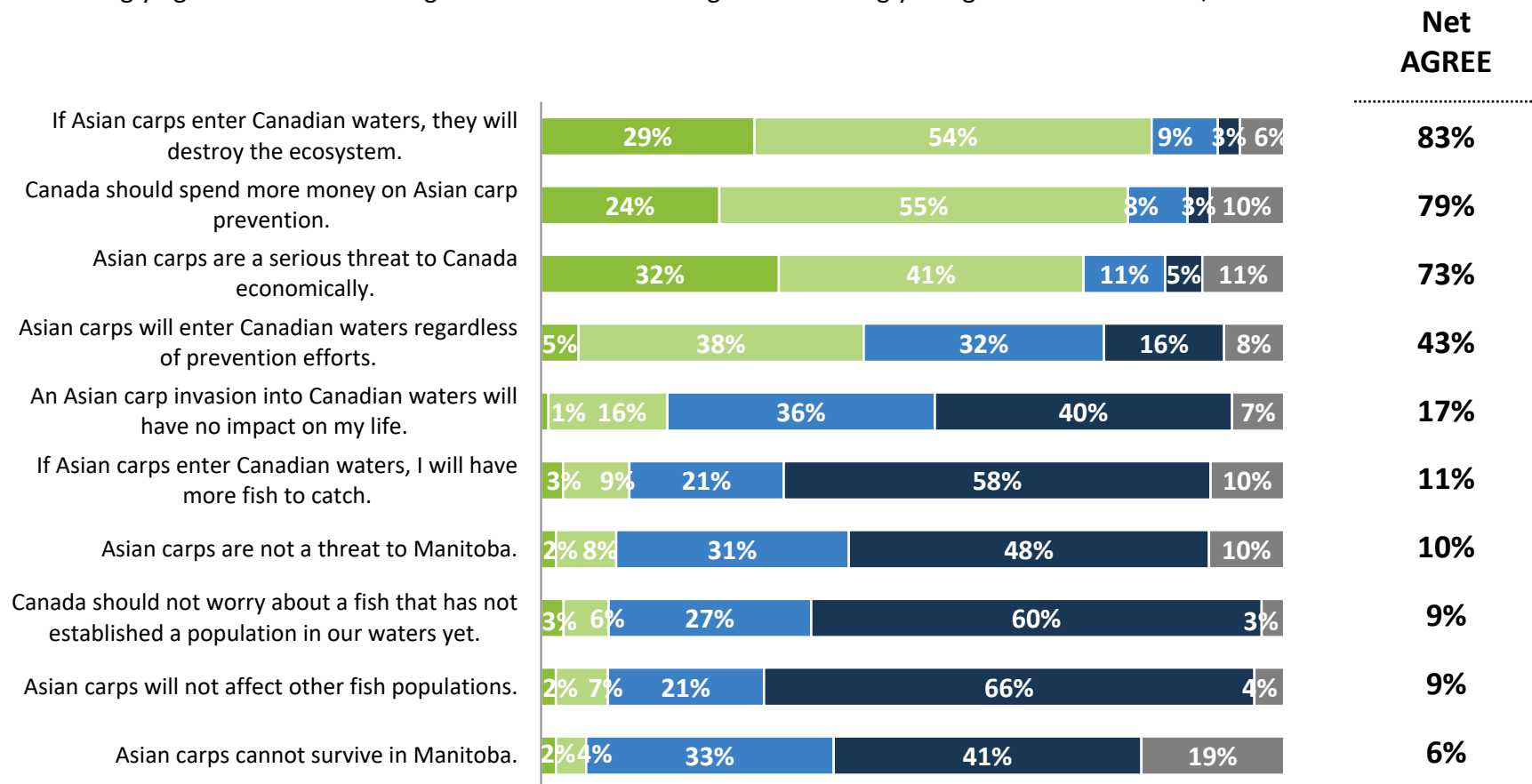


LEVEL OF AGREEMENT WITH VARIOUS STATEMENTS ABOUT ASIAN CARPS

Q25. To what extent do you agree or disagree with the following statements about Asian carps.

Base: Respondents who remember having seen, read or heard about Asian carps before the survey (n=367)

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know/Refusal



4. Personal Experience with Asian Carps

KEY INSIGHTS

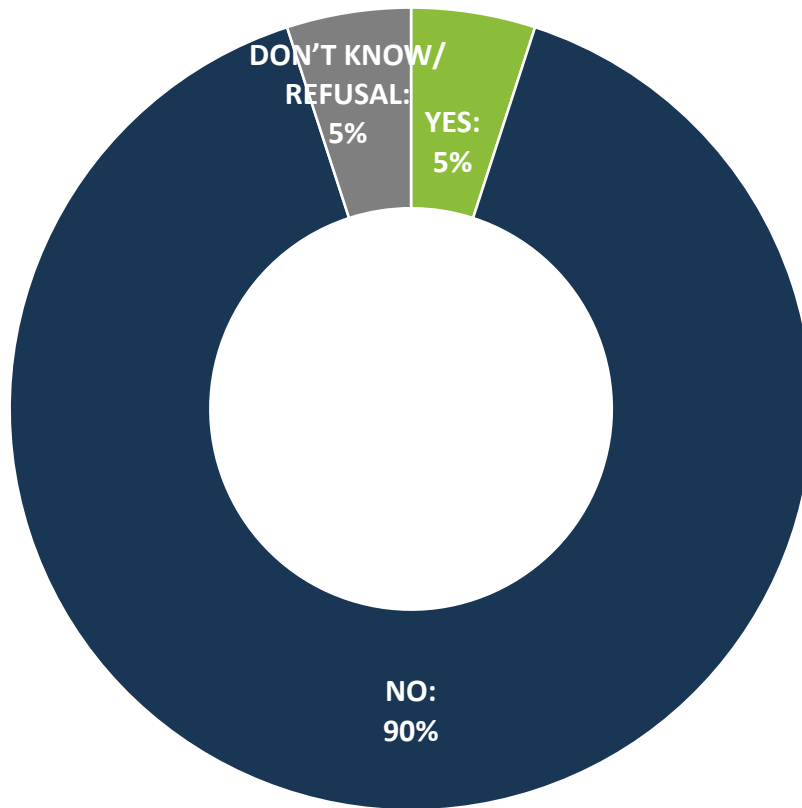
A few encounters with Asian carps in Manitoba

- Among Manitobans, 5% believe they have already caught an Asian carp, mostly in the Red River (25%). However, a relatively high proportion of these people remember neither when the fish was caught (55%), nor what they did with it (36%). It is troubling to note that 27% mentioned throwing it back in the water.

PROPORTION OF MANITOBANS WHO BELIEVE THEY HAVE ALREADY CAUGHT AN ASIAN CARP

Q22. Do you believe that you have ever caught this fish?

Base: All respondents (n=1,001)



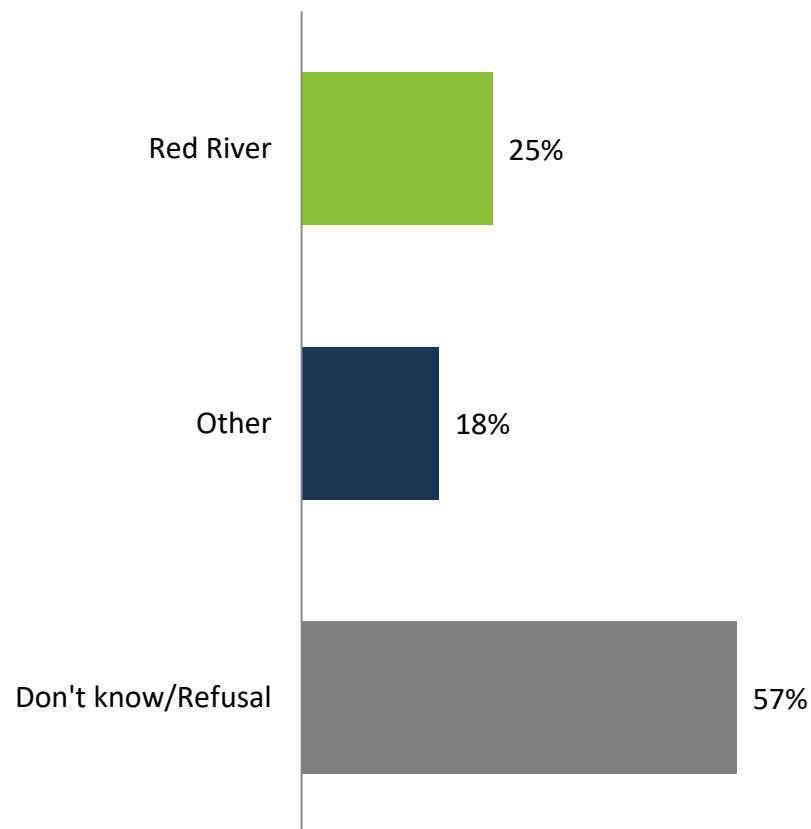
(This picture was shown to respondents)

LOCATION WHERE THE ASIAN CARP WAS CAUGHT

Q22b. Where did you catch this fish?

SPONTANEOUS ANSWER

Base: Respondents who believe they have already caught an Asian carp (n=47)

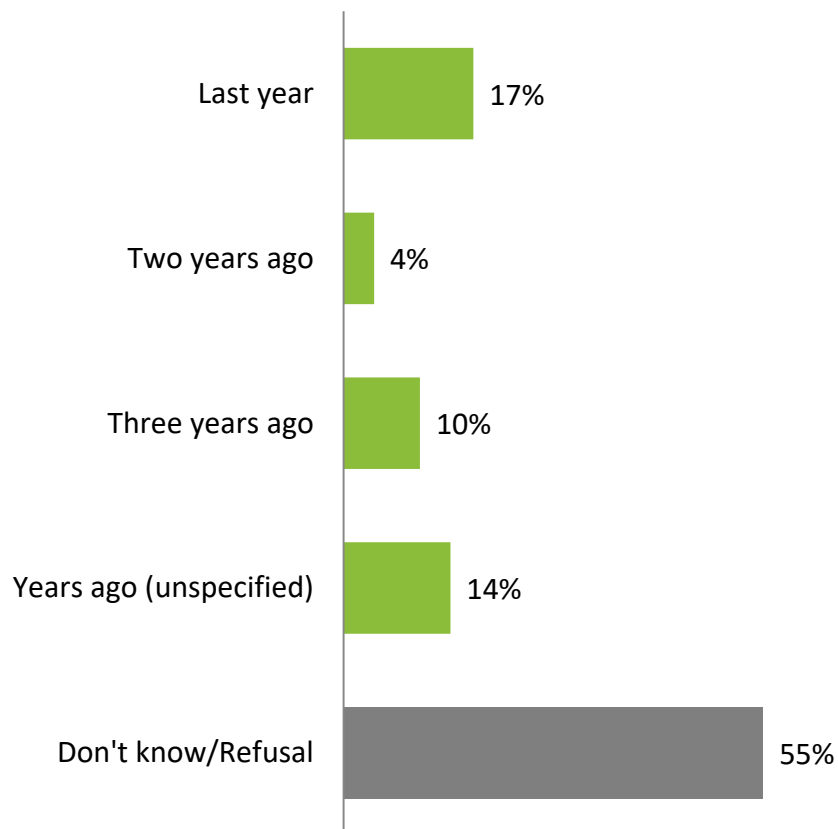


MOMENT WHEN THE ASIAN CARP WAS CAUGHT

Q22c. When did you catch this fish?

SPONTANEOUS ANSWER

Base: Respondents who believe they have already caught an Asian carp (n=47)

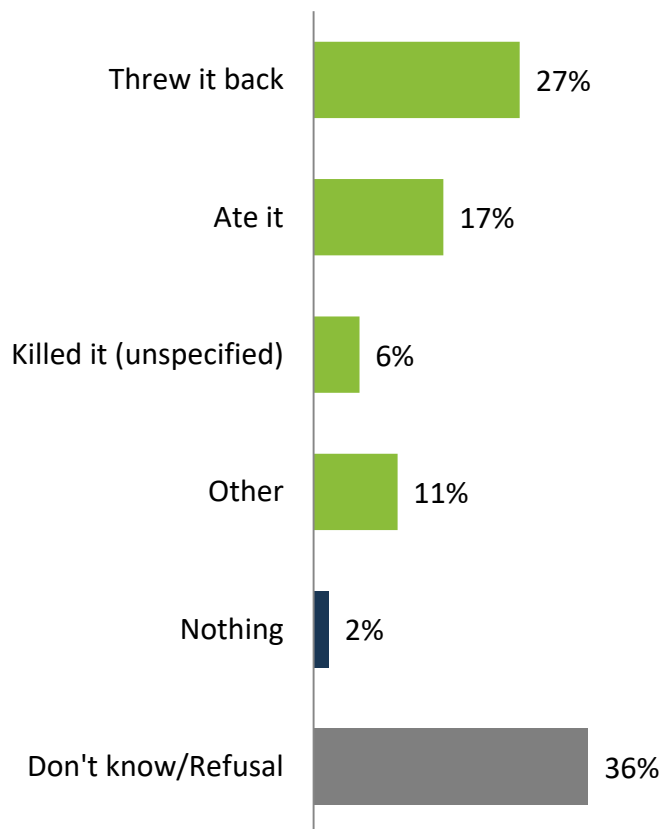


DISPOSAL OF THE CAUGHT ASIAN CARP

Q22d. What did you do with it?

SPONTANEOUS ANSWER

Base: Respondents who believe they have already caught an Asian carp (n=47)



TEAM

TEAM

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