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Waterfowl hunters have, and continue to, play an important role in the conservation of waterfowl species. They provide financial support for conservation programs and habitat acquisition, protection, restoration and enhancement; they also assist in the monitoring of waterfowl populations and play important roles in population management (Heffelfinger, Giest & Wishart, 2013). Although national surveys have documented recreation use, activity categories have not been consistent to allow for the identification of participation trends: in 1996, 235,000 Canadians hunted waterfowl; in 2012, 2.1 million Canadians participated in hunting and trapping (Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians, 1999; Federal, Provincial, and Territorial Governments of Canada, 2014). Some provincial-level studies suggest a decline in hunting participation; for example, participation in hunting in Alberta declined by 28% and hunter retention declined by 30-35% between 1990 and 2000 (Watson & Boxall, 2005). One reason for changes in hunting participation is changes in social structures that support hunting traditions due to increased urbanization (Watson & Boxall, 2005). In response to this decline of the number of waterfowl hunters, and in an effort to broaden the base of waterfowl and wetland conservation supporters, the North American Waterfowl Management Plan (NAWMP) introduced the goal of "Growing the numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation" (North American Waterfowl Management Plan, 2012, p. 2). In an effort to address this goal, waterfowl hunters were engaged in a continental survey to examine their motivations for participation, and their preferences for waterfowl and wetlands management objectives. Knowing more about waterfowl hunters' attitudes, behaviours, priorities, and characteristics will aid in understanding Canadians' participation in nature-based activities and conservation priorities more generally. Furthermore, this research will inform waterfowl hunting and wetland management policies.

The ultimate success of the NAWMP depends on maintaining its relevance to stakeholders and society. Better understanding what people value about waterfowl and their habitats can foster this relevancy. Without this information, NAWMP population, habitat, and people objectives may not reflect stakeholder and societal values, and management and policy decisions may lead to actions that could be either irrelevant or counter to stakeholder and societal expectations. This study integrated several fields of research, including outdoor recreation, environmental sociology, and wildlife management. This study developed, delivered, and analyzed a survey of adult Canadian waterfowl hunters. The survey elicited waterfowl hunter participation characteristics, information about identify, and knowledge about, interest in, and preferences for waterfowl and wetland conservation.

2. Study Objectives.

This study is part of a larger North American initiative to examine people's interactions with waterfowl and wetlands in order to understand the dynamics of these interactions, and how the motivations for these interactions appear to have shifted from consumption to appreciation. This research investigated the characteristics that influence waterfowl hunting participation in Canada, and permit a broader examination of waterfowl conservation in a North American context. This effort represents the first continental effort to actively engage the broad range of stakeholders in the process of developing objectives for waterfowl and wetlands management. Six objectives framed the development of this study:

- 1. Assess what waterfowl hunters and other waterfowl conservationists (*i.e.*, bird watchers/birders) most desire from their natural resource-based management and social settings to inform NAWMP objectives and select habitat and population management alternatives.
- Establish baseline measures that can be repeated to inform the development of a Public Engagement Strategy and monitor trends in achieving the NAWMP goal of "growing numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation."
- 3. Assess waterfowl hunters' and conservationists' knowledge, preferences, levels of use and support for waterfowl and wetlands conservation.
- 4. Assess the general publics' participation in waterfowl associated recreation and how much they support waterfowl and wetlands conservation.
- Assess the general publics' awareness and their perceptions regarding the importance of the benefits and values (*i.e.*, Ecological Goods and Services – EGS) provided by waterfowl and wetlands conservation.
- 6. Assess waterfowl professionals' perspectives on the levels of waterfowl populations and habitats needed to support hunter and viewer use opportunities.

The expected outcomes of these studies were:

- 1. Quantified measures of stakeholder preferences;
- 2. A greater likelihood of developing NAWMP objectives and management actions that are informed by waterfowl and wetland stakeholders; and
- 3. A focus on harvest management actions that will provide the greatest benefits in terms of stakeholder preferences within the context of what is biologically feasible.

The key research was completed by a collaborative research team at the University of Alberta, the U.S. Geological Survey's Fort Collins Science Center, and the Minnesota Cooperative Research Unit located at the University of Minnesota.

3. Study Design & Methods.

The development of baseline measures for waterfowl hunting focused on participants' decisions, identity, and capacity. Individual *decisions* to participate in waterfowl hunting are reflected in participation patterns; questions about decisions inform baseline participation levels in waterfowl hunting, and on waterfowl hunters' degrees of recreation specialization and types of participation. Measures of *identity* formation focused on determining the degree of specialization that waterfowl hunters have achieved (*i.e.*, an individual's formation of their identity as a waterfowl hunter). Long-term sustainability of waterfowl and wetlands depends on building support and relevancy: it is a matter of maintaining or increasing the *capacity* to increase waterfowl populations, protect and restore habitat, and the activities people enjoy that involve waterfowl and wetlands. *Institutional capacity* can be thought of in terms of the social, political, economic, and human capital. The survey examined the levels of social, political, economic, and human capital that waterfowl hunters provide to waterfowl and wetland conservation.

A discrete choice experiment formed part of the survey. In stated choice experiments, people are presented a range of hypothetical choice sets. Each choice set includes a different combination of levels associated with each attribute of a product or plan; waterfowl and wetlands management elements could be thought of as the attributes. For example, choice sets might include different combinations of the attributes: waterfowl population size, amount of habitat, participation level, number of other recreationists present, and success rate. The choice set attributes were determined by workshops conducted with waterfowl hunters across Canada in the Winter of 2016. The discrete choice experiment provides quantified measures of waterfowl hunters' preferences for potential conditions influencing waterfowl hunting experiences, and management actions and objectives. This approach is designed to help understand how individuals evaluate trade-offs when making choices that involve multiple dimensions, such as attributes related to waterfowl populations, habitat, and social and managerial conditions. For example, a duck hunter may consider hunting season length, bag limit size, potential to see ducks, potential to harvest ducks, travel distance, and other factors when deciding whether to purchase a waterfowl hunting license.

3.1. Questionnaire Development.

The core design team for the *National Waterfowl Hunting Survey* included Human Dimensions Working Group (HDWG) members from the Atlantic, Mississippi, Central and Pacific Flyways. This team held multiple meetings and webinars to identify appropriate sampling approaches and questionnaire design elements. In addition to achieving the study objectives and implementing the discrete choice experiments on hunting preferences, the hunter surveys included questions about three important areas identified by the HDWG as important (*i.e.*, decisions, identity, and capacity). A brief description for each question follows. Copies of the English and French questionnaires can be found in Appendix A.

3.1.1. Question 1: Participation in Waterfowl Hunting.

Q1 Which of the following statements best describes your pursuits in waterfowl hunting?

This question asked about participation in waterfowl hunting (ducks and geese). This question served to establish respondents' qualifications as waterfowl hunters. If respondents did not hunt ducks or geese, they were directed to the end of the survey and thanked for their time (*i.e.*, they are not permitted to complete the survey).

3.1.2. Question 2: Age When Waterfowl Hunting Began.

Q2 How old were you when you started waterfowl hunting?

This question asked about when respondents started waterfowl hunting in order to provide a sense of the duration of their participation in this activity.

3.1.3. Question 3: Participation in Waterfowl Hunting in Last Five Years.

Q3 How many years of the last 5 years have you hunted waterfowl?

This question asked about respondents' participation in waterfowl hunting in the past five years to establish the avidity of their waterfowl hunting. If respondents indicated that they had not hunted waterfowl in any of the past five years, they are directed to the end of the survey and thanked for their time (*i.e.*, they are not permitted to complete the survey).

3.1.4. Question 4: Average Number of Ducks/Geese Harvested Each Year Over Last Five Years.

Q4 Ducks Over the last five years, about how many DUCKS did you harvest in a year ON AVERAGE?

Q4 Geese Over the last five years, about how many GEESE did you harvest in a year ON AVERAGE?

These two questions measured respondents' average harvest of ducks and geese. If respondents indicated in Question 1 that they only hunted ducks, they were directed to *Q4 Ducks*; if respondents indicated in Question 1 that they only hunted geese, they were directed to Q4 Geese; if respondents indicated that they hunted ducks and geese, they were directed to *Q4 Ducks* and *Q4 Geese*.

3.1.5. Question 5: Average Frequency of Waterfowl Hunting Participation Over Last Five Years.

Q5 Over the last five years, about how many days did you usually hunt WATERFOWL in a year?

This question sought to quantify respondents' annual frequency of waterfowl hunting participation based on their activity over the last five years.

3.1.6. Question 6: Frequency of Waterfowl Hunting Participation in 2016.

Q6 During LAST YEAR'S (2016) waterfowl hunting season, how many days did you hunt for WATERFOWL?

This question sought to quantify respondents' annual frequency of waterfowl hunting participation in 2016.

3.1.7. Question 7: Waterfowl Hunting Satisfaction and Need to Shoot Daily Limit.

Q7 How many times do you feel that you need to shoot a daily bag limit of ducks/geese to have a satisfying season?

This question asked about respondents' satisfaction with the waterfowl hunting season relative to the number of times that they shot a daily limit of waterfowl.

3.1.8. Question 8: Number of Times a Daily Limit was Shot in 2016.

Q8 How many times did you shoot a limit of ducks/geese last year's season (2016)?

This question asked how often respondents' shot a daily limit of waterfowl in 2016.

3.1.9. Question 9: Social Circumstances of Waterfowl Hunting Trip Planning.

Q9 Under what circumstances do you typically go hunting?

This question elicited information about the social circumstances of waterfowl hunting trip planning. Respondents were asked whether they typically go waterfowl hunting...

- When I plan the hunt myself
- When someone else invites me
- Both when I plan the hunt or someone else invites me

3.1.10. Question 10: Flyway and Jurisdiction in Which Waterfowl Hunting Occurs Most Often.

Q10a In which Flyway did you hunt most often last year (2016) or the year you last hunted?

Q10b In which Canadian Province/Territory or US State have you hunted waterfowl most often over the past 5 years?

These two questions asked respondents to identify the Flyway and jurisdiction in which they hunted waterfowl in order to get a sense of the geographical distribution of waterfowl hunting (as opposed to where they reside); respondents could also identify a US State if that was where they hunted waterfowl most often. The identification of the Flyway where respondents' hunted for waterfowl most often directed respondents to Flyway specific questions about the importance of hunting for different waterfowl species in Question 13 (below).

3.1.11. Question 11: Waterfowl Hunting Trip Duration.

Q11 Do you primarily take day trips or overnight/multi-day trips when you waterfowl hunt?

Respondents were asked to characterize the duration of their waterfowl hunting trips as primarily being day trips or multi-day trips.

3.1.12. Question 12: Jurisdiction of Waterfowl Hunting Experiences.

Q12 Please indicate where you do most of your waterfowl hunting?

In order to get a sense of the jurisdictions in which waterfowl hunting takes place, respondents were asked to indicate where they pursued most of their waterfowl hunting:

- Public land or waters;
- Private property owned by you, your family or in partnership with someone else;
- Private property owned by a friend or another landowner who gives you permission to hunt for free;
- Private property you lease or pay to hunt on; or
- Guest on private property someone else leases or pays to hunt on.

3.1.13. Question 13: Importance of Hunting Different Waterfowl Species by Flyway.

Q13 How important is it to you to hunt the following in the Pacific / Central / Mississippi / Atlantic Flyway?

Waterfowl hunters can have preferences for the species of waterfowl that they seek to harvest; the distribution of these species differs by Flyway. Based on where respondents' hunted waterfowl most often in 2016 or the year that they had last hunted (*i.e.*, Question 10a), they were directed to Flyway-specific questions about the importance of hunting different waterfowl species (importance was measured using a five-point interval response). Respondents that hunted waterfowl in the Pacific Flyway most often were asked about the importance of hunting for:

- Diving ducks (e.g., scaup/bluebills, canvasback, redheads, etc.);
- Seaducks (*e.g.*, scoter, eider, long-tail, *etc.*);
- Mallards;
- Pintails;
- Other dabbling ducks (*e.g.*, teal, wood duck, *etc.*); and
- Geese.

Respondents that hunted waterfowl in the Central Flyway most often were asked about the importance of hunting for:

- Diving ducks (e.g., scaup/bluebills, canvasback, redheads, etc.);
- Mallards;
- Other dabbling ducks (e.g., gadwall, pintails, teal, etc.); and
- Geese.

Respondents that hunted waterfowl in the Mississippi Flyway most often were asked about the importance of hunting for:

- Diving ducks (e.g., scaup/bluebills, canvasback, redheads, etc.);
- Mallards;
- Other dabbling ducks (*e.g.*, gadwall, pintails, teal, *etc.*); and
- Geese.

Respondents that hunted waterfowl in the Atlantic Flyway most often were asked about the importance of hunting for:

- Diving ducks (e.g., scaup/bluebills, bufflehead, canvasback, ring- necked duck, etc.);
- Seaducks (*e.g.*, scoter, eider, and long-tailed);
- Mallards;
- Wood ducks;
- Black ducks;
- Other ducks (*e.g.*, teal, pintails, *etc.*);
- Canada geese;
- Snow geese; and
- Brant.

3.1.14. Question 14: Constraints to Waterfowl Hunting.

Q14 Please indicate how much of a problem the following are in the province / territory where you hunt waterfowl most.

Constraints in outdoor recreation refer to "... factors that... limit the formation of leisure preferences and/or inhibit or prohibit participation and enjoyment of leisure" (Jackson, 2000, p. 62). Constraints include *intrapersonal constraints* (*i.e.*, individual psychological qualities that affect the formation of leisure preferences, such as anxiety, perceived lack of skill); *interpersonal constraints* (*i.e.*, social factors that affect the formation of leisure preferences, such as anxiety preferences, such as friends or family members who prefer similar or other activities), and *structural constraints* (*i.e.*, factors that occur after leisure preferences are formed but before actual participation takes place, such as lack of time, lack of money) (Walker & Virden, 2005). Respondents were asked to indicate, using a five-point interval scale, how much of a problem interpersonal constraints (*i.e.*, crowding at hunting areas, hunting pressure, interference from other waterfowl hunters, and conflict with other waterfowl hunters in places where I hunt) and structural constraints (*i.e.*, lack of public places for waterfowl hunting) were in the provinces and/or territories where they hunted waterfowl most. Intrapersonal constraints were not asked about.

3.1.15. Satisfaction with Duck Hunting Management.

Q15 In the province / territory where you hunt ducks most often, how dissatisfied or satisfied are you with...

Satisfaction is a central concept in the field of outdoor recreation research and management. Framed in

terms of expectancy theory, the concept of satisfaction suggests that:

... participants engage in recreation activities with the expectation that this will fulfill selected needs, motivations, or other desired states. The congruence between expectations and outcomes is seen to ultimately define satisfaction. (Manning, 2011, pp. 12-13).

Using a five-point interval scale, respondents were asked to rate their satisfaction with seven duck management outcomes:

- The number of ducks you see during the season;
- The number of ducks you harvest during the season;
- The number of days in the duck season;
- The number of ducks in the daily limit;
- The number of ducks typically present during the hunting season;
- Quality of habitat where you hunt; and
- Your overall duck hunting experience.

Only those respondents that indicated that they hunted ducks in Question 1 were directed to this question; waterfowl hunters that only hunted geese were not presented with this question.

3.1.16. Question 16: Respondent Thresholds of Waterfowl Hunting Harvest, Bag Limit Sizes, and Season Length.

Q16a What is the minimum number of ducks you have to harvest in a day to feel satisfied with the hunt?

Q16b What is the smallest daily bag limit you would accept before you would no longer hunt ducks?

Q16c What is the minimum number of days in a waterfowl hunting season you would accept before you would no longer hunt ducks?

In order to get a better sense of waterfowl hunters' satisfaction with the management of duck hunting, these three questions asked about respondents' thresholds for minimum harvest numbers, bag limit size, and season length. Only those respondents that indicated that they hunted ducks in Question 1 were directed to this question; waterfowl hunters that only hunted geese were not presented with this question.

3.1.17. Discrete Choice Models for Preferred Trips

This question set is a discrete choice experiment (DCE) that examines the preferences of waterfowl hunters concerning different potential combinations of waterfowl hunting elements. Discrete choice experiments represent a rigorous, quantitative approach to determine the relative importance of multiple attributes or objectives on choice decision processes. The approach is founded on random utility theory, a robust theory of human choice behavior (Louviere, Hensher & Swait, 2000; Louviere, Flynn & Carson, 2010; Thurstone, 1927; McFadden & Train, 2000). In discrete choice experiments, survey respondents are presented a range of hypothetical choice sets. Each choice set includes a different combination of levels associated with each attribute of a product or plan. For example, choice sets might include different combinations of the attributes: waterfowl population sizes, amounts of habitat, and participation levels. Through this exercise, we would be able to determine the relative importance (*i.e.*, weights/utilities) that waterfowl hunters place on the individual attributes, the tradeoffs they are willing to make among attributes, and the total utility or value that will be achieved from different combinations of the attributes (Ryan, 1996; Wattage, Mardle & Pascoe, 2005). Choice models present hypothetical scenarios to respondents to derive individuals' preferences for alternatives composed of multiple resource and management attributes (Adamowicz, Louviere & Williams, 1994; Louviere, Hensher & Swait, 2000; Oh et al., 2005). The approach depends on the imperfect relationship between behavioral intention and behavior (Ajzen & Fishbein, 1980), yet allows estimation of the effects of all parameters of interest independently. Individuals are assumed to be utility maximizers, and respondents' choices reflect the perceived utility of the alternatives presented (McFadden, 1981). Individual respondent choices reflect the personal utility of attributes and attribute levels, and are aggregated to estimate the utility of attributes and attribute levels in a population (McFadden, 1981). In an economic sense, utility is simply a measure of the perceived usefulness of something to an individual. The degree to which someone chooses one circumstance over another provides the ability to measure its perceived usefulness, or utility, to that person. In general, the utility of an attribute level may be considered a reflection of relative desirability (Orme, 2014).

Alternatives presented in this discrete choice experiment consisted of five attributes:

- 1. Harvest: The number of waterfowl you are likely to harvest in a day.
- 2. Access Effort: How easy or difficult it is to get into, out of, and around an area in order to hunt.
- 3. Length of Travel: The time you have to travel one-way in order to hunt.
- 4. Quantity of Waterfowl: The number of ducks/geese that you see in a day when hunting even if not in shooting range.
- 5. Potential for Interference/Competition: Competition from other hunters who might interfere with your hunt in some way such as making you feel crowded or competing for hunting spots or birds.

Response levels varied between three and five levels for each attribute (Table 1). In order to have adequate statistical power to conduct this experiment, ten choice sets (each containing two scenarios) were developed. Respondents were presented with ten different paired hypothetical comparisons of waterfowl hunting experiences and asked to choose one option. Each scenario included two viewing option choices plus a "none" (*i.e.*, I would not go if these were my only choices).

Attribute	Possible Levels
Harvest The number of waterfowl you are likely to harvest in a day.	 1 bird; 3 birds; and 6 birds.
Access Effort How easy or difficult it is to get into, out of and around an area in order to hunt.	 Easy access that takes little effort; Moderate access that takes some effort; and Difficult access that takes a lot of effort.
Length of Travel The time you have to travel one-way in order to hunt.	 30 minutes; 1 hour; 2 hours; 3 hours; and 4 hours.
Quantity of Waterfowl The number of ducks/geese that you see in a day when hunting even if not in shooting range.	 25 birds or less; 50 birds; 250 birds; 500 birds; and 1,000 birds or more.
Potential for Interference/Competition Competition from other hunters who might interfere with your hunt in some way such as making you feel crowded or competing for hunting spots or birds.	 No competition; Low competition from other hunters; Moderate competition from other hunters; and High competition from other hunters.

Table 1. Possible trip choice characteristics in discrete choice experiment.

The resultant hierarchical Bayes models include average utilities (or 'usefulness') for each attribute level, and summarize waterfowl hunters' attribute preferences, and the overall importance of the five attributes embodied in respondents' choices.

3.1.18. Question 18: Prioritization of Waterfowl Hunting Management Options.

Q18a How much priority should provincial / territorial and federal agencies give the following when setting annual duck hunting regulations?

Q18b Of all the options listed below, please rank your top three to indicate your highest priorities. Use the numbers 1, 2, and 3, with 1 being your highest priority, 2 being your second highest priority and 3 being your third highest priority.

For the first part of this question, respondents were asked to use a five-point interval scale (from *Very Low* to *Very High*) to prioritize seven waterfowl management options:

- Having the largest bag limits possible;
- Having the longest seasons possible;
- Having the largest duck populations possible;
- Avoiding different season lengths for different duck species;
- Providing the simplest regulations possible;
- Reducing the number of species-specific bag limits (*i.e.*, bag limits that apply to specific species instead of the general duck bag limit); and
- Having the largest drake mallard bag limits possible.

The second part of this question asked respondents to only identify the top three waterfowl hunting management options from the seven identified above.

3.1.19. Questions 19 - 21: Attitudes About Species-Specific Bag Limits.

Q19 For the provinces / territories where you hunt, are the rules and regulations for current species-specific bag limits difficult to understand?

Q20 For the provinces / territories where you hunt, are the current species-specific bag limits difficult to comply with in the field?

Q21 Please indicate your preferred scenario for bag limits of duck species that typically have smaller bag limits.

These three questions asked respondents about their attitudes and preferences about species-specific bag limits in different settings, including in the field. Question 19 asked about whether the rules and regulations for current species-specific bag limits were difficult to understand. Question 20 asked whether the current species-specific bag limits were difficult to comply with in the field. Question 21 asked respondents to indicate their preference for two bag limit scenarios:

Maximize harvest opportunity by maintaining individual species bag limits; or

- Create simpler regulations by creating aggregate bag limits for a combination of certain species (*e.g.*, a diving duck limit).
- 3.1.20. Question 22: Recreation Specialization.

Q22 We are interested in knowing how much waterfowl hunting means to you. Please indicate how much you disagree or agree with the following statements about your personal participation in waterfowl hunting.

Recreationists, even those that pursue the same activity like waterfowl hunters, are not homogeneous (Salz, Loomis & Finn, 2001; Rollins & Robinson, 2002; Fulton & Hundertmark, 2004). Recreationists differ in their values, the activities that they pursue, the settings that they prefer, the experiences they desire, and their motivation for participating (Choi, Loomis & Ditton, 1994). Traditional social aggregation variables neither completely explain recreation participation, nor the variation among preferences, attitudes, and behaviours (Bryan, 1977; McFarlane, Boxall & Watson, 1998). One way to contextualize waterfowl hunting participation is an examination of waterfowl hunters' identity and commitment to the activity. Identity is the process by which an individual distinguishes themselves from others, and refers to one's affiliation with a particular social group (Hoult, 1977; Stryker, 2000). Group membership often brings together people with similar attitudes and opinions; the emotional significance of association with likeminded individuals reinforces a person's social identity (Tajfel, 1982), and affects their concept of self. It has been argued that social identity serves a cognitive function that facilitates group behaviour (Turner, 1982). In this research identity is framed in terms of the recreation specialization framework (Bryan, 1977). The utility of the specialization framework lies in its ability to predict attitudes, preferences, and behaviour (McFarlane, 1994). As a recreationist's degree of specialization increases, so too does their degree of knowledge about various aspects of the activity that they pursue. The differences in knowledge among recreationists with differing levels of specialization may lead to differences in attitudes, preferences and behaviour (Scott & Shafer, 2001). Degrees of recreation specialization are related to attitudes about, and preferences for, management practices (Salz, Loomis & Finn, 2001; Manning, 1999; Bryan, 2000; Jackson, 1987): as specialization increases, recreation management preferences can shift from resource consumption to preferences for management strategies that focus on and resource conservation.

Personal connections to nature can influence how people acquire their knowledge about land-use management strategies and approaches. Knowing about what people's connections to nature are could yield information about the general relevancy of nature to respondents; this information may assist in the interpretation of general attitudes and perceptions for priorities for land-use management, and could address how "experienced" people are when addressing land-use issues and priorities. This set of questions measured the degree of a person's involvement in waterfowl hunting. Participation in waterfowl

hunting provides opportunities to experience nature and the environment first-hand; these experiences can shape people's attitudes and beliefs about the management of natural resources. Respondents were asked to indicate their level of agreement with twelve statements using a five-point interval scale (from *Strongly Disagree* to *Strongly Agree*). The recreation specialization items in these questions have been informed by Schroeder *et al.* (2013) and Needham *et al.* (2009).

3.1.21. Question 23: Waterfowl Hunting Mentoring.

Q23a During this past season did you take anyone waterfowl hunting who had never waterfowl hunted before?

Q23b If you did, who did you introduce?

Respondents were asked whether they had introduced someone to waterfowl hunting, and if they had, what the characteristics of that person were:

- My own child(ren);
- Related child(ren);
- Other Child(ren);
- Adult close family (*e.g.*, brother/sister);
- Adult extended family (*e.g.*, cousin/uncle);
- Adult friend;
- Co-worker; and
- Other.
- 3.1.22. Question 13: Identity

Q13 A person can think of themselves in a variety of ways. Please indicate the extent to which you identify yourself as a/an...

This question asked about the strength of respondents' identification with birdwatching, hunting, and conservation. Respondents were asked to indicate how much they identify with five structural positions related to waterfowl/wetlands using a five-point interval scale (ranging from *Not at All* to *Very Strongly*).

3.1.23. Question 25: Social Networks (personal community).

Q25 We are interested in knowing about your "personal community" and whether you know people in certain kinds of occupations and people affiliated with certain types of organizations. Among your relatives, close friends, or acquaintances, are there people who participate in the following activities, have the following jobs or who belong to the following organizations? Also, would you classify yourself in any of the following areas [structural positions]?

The relationships that people have with other people can exert influences in a number of ways, including the flow and type of information available and their familiarity with different social identifies (*i.e.*, a scientist, a logger, a politician). This question uses a position generator (Lin, 2001; Lin et al., 2001) to measure the characteristics (*i.e.*, range of social ties, tie strength) of people's social networks. This question is based on a position generator developed by (Tindall & Harshaw, 2005) that has been revised to reflect positions/fields associated with waterfowl and wetlands. It is anticipated, for example, that people who have relationships to, or are, scientists or land-use managers will have different perceptions about the management of waterfowl and wetlands than people who have, for example, relationships to (or are) members of environmental organizations or people with a regular connection to the land (e.g., hunters, anglers). The position generator is a means of eliciting information about the characteristics of people's social networks. This approach asks people about their connections to nature through the relationships that they have with other people. The advantage of this approach is that it provides richer information about their connection to nature (*i.e.*, what the connections are), as well as where they get their information from. Structural positions were chosen from the full range of position levels and classes and represent different economic sectors in order to capture a representative distribution of resources in the waterfowl/wetlands and birdwatching conservation communities. Care was taken to select structural positions that had enough variation of community members, and that the structural positions were clear and widely understood job titles/memberships (Verhaeghe et al., 2013).

3.1.24. Question 26: Involvement in Organizations.

Q26 Please indicate your level of involvement with the following organizations in the past 12 months, even if you were not a member.

This question asked about respondents' involvement in the types of organizations that are concerned with the conservation of waterfowl and wetlands. Involvement in these types of organizations can indicate respondents' connections to the waterfowl hunting community, and can also be sources of information. Respondents were asked to rate their involvement using a four-point interval scale (from *No Involvement* to *High Involvement*). The three types of organizations that were asked about were:

- Ducks Unlimited
- Delta Waterfowl
- Provincial / Territorial / Regional Waterfowl Association

3.1.25. Question 27: Trust in Organizations.

Q27 How much do you trust the following organizations to keep your best interest in mind as a waterfowl hunter?

There are many different organizations/positions that are involved in the conservation of waterfowl and wetlands, and of the management of opportunities for waterfowl hunting. Respondents were asked to indicate the trustworthiness of each organization using a five-point interval scale (from *Do Not Trust at All* to *Trust Completely*). The seven organizations/positions conservation of waterfowl and wetlands, and of the management of opportunities for waterfowl hunting that respondents indicated trustworthiness for waterfowl hunting that respondents indicated trustworthiness for were:

- Provincial/Territorial wildlife agencies;
- the Canadian Wildlife Service;
- Elected officials;
- Waterfowl hunting/conservation organizations; and
- Birding/bird conservation organizations.
- Other conservation organizations
- University researchers/scientists

3.1.26. Question 28: Donations in the Previous 12-months.

Q28 Please indicate how much money you personally donated to the following causes in the past 12 months.

Respondents were asked about any donations that they had made to four different causes in the 12months preceding the survey. Seven categories representing different levels of donations (from \$0.00 to \$10,000.00 or more) were presented for each cause. The four causes were:

- Wetland and/or waterfowl conservation;
- Conservation of other bird species;
- Birdwatching and related issues; and
- Waterfowl hunting and hunting related issues.

3.1.27. Question 29: Willingness to Pay for Fees/Permits Purchased to Access Lands for Waterfowl Hunting.

Q29 Under the Migratory Birds Regulations, hunters must acquire both a Migratory Game Bird Hunting (MGBH) permit and a Canadian Wildlife Habitat Conservation (CWHC) stamp. Each cost \$8.50 for a combined total of \$17. Revenue from the stamp goes to Wildlife Habitat Canada to support habitat conservation. Revenue from the permit provides partial support for managing permits and monitoring waterfowl populations. The stamp and permit fees have not increased since 1991 and 1998 respectively.

Would you still be willing to buy a Migratory Game Bird Hunting permit and a Canadian Wildlife Habitat Conservation stamp if...

The *Wildlife Habitat Conservation Stamp* (*i.e.*, the Canadian Duck Stamp) is a mechanism that directly provides funding for the conservation of wetlands, and for research and programs that support the conservation of wetlands. Respondents were asked to indicate their preference (using Yes/No options) for three hypothetical price changes to the *Migratory Game Bird Hunting Permit* and a *Canadian Wildlife Habitat Conservation Stamp*; an option of no fee increase was also included as a fourth option. The four options were:

- ... the Stamp fee increases by \$4 for new combined fee of \$21.
- ... the Stamp fee increases by \$4 and Permit fee increases by \$4 for new combined fee of \$25.
- ... the Stamp fee increases by \$9 and Permit fee increases by \$9 for new combined fee of \$35.
- ...the Stamp and Permit fees along with the combined fee remain the same (*i.e.*, no fee increase).

3.1.28. Question 30: Payments for Wetlands Management on Private Lands.

Q30 In the past 12 months did you personally spend money for wetlands management on private lands?

Respondents were asked whether they had spent any money on wetlands management on private lands; if they had, they were asked to indicate how much was spent.

3.1.29. Questions 31: Level of Involvement in Wetlands- and Waterfowl-Related Conservation Activities.

Q31 Please indicate your level of involvement in the following wetlands or waterfowl conservation activities in the last 12 months.

This question asked about respondents' involvement in conservation activities that were related to wetlands and waterfowl. Question items were adapted from Larson *et al.*, (2015). Respondents were asked to indicate their involvement in each activity using a five-point interval scale (from *Never* to *Very Often*). Respondents were asked their involvement in six activities:

- Worked on land improvement projects related to wetlands or waterfowl conservation;
- Attended meetings about wetlands or waterfowl conservation;
- Volunteered my personal time and effort to conserve wetlands or waterfowl;
- Contacted elected officials or government agencies about wetlands or waterfowl conservation;
- · Voted for candidates or ballot issues to support wetlands or waterfowl conservation; and
- Advocated for political action to conserve wetlands or waterfowl.

3.1.30. Question 32: Participation in Nature-Based Activities.

Q32 In the last 12 months, have you participated in the following nature-based activities?

This question asked about general participation in outdoor recreation activities, including close-to-home and away-from-home pursuits, consumptive and non-consumptive activities, and motorized and non-motorized activities. This question permits an assessment of the breadth of respondents' outdoor recreation activity.

3.1.31. Question 33: Participation in Activities Related to Wild Birds.

Q33 In the last 12 months, which of the following activities related to wild birds did you participate in, if any?

This question asked about general participation in activities that are related to birdwatching to provide a sense of respondents' engagement in birdwatching from low-engagement activities (*e.g.*, watching birds from my home) to high-engagement activities (*e.g.*, counting/monitoring birds for programs like the Christmas or Backyard Bird Counts).

3.1.32. Questions 34 & 35: Ecological Goods and Services of Wetlands.

Q34 Wetlands perform a variety of functions that are beneficial to people. When wetlands are lost or degraded, these benefits can be greatly reduced or disappear altogether. Below is a list of benefits that are threatened due to loss of wetlands. How concerned would you be if the following benefits were reduced in your community due to a loss of wetlands?

Q35a Which of the wetland benefits listed on the previous page would you be most concerned about being substantially reduced in your community?

Q35b Which of the wetland benefits listed on the previous page would you be least concerned about being substantially reduced in your community?

In Question 34, respondents were also asked about their level of concern about the loss of ten ecological goods and services provided by wetlands using a four-point interval scale (from *Not Concerned at All* to *Very Concerned*). Question 35a asked about the ecological good/service that respondents were most concerned about losing in their community; Question 35b asked respondents to identify the ecological good/service that they were least concerned about losing in their community. The ten ecosystem goods and services that respondents were asked about were:

- Flooding protection;
- Erosion protection;
- Wildlife viewing and birdwatching;
- Hunting opportunities;
- Storage of greenhouse gases, such as carbon;
- Clean water;
- Clean air;
- Providing a home for wildlife;
- Providing a home for animals such as butterflies and bees that pollinate plants and crops; and
- Scenic places for inspiration or spiritual renewal.

3.1.33. Questions 36 - 42: Demographic Characteristics.

Q36 In what year were you born?

Q37 Are you... Male [or] Female?

Q38 What is the highest level of education you have completed?

Q39 Is a nature-related profession (such as farming, fisheries, forestry, environmental science, or conservation) the primary source of your PERSONAL income?

Q40a Do you own land in a rural area (outside of an urban or suburban area)?

Q40b Yes - If so, how many acres do you own in total?

Q41 Which of these categories best describes the place where you live now and where you lived during most of the time you were growing up (that is, until age 16)?

Q42 Please indicate which of the following categories applies to your total personal income for last year?

This set of questions asked respondents to provide information about themselves. Socioeconomic characteristics, such as urban and rural residency (Manfredo *et al.*, 2003; Clendenning *et al.*, 2005), gender, age, length of residency in community (Koval & Mertig, 2004; White *et al.*, 2005), income and education (Manfredo et al., 2003) help to explain people's attitudes, beliefs and perceptions toward environmental issues and land-use management. Information about socioeconomic characteristics also permits for a segmentation of responses to other questions by particular socioeconomic characteristics.

3.2. Sampling Design.

The target population included all Canadian waterfowl hunters 18 years of age and older. The sample frame was provided by Wildlife Habitat Canada; the sample frame was Canadians that had purchased a *Canadian Wildlife Habitat Conservation Stamp (i.e.,* a 'duck stamp') in 2016. The sample frame was stratified by Flyways based on postal codes; the postal codes were linked with geographic coordinates using the *Postal Code Conversion File* (Statistics Canada, 2017) and associated with the geographical coordinates of Flyway boundary delineations using GIS. All waterfowl hunters in Canada are required to purchase a *Canadian Wildlife Habitat Conservation Stamp* in addition to the necessary hunting permits. In order to preserve the privacy of *Canadian Wildlife Habitat Conservation Stamp* purchasers, Wildlife Habitat Canada was responsible for the mailing of survey materials from their office.

Large sample sizes are required to evaluate discrete choice experiment attributes, especially if the probability of a choice is low (p = 0.10). Choice experiments sample both individual study participants and the total number of choices that make up the study. Assuming that each respondent completes 10 choice sets, a sample of 432 is needed for enough power for a relatively rare choice of p = .10. Thus, the minimum sample size of n = 400 for each Flyway should provide enough statistical power to estimate a real choice probability of close to 10% of a market ±10% at the 95% confidence interval (Louviere *et al.*, 2000). Assuming a response rate of lower than 25%, 2,000 waterfowl hunters were recruited in each of the four Flyways, for a total sample of 8,000 Canadian waterfowl hunters.

3.3. Data Collection.

A web-based survey of Canadian waterfowl hunters was administered. Potential respondents were contacted through mail and provided instructions about how to access the web-based survey (Appendix C). Using a modified Tailored Design Method, up to four contacts were used; mail-based contacts were used as they are more effective in reaching desired respondents, and increase the likelihood of response (Dillman, 2009). An incentive was used to increase the response rate; potential participants were advised that all survey respondents would be entered into a draw for one of two *Wildlife Habitat Canada Limited Edition 2017 Canadian Wildlife Habitat Conservation Prints*. Non-response bias was examined through a mail survey of non-respondents on key demographic and waterfowl hunting-related recreation characteristic variables (Appendix B). All survey materials were reviewed by the *University of Alberta Research Ethics Board* (Appendix D). Non-response bias results are provided in Appendix E.

3.4. Analysis.

Descriptive statistics (frequency of response, mean, mode) were calculated for each question. Comparisons were made between the four Flyways using ANOVA for interval and ratio data; when the Levene's test indicated that the distribution of the Flyway data violated the assumption of homogeneity of variance, a Welch F-test was used. Effect size was calculated using Cramer's V (ϕ_c) and Phi (ϕ) for categorical data, and Cohen's *d* and Eta-squared (n^2) for interval and ratio data (Table 2).

			Effect Size	
Statistical Test	Effect Size Index -	Small	Medium	Large
Chi Square (χ ²)	Phi (φ) Cramer's V (φ _c)	0.1	0.3	0.5
T-test	Cohen's d	0.20	0.50	0.80
ANOVA	Eta squared (η ²)	0.01	0.06	0.14

Table 2. Effect size indices and associated values for Small, Medium, and Large Effects (Cohen, 1988; Sawilowsky, 2009).

4. Results

Of the 8,000 potential participants that were contacted, 745 did not have valid mail addresses and could not be delivered; 27 potential participants indicated that they were not waterfowl hunters; and 19 declined to participate. A total of 1,395 responses were received between September 27th 2017 and April 2nd 2018, which represents a response rate of 19.3% after correcting for undeliverable addresses and ineligible participants (*i.e.*, non-waterfowl hunters). Of the 1,395 questionnaires that were received, 1,249 (89.5%) were completed in English and 146 (10.5%) were completed in French.

An analysis of non-response bias revealed significant differences between respondents to the main survey and those that replied to the non-response survey. However, with one exception, these significant differences were of small effect. Thus, no weights have been applied to the data based on non-response bias. However, the pattern of response suggested that the geographic distribution of returned completed questionnaires (*i.e.*, by Flyway) was not the same as that of the distribution of Wildlife Habitat Conservation Stamps (*i.e.*, the sample frame). Thus, weights have been applied to the national data based on the number of Wildlife Habitat Conservation Stamps sold in each Flyway (Table 3):

 $Weight = \frac{Population \%}{Sample \%}$

 $Population \% = \frac{\# Hunters in Flyway}{\# Hunters across all Flyways}$

Sample $\% = \frac{\# Respondents in Flyway}{\# Respondents across all Flyways}$

(Vaske, 2008, p. 214)

Ehavov	Sample Frame		e Sample Returns		ple Frame Sample Returns		Weight
Flyway	Frequency	Percent	Frequency	Percent	weight		
Pacific	5,730	7.4%	422	30.3%	0.245		
Central	13,748	17.8%	330	23.7%	0.752		
Mississippi	31,186	40.4%	345	24.7%	1.632		
Atlantic	26,622	34.4%	298	21.4%	1.612		
Total	77,286	100.0%	1,395	100.0%			

Table 3. Summary of sample frame and sample returns by Flyway and applied weights to the data.

Where...

and

4.1. Question 1: Type of Waterfowl Hunted.

The majority of respondents (82.3%) hunted both ducks and geese (Table 4). There was a small significant association between Flyway of residence and where most of respondents birdwatching activities occurred (χ^2 (9) = 20.708, p < 0.05, φ_c = .071). The proportion of Mississippi (\hat{p} = 0.092) and Atlantic (\hat{p} = 0.083) Flyway respondents that only hunted ducks was higher than that of respondents from the Pacific (\hat{p} = 0.040) and Central (\hat{p} = 0.028) Flyways. The proportion of Central Flyway respondents (\hat{p} = 0.036) that only hunted geese was lower than that of Atlantic Flyway respondents (\hat{p} = 0.073).

Table 4. Which of the following statements bestdescribes your pursuits in waterfowl hunting? (n =1,385; most frequently identified response is in **bold**.)

Response	Frequency	%
I hunt only ducks	102	7.4% ^a
I hunt ducks and geese	1,140	82.3%
I hunt only geese	84	6.1% ^b
I hunt neither ducks nor geese	59	4.2%

^a The proportion of Mississippi and Atlantic Flyway respondents was higher than that of Pacific and Central Flyway respondents.

^b The proportion of Central Flyway respondents was lower than that of Atlantic Flyway respondents.

4.2. Question 2: Age When Waterfowl Hunting Started

Respondents reported being an average of 22.7 years old when they started waterfowl hunting (Table 5; Figure 1). The mean age of Atlantic Flyway respondents ($\bar{x} = 23.64$) when they started waterfowl hunting was significantly higher than that of Central Flyway respondents ($\bar{x} = 20.72$) (F(3,1371) = 2.855, p < .05, $\eta^2 = .006$).

Statistic	Value
n	1,375
Minimum	3
Maximum	89
Mode	16
Median	17
Mean	22.7 ^a
Standard Deviation	12.771
a Theorem and a final sector	El ante de la statuta de la sete

Table 5. (Q2) How	old were you when	you started
waterfowl hunting?		

^a The mean age of Atlantic Flyway respondents was

significantly higher than that of Central Flyway respondents.

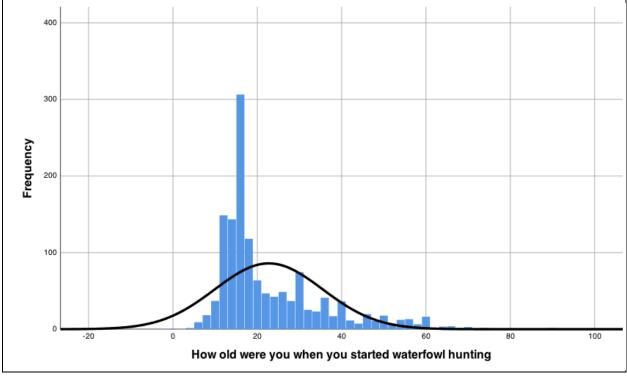


Figure 1. (Q2) Histogram: How old were you when you started waterfowl hunting?

4.3. Question 3: Waterfowl Hunting Participation Over Last Five Years.

Most respondents reported hunting 5 years over the last 5 years (Table 6). There was not a significant difference between the Flyway of residence and the number of years waterfowl were hunted over the last five years.

Table 6. (Q3) How many years of thelast 5 years have you huntedwaterfowl? (n = 1,326; most frequentlyidentified response is in bold .)				
Response Frequency %				
None	19	1.5%		
1 Year	1 Year 67 5.0%			
2 Years 126 9.5%				
3 Years 166 12.5%				
4 Years 138 10.4%				
5 Years 810 61.1%				

There were no significant differences between Flyway responses.

4.4. Question 4D: Average Number of Ducks Harvested Per Year Over Last Five Years.

Most respondents reported harvesting an average of five or fewer ducks a year over the last five years (Table 7). There was a small significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (12) = 21.926, p < 0.05, φ_c = .077). The proportion of Mississippi Flyway respondents (\hat{p} = 0.405) that harvested an average of five or fewer ducks per year was higher than that of respondents from the Pacific (\hat{p} = 0.374), Central (\hat{p} = 0.314), and Atlantic (\hat{p} = 0.361) Flyways. The proportion of Atlantic Flyway respondents (\hat{p} = 0.209), Central (\hat{p} = 0.227), and Mississippi (\hat{p} = 0.208) Flyway respondents. The proportion of Pacific (\hat{p} = 0.209), Central (\hat{p} = 0.798) that harvested an average of eleven to twenty ducks per year was lower than that of Central (\hat{p} = 0.241), Mississippi (\hat{p} = 0.238), and Atlantic (\hat{p} = 0.224) Flyway respondents. The proportion of Pacific (\hat{p} = 0.176) and Central (\hat{p} = 0.155) Flyway respondents that harvested an average of 21 to 50 ducks per year was higher than that of Mississippi (\hat{p} = 0.103) and Atlantic (\hat{p} = 0.106) Flyway respondents. The proportion of Atlantic Flyway respondents. The proportion of Atlantic Flyway respondents. The proportion of Pacific (\hat{p} = 0.106) Flyway respondents. The proportion of Atlantic Flyway respondents. The proportion of Pacific (\hat{p} = 0.176) and Central (\hat{p} = 0.103) and Atlantic (\hat{p} = 0.106) Flyway respondents. The proportion of Atlantic Flyway respondents (\hat{p} = 0.026) that harvested an average of more than 50 ducks per year was lower than that of Central Flyway respondents (\hat{p} = 0.064).

Table 7. (Q4D) Over the last five years, how many ducks did you harvest in a year on average? (n = 1,220; most frequently identified response is in **bold**.)

Response	Frequency	%
5 or less	453	37.2% ^a
Between 6 and 10	290	23.7% ^b
Between 11 and 20	282	23.1% ^c
Between 21 and 50	144	11.8% ^d
More than 50	52	4.3% ^e
^a The proportion of Mississig	ppi Flyway respond	lents was

higher than that of other Flyway respondents.

^b The proportion of Atlantic Flyway respondents was higher than that of other Flyway respondents.

^c The proportion of Pacific Flyway respondents was lower than that of other Flyway respondents.

^d The proportion of Pacific and Central Flyway respondents was higher than that of Mississippi and Atlantic Flyway respondents.

• The proportion of Atlantic Flyway respondents was lower than that of Central Flyway respondents.

Most respondents reported harvesting an average of five or fewer geese a year over the last five years (Table 8). There was a small significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (12) = 50.893, p < 0.001, φ_c = .120). The proportion of Pacific Flyway respondents (\hat{p} = 0.544) that harvested an average of five or fewer geese per year was higher than that of Central Flyway respondents (\hat{p} = 0.342). The proportion of Mississippi (\hat{p} = 0.222) and Atlantic (\hat{p} = 0.243) Flyway respondents that harvested an average of six to ten geese per year was higher than that of Pacific (\hat{p} = 0.178) and Central (\hat{p} = 0.164) Flyway respondents. The proportion of Atlantic Flyway respondents (\hat{p} = 0.196) that harvested an average of 11-20 geese per year was higher than that of Mississippi Flyway respondents (\hat{p} = 0.143). The proportion of Central Flyway respondents (\hat{p} = 0.120) that harvested an average of 21-50 geese per year was higher than that of Mississippi (\hat{p} = 0.126), and Atlantic (\hat{p} = 0.092) Flyway respondents. The proportion of Central Flyway respondents (\hat{p} = 0.126), and Atlantic (\hat{p} = 0.022), Mississippi (\hat{p} = 0.143), and Atlantic (\hat{p} = 0.022), Mississippi (\hat{p} = 0.045), and Atlantic (\hat{p} = 0.040) Flyway respondents.

Table 8. (Q4G) Over the last five years, how many geese did you harvest in a year on average? (n = 1,182; most frequently identified response is in **bold**.)

Response	Frequency	%
5 or less	515	43.6% ^a
Between 6 and 10	255	21.6% ^b
Between 11 and 20	196	16.6% ^c
Between 21 and 50	151	12.8% ^d
More than 50	64	5.4% ^e

^a The proportion of Pacific Flyway respondents was higher than that of Central Flyway respondents.

^b The proportion of Mississippi and Atlantic Flyway was higher than that of Pacific and Central Flyway respondents.

- ^c The proportion of Atlantic Flyway respondents was higher than that of Mississippi Flyway respondents.
- ^d The proportion of Central Flyway respondents was higher than that of other Flyway respondents.
- The proportion of Central Flyway respondents was higher than that of other Flyway respondents.

4.6. Question 5: Number of Days Typically Spent Hunting Waterfowl per Year Over Last Five Years. Most respondents reported hunting waterfowl an average of five or fewer days over the last five years (Table 9). There was not a significant difference between the Flyway of residence and the number of days that waterfowl were hunted.

Table 9. (Q5) Over the last five years, about how many days did you usually hunt waterfowl in a year? (n = 1,295; most frequently identified response is in **bold**.)

Response	Frequency	%
5 days or less	561	43.3%
6 to 10 days	383	29.6%
11 to 20 days	218	16.8%
21 to 30 days	83	6.4%
More than 30 days	49	3.8%

There were no significant differences between Flyway responses.

4.7. Question 6: Number of Days Spent Waterfowl hunting in 2016.

Respondents reported spending an average of 6.9 days hunting waterfowl in 2016; there were no significant differences between Flyways for the average number of days spent waterfowl hunting in 2016 (Table 10; Figure 2).

you hunt for waterfowl?		
Statistic	Value	
n	1,138	
Minimum	0	
Maximum	90	
Mode	0	
Median	4	
Mean	6.9	
Standard Deviation	8.951	

Table 10. (Q6) During last year's (2016) waterfowl hunting season, how many days did you hunt for waterfowl?

There were no significant differences between Flyway responses.

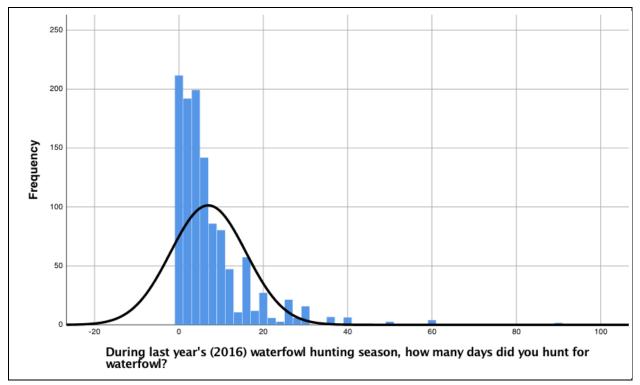


Figure 2. During last year's (2016) waterfowl hunting season, how many days did you hunt for waterfowl?

4.8. Question 7: Number of Times Required to Shoot a Daily Bag Limit of Ducks/Geese to Have a Satisfying Season.

Most respondents reported that they never felt the need to shoot a daily bag limit of ducks/geese to have a satisfying season (Table 11). There was not a significant difference between the Flyway of residence and the number times needed to shoot a daily bag limit of ducks/geese to have a satisfying season.

Table 11. (Q7) How many times do you feel you need to shoot a daily bag limit of ducks/geese to have a satisfying season? (n = 1,298; most frequently identified response is in **bold**.)

Response	Frequency	%
Never	848	65.3%
On at least one of my hunts	183	14.1%
Occasionally on my hunts	205	15.8%
Most of my hunts	54	4.1%
Every time I hunted	8	0.6%

There were no significant differences between Flyway responses.

4.9. Question 8: Number of Times the Limit of Ducks/Geese was Shot in 2016.

Most respondents reported that they never shot a limit of ducks/geese during last year's season (Table 12). There was a small significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (15) = 31.066, p < 0.01, ϕ_c = .089). The proportion of Central Flyway respondents ($\hat{p} = 0.507$) that never shot a limit of ducks/geese in 2016 was lower than that of Mississippi Flyway respondents ($\hat{p} = 0611$). The proportion of Pacific Flyway respondents ($\hat{p} = 0611$). 0.147) that shot a limit of ducks/geese on at least one of their hunts in 2016 was lower than that of Central ($\hat{p} = 0.231$), Mississippi ($\hat{p} = 0.202$), and Atlantic ($\hat{p} = 0.221$) Flyway respondents. The proportion of Pacific ($\hat{p} = 0.126$) and Central ($\hat{p} = 0.131$) Flyway respondents that shot a limit of ducks/geese occasionally in 2016 was higher than that of Mississippi ($\hat{p} = 0.113$) and Atlantic ($\hat{p} = 0.106$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.079$) that shot a limit of ducks/geese on most of their hunts in 2016 was higher than that of Pacific ($\hat{p} = 0.032$), Mississippi ($\hat{p} = 0.029$), and Atlantic ($\hat{p} = 0.033$) Flyway respondents. The proportion of Pacific Flyway respondents ($\hat{p} = 0.011$) that shot a limit of ducks/geese every time that they hunted was higher than that of Central ($\hat{p} = 0.004$), Mississippi ($\hat{p} = 0.000$), and Atlantic ($\hat{p} = 0.000$) Flyway respondents. The proportion of Pacific Flyway respondents that did not hunt in 2016 ($\hat{p} = 0.105$) was higher than that of Central ($\hat{p} = 0.048$). Mississippi $(\hat{p} = 0.046)$, and Atlantic $(\hat{p} = 0.051)$ Flyway respondents.

Table 12. (Q8) How many times did you shoot a limitof ducks/geese during last year's season (2016)? (n =1,298; most frequently identified response is in **bold**.)

Response	Frequency	%
Never	757	58.3% ^a
On at least one of my hunts	272	21.0% ^b
Occasionally on my hunts	149	11.5% ^c
Most of my hunts	50	3.9% ^d
Every time I hunted	2	0.1% ^e
I did not hunt in 2016	68	5.2% ^f

^a The proportion of Central Flyway respondents was lower than that of Mississippi Flyways.

^b The proportion of Pacific Flyway respondents was lower than that of the other Flyways.

^c The proportion of Pacific and Central Flyway respondents was higher than that of Mississippi and Atlantic Flyway respondents.

^d The proportion of Central Flyway respondents was higher than that of the other Flyways.

 The proportion of Pacific Flyway respondents was higher than that of the other Flyways.

^f The proportion of Pacific Flyway respondents was higher than that of the other Flyways.

4.10. Question 9: Circumstances of a Typical Hunt.

Most respondents reported that they typically go hunting when they plan the hunt and when someone else invites them (Table 13). There was a small significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (6) = 20.299, p < 0.01, φ_c = .088). The proportion of Central ($\hat{p} = 0.306$) and Atlantic ($\hat{p} = 0.327$) Flyway respondents that typically plan the hunt themselves was higher than that of Mississippi Flyway respondents ($\hat{p} = 0.207$). The proportion of Mississippi Flyway respondents ($\hat{p} = 0.670$) that typically hunt both when they plan the hunt or when someone else invites them was higher than that of Atlantic Flyway respondents ($\hat{p} = 0.555$).

Table 13. (Q9) Under what circumstances do you typically go hunting? (n = 1,304; most frequently identified response is in **bold**.)

Response	Frequency	%
When I plan the hunt myself	354	27.1% ^a
When someone else invites me	157	12.1%
Both when I plan the hunt or someone else invites me793		60.8% ^b

^a The proportion of Central and Atlantic Flyway respondents was higher than that of Mississippi Flyway respondents.

^b The proportion of Mississippi Flyway respondents was higher than that of Atlantic Flyway respondents.

4.11. Question 10a: Flyway Hunted in Most Often.

Most respondents reported that they hunted most often in the Mississippi Flyway last year or in the year that they last hunted (Table 14). There was a large significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (9) = 2420.192, p < 0.001, ϕ_c = .786). The proportion of Pacific Flyway respondents (\hat{p} = 0.642) that hunted most often in the Pacific Flyway was higher than that of Central (\hat{p} = 0.017), Mississippi (\hat{p} = 0.038),and Atlantic (\hat{p} = 0.004) Flyway respondents. The proportion of Central Flyway respondents that hunted most often in the Central Flyway (\hat{p} = 0.983) was higher than that of Pacific (\hat{p} = 0.358), Mississippi (\hat{p} = 0.059), and Atlantic (\hat{p} = 0.121) Flyway respondents. The proportion of Mississippi Flyway respondents (\hat{p} = 0.875) that hunted most often in the Mississippi Flyway was higher than that of Pacific (\hat{p} = 0.000), Central (\hat{p} = 0.000), and Atlantic (\hat{p} = 0.013) Flyway respondents. The proportion of Atlantic Flyway respondents (\hat{p} = 0.861) that hunted most often in the Atlantic Flyway was higher than that of Pacific (\hat{p} = 0.000), Central (\hat{p} = 0.000), and Atlantic (\hat{p} = 0.028) Flyway respondents.

Table 14. (Q10a) In which Flyway did you hunt most often last year (2016) or in the year you last hunted? (n = 1,304; most frequently identified response is in **bold**.)

Response	Frequency	%
Pacific Flyway	86	6.6%ª
Central Flyway	345	26.4% ^b
Mississippi Flyway	469	35.9%°
Atlantic Flyway	405	31.0% ^d

^a The proportion of Pacific Flyway respondents was higher than that the other Flyways.

^b The proportion of Central Flyway respondents was higher than that of the other Flyways.

° The proportion of Mississippi Flyway respondents was higher than that of the other Flyways.

^d The proportion of Atlantic Flyway respondents was higher than that of the other Flyways.

4.12. Question 10b: Province / Territory / State Hunted in Most Often.

Most respondents reported the Canadian Province/Territory or US State they hunted waterfowl in most often over the past five years was Ontario (Table 15). There was a large significant association between Flyway of residence and the average number of ducks harvested per year over the past five years (χ^2 (39) = 2545.526, p < 0.001, ϕ_c = .806). The proportion of Pacific (\hat{p} = 0.347) and Central (\hat{p} = 0.480) Flyway respondents that hunted waterfowl most often in Alberta was higher than that of Mississippi ($\hat{p} =$ 0.034) and Atlantic ($\hat{p} = 0.064$) Flyway respondents. The proportion of Pacific Flyway respondents ($\hat{p} = 0.064$) 0.568) that hunted waterfowl most often in British Columbia was higher than that of Central ($\hat{p} = 0.000$), Mississippi ($\hat{p} = 0.034$) and Atlantic ($\hat{p} = 0.000$) Flyway respondents. The proportion of Mississippi Flyway respondents ($\hat{p} = 0.112$) that hunted waterfowl most often in Manitoba was higher than that of Pacific ($\hat{p} = 0.112$) 0.000), Central ($\hat{p} = 0.000$), and Atlantic ($\hat{p} = 0.000$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.097$) hunted waterfowl most often in New Brunswick was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.000$), and Mississippi ($\hat{p} = 0.000$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.099$) that hunted waterfowl most often in Newfoundland was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.000$), and Mississippi ($\hat{p} = 0.000$). The proportion of Atlantic Flyway respondents ($\hat{p} = 0.104$) that hunted waterfowl most often in Nova Scotia was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.000$), and Mississippi ($\hat{p} = 0.000$) Flyway respondents. The proportion of Mississippi Flyway respondents ($\hat{p} = 0.800$) that hunted waterfowl most often in Ontario was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.000$), and Atlantic ($\hat{p} = 0.022$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.544$) that hunted waterfowl most often in Québec was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.000$), and Mississippi ($\hat{p} = 0.000$) Flyway

respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.511$) that hunted waterfowl most often in Saskatchewan was higher than that of Pacific ($\hat{p} = 0.074$), Mississippi ($\hat{p} = 0.009$), and Atlantic (0.064) Flyway respondents.

Table 15. (Q10b) In which Canadian Province/		
Territory or US State have you hunted waterfowl most		
often over the past 5 years? (n = 1,304; most		
frequently identified response is in bold .)		

Response	Frequency	%
Alberta	190	14.5% ^a
British Columbia	72	5.5% ^b
Manitoba	59	4.5% ^c
New Brunswick	44	3.3% ^d
Newfoundland	45	3.5% ^e
Nova Scotia	47	3.6% ^f
Northwest Territories	4	0.3%
Nunavut	2	0.1%
Ontario	433	33.2% ^g
Prince Edward Island	3	0.2%
Québec	247	18.9% ^h
Saskatchewan	157	12.1% ⁱ
Yukon	1	0.1%
USA: North Dakota	2	0.1%

^a The proportion of Pacific and Central Flyway respondents was higher than that of the other Flyways.

^b The proportion of Pacific Flyway respondents was higher than that of the other Flyways.

- $^\circ$ The proportion of Mississippi Flyway respondents was higher than that of the other Flyways.
- ^d The proportion of Atlantic Flyway respondents was higher than that of the other Flyways.
- The proportion of Atlantic Flyway respondents was higher than that of the other Flyways.
- ^f The proportion of Atlantic Flyway respondents was higher than that of the other Flyways.
- ^g The proportion of Mississippi Flyway respondents was higher than that of the other Flyways.
- ^h The proportion of Atlantic Flyway respondents was higher than that of the other Flyways.
- ⁱ The proportion of Central Flyway respondents was higher than that of the other Flyways.

4.13. Question 11: Waterfowl Hunting Trip Duration.

Most respondents reported that they primarily took day trips when they hunt waterfowl (Table 16). There was not a significant difference between the Flyway of residence and the duration of waterfowl hunting trips.

Table 16. (Q11) Do you primarily take day trips or overnight/multi-day trips when you waterfowl hunt? (n = 1,302; most frequently identified response is in **bold**.)

Response	Frequency	%
Primarily day trips	1,065	81.8%
Primarily overnight or multi-day trips	152	11.7%
Both about equally	86	6.6%

There were no significant differences between Flyway responses.

4.14. Question 12: Jurisdiction of Where Most Waterfowl Hunting is Done.

The two most frequently identified places where respondents hunted waterfowl were public lands or waters, and private property owned by a friend or another landowner who had given them permission to hunt for free (Table 17). There was a small significant association between Flyway of residence and the jurisdiction of where respondents did most of their waterfowl hunting (χ^2 (12) = 177.861, p < 0.001, φ_c = .213). The proportion of Central Flyway respondents ($\hat{p} = 0.162$) that do most of their waterfowl hunting on public lands or waters was lower than that of Pacific ($\hat{p} = 0.442$), Mississippi ($\hat{p} = 0.455$), and Atlantic ($\hat{p} = 0.478$) Flyway respondents. The proportion of Mississippi Flyway respondents ($\hat{p} = 0.176$) that do most of their waterfowl hunting on private property that they or their family own was higher than that of Pacific ($\hat{p} = 0.053$), Central ($\hat{p} = 0.100$), and Atlantic ($\hat{p} = 0.069$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.369$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.369$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.334$), that do most of their hunting on private property owned by a friend or another landowner who give them permission to hunt for free was higher than that of Pacific ($\hat{p} = 0.474$), Mississippi ($\hat{p} = 0.334$), and Atlantic ($\hat{p} = 0.350$) Flyway respondents.

Table 17. (Q12) Please indicate where you do most of your waterfowl hunting. (n = 1,302; most frequently identified response is in **bold**.)

Response	Frequency	%
Public lands or waters.	535	41.1% ^a
Private property owned by you, your family or in partnership with someone else.	152	11.7% ^b
Private property owned by a friend or another landowner who give you permission to hunt for free.	547	42.0% ^c
Private property you lease or pay to hunt on.	45	3.4%
Guest on private property someone else leases or pay to hunt on.	23	1.8%

^a The proportion of Central Flyway respondents was lower than that of the other Flyways.

^b The proportion of Mississippi Flyway respondents was higher than that of the other Flyways.

° The proportion of Central Flyway respondents was higher than that of the other Flyways.

4.15. Question 13: Importance of Hunting Different Categories of Waterfowl.

Although Question 13 asks about the importance of hunting different categories of waterfowl, it was a Flyway-specific question (*i.e.*, the questions asked differed for each Flyway). Readers are directed to the Canadian Waterfowl Hunter Flyway Reports for details.

4.16. Question 14: Potential Waterfowl Hunting Issues.

Almost half of respondents (49.0%) indicated that crowding at hunting areas was not a problem at all in the province / territory where they hunted waterfowl most (Table 18); the mean response of Central Flyway respondents ($\bar{x} = 1.61$) was significantly lower than that of Atlantic ($\bar{x} = 1.98$) and Mississippi ($\bar{x} = 1.61$) 2.02) Flyway respondents ($F_w(3, 374.889) = 12.391, p < .001, \eta^2 = .020$). More than two in five respondents (46.3%) reported that hunting pressure was not a problem at all in the province / territory where they hunted waterfowl most; the mean response of Central Flyway respondents ($\bar{x} = 1.73$) was significantly lower than that of Mississippi ($\bar{x} = 2.01$) and Atlantic ($\bar{x} = 2.01$) Flyway respondents (F_w(3, 372.257) = 6.139, p < .001, η^2 = .011). Almost half of respondents (48.2%) reported that interference from other waterfowl hunters was not a problem at all in the province / territory where they hunted waterfowl most; the mean response of Atlantic Flyway respondents ($\bar{x} = 1.95$) was significantly higher than that of Pacific Flyway respondents ($\bar{x} = 1.65$) ($F_W(3, 375.094) = 4.890$, p < .01, $\eta^2 = .010$). Almost two-thirds of respondents (64.8%) indicated that conflict with other waterfowl hunters in places where they hunted was not a problem at all in the province / territory where they hunt waterfowl most; there were no significant differences in mean responses between the Flyways. One-third of respondents (33.9%) reported that a lack of public places for waterfowl hunting was not a problem at all in the province / territory where they hunted waterfowl most; the mean response of Central Flyway respondents ($\bar{x} = 2.27$) was significantly lower than that of the other Flyways ($F_W(3, 363.716) = 8.320$, p < .001, $\eta^2 = .017$).

4.17. Question 15: Satisfaction With the Management of Duck Hunting.

More than two in five respondents (45.9%) were satisfied with the number of ducks that they saw during the season (Table 19); the mean response of Mississippi ($\bar{x} = 3.15$) and Atlantic ($\bar{x} = 3.16$) Flyway respondents was significantly lower than that of Pacific ($\bar{x} = 3.61$) and Central ($\bar{x} = 3.75$) Flyway respondents ($F_w(3, 341.227) = 16.154$, p < .001, n² = .041). More than one-third of respondents (38.7%) were satisfied with the number of ducks that they harvested during the season; the mean response of Mississippi Flyway respondents ($\bar{x} = 3.05$) was significantly lower than that of Pacific ($\bar{x} = 3.41$) and Central ($\bar{x} = 3.62$) Flyway respondents; the mean response of Atlantic Flyway respondents ($\bar{x} = 3.10$) was significantly lower than that of Central Flyway respondents (F(3, 1196) = 15.214, p < .001, η^2 = .037). More than three in five respondents (62.6%) were satisfied with the number of days in the duck season; the mean response of Mississippi Flyway respondents ($\bar{x} = 3.80$) was significantly lower than that of Central Flyway respondents ($\bar{x} = 4.08$) (F_w(3, 342.127) = 3.817, p < .05, n² = .009). More than two-thirds of respondents (68.2%) were satisfied with the number of ducks in the daily limit; the mean response of Central Flyway respondents ($\bar{x} = 4.08$) was significantly higher than that of Mississippi Flyway respondents ($\bar{x} = 3.80$) (F(3, 1197) = 3.086, p < .05, $\eta^2 = .008$). More than two in five respondents (45.9%) were satisfied with the number of ducks typically present during the hunting season; the mean responses of Atlantic ($\bar{x} = 3.09$) and Mississippi ($\bar{x} = 3.15$) Flyway respondents was significantly lower than that of Pacific ($\bar{x} = 3.56$) and Central ($\bar{x} = 3.76$) Flyway respondents (F(3, 1204) = 19.739, p < .001, η^2 = .047). More than three in five respondents (61.8%) were satisfied with the quality of habitat where they hunted; the mean responses of Atlantic ($\bar{x} = 3.66$) and Mississippi ($\bar{x} = 3.66$) Flyway respondents were significantly lower than that of Central Flyway respondents ($\bar{x} = 3.90$) (F(3, 1203) = 2.939, p < .05, η^2 = .007). More than two-thirds of respondents (69.6%) were satisfied with their overall duck hunting experience; the mean response of Central Flyway respondents ($\bar{x} = 4.07$) was significantly higher than that of Mississippi ($\bar{x} = 3.79$) and Atlantic ($\bar{x} = 3.82$) Flyway respondents (F(3, 1204) = 4.518, p < .01, η^2 = .011).

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Table 18. (Q14) Please indicate how much of a problem the following are in the province / territory where you hunt waterfowl most often. (Most frequently identified response is in **bold**.)

Item	c	Not at all a Problem (1)	Slight Problem (2)	Moderate Problem (3)	Severe Problem (4)	Very Severe Problem (5)	Mean	SD
Crowding at hunting areas	1,284	49.0%	22.7%	18.7%	7.0%	2.6%	1.91 ^a	1.088
Hunting pressure	1,283	46.3%	24.7%	18.9%	8.2%	1.9%	1.95 ^b	1.071
Interference from other waterfowl hunters	1,284	48.2%	28.2%	15.7%	5.9%	2.0%	1.85°	1.016
Conflict with other waterfowl hunters in places I hunt	1,286	64.8%	20.3%	10.6%	3.3%	0.9%	1.55	0.876
Lack of public places for waterfowl hunting.	1,288	33.9%	14.2%	20.6%	14.8%	16.4%	2.66 ^d	1.480
^a The mean response of Central Flyway respondents was significantly lower than that of Atlantic and Mississippi Flyway respondents. ^b The mean response of Central Flyway respondents was significantly lower than that of Mississippi and Atlantic Flyway respondents.	as significa.	ntly lower than tha ntly lower than tha	tt of Atlantic an tt of Mississippi	d Mississippi Fly i and Atlantic Fly	way responden wav responden	lts. Its.		

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° The mean response of Atlantic Flyway respondents was significantly higher than that of Pacific Flyway respondents.

 $^{
m d}$ The mean response of Central Flyway respondents was significantly lower than that of the other Flyways.

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Table 19. (Q15) In the province / territory where you hunt ducks most often, how dissatisfied or satisfied are you with... (Most frequently identified response is in **bold**.)

								ĺ
Satisfaction with	2	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Neutral (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Mean	SD
The number of ducks you see during the season	1,210	7.6%	20.7%	25.9%	26.6%	19.3%	3.29ª	1.209
The number of ducks you harvest during the season	1,200	2.0%	20.5%	33.8%	23.2%	15.5%	3.20b	1.141
The number of days in the duck season	1,206	3.0%	7.8%	26.5%	25.3%	37.3%	3.86°	1.096
The number of ducks in the daily limit	1,201	2.2%	4.6%	24.9%	27.1%	41.1%	4.00d	1.024
The number of ducks typically present during the hunting season	1,208	6.2%	24.1%	23.8%	28.4%	17.5%	3.27 €	1.185
Quality of habitat where you hunt	1,207	2.3%	13.1%	22.9%	34.8%	27.0%	3.71	1.070
Your overall duck hunting experience	1,208	2.2%	8.8%	19.3%	39.7%	29.9%	3.869	1.012
^a The mean responses of Mississippi and Atlantic Flyway r		espondents was significantly lower than that of Pacific and Central Flyway respondents.	ver than that of Pacif	ic and Central I	⁻ lyway respondents			
^b The mean response of Mississippi Flyway respondents was significantly low respondents was significantly lower than that of Central Flyway respondents	was significa	was significantly lower than that of Pacific and Central Flyway respondents; the mean response of Atlantic Flyway	of Pacific and Central	Flyway respor	idents; the mean re	sponse of Atlant	tic Flyway	

respondents was significantly lower than that of Central Flyway respondents.

• The mean response of Mississippi Flyway respondents was significantly lower than that of Central Flyway respondents.

^d The mean response of Central Flyway respondents was significantly higher than that of Mississippi Flyway respondents.

• The mean responses of Attantic and Mississippi Flyway respondents was significantly lower than that of Pacific and Central Flyway respondents.

⁴ The mean responses of Atlantic and Mississippi Flyway respondents were significantly lower than that of Central Flyway respondents.

⁹ The mean response of Central Flyway respondents was significantly higher than that of Mississippi and Atlantic Flyway respondents.

4.18. Question 16a: Minimum Number of Ducks Harvested per Day for a Satisfying Hunt.

More than half of respondents (63.7%) reported that two or fewer ducks was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt (Table 20). There was a small significant association between Flyway of residence and the minimum number of ducks that could be harvested per day to have a satisfying hunt (χ^2 (24) = 50.936, p < 0.01, ϕ_c = .119). The proportion of Central Flyway respondents ($\hat{p} = 0.247$) that indicated that zero ducks was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt was higher than that of Atlantic Flyway respondents ($\hat{p} = 0.180$). The proportion of Central Flyway respondents ($\hat{p} = 0.172$) that indicated that one duck was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt was lower than that of Pacific ($\hat{p} = 0.211$), Mississippi ($\hat{p} = 0.202$), and Atlantic ($\hat{p} = 0.263$) Flyway respondents. The proportion of Mississippi ($\hat{p} = 0.249$) and Atlantic ($\hat{p} = 0.212$) Flyway respondents that indicated that two ducks was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt was higher than that of Pacific ($\hat{p} = 0.189$) and Central ($\hat{p} = 0.177$) Flyway respondents. The proportion of Mississippi ($\hat{p} = 0.148$) and Atlantic ($\hat{p} = 0.134$) Flyway respondents that indicated that three ducks was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt was higher than that of Pacific ($\hat{p} = 0.100$) and Central ($\hat{p} = 0.093$) Flyway respondents. The proportion of Pacific ($\hat{p} = 0.156$) and Central ($\hat{p} = 0.144$) Flyway respondents that indicated that four ducks was the minimum number of ducks that they had to harvest in a day to feel satisfied with the hunt was higher than that of Mississippi ($\hat{p} = 0.080$) and Atlantic ($\hat{p} = 0.078$) Flyway respondents.

Table 20. (Q16a) What is the minimum number of ducks you have to harvest in a day to feel satisfied with the hunt? (n = 1,198; most frequently identified response is in **bold**.)

Number of ducks	Frequency	%
0 ducks	239	20.0%ª
1 duck	261	21.8% ^b
2 ducks	263	21.9% ^c
3 ducks	155	13.0% ^d
4 ducks	116	9.7% ^e
5 ducks	86	7.2%
6 ducks	60	5.0%
7 ducks	3	0.3%
More than 7 ducks	15	1.2%

^a The proportion of Central Flyway respondents was higher than that of Atlantic Flyway respondents.

^b The proportion of Central Flyway respondents was lower than that of the other Flyways.

^c The proportion of Mississippi and Atlantic Flyway respondents was higher than that of Pacific and Central Flyway respondents.

^d The proportion of Mississippi and Atlantic Flyway respondents was higher than that of Pacific and Central Flyway respondents.

 The proportion of Pacific and Central Flyway respondents was higher than that of Mississippi and Atlantic Flyway respondents.

4.19. Question 16b: Smallest Acceptable Bag Limit.

Almost one-third of respondents (31.0%) indicated that they would hunt with a daily bag limit of any size (Table 21). There was not a significant difference between the Flyway of residence and the smallest acceptable daily bag limit.

Daily Bag Limit Size	Frequency	%					
6 ducks	170	14.1%					
5 ducks	137	11.4%					
4 ducks	186	15.5%					
3 ducks	148	12.3%					
2 ducks	132	11.0%					
1 duck	57	4.7%					
I'll hunt with any size daily bag limit	373	31.0%					

Table 21. (Q16b) What is the smallest daily bag limit you would accept before you would no longer hunt ducks? (n = 1,204; most frequently identified response is in **bold**.)

There were no significant differences between Flyway responses.

4.20. Question 16c: *Minimum Acceptable Number of Days in a Waterfowl Hunting Season.*

More than one-third of respondents (35.3%) indicated that they would hunt with any season length (Table 22). There was a small significant association between Flyway of residence and the acceptable minimum number of days in a waterfowl hunting season (χ^2 (33) = 51.999, p < 0.05, φ_c = .120). The proportion of Pacific Flyway respondents ($\hat{p} = 0.300$) that indicated that 60 days was the minimum number of days in a waterfowl hunting season that they would accept before they would no longer hunt ducks was higher than that of Central ($\hat{p} = 0.230$) and Atlantic ($\hat{p} = 0.180$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.396$) that indicated that they would hunt with any season length was higher than that of Pacific ($\hat{p} = 0.289$) and Central ($\hat{p} = 0.313$) Flyway respondents.

Table 22. (Q16c) What is the minimum number of days in a
waterfowl hunting season you would accept before you
would no longer hunt ducks? (n = 1,204; most frequently
identified response is in bold .)

Number of Days	Frequency	%
60 days	285	23.7% ^a
55 days	10	0.9%
50 days	44	3.7%
45 days	85	7.0%
40 days	59	4.9%
35 days	12	1.0%
30 days	162	13.5%
25 days	22	1.9%
20 days	33	2.8%
15 days	23	1.9%
10 days	42	3.5%
I'll hunt with any season length	425	35.3% ^b

^a The proportion of Pacific Flyway respondents was higher than that of Central and Atlantic Flyway respondents.

^b The proportion of Atlantic Flyway respondents was higher than that of Pacific and Central Flyway respondents.

4.21. Discrete Choice Models for Preferred Trips.

Results for the hierarchical Bayes model, including average utilities, or usefulness, for each attribute level, summarize waterfowl hunters' preferences for attributes associated with waterfowl hunting experiences. The attribute importances (Table 23) provide a summary of how important each of the five attributes were in respondents' choices. The utilities of each level for each attribute are summarized in Table 24. The most important attributes in the choice of birdwatching trips were:

- Interference/competition from other hunters
- Length of travel; and
- Harvest.

The levels with the highest utility included:

- Travel time of 30 minutes;
- Travel time of 1 hour;
- Harvest 6 birds;
- No interference/competition from other hunters; and
- Low competition from other hunters.

Table 23. Relative attribute importance derived from hierarchical Bayes estimation (n = 1,280).

Trip Choice Attribute	Average Importances	SD
Harvest	22.12	11.569
Access Effort	12.43	7.365
Length of Travel	26.55	11.822
Quantity of Waterfowl	11.71	5.760
Potential for Interference/Competition	27.19	11.474

Trip Choice Attribute Level	Average Utilities	SD
Harvest		
One bird	-59.046	37.647
3 birds	16.031	12.595
6 birds	43.015	33.636
Access Effort		
Easy access that takes little effort	20.155	19.827
Moderate access that takes some effort	13.708	11.404
Difficult access that takes a lot of effort	-33.863	26.407
Length of Travel		
30 minutes	52.371	41.662
1 hour	44.415	26.796
2 hours	4.302	11.829
3 hours	-34.813	29.752
4 hours	-66.274	38.106
Quantity of Waterfowl		
25 birds or less	-25.903	19.737
50 birds	-10.819	13.583
250 birds	7.178	12.177
500 birds	8.601	12.543
1,000 birds or more	20.942	22.258
Potential for Interference/Competition from Other Hunters		
No competition	41.647	28.965
Low competition from other hunters	38.123	16.742
Moderate competition from other hunters	7.001	12.604
High competition from other hunters	-86.771	37.382
NONE: I would not go waterfowl hunting if these were my only choices.	-38.037	137.509

Table 24. Hierarchical Bayes model average utilities for waterfowl hunting trip attribute levels (n = 1,280).

Question 18a: Duck Hunting Regulation Priorities.

More than two in five respondents (43.9%) indicated that having the largest bag limits possible was a moderate priority (Table 25); there was not a significant difference between the Flyway of residence and the prioritization of large bag sizes. Just more than two in five (41.5%) respondents indicated that having the longest seasons possible was a moderate priority; the mean responses of Atlantic Flyway respondents ($\bar{x} = 3.16$) was significantly lower than that of Pacific Flyway respondents ($\bar{x} = 3.46$) (F(3, 1256) = 5.281, p < .01, $\eta^2 = .012$). More than one-third (39.6%) of respondents indicated that having the largest duck populations possible was a high priority; the mean responses of Central Flyway respondents ($\bar{x} = 3.84$) was significantly lower than that of Mississippi Flyway respondents ($\bar{x} = 3.04$) (F(3, 1249) =

2.974, p < .05, $\eta^2 = .007$). Almost three of ten (29.7%) respondents indicated that avoiding different season lengths for different duck species was a moderate priority; the mean responses of Atlantic Flyway respondents ($\bar{x} = 3.31$) was significantly lower than that of Central ($\bar{x} = 3.58$) and Mississippi ($\bar{x} = 3.61$) Flyway respondents ($F_w(3, 351.473) = 5.603$, p < .04, $\eta^2 = .013$). More than one-third of respondents ($\bar{x} = 34.6\%$) indicated that providing the simplest regulations possible was a very high priority; there was not a significant difference between the Flyway of residence and the prioritization of simplifying regulations. Almost two in five respondents (39.7%) indicated that reducing the number of species-specific bag limits was a moderate priority; there was not a significant difference between the Flyway of species-specific bag limits. More than two in five respondents (43.2%) indicated that having the largest drake mallard bag limits possible was a moderate priority; there was not a significant difference and the prioritization of the size of drake mallard bag limits.

Table 25. (Q18a) How much priority should provincial / territorial and federal agencies give the following when setting annual duck hunting regulations? (Most frequently identified response is in **bold**.)

Item	n	Very Low (1)	Low (2)	Moderate (3)	High (4)	Very High (5)	Mean	SD
Having the largest bag limits possible.	1,264	12.3%	25.3%	43.9%	12.3%	6.3%	2.75	1.028
Having the longest seasons possible.	1,261	5.0%	13.1%	41.5%	27.9%	12.5%	3.30ª	1.011
Having the largest duck populations possible.	1,254	1.2%	4.7%	23.0%	39.6%	31.6%	3.96 ^b	0.915
Avoiding different season lengths for different duck species.	1,258	6.8%	12.5%	29.7%	26.6%	24.4%	3.49°	0.181
Providing the simplest regulations possible.	1,264	1.9%	4.3%	25.3%	34.0%	34.6%	3.95	0.968
Reducing the number of species-specific bag limits.	1,263	7.4%	20.1%	39.7%	21.1%	11.6%	3.09	1.081
Having the largest drake mallard bag limits possible.	1,263	10.1%	23.4%	43.2%	15.2%	8.2%	2.88	1.050

^a The mean responses of Atlantic Flyway respondents was significantly lower than that of Pacific Flyway respondents.

^b The mean responses of Central Flyway respondents was significantly lower than that of Mississippi Flyway respondents.

^c The mean responses of Atlantic Flyway respondents was significantly lower than that of Central and Mississippi Flyway respondents.

4.22. Question 18b: Ranking Duck Hunting Regulation Priorities.

More than two-thirds of respondents (68.5%; Table 26) indicated that having the largest duck populations possible was the first priority for the setting of duck hunting regulations. More than two in five respondents (42.2%) indicated that avoiding different season lengths for different duck species was the second propriety for the setting of duck hunting regulations. More than half of respondents (53.8%) indicated that reducing the number of species-specific bag limits was the third propriety for the setting of duck hunting regulations. There were no

Item	n	First Priority	Second Priority	Third Priority
Having the largest bag limits possible	354	25.9%	27.8%	46.3%
Having the longest seasons possible	664	30.4%	41.8%	27.8%
Having the largest duck populations possible	894	68.5%	18.4%	13.1%
Avoiding different season lengths for different duck species	478	15.3%	42.2%	42.5%
Providing the simplest regulations possible	753	23.4%	38.2%	38.4%
Reducing the number of species-specific bag limits	277	12.0%	34.2%	53.8%
Having the largest drake mallard bag limits possible	183	13.1%	39.9%	47.1%

Table 26. (Q18b) Of all the options listed below, please rank your top three to indicate your highest priorities.

4.23. Question 19: Comprehension of Species-Specific Bag Limits.

More than four of five respondents (82.8%) indicated that the current rules for species-specific bag limits are not difficult understand (Table 27). There was a small significant association between Flyway of residence and whether the rules for current species-specific bag limits are difficult to understand (χ^2 (3) = 18.605, p < 0.001, φ_c = .122). The proportion of Pacific (\hat{p} = 0.871) and Central (\hat{p} = 0.918) Flyway respondents that did not find rules for current species-specific bag limits difficult to understand in the provinces / territories where they hunt was higher than that of Mississippi (\hat{p} = 0.814) and Atlantic (\hat{p} = 0.790) Flyway respondents.

Table 27. (Q19) For the provinces / territories where you hunt, are rules for current species-specific bag limits difficult to understand? (n = 1,242; most frequently identified response is in **bold**.)

Response	Frequency	%
Yes	214	17.2%
No	1,028	82.8% ª
^a The proportion of P higher than that of I	acific and Central Fl Mississippi and Atlar	

Flyway respondents.

4.24. Question 20: Field Compliance of Species-Specific Bag Limits.

Almost three-quarters of respondents reported that the current species-specific bag limits are not difficult to comply with in the field (Table 28). There was a small significant association between Flyway of residence and the difficulty of field compliance for current species-specific bag (χ^2 (3) = 17.867, p < 0.001, ϕ_c = .120). The proportion of Pacific (\hat{p} = 0.181) and Central (\hat{p} = 0.168) Flyway respondents that did find it difficult to comply with current species-specific bag limits in the field was lower than that of Mississippi (\hat{p} = 0.275) and Atlantic (\hat{p} = 0.305) Flyway respondents.

Table 28. (Q20) For the provinces / territories where you hunt, are the current species-specific bag limits difficult to comply with in the field? (n = 1,242; most frequently identified response is in **bold**.)

Response	Frequency	%
Yes	321	25.9%ª
No	921	74.1%

^a The proportion of Pacific and Central Flyway respondents was lower than that of Mississippi and Atlantic Flyway respondents.

4.25. Question 21: Preferred Scenarios for Bag Limits of Duck Species that Typically Have Smaller Bag Limits.

A majority of respondents expressed a preference for the creation of simpler regulations by creating aggregate bag limits for a combination of certain species (Table 29). There was a small significant association between Flyway of residence and preferred scenario for bag limits for duck species that typically have smaller bag limits (χ^2 (3) = 21.371, p < 0.001, φ_c = .132). The proportion of Mississippi (\hat{p} = 0.614) and Atlantic (\hat{p} = 0.635) Flyway respondents that preferred the creation of simpler regulations by creating aggregate bag limits for a combination of certain species was higher than that of Pacific (\hat{p} = 0.467) and Central (\hat{p} = 0.479) Flyway respondents.

Table 29. (Q21) Please indicate your preferred scenario for bag limits of duck species that typically have smaller bag limits. (n = 1,233; most frequently identified response is in **bold**.)

Scenario	Frequency	%
Maximize harvest opportunity by maintaining individual species bag limits.	510	41.4%
Create simpler regulations by creating aggregate bag limits for a combination of certain species.	722	58.6%ª

^a The proportion of Mississippi and Atlantic Flyway respondents was higher than that of Pacific and Central Flyway respondents.

4.26. Question 22: Degree of Specialization (Commitment/Experience) with Waterfowl Hunting.

More than two in five respondents (44.3%) disagreed that if they couldn't go waterfowl hunting they were not sure what they would do instead (Table 30); there was not a significant difference between the Flyway of residence and whether respondents were sure of what they would do if they could not go waterfowl hunting. Almost half of respondents (47.4%) disagreed that a lot of their life was organized around waterfowl hunting; there was not a significant difference between Flyway of residence and whether respondents had organized a lot of their lives around waterfowl hunting. More than two in five respondents (41.3%) disagreed that waterfowl hunting had a central role in their lives; there was not a significant difference between Flyway of residence and the centrality of waterfowl hunting to respondents' lives. More than nine in ten respondents (91.4%) agreed that getting to enjoy the natural environment through waterfowl hunting was important; the mean response of Atlantic Flyway respondents ($\bar{x} = 4.24$) was significantly lower than that of Central Flyway respondents ($\bar{x} = 4.39$) (F(3, 1239) = 3.003, p < .05, η^2 = .007). Nineteen of twenty respondents (95.2%) agreed that being in nature was an important part of waterfowl hunting; there was not a significant difference between Flyway of residence and the importance of being in nature as a part of waterfowl hunting. Over half of respondents (59.0%) disagreed that getting their limit was important to them; there was not a significant difference between Flyway of residence and the importance of getting their limit. More than three-quarters of respondents (77.9%) agreed that developing their skills and abilities in waterfowl hunting was important to them; there was not a significant

difference between Flyway of residence and the importance of developing skills and abilities in waterfowl hunting. Almost two-thirds of respondents (64.1%) agreed that challenging their waterfowl hunting skills was important; there was not a significant difference between Flyway of residence and the importance of challenging waterfowl hunting skills. More than two in five respondents (41.1%) disagreed that most of their friends were in some way connected with waterfowl hunting; there was not a significant difference between Flyway of residence and whether or not respondents' friends were in some way connected with waterfowl hunting. More than nine in ten respondents (91.9%) agreed that the sights and sounds of nature were important to waterfowl hunting; there was not a significant difference between Flyway of residence and the importance of the sights and sounds of nature to waterfowl hunting. More than twothirds of respondents (71.4%) agreed that waterfowl hunting was one of the most enjoyable activities that they did; there was not a significant difference between Flyway of residence and the level of enjoyment of waterfowl hunting. More than one-third of respondents (38.6%) indicated that they neither agreed or disagreed (*i.e.*, were neutral) about the importance of using new techniques, technology, and equipment to improve their waterfowl hunting was important; there was not a significant difference between Flyway of residence and the importance of the use of new techniques, technology and equipment to improve respondents' waterfowl hunting.

Statement	۲	Strongly Disagree (1)	Strongly Disagree Neutral Agree Strong n Disagree (2) (3) (4) (5)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	SD
If I couldn't go waterfowl hunting I am not sure what I would do instead.	1,242	16.9%	27.4%	27.3%	17.9%	10.6%	2.78	1.227
A lot of my life is organized around waterfowl hunting.	1,240	18.2%	29.2%	25.6%	17.7%	9.3%	2.71	1.219
Waterfowl hunting has a central role in my life.	1,235	16.2%	25.1%	27.5%	21.5%	9.7%	2.83	1.215
Getting to enjoy the natural environment through waterfowl hunting is important.	1,244	1.6%	1.2%	5.8%	46.0%	45.4%	4.33 ^a	0.773
Being in nature is an important part of waterfowl hunting.	1,244	0.7%	0.4%	3.7%	38.9%	56.3%	4.50	0.661
Getting my limit is important to me.	1,244	19.2%	39.8%	31.0%	8.1%	2.0%	2.34	0.943
Developing my skills and abilities in waterfowl hunting is important to me.	1,244	1.8%	3.0%	17.3%	54.9%	23.0%	3.94	0.828
Challenging my waterfowl hunting skills is important.	1,244	2.2%	7.2%	26.4%	46.5%	17.6%	3.70	0.916
Most of my friends are in some way connected with waterfowl hunting.	1,241	10.5%	30.6%	24.5%	27.1%	7.3%	2.90	1.132
The sights and sounds of nature are important to waterfowl hunting.	1,244	0.5%	1.1%	6.5%	45.4%	46.5%	4.36	0.702
Waterfowl hunting is one of the most enjoyable activities I do.	1,240	2.6%	5.9%	20.2%	40.4%	31.0%	3.91	0.985
Using new techniques, technology and equipment to improve my waterfowl hunting is important to me.	1,244	5.6%	19.7%	38.6%	24.9%	11.2%	3.16	1.045

^a The mean response of Atlantic Flyway respondents was significantly lower than that of Central Flyway respondents.

Two-thirds of respondents reported that they did not take anyone waterfowl hunting who had never waterfowl hunted before (Table 31). There was not a significant association between Flyway of residence and whether respondents had taken anyone waterfowl hunting that had not hunted waterfowl before.

Table 31. (Q23a	a) During this pas	st	
season did you t	take anyone wat	erfowl	
hunting who had never waterfowl hunted			
before? $(n = 1, 2)$	44; most frequer	ntly	
identified respor	nse is in bold .)	-	
Response	Frequency	%	

перропас	ricquency	/0
Yes	402	32.3%
No	842	67.7%

There were no significant differences between Flyway responses.

4.28. Question 23b: Who was Introduced to Waterfowl Hunting that had not Hunted Waterfowl Before. Of those respondents that did take someone waterfowl hunting who had never hunted waterfowl before, more than half introduced an adult friend to waterfowl hunting (Table 32). There was not a significant association between Flyway of residence and who was introduced by respondents to waterfowl hunting.

Table 32. (Q23b) If you did [take anyone waterfowl hunting who had never waterfowl hunted before], who did you introduce? (n = 401; most frequently identified response is in **bold**.)

Response	Frequency	%
My own children	107	26.8%
Related children	56	13.9%
Other children	70	17.5%
Adult close family	45	11.3%
Adult extended family	33	8.4%
Adult friend	212	53.0%
Co-worker	65	16.3%
Other	30	7.6%

There were no significant differences between Flyway responses.

Four of five respondents (80.7%) reported some degree of identification as birdwatchers (Table 33); the mean response of Atlantic Flyway respondents ($\bar{x} = 2.47$) was significantly lower than that of Mississippi Flyway respondents ($\bar{x} = 2.68$) (F(3, 1201) = 4.247, p < .05, $\eta^2 = .089$). More than 19 in 20 respondents (97.6%) reported some degree of identification as duck hunter; there were no significant differences between Flyway responses. A similar percentage of respondents (96.3%) indicated some degree of identification as a goose hunter; the mean response of Central Flyway respondents ($\bar{x} = 3.62$) was significantly higher than that of Mississippi ($\bar{x} = 3.34$) and Atlantic ($\bar{x} = 3.38$) Flyway respondents (Fw(3, 353.827) = 4.325, p < .01, $\eta^2 = .009$). More than nine in ten respondents (94.8%) reported some degree of identification as another type of hunter; there were no significant differences between Flyway respondents (96.8%) indicated some degree of identification as a conservationist; the mean response of Atlantic Flyway respondents ($\bar{x} = 3.51$) was significantly lower than 19 in 20 respondents (96.8%) indicated some degree of identification as a conservationist; the mean response of Atlantic Flyway respondents ($\bar{x} = 3.51$) was significantly lower than that of Central ($\bar{x} = 3.93$), Mississippi ($\bar{x} = 3.98$), and Pacific ($\bar{x} = 3.82$) Flyway respondents (Fw(3, 355.569) = 17.366, p < .001, $\eta^2 = .046$).

4.30. Question 25: Social Networks.

Respondents indicated that they had acquaintances, close friends, and relatives in each of the structural positions that were presented to them; and all of the structural positions resonated with at least some of the respondents as structural positions that they would use to classify themselves (Table 34). The top five structural positions that respondents indicated they had acquaintances in were other type of hunter (*e.g.*, small/big game), waterfowl hunter, angler, farmer/rancher, and member of Ducks Unlimited. The top five structural positions that respondents indicated that they had close friends in were other type of hunter (*e.g.*, small/big game), waterfowl hunter, angler, farmer/rancher, and member of Ducks Unlimited. The top five structural positions that respondents indicated that they had relatives in were other type of hunter (*e.g.*, small/big game), angler, waterfowl hunter, farmer/rancher, and birdwatcher. The top five structural positions that respondents indicated that they would classify themselves as being a part of were waterfowl hunter, other type of hunter (*e.g.*, small/big game), birdwatcher, and member of Ducks Unlimited.

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Identity	c	Not at All (1)	Slightly (2)	Moderately (3)	Strongly (4)	Very Strongly (5)	Mean	SD
Birdwatcher	1,205	19.3%	29.4%	30.0%	14.0%	7.2%	2.60ª	1.157
Duck Hunter	1,224	2.4%	15.3%	34.9%	29.0%	18.3%	3.45	1.034
Goose Hunter	1,226	3.7%	16.9%	33.1%	27.4%	19.0%	3.41 ^b	1.087
Other type of hunter	1,224	5.2%	7.9%	22.2%	36.4%	28.3%	3.75	1.109
Conservationist	1,225	3.2%	8.4%	21.5%	37.0%	29.8%	3.82°	1.053
^a The mean response of Atlantic Flyway respondents was significantly lower than that of Mississippi Flyway respondents.	antic Flyway	respondents was	significantly lov	ver than that of Miss	issippi Flyway re	espondents.		

^b The mean response of Atlantic Flyway respondents was significantly higher than that of Mississippi and Atlantic Flyway respondents.
^c The mean response of Atlantic Flyway respondents was significantly lower than that of the other Flyways.

Table 34. (Q25) We are interested in knowing about your "personal community" and whether you know people in certain kinds of occupations and people affiliated with certain types of organizations. Among your relatives, close friends, or acquaintances, are there people who participate in the following activities, have the following jobs or who belong to the following organizations? Also, would you classify yourself in any of the following areas [structural positions]? (n = 1,235)

Structural Position	Acquaintance	Close Friend	Relative	Myself
Angler	50.0%	65.1%	61.2%	76.7%
Birdwatcher	30.8%	21.9%	28.4%	36.7%
Farmer/Rancher	46.3%	38.2%	30.5%	14.2%
National park manager/employee	20.5%	7.4%	2.8%	1.4%
Outdoor educator	26.3%	12.9%	5.5%	9.2%
Provincial/state park manager/employee	21.0%	9.4%	3.4%	2.5%
Waterfowl hunter	53.2%	70.1%	55.9%	83.3%
Other type of hunter (<i>e.g.,</i> small/big game)	56.4%	73.6%	64.6%	82.4%
Provincial/state wildlife agency manager/employee	23.2%	10.0%	4.0%	3.5%
Canadian Wildlife Service manager/employee	16.2%	4.3%	1.6%	2.2%
Wildlife artist (amateur or professional)	19.3%	5.8%	6.1%	2.6%
Wildlife biologist	24.8%	11.6%	5.1%	4.5%
Wildlife photographer (amateur or professional)	26.9%	15.9%	12.1%	16.1%
Member of a fishing/conservation organizations (<i>e.g.,</i> Trout Unlimited)	26.3%	24.0%	14.9%	21.7%
Member of birding and birdwatching groups (<i>e.g.,</i> Bird Studies Canada)	17.2%	6.4%	4.9%	3.9%
Member of bird conservation groups (<i>e.g.</i> , National Audubon Society (including local chapters), Cornell Lab, bird observatories)	14.3%	6.7%	4.0%	4.9%
Member of ornithological societies and groups (<i>e.g.</i> , Western field ornithologist, National or regional ornithological societies)	10.4%	2.7%	1.0%	0.9%
Member of Ducks Unlimited	33.2%	31.0%	18.5%	26.9%
Member of Delta Waterfowl	13.9%	11.4%	5.2%	8.0%
Member of provincial/territorial or regional waterfowl association	11.3%	7.5%	3.0%	5.4%
Member of a hunting/conservation organizations not focused on waterfowl (<i>e.g.</i> , National Wild Turkey Federation, Rocky Mountain Elk Foundation)	24.7%	23.0%	16.5%	26.8%
Member of other local/regional conservation organizations	17.5%	13.7%	9.3%	15.5%
Member of a local naturalist organizations	10.4%	4.9%	2.8%	2.8%
Member of other national/international conservation organizations (<i>e.g.,</i> The Nature Conservancy, Sierra Club, World Wildlife Fund)	11.9%	5.4%	3.4%	5.7%

4.31. Question 26: Organizational Involvement.

The majority of respondents indicated that they did not have any involvement with the waterfowl organizations that were asked about (Table 35). Three in five respondents reported no involvement with Ducks Unlimited; the mean response of Mississippi Flyway respondents ($\bar{x} = 1.59$) was significantly higher than that of Atlantic Flyway respondents ($\bar{x} = 1.43$) (F_w(3, 331.632) = 4.589, p < .01, η^2 = .010). More than four of five respondents reported no involvement in Delta Waterfowl; the mean response of Mississippi Flyway respondents in Delta Waterfowl; the mean response of Mississippi Flyway respondents ($\bar{x} = 1.25$) was significantly higher than that of Pacific ($\bar{x} = 1.10$) and Atlantic ($\bar{x} = 1.12$) Flyway respondents (F_w(3, 314.231) = 4.718, p < .01, η^2 = .004). More than four of five respondents with a Provincial / Territorial / Regional Waterfowl Association; there were no significant differences between Flyway responses.

Table 35. (Q26) Please indicate your level of involvement with the following organizations in the past 12 months,
even if you were not a member. (Most frequently identified response is in bold .)

Organization	n	No Involvement (1)	Slight Involvement (2)	Moderate Involvement (3)	High Involvement (4)	Mean	SD
Ducks Unlimited	1,195	60.3%	28.5%	8.4%	2.8%	1.54ª	0.765
Delta Waterfowl	1,082	87.7%	8.2%	2.6%	1.5%	1.18 ^b	0.536
Provincial / Territorial / Regional Waterfowl Association	1,072	86.0%	9.5%	3.3%	1.3%	1.20	0.548

^a The mean response of Mississippi Flyway respondents was significantly higher than that of Atlantic Flyway respondents.

^b The mean response of Mississippi Flyway respondents was significantly higher than that of Pacific and Atlantic Flyway respondents.

4.32. Question 27: Trust of Organizations.

More than nine in ten respondents (92.6%) indicated some degree of trust in Provincial / Territorial wildlife agencies to keep their best interest in mind as a waterfowl hunter (Table 36); the mean responses of Mississippi Flyway respondents ($\bar{x} = 2.93$) was significantly lower than that of Atlantic ($\bar{x} = 3.15$) and Central ($\bar{x} = 3.20$) Flyway respondents (F(3, 1202) = 5.794, p < .01, $\eta^2 = .014$). A similar percentage of respondents (92.1%) indicated some degree of trust in Federal wildlife and land management agencies; there were no significant differences between Flyway responses. More than half of respondents (54.4%) indicated some degree of trust in elected officials; the mean response of Pacific Flyway respondents ($\bar{x} = 1.69$) was significantly lower than that of Atlantic Flyway respondents ($\bar{x} = 1.97$) (F(3, 1191) = 4.006, p < .01, $\eta^2 = .010$). More than 19 in 20 respondents (97.8%) indicated some degree of trust in waterfowl hunting/conservation organizations; there were no significant differences between Flyway responses. Nine in ten respondents (90.8%) indicated some degree of trust in birding/bird conservation organizations; there were no significant differences between Flyway responses. Nine in ten respondents (90.8%) indicated some degree of trust in birding/bird conservation

differences between Flyway responses. More than nine in ten respondents (92.6%) indicated some degree of trust in university/college researchers/scientists; the mean response of Pacific Flyway respondents ($\bar{x} = 2.98$) was significantly lower than that of Atlantic Flyway respondents ($\bar{x} = 3.31$) (F_w(3, 337.392) = 5.481, p < .01, $\eta^2 = .014$).

4.33. Question 28: Donations to Organizations Concerned with Wetland, Waterfowl, and Birds. Most respondents reported that they did not make any donations to the four causes that were presented to them (Table 37). Almost half of respondents (49.7%) reported that they did not make any donations to wetland and/or waterfowl conservation causes; there was a small significant association between Flyway of residence and donations to wetland and/or waterfowl conservation (χ^2 (18) = 51.938, p < 0.001, Φ_c = .120), as the proportion of Atlantic Flyway respondents ($\hat{p} = 0.593$) that donated \$0.00 was significantly higher than that of Pacific ($\hat{p} = 0.461$), Central ($\hat{p} = 0.495$), and Mississippi (0.418) Flyway respondents; the proportion of Pacific ($\hat{p} = 0.438$) and Mississippi ($\hat{p} = 0.460$) that donated less than \$250 was higher than that of Central ($\hat{p} = 0.382$) and Atlantic (0.371) Flyway respondents; and the proportion of Atlantic Flyway respondents that donated between \$250 and \$999 was lower than that of the other Flyways. More than four of five respondents (82.3%) did not make any donations to conservation of other bird species causes; there were no significant associations between Flyway of residence and donations to causes related to the conservation of other bird species. More than nine in ten respondents (92.3%) did not make any donations to birdwatching and related issues; there were no significant associations between Flyway of residence and donations to birdwatching and related issues. More than half of respondents (51.5%) did not make any donations to waterfowl hunting and hunting-related issues; there was a small significant association between Flyway of residence and donations to wetland and/or waterfowl conservation (χ^2 (18) = 40.621, p < 0.01, ϕ_c = .107), as the proportion of Atlantic Flyway respondents (\hat{p} = 0.595) that donated \$0.00 was higher than that of Pacific ($\hat{p} = 0.483$), Central ($\hat{p} = 0.500$), and Mississippi ($\hat{p} = 0.453$) Flyway respondents; and the proportion of Mississippi Flyway respondents ($\hat{p} = 0.443$)that donated less than \$250 was higher than that of Pacific ($\hat{p} = 0.382$), Central ($\hat{p} = 0.381$), and Atlantic ($\hat{p} = 0.306$) Flyway respondents.

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Organization	c	Do not Trust at All (1)	Trust a Little (2)	Trust Somewhat (3)	Trust a Lot (4)	Trust Completely (5)	Mean	SD
Provincial / Territorial wildlife agencies	1,207	7.4%	18.3%	41.5%	27.4%	5.4%	3.05 ^a	0.984
Federal wildlife and land management agencies	1,207	7.9%	18.0%	40.0%	28.0%	6.1%	3.07	1.008
Elected officials	1,196	45.6%	28.4%	21.7%	3.2%	1.2%	1.86 ^b	0.941
Waterfowl hunting/conservation organizations	1,198	2.2%	9.8%	30.4%	46.1%	11.4%	3.55	0.894
Birding/bird conservation organizations	1,188	9.2%	21.4%	33.7%	28.2%	7.4%	3.03	1.077
Other conservation organizations	1,171	10.0%	21.6%	42.0%	21.8%	4.6%	2.89	1.004
University/college researchers/scientists	1,193	7.4%	17.9%	35.5%	31.4%	7.8%	3.14°	1.041
^a The mean responses of Mississippi Flyway respondents was significantly lower than that of Atlantic and Central Flyway respondents	was significa	intly lower than that	t of Atlantic an	d Central Flyway re	spondents.			

^b The mean response of Pacific Flyway respondents was significantly lower than that of Atlantic Flyway respondents.

• The mean response of Pacific Flyway respondents was significantly lower than that of Atlantic Flyway respondents.

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Cause	c	\$0	Less than \$250	\$250 – \$999	\$1,000 – \$2,499	\$2,500 – \$4,999	\$5,000 – \$9,999	\$10,000 or More
Wetland and/or waterfowl conservation	1,195 4	49.7% ^a	41.3% ^b	7.1% ^c	1.0%	0.3%	0.5%	0.2%
Conservation of other bird species	1,103	82.3%	16.2%	1.0%	0.3%	0.2%	•	ı
Birdwatching and related issues	1,092	92.3%	7.1%	0.5%	0.0%	ı		I
Waterfowl hunting and hunting related issues	1,170	51.5% ^d	37.9% ^e	8.0%	2.1%	0.2%	0.2%	0.1%
^a The proportion of Atlantic Flyway respondents was significantly higher than that of Pacific, Central, and Mississippi Flyway respondents.	antly higher	than that of F	^p acific, Central, an	d Mississippi	Flyway respond	ents.		

^b The proportion of Pacific and Mississippi respondents was higher than that of Central and Atlantic Flyway respondents;

° The proportion of Atlantic Flyway respondents was lower than that of the other Flyways.

^d The proportion of Atlantic Flyway respondents was higher than that of Pacific, Central, and Mississippi Flyway respondents.

• The proportion of Mississippi Flyway respondents was higher than that of Pacific, Central, and Atlantic Flyway respondents.

4.34. Question 29: Potential Changes to the Costs of Migratory Game Bird Hunting Permits and Canadian wildlife Habitat Conservation Stamps.

With the exception of increasing the Stamp and Permit fees by \$9.00 each, a majority of respondents indicated a willingness to buy the Stamp and Permit under different conditions (Table 38). More than four of five respondents indicated that they would be willing to pay an additional \$4.00 for the Stamp; there was a small significant association between Flyway of residence and a \$4.00 Stamp increase (χ^2 (3) = 10.888, p < 0.01, ϕ_c = .096), as the proportion of Pacific Flyway respondents (\hat{p} = 0.905) that were willing to pay the increased cost was higher than that of Pacific ($\hat{p} = 0.881$), Mississippi ($\hat{o} = 0.850$) and Atlantic $(\hat{p} = 0.809)$ Flyway residents. More than seven in ten respondents (71.3%) indicated that they would be willing to pay an additional \$4.00 for the Stamp and \$4.00 for the Permit; there was a small significant association between Flyway of residence and \$4.00 Stamp and Permit increases (χ^2 (3) = 25.403, p < 0.001, $\phi_c = .147$), as the proportion of Pacific ($\hat{p} = 0.791$) and Central ($\hat{p} = 0.818$) Flyway respondents that were willing to the increased cost was higher than that of Mississippi ($\hat{p} = 0.719$) and Atlantic ($\hat{p} = 0.638$) Flyway respondents. More than two in five respondents (44.3%) indicated that they were willing to pay an additional \$9.00 for the Stamp and \$9.00 for the Permit; there was a small significant association between Flyway of residence and \$9.00 Stamp and Permit increases (χ^2 (3) = 21.418, p < 0.001, φ_c = .135), as the proportion of Pacific ($\hat{p} = 0.549$) and Central ($\hat{p} = 0.553$) that were willing to pay the increased costs was higher than that of Mississippi ($\hat{p} = 0.433$) and Atlantic ($\hat{p} = 0.377$) Flyway respondents. More than nine in ten (93.9%) respondents were supportive of no fee increases; there was a small significant association between Flyway of residence and no fee increases (χ^2 (3) = 8.997, p < 0.05, ϕ_c = .087), as the proportion of Atlantic Flyway respondents ($\hat{p} = 0.916$) that were supportive of no fee increases was lower than that of Pacific ($\hat{p} = 0.952$), Central ($\hat{p} = 0.976$), and Mississippi ($\hat{p} = 0.940$) Flyway respondents.

Table 38. (Q29) Would you be willing to buy a Migratory Bird Hunting permit and a Canadia	n Wildlife
Habitat Conservation if (Most frequently identified response is in bold .)	

Statement	n	Frequency	%
the Stamp fee increases by \$4 for a new combined fee of \$21.	1,174	995	84.8% ^a
the Stamp fee increases by \$4 and Permit fee increases by \$4 for new combined fee of \$25.	1,174	837	71.3% ^b
the Stamp fee increases by \$9 and Permit fee increases by \$9 for a new combined fee of \$35.	1,170	518	44.3% ^c
the Stamp and Permit fees along with the combined fee remain the same (<i>i.e.</i> , no fee increase).	1,179	1,106	93.9% ^d

^a The proportion of Pacific Flyway respondents was higher than that of Pacific, Mississippi, and Atlantic Flyway residents.

^b The proportion of Pacific and Central Flyway respondents was higher than that of Mississippi and Atlantic Flyway respondents.

^c The proportion of Pacific and Central respondents was higher than that of Mississippi and Atlantic Flyway respondents.

^d The proportion of Atlantic Flyway respondents was lower than that of Pacific, Central, and Mississippi Flyway respondents.

4.35. Question 30: Money Spent for the Management of Wetlands on Private Lands.

More than four in five respondents did not spend any money for wetlands management on private lands (Table 39). There was a small significant association between Flyway of residence and whether money was spent for wetlands management on private lands (χ^2 (6) = 17.396, p < 0.01, ϕ_c = .084), as the proportion of Mississippi Flyway respondents (\hat{p} = 0.819) that did not spend money was less than that of Pacific (\hat{p} = 0.912), Central (\hat{p} = 0.894), and Atlantic (\hat{p} = 0.895) Flyway respondents.

Table 39. (Q30) In the past 12 months did you personallyspend money for wetlands management on private lands?(Most frequently identified response is in **bold**.)

Response	Frequency	%
No	1,058	86.6% ^a
Yes I spent	62	5.1%
Yes, but I'd rather not say how much	102	8.3%

^a The proportion of Mississippi Flyway respondents was less than that of Pacific, Central, and Atlantic Flyway respondents.

Respondents that did indicate how much money they spent for wetlands management on private lands reported spending an average of \$3,171.84; there were no significant differences between Flyways for the average amount spent (Table 40; Figure 3).

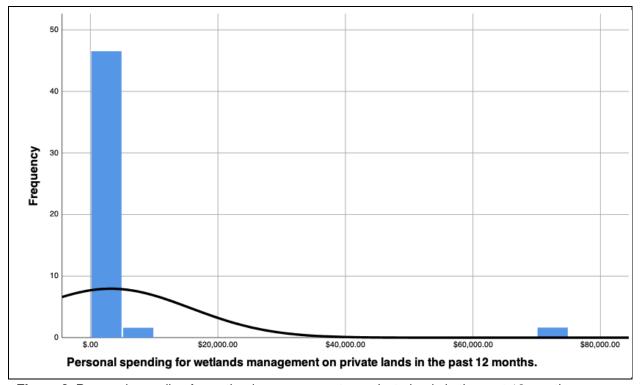
management on private la	
Statistic	Value
n	50
Minimum	\$50.00
Maximum	\$70,000.00
Mode	\$200.00
Median	\$500.00
Mean	\$3,171.84
Standard Deviation	\$12,4485.29

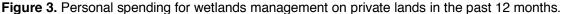
Table 40. (Q30) In the last 12 months did you

 personally spend money for wetlands

 management on private lands??

There were no significant differences between Flyway responses.





4.36. Question 31: Involvement in Wetlands or Waterfowl Conservation Activities.

More than seven in ten respondents had never been involved in any of the wetlands or waterfowl conservation activities that were presented to them (Table 41). One-quarter of respondents (25.3%) reported that they had some degree of involvement working on land improvement projects related to wetlands or waterfowl conservation; the mean responses of Atlantic Flyway respondents ($\bar{x} = 1.34$) was significantly lower than that of Mississippi Flyway respondents ($F_w(3, 346.256) = 5.864, p < .01, \eta^2 =$.015). One-quarter of respondents (25.6%) indicated that they had some degree of involvement in attending meetings about wetlands or waterfowl conservation; there were no significant differences between Flyway mean responses. One-quarter of respondents (25.9%) reported that they had some degree of involvement in volunteering their personal time and effort to conserve wetlands or waterfowl; the mean responses of Atlantic Flyway respondents ($\bar{x} = 1.37$) was significantly lower than that of Mississippi Flyway respondents ($\bar{x} = 1.57$) (F_w(3, 334.747) = 3.743, p < .05, $\eta^2 = .009$). Fewer than one in five respondents (17.6%) reported that they had some degree of involvement in contacting elected officials or government agencies about wetlands or waterfowl conservation; there were no significant differences between Flyway mean responses. More than seven of ten respondents (74.6%) indicated that they had never voted for candidates or ballot issues to support wetlands or waterfowl conservation; the mean response of Atlantic Flyway respondents ($\bar{x} = 1.35$) was significantly lower than that of Mississippi

Flyway respondents ($\bar{x} = 1.66$) (F_w(3, 335.185) = 7.985, p < .001, $\eta^2 = .018$). More than three-quarters of respondents (76.0%) reported that they had never advocated for political action to conserve wetlands or waterfowl; the mean response of Atlantic Flyway respondents ($\bar{x} = 1.37$) was significantly lower than that of Mississippi Flyway respondents ($\bar{x} = 1.57$) (F_w(3, 341.449) = 3.928, p < .01, $\eta^2 = .010$).

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Table 41. (Q31) Please indicate your level of involvement in the following wetlands or waterfowl conservation activities in the last 12 months. (Most from individualitied resonance is in **bold**.)

frequently identified response is in bold .)								
Wetland/Waterfowl Conservation Activity	с	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	Mean	SD
Worked on land improvement projects related to wetlands or waterfowl conservation.	1,206	74.7%	10.5%	9.6%	3.9%	1.3%	1.47a	0.913
Attended meetings about wetlands or waterfowl conservation.	1,203	74.4%	12.1%	10.6%	2.1%	0.8%	1.43	0.824
Volunteered my personal time and effort to conserve wetlands or waterfowl.	1,205	74.1%	9.8%	11.3%	2.9%	1.9%	1.49 ^b	0.937
Contacted elected officials or government agencies about wetlands or waterfowl conservation.	1,199	82.4%	8.3%	7.4%	1.3%	0.5%	1.29	0.701
Voted for candidates or ballot issues to support wetlands or waterfowl conservation.	1,204	74.6%	7.8%	10.0%	5.8%	1.8%	1.52°	1.007
Advocated for political action to conserve wetlands or waterfowl.	1,199	76.0%	8.8%	9.7%	3.3%	2.2%	1.47 ^d	0.950
^a The mean responses of Atlantic Flyway respondents was significantly lower than that of Mississippi Flyway respondents. ^b The mean responses of Atlantic Flyway respondents was significantly lower than that of Mississippi Flyway respondents.	antly lower tha antly lower tha	n that of Mis n that of Mis	sissippi Flywa sissippi Flywa	ly respondents. ly respondents.				

• The mean response of Atlantic Flyway respondents was significantly lower than that of Mississippi Flyway respondents. ^d The mean response of Atlantic Flyway respondents was significantly lower than that of Mississippi Flyway respondents.

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4.37. Question 32: Participation in Nature-Based Activities.

Almost all respondents (96.2%) reported that they had spent time in nature away from home (Table 42); there were no significant associations between Flyway of residence and spending time in nature away from home. More than four of five respondents (83.2%) reported that they had viewed wildlife; there were no significant associations between Flyway of residence and viewing wildlife. More than half of respondents (51.1%) indicated that they had learned about nature; there were no significant associations between Flyway of residence and learning about nature. More than nine in ten respondents (92.5%) indicated that they had participated in backyard/at-home nature activities; there was a small significant association between Flyway of residence and participation in backyard/at-home nature activities (χ^2 (3) = 8.775, p < 0.05, ϕ_c = .085), as the proportion of Atlantic Flyway respondents (\hat{p} = 0.895) was smaller than that of Pacific ($\hat{p} = .923$), Central ($\hat{p} = 0.950$), and Mississippi ($\hat{p} = 0.940$) Flyway respondents. More than four of five respondents (88.1%) reported participation in fishing; there were no significant associations between Flyway of residence and participation in fishing. One-third of respondents (33.3%) reported that they hunted migratory birds other than waterfowl; there was a small significant association between Flyway of residence and hunting migratory birds other than waterfowl (χ^2 (3) = 17.515, p < 0.01, ϕ_c = .121), as the proportion of Mississippi ($\hat{p} = 0.400$) and Atlantic ($\hat{p} = 0.308$) Flyway respondents that had hunted migratory birds other than waterfowl was larger than that of Pacific ($\hat{p} = 0.244$) and Central ($\hat{p} = 0.244$) 0.274) Flyway respondents. Four in five respondents (80.9%) reported that they hunted other game birds; there was a small significant association between Flyway of residence and hunting other game birds (χ^2 (3) = 9.817, p < 0.05, ϕ_c = .090), as the proportion of Central Flyway respondents (\hat{p} = 0.736) that did hunt other game birds was smaller than that of Pacific ($\hat{p} = 0.846$), Mississippi ($\hat{p} = 0.831$), and Atlantic ($\hat{p} = 0.846$) 0.814) Flyway residents. More than four of five respondents (85.0%) reported that they hunted other game animals; there were no significant associations between Flyway of residence and hutting other game animals. Almost three in ten respondents (29.7%) indicated that they participated in other naturebased activities; there were no significant associations between Flyway of residence and other naturebased activities.

Activity	n	Frequency	%
Spending time in nature away from home.	1,223	1,176	96.2%
Viewing wildlife.	1,218	1,013	83.2%
Learning about nature.	1,205	616	51.1%
Backyard/at-home nature activities.	1,214	1,123	92.5%ª
Fishing.	1,218	1,073	88.1%
Hunting migratory birds other than waterfowl.	1,206	402	33.3% ^b
Hunting other game birds.	1,217	984	80.9% ^c
Hunting any other game animals.	1,217	1,035	85.0%
Other	660	196	29.7%

Table 42. (Q32) In the last 12 months, have you participated in the following nature-based activities?

^a The proportion of Atlantic Flyway respondents was smaller than that of Flyway respondents.

^b The proportion of Mississippi and Atlantic Flyway respondents was larger than that of Pacific and Central Flyway respondents.

^c The proportion of Central Flyway respondents was smaller than that of other Flyway respondents.

4.38. Question 33: Participation in Wild Bird Related Activities.

More than four of five respondents (83.8%) reported watching birds at their homes in the past twelve months (Table 43); there were no significant associations between Flyway of residence and watching birds at home. Almost two-thirds of respondents (64.5%) reported that they had fed birds at their home in the last twelve months; there was a small significant association between Flyway of residence and feeding birds at home (χ^2 (3) = 8.280, p < 0.05, ϕ_c = .082), as the proportion of Mississippi Flyway respondents ($\hat{p} = 0.693$) that had fed birds at their home was larger than that of Pacific ($\hat{p} = 0.630$), Central ($\hat{p} = 0.602$), and Atlantic ($\hat{p} = 0.616$) Flyway respondents. Three-quarters of respondents (75.2%) indicated that they had watched birds away from their homes; there were no significant associations between Flyway of residence and watching birds away from home. More than one-third of respondents (39.4%) reported that they had photographed or filmed birds; there were no significant associations between Flyway of residence and photographing or filming birds. More than one in ten respondents (14.0%) reported that they counted or monitored birds; there were no significant associations between Flyway of residence and counting/monitoring birds. More than one in ten respondents (12.1%) indicated that they had keep track of the birds that they had seen on a list, online or on paper; there were no significant associations between Flyway of residence and keeping track of birds that had been seen. More than one-third of respondents (37.4%) reported that they had installed or maintained nest boxes for birds; there were no significant associations between Flyway of residence and installing or maintaining nest boxes.

Activity	n	Frequency	%
Watching birds at my home.	1,225	1,026	83.8%
Feeding birds at my home.	1,220	787	64.5% ^a
Watching birds away from my home.	1,221	918	75.2%
Photographing or filming birds.	1,208	476	39.4%
Counting/monitoring birds.	1,193	167	14.0%
Keeping track of the birds you see on a list, online or on paper.	1,195	145	12.1%
Installing or maintaining nest boxes for birds.	1,205	451	37.4%

Table 43. (Q33) In the last 12 months, which of the following activities related to wild birds did you participate in, if any? (Most frequently identified response is in **bold**.)

^a The proportion of Mississippi Flyway respondents was larger than that of other Flyway respondents.

4.39. Question 34: Concern About Ecosystem Goods & Services.

More than nine in ten respondents (91.4%) reported that they had some degree of concern about the reduction of flooding protection in their community due to the loss of wetlands (Table 44); there were no significant differences between Flyway mean responses. Almost 19 in 20 respondents (94.4%) reported some degree of concern about the reduction of erosion protection in their community due to the loss of wetlands; there were no significant differences between Flyway mean responses. More than four of five respondents (87.7%) reported some degree of concern about the reduction of wildlife viewing and birdwatching in their community due to the loss of wetlands; there were no significant differences between Flyway mean responses. More than 19 of 20 respondents (97.7%) reported some degree of concern about the reduction of hunting opportunities in their community due to the loss of wetlands; the mean response of Atlantic Flyway respondents ($\bar{x} = 3.34$) was significantly lower than that of Central ($\bar{x} = 3.54$), Mississippi ($\bar{x} = 3.56$), and Pacific ($\bar{x} = 3.66$) Flyway respondents (F_w(.3, 1209) = 9.902, p < .001, η^2 = .024). Fewer than nine in ten respondents (87.4%) indicated that they had some degree of concern about the reduction the storage of greenhouse gases in their community, such as carbon, due to the loss of wetlands; the mean response of Central Flyway respondents ($\bar{x} = 2.64$) was significantly lower than that of Atlantic Flyway respondents ($\bar{x} = 3.01$) (F_w(3, 343.276) = 5.896, p < .01, $\eta^2 = .016$). Almost all respondents (98.1%) indicated that they had some degree of concern about the reduction of clean water in their community due to the loss of wetlands; the mean response of Central Flyway respondents (\bar{x} = 3.54) was significantly lower than that of Mississippi Flyway respondents ($\bar{x} = 3.68$) (F_w(3, 362.335) = 3.754, p < .05, $n^2 = .009$). More than 19 in 20 respondents (97.4%) indicated that they had some degree of concern about the reduction of clean air in their community due to the loss of wetlands; there were no significant differences between Flyway mean responses. Almost all respondents (98.8%) reported some degree of concern about the reduction of wildlife habitat in their community due to a loss of wetlands; there were no significant differences between Flyway mean responses. Almost all respondents (98.1%)

reported some degree of concern about the reduction of habitat for animals such as butterflies and bees that pollinate plants and crops in their community due to the loss of wetlands; the mean response of Atlantic Flyway respondents ($\bar{x} = 3.44$) was significantly lower than that of Pacific Flyway respondents ($\bar{x} = 3.66$) (F_w(3, 364.584) = 3.974, p < .01, $\eta^2 = .009$). More than four in five respondents (81.5%) indicated some degree of concern about the reduction of scenic places for inspiration or spiritual renewal in their communities due to the loss of wetlands; there were no significant differences between Flyway mean responses.

Table 44. (Q34) Wetlands perform a variety of functions which are beneficial to people. When wetlands are lost or degraded, these benefits can be greatly reduced or disappear altogether. Below is a list of benefits that are threatened due to loss of wetlands. How concerned would you be if the following benefits were reduced in your community due to the loss of wetlands? (Most frequently identified response is in bold .)	ictions whic is a list of munity due	of functions which are beneficial to people. When wetlands are lost or degraded, these b ielow is a list of benefits that are threatened due to loss of wetlands. How concerned wo community due to the loss of wetlands? (Most frequently identified response is in bold .)	people. When ireatened due t ands? (Most fre	wetlands are le to loss of wetla equently identifi	ost or degrade nds. How conc ied response is	d, these ber erned woul s in bold .)	lefits can d you be
		Not Concerned	Slightly	Somewhat	Very		
Benefit	c	at All (1)	Concerned (2)	Concerned (3)	Concerned (4)	Mean	SD
Flooding protection	1,219	8.6%	17.4%	34.5%	39.5%	3.05	0.955
Erosion protection	1,219	5.6%	16.2%	37.4%	40.7%	3.13	0.882
Wildlife viewing and birdwatching	1,215	12.3%	23.1%	32.7%	31.9%	2.84	1.009
Hunting opportunities	1,214	2.3%	7.2%	30.1%	60.4%	3.49ª	0.73
Storage of greenhouse gases, such as carbon	1,213	12.6%	19.0%	35.0%	33.4%	2.89 ^b	1.009
Clean water	1,218	1.9%	5.0%	21.8%	71.3%	3.62°	0.671
Clean air	1,216	2.6%	5.8%	22.3%	69.4%	3.59	0.715
Providing a home for wildlife	1,211	1.2%	3.5%	24.5%	70.8%	3.65	0.61
Providing a home for animals such as butterflies and bees that pollinate plants and crops	1,215	1.9%	7.7%	25.6%	64.8%	3.53 ^d	0.72
Scenic places for inspiration or spiritual renewal	1,211	18.5%	24.5%	28.6%	28.4%	2.67	1.077
^a The mean response of Atlantic Flyway respondents was significantly lower than that of other Flyway respondents. ^b The mean response of Central Flyway respondents was significantly lower than that of Atlantic Flyway respondents. ^c The mean response of Central Flyway respondents was significantly lower than that of Mississippi Flyway respondents.	ificantly lower ificantly lower ificantly lower	significantly lower than that of other Flyway respondents. significantly lower than that of Atlantic Flyway respondents. significantly lower than that of Mississippi Flyway respondents.	ay respondents. way respondents. Flyway responder	uts.			

^d The mean response of Atlantic Flyway respondents was significantly lower than that of Pacific Flyway respondents.

4.40. Question 35a: Reduction of Wetland Benefits of Most Concern.

The reduction of wildlife habitat in their community was the wetland benefit that was of most concern to respondents (Table 45). There was a significant association between Flyway of residence and the wetland benefit of most concern about being substantially reduced in respondents' communities (χ^2 (27) = 73.592, p < 0.001, ϕ_c = .143). The proportion of Central Flyway respondents (\hat{p} = 0.364) that indicated that they were most concerned about the reduction of wildlife habitat in their community was higher than that of Mississippi Flyway respondents ($\hat{p} = 0.292$). The proportion of Mississippi Flyway respondents ($\hat{p} = 0.292$). 0.346) that indicated that they were most concerned about the reduction of hunting opportunities in their community was higher than that of Atlantic Flyway respondents ($\hat{p} = 0.222$). The proportion of Mississippi $(\hat{p} = 0.096)$ and Atlantic $(\hat{p} = 0.089)$ Flyway respondents that indicated that they were most concerned about the reduction of flooding protection in their community was higher than that of Pacific ($\hat{p} = 0.056$) and Central ($\hat{p} = 0.065$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.046$) that indicated that they were most concerned about the reduction of erosion protection in their community was higher than that of Pacific ($\hat{p} = 0.022$), Central ($\hat{p} = 0.023$), and Mississippi ($\hat{p} = 0.021$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.009$) that indicated that they were most concerned about the reduction of clean air in their community was lower than that of Pacific ($\hat{p} = 0.045$). Mississippi ($\hat{p} = 0.027$), and Atlantic ($\hat{p} = 0.039$) Flyway respondents. The proportion of Pacific Flyway respondents ($\hat{p} = 0.034$) that indicated that they were most concerned about the reduction of wildlife viewing and birdwatching in their community was higher than that of Central Flyway respondents (\hat{p} = 0.009). The proportion of Atlantic Flyway respondents ($\hat{p} = 0.039$) that indicated that they were most concerned about the reduction of the storage of greenhouse gases in their community was higher than that of Pacific ($\hat{p} = 0.000$), Central ($\hat{p} = 0.009$), and Mississippi ($\hat{p} = 0.004$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.023$) that indicated that they were most concerned about the reduction of scenic places for inspiration and spiritual renewal in their community was higher than that of Mississippi ($\hat{p} = 0.000$), Atlantic ($\hat{p} = 0.000$), and Pacific ($\hat{p} = 0.011$) Flyway respondents.

Ecosystem Good/Service	Frequency	%
Providing a home for wildlife	376	31.4%
Hunting opportunities	344	28.7%
Clean water	225	18.8%
Flooding Protection	102	8.5%
Erosion Protection	36	3.0%
Clean air	36	3.0%
Providing a home for butterflies and bees (pollinators)	30	2.5%
Wildlife viewing and birdwatching	24	2.0%
Storage of greenhouse gases	20	1.6%
Scenic places for inspiration and spiritual renewal	5	0.5%

Table 45. (Q35a) Which of the wetland benefits listed on the previous page would you be **most** concerned about being substantially reduced in your community? (n = 1,199; most frequently identified response is in **bold**.)

4.41. Question 35b: Reduction of Wetland Benefits of Least Concern.

The reduction of scenic places for inspiration and spiritual renewal in their community was the wetland benefit that was of least concern to respondents (Table 46). There was a significant association between Flyway of residence and the wetland benefit of least concern about being substantially reduced in respondents' communities (χ^2 (27) = 93.010, p < 0.001, ϕ_c = .161). The proportion of Atlantic Flyway respondents ($\hat{p} = 0.459$) that indicated that they were least concerned about the reduction of scenic places for inspiration and spiritual renewal in their community was higher than that of Pacific ($\hat{p} = 0.292$), Central ($\hat{p} = 0.227$), and Mississippi ($\hat{p} = 0.360$) Flyway respondents. The proportion of Central ($\hat{p} = 0.227$) 0.336) and Pacific ($\hat{p} = 0.292$) Flyway respondents that indicated that they were least concerned about the reduction of the storage of greenhouse gases in their community was higher than that of Mississippi ($\hat{p} = 0.179$) and Atlantic ($\hat{p} = 0.186$) Flyway respondents. The proportion of Atlantic Flyway respondents (\hat{p} = 0.094) that indicated that they were least concerned about the reduction of wildlife viewing and birdwatching in their community was higher than that of Pacific ($\hat{p} = 0.056$), Central ($\hat{p} = 0.057$), and Mississippi ($\hat{p} = 0.064$) Flyway respondents. The proportion of Atlantic ($\hat{p} = 0.085$) and Mississippi ($\hat{p} = 0.085$) 0.069) Flyway respondents that indicated that they were least concerned about the reduction of flooding protection in their community was lower than that of Pacific ($\hat{p} = 0.112$) and Central ($\hat{p} = 0.137$) Flyway respondents. The proportion of Mississippi Flyway respondents ($\hat{p} = 0.102$) that indicated that they were least concerned about the reduction of erosion protection in their community was higher than that of Pacific ($\hat{p} = 0.067$), Central ($\hat{p} = 0.057$), and Atlantic ($\hat{p} = 0.051$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.094$) that indicated that they were least concerned about the reduction of hunting opportunities in their community was higher than that of Pacific ($\hat{p} = 0.056$), Central ($\hat{p} = 0.057$), and Mississippi ($\hat{p} = 0.064$) Flyway respondents.

	,	
EGS: Least concerned about losing	Frequency	%
Scenic places for inspiration and spiritual renewal	438	36.6%
Storage of greenhouse gases	261	21.8%
Wildlife viewing and birdwatching	127	10.6%
Flooding Protection	107	9.0%
Erosion Protection	88	7.4%
Hunting opportunities	86	7.2%
Clean air	32	2.7%
Providing a home for butterflies and bees (pollinators)	30	2.5%
Clean water	15	1.3%
Providing a home for wildlife	12	1.0%

Table 46. (Q35a) Which of the wetland benefits listed on the previous page would you be **least** concerned about being substantially reduced in your community? (n = 1,199; most frequently identified response is in **bold**.)

4.42. Question 36: Respondent Age.

The mean age of respondents was 49.26 years (Table 47; Figure 4); the mean age of Mississippi Flyway respondents ($\bar{x} = 48.21$) was significantly lower than that of Pacific Flyway respondents ($\bar{x} = 53.00$) (F_w(3, 347.612) = 3.672, p < .05, $\eta^2 = .009$).

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Statistic	Value
n	1,220
Minimum	18
Maximum	88
Mode	55
Median	51
Mean	49.36
Standard Deviation	15.079

 Table 47. (Q36) Respondent age (calculated from year born).

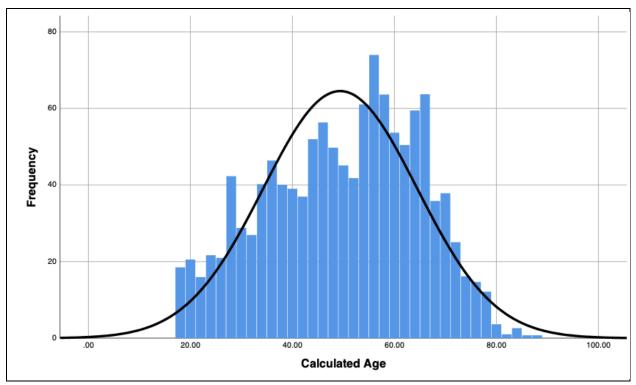


Figure 4. (Q36) Respondent age (calculated from year born).

4.43. Question 37: Respondents' Gender.

Almost all respondents (96.7%) were male (Table 48). There was not a significant association between Flyway of residence and respondents' gender.

Table 48. (Q37) Gender (n = 1,217)				
Response Frequency %				
Male	1,178	96.7%		
Female 40 3.3%				
There were no significant differences between				

There were no significant differences between Flyway responses.

Question 38: Respondents' Highest Level of Education.

More than half of respondents (59.6%) had earned a university/college degree or graduate degree (Table 49). There was a small significant association between Flyway of residence and the highest level of education that respondents had completed (χ^2 (15) = 28.194, p < 0.05, φ_c = .088). The proportion of Central (\hat{p} = 0.222) and Atlantic (\hat{p} = 0.202) Flyway respondents that reported that high school was the highest level of education that they had completed was higher than that of Pacific (\hat{p} = 0.152) and

Mississippi ($\hat{p} = 0.154$) Flyway respondents. The proportion of Pacific Flyway respondents ($\hat{p} = 0.261$) that reported that they highest level of education that they had completed was some university/college (no degree) was higher than that of Central ($\hat{p} = 0.184$), Mississippi ($\hat{p} = 0.197$), and Atlantic ($\hat{p} = 0.157$) Flyway respondents. The proportion of Mississippi Flyway respondents ($\hat{p} = 0.461$) that reported that a university/college degree was the highest level of education that they had completed was higher than that of Pacific ($\hat{p} = 0.348$), Central ($\hat{p} = 0.340$), and Atlantic ($\hat{p} = 0.400$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.085$) that indicated that another category of education was their highest level of completed education was higher than that of Mississippi Flyway respondents ($\hat{p} = 0.031$).

Response	Frequency	%
Some high school	36	3.0%
High school	222	18.3%
Some university/college (no degree)	225	18.6%
University/college degree	497	41.0%
Graduate degree	166	13.7%
Other	65	5.4%

Table 49. (Q38) What is the highest level of education you have completed? (n = 1,212; most frequently identified response is in **bold**.)

4.44. Question 39: Employment in a Nature-related Profession.

Four of five respondents (80.1%) reported that a nature-related profession was the primary source of their personal income (Table 50). There was not a significant association between Flyway of residence and whether a nature-related profession (such as farming, fisheries, forestry, environmental science, or conservation) was the primary source of respondents' personal income.

Table 50. (Q39) Is a nature-related profession (such as farming, fisheries, forestry, environmental science, or conservation) the primary source of your PERSONAL income? (n = 1,225; most frequently identified response is in **bold**.)

Response	Frequency	%
Yes	243	19.9%
No	981	80.1%

There were no significant differences between Flyway responses.

4.45. Question 40a: Rural Land Ownership.

More than two in five of respondents (44.0%) owned land in a rural area (Table 51). There was not a significant association between Flyway of residence and whether respondents owned land in a rural area (outside of an urban or suburban area).

Table 51. (Q40a) Do you own land in a
rural area (outside of an urban or
suburban area)? (n = 1,224; most
frequently identified response is in bold .)

Response	Frequency	%
Yes	539	44.0%
No	685	56.0%

There were no significant differences between Flyway responses.

4.46. Question 40b: Amount of Rural Land Owned.

Respondents that reported owning rural land owned an average of 211.96 acres (Table 52). The mean number of acres owned by Central Flyway respondents ($\bar{x} = 639.31$) was significantly higher than that of Mississippi ($\bar{x} = 119.44$), Pacific ($\bar{x} = 119.96$), and Atlantic ($\bar{x} = 122.24$) Flyway respondents (F_w(3, 102.623) = 3.165, p < .05, $\eta^2 = .069$).

Statistic	Value	
n	496	
Minimum	0.25	
Maximum	11,500	
Mode	1	
Median	40	
Mean	211.96	
Standard Deviation	752.815	

Table 52. (Q40b) Number of acres owned in a rural area.

4.47. Question 41: Size of Community Respondents' Grew Up in and Where They Currently Reside. Almost one-third of respondents (31.8%) currently reside in a large urban area (Table 53). There was a significant association between Flyway of residence and the size of the community currently lived in (χ^2 (12) = 46.502, p < .001, φ_c = .113), as the proportion of Pacific Flyway respondents (\hat{p} = 0.258) that indicated that they currently reside in a large urban area was higher than that of Central (\hat{p} = 0.186), Mississippi (\hat{p} = 0.194), and Atlantic (\hat{p} = 0.123) Flyway respondents. The proportion of Pacific Flyway respondents ($\hat{p} = 0.204$) that indicated that they currently reside in a small city was higher than that of Central ($\hat{p} = 0.112$), Mississippi ($\hat{p} = 0.122$), and Atlantic ($\hat{p} = 0.156$) Flyway respondents. The proportion of Atlantic Flyway respondents ($\hat{p} = 0.231$) that indicated that they currently reside in a small town was higher than that of Pacific ($\hat{p} = 0.172$), Central ($\hat{p} = 0.107$), and Mississippi ($\hat{p} = 0.147$) Flyway respondents that indicated that they respondents. The proportion of Central ($\hat{p} = 0.372$) and Mississippi ($\hat{p} = 0.347$) Flyway respondents that indicated that they reside in a rural area was higher than that of Pacific ($\hat{p} = 0.151$) and Atlantic ($\hat{p} = 0.292$) Flyway respondents.

More than one-third of respondents grew up in a rural area. There was a significant association between Flyway of residence and the size of the community that respondents grew up in (χ^2 (12) = 50.752, p < .001, $\varphi_c = .118$). The proportion of Central ($\hat{p} = 0.107$) and Atlantic ($\hat{p} = 0.107$) Flyway respondents that indicated that they grew up in a large urban area was lower than that of Pacific ($\hat{p} = 0.198$) and Mississippi ($\hat{p} = 0.177$) Flyway respondents. The proportion of Pacific ($\hat{p} = 0.187$) and Atlantic ($\hat{p} = 0.188$) Flyway respondents that indicated that they grew up in a small city was higher than that of Central ($\hat{p} = 0.103$) and Mississippi ($\hat{p} = 0.152$). The proportion of Atlantic Flyway respondents ($\hat{p} = 0.280$) that indicated that they grew up in a small town was higher than that of Pacific ($\hat{p} = 0.187$), Central ($\hat{p} = 0.201$), and Mississippi ($\hat{p} = 0.150$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.187$), Central ($\hat{p} = 0.201$), and Mississippi ($\hat{p} = 0.150$) Flyway respondents. The proportion of Central Flyway respondents ($\hat{p} = 0.280$) that indicated that they grew up in a rural area was higher than that of Pacific ($\hat{p} = 0.287$), Mississippi ($\hat{p} = 0.356$), and Pacific ($\hat{p} = 0.292$) Flyway respondents.

Table 53. (Q41) Which of these categories best describes the place where you live now and where you lived
during most of the time you were growing up (that is, until age 16)? (Most frequently identified response is in
bold.)

Community Category	n	Large urban area (population 500,000 or more)	Medium Urban area (population between 50,000 and 499,999)	Small city (population between 10,000 and 49,999)	Small town (population between 2,000 and 9,999)	Rural area (population less than 2,000)
Where you live now	1,222	17.2%	20.1%	13.9%	17.1%	31.8%
Where you grew up	1,207	14.2%	15.3%	15.8%	20.7%	34.0%

4.48. Question 42: Respondents' Personal Income.

Half of respondents (50.9%) indicated a personal income of \$74,999 or less (Table 54); there was not a significant association between Flyway of residence and respondents' reported level of personal income in the year prior to completing the survey.

Table 54. (Q42) Please indicate which of the
following categories applies to your total
personal income for last year? (n = 1,155; most
frequently identified response is in bold .)

Response	Frequency	%
< \$24,999	84	7.3%
\$25,000 to \$49,999	217	18.8%
\$50,000 to \$74,999	287	24.8%
\$75,000 to \$99,999	238	20.6%
\$100,000 to \$124,999	163	14.1%
\$125,000 to \$149,999	73	6.3%
\$150,000 to \$199,999	33	2.8%
\$200,000 to \$249,999	18	1.6%
\$250,000 to \$299,999	5	0.4%
\$300,000 or more	36	3.1%

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Appendix A Questionnaire



National Survey of Waterfowl Hunters

Thank you for participating in the national survey of waterfowl hunters. You are one of only a relatively few waterfowl hunters in your province/territory being contacted to participate in this study. The Canadian Wildlife Service is helping to sponsor this study because it is important to them to understand your waterfowl hunting experiences and what you think might improve them. We are working closely with your provincial/territorial waterfowl managers and the National Flyway Council to complete this study. The survey will take about 20 minutes to complete, and we greatly appreciate your time and effort. Your responses are very important to the study and will be used to help guide and improve waterfowl management in the future. Please be assured that your participation in the study, and all of your responses, will be kept confidential. <u>You must be 18 or older to participate</u>. Thank you for your help!

Please enter the Access Code that we mailed you in the box below:

Submit Personal Access Code:

Q1

Which of the following statements best describes your pursuits in waterfowl hunting? Please select one.

I hunt only ducks

I hunt ducks and geese

I hunt only geese

I hunt neither ducks nor geese

Q2

How old were you when you started waterfowl hunting? Please type in an age.

Age		
Please use the GREEN to complete new ques	ARROWS at the bottom of eac tions or backward to review q	h page to move forward juestions in the survey.
0%		100%

Q3
How many years of the last 5 years have you hunted WATERFOWL? Please select one.
O None
1 year
2 years
3 years
4 years
5 years
0%

Q4 Ducks

Over the last five years, about how many <u>DUCKS</u> did you harvest in a year ON AVERAGE? Please select one.

\bigcirc	5 or less	
\bigcirc	Between 6 and 10	
\bigcirc	Between 11 and 20	
\bigcirc	Between 21 and 50	
\bigcirc	More than 50	
	0%	100%

Q4 Geese				
Over the last five ye one.	ars, about how many <u>(</u>	SEESE did you h	arvest in a year (DN AVERAGE? Please select
5 or less				
Between 6 and 10				
Between 11 and 20	1			
Between 21 and 50	1			
More than 50				
	0%	-		100%

Q5
Over the last five years, about how many days did you usually hunt <u>WATERFOWL</u> in a year? <i>Please select one</i> .
5 days or less
🔘 6 to 10 days
11 to 20 days
21 to 30 days
O More than 30 days
Q6
During LAST YEAR'S (2016) waterfowl hunting season, how many days did you hunt for <u>WATERFOWL</u> ? (If you did not hunt enter "0").
0%

How many times do you feel that you need to shoot a daily bag limit of ducks/geese to have a satisfying season? <i>Please select one.</i>
Never
On at least one of my hunts
Occasionally on my hunts
Most of my hunts
Every time I hunted
Q8
How many times did you shoot a limit of ducks/geese last year's season (2016)? Please select one.
O Never
On at least one of my hunts
Occasionally on my hunts
Most of my hunts
Every time I hunted
I did not hunt in 2016
0%

Q9	
Under what circumstances do you typically go hunting? Please select one.	
When I plan the hunt myself	
When someone else invites me	
Both when I plan the hunt or someone else invites me	
0%	

Q10a

2-04			
	United States, waterfowl a antic. These Flyways are illu	2	s four Flyways: Pacific, Central,
In which Flyway did	you hunt most often last year	(2016) or the year y	ou last hunted? Please select one.
1-Pacific Flyway	(BC, YT, AK, AZ, CA, ID, Western	MT, NV, OR, UT, WA)	
2-Central Flyway	(AB, NT, SK, CO, Eastern MT, KS	, ND, NE, NM, OK, SD	, TX, WY)
🔵 3-Mississippi Flyv	vay (ON, AL, AR, IA, IL, IN, LA, K	Y, MI, MN, MO, MS, OH	I, TN, WI, MB, NU)
4-Atlantic Flyway	(NB, NL, NS, PE, QC, CT, DE, FL,	, GA, MA, MD, ME, NC,	NH, NJ, NY, PA, RI, SC, VA, VT, WV)
	0%		100%

Q10b	
In which Canadian Province/Territory or US State have years?	you hunted waterfowl most often over the past 5
0%	100%

Do you primarily take day trips or overnight/multi-day trips when you waterfowl hunt? Please select one.

Primarily day trips
 Primarily overnight or multi-day trips
 Both about equally

Q12
Please indicate where you do most of your waterfowl hunting? *Please select one*.

 Public land or waters
 Private property owned by you, your family or in partnership with someone else
 Private property owned by a friend or another landowner who gives you permission to hunt for free
 Private property you lease or pay to hunt on
 Guest on private property someone else leases or pays to hunt on

0%	100%

Q13

How important is it to you to hunt the following in the Central Flyway? Select one for each category.

0 0 0	0	0	0	0
<u> </u>	0	0	0	\bigcirc
\bigcirc	\bigcirc		0	
	-	\cup	\cup	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
			100%	
				100%

How important is it to you to hunt the following in the Mississippi Flyway? Select one for each category.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Diving ducks (e.g., scaup/bluebills, canvasback, redheads, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Mallards	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Other dabbling ducks (e.g., gadwall, pintails, teal, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Geese	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Q13

How important is it to you to hunt the following in the Atlantic Flyway? Select one for each category.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Diving ducks (e.g., scaup/bluebills, bufflehead, canvasback, ring- necked duck, etc.)	•	\odot	\odot	\odot	•
Seaducks (e.g., scoter, eider, and long-tailed)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Mallards	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Wood ducks	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Black ducks	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other ducks (e.g., teal, pintails, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canada geese	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Snow geese	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Brant	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	0%			100%	

How important is it to you to hunt the following in the Pacific Flyway? Select one for each category.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Diving ducks (e.g., scaup/bluebills, canvasback, redheads, etc.)	\bigcirc	\odot	\odot	\odot	\bigcirc
Seaducks (e.g., scoter, eider, long-tail, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Mallards	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Pintails	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other dabbling ducks (e.g., teal, wood duck, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Geese	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Q14

Please indicate how much of a problem the following are in the province / territory where you hunt waterfowl most. *Select one for each.*

	Not at all	Slight problem	Moderate problem	Severe problem	Very severe problem
Crowding at hunting areas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Hunting pressure	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interference from other waterfowl hunters	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Conflict with other waterfowl hunters in places I hunt	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Lack of public places for waterfowl hunting	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100	%	

In the province / territory where you hunt ducks most often, how dissatisfied or satisfied are you with: Select one for each

	Very Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Very Satisfied
The number of ducks you see during the season	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The number of ducks you harvest during the season	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The number of days in the duck season	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The number of ducks in the daily limit	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The number of ducks typically present during the hunting season	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Quality of habitat where you hunt	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Your overall duck hunting experience	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%					

Q16a
What is the minimum number of ducks you have to harvest in a day to feel satisfied with the hunt?
Q16b
What is the smallest daily bag limit you would accept before you would no longer hunt ducks?
Q16c
What is the minimum number of days in a waterfowl hunting season you would accept before you would no longer hunt ducks?
0%

WATERFOWL HUNTING CHOICES

Waterfowl hunting experiences can vary across many different areas and situations. You might hunt very near your home or drive a few hours away to hunt. You might hunt on public land for free or pay a daily or seasonal lease fee to hunt on private land. We are interested in knowing what experiences and conditions influence where you decide to hunt on a given trip. On the next few pages, we present 10 different hypothetical comparisons of waterfowl hunting trips you could choose to take. These trips vary on 5 conditions:

1) Harvest: The number of waterfowl you are likely to harvest in a day;

2) Access Effort: How easy or difficult it is to get into, out of and around an area in order to hunt;

3) Length of Travel: The time you have to travel one-way in order to hunt;

4) **Quantity of Waterfowl:** The number of ducks/geese that you see in a day when hunting even if not in shooting range; and

5) **Potential for Interference/Competition:** Competition from other hunters who might interfere with your hunt in some way such as making you feel crowded or competing for hunting spots or birds.

Some of these scenarios might seem unlikely to you, or neither option represents the places you currently hunt, but we are still interested in understanding which described hunts you would choose. Your opinions about these comparisons will help waterfowl managers better understand waterfowl hunter preferences.

For each scenario, select the <u>one choice</u> you would make if these were your only hunting options and assuming all other conditions were the same.



	Option 1	Option 2	WOULD NOT GO		
Harvest: Number of waterfowl you likely harvest in a day	One bird	3 birds	NONE: I would not go waterfowl hunting if		
Access Effort: How easy or difficult it is to get into, out of and around an area in order to hunt	Easy access that takes little effort	Moderate access that takes some effort	these were my only choices.		
Length of Travel: The time you have to travel one-way in order to hunt	3 hours	30 minutes			
Quantity of Waterfowl: The number of ducks/geese that you see in a day when hunting even if not in shooting range	50 birds	1,000 birds or more			
Potential for Interference/Competition: Competition from other hunters who might interfere with your hunt	High competition from other hunters	Moderate competition from other hunters			
Choose one option	\bigcirc	\bigcirc	\bigcirc		
0%					

3 birds	6 birds	NONE: I would not go waterfowl hunting if these were my only choices.
Difficult access that takes a lot of effort	Easy access that takes little effort	
4 hours	4 hours	
250 birds	25 birds or less	
No competition	Low competition from other hunters	
0	\bigcirc	\bigcirc
		0
		100%
	takes a lot of effort 4 hours 250 birds No competition	takes a lot of effort little effort 4 hours 4 hours 250 birds 25 birds or less No competition Low competition from other hunters

	Option 1	Option 2	WOULD NOT GO
Harvest: Number of waterfowl you likely harvest in a day	6 birds	3 birds	NONE: I would not go waterfowl hunting if
Access Effort: How easy or difficult it is to get into, out of and around an area in order to hunt	Difficult access that takes a lot of effort	Moderate access that takes some effort	these were my only choices.
Length of Travel: The time you have to travel one-way in order to hunt	2 hours	1 hour	
Quantity of Waterfowl: The number of ducks/geese that you see in a day when hunting even if not in shooting range	500 birds	500 birds	
Potential for Interference/Competition: Competition from other hunters who might interfere with your hunt	High competition from other hunters	Low competition from other hunters	
Choose one option	\bigcirc	\bigcirc	\bigcirc
0%			100%
0%			100%

Option 1	Option 2	WOULD NOT GO
One bird	One bird	NONE: I would not go waterfowl hunting if
Easy access that takes little effort	Moderate access that takes some effort	these were my only choices.
3 hours	2 hours	
250 birds	25 birds or less	
Moderate competition from other hunters	No competition	
0	\bigcirc	0
		100%
		100%
	One bird Easy access that takes little effort 3 hours 250 birds Moderate competition from other hunters	One bird One bird Easy access that takes little effort Moderate access that takes some effort 3 hours 2 hours 250 birds 25 birds or less Moderate competition from other hunters No competition One bird One bird

Option 1	Option 2	WOULD NOT GO
One bird	6 birds	NONE: I would not go waterfowl hunting if
Difficult access that takes a lot of effort	Difficult access that takes a lot of effort	these were my only choices.
30 minutes	1 hour	
25 birds or less	50 birds	
Low competition from other hunters	High competition from other hunters	
\bigcirc	\bigcirc	\bigcirc
►		100%
	One bird Difficult access that takes a lot of effort 30 minutes 25 birds or less Low competition from other hunters	One bird 6 birds Difficult access that takes a lot of effort Difficult access that takes a lot of effort 30 minutes 1 hour 25 birds or less 50 birds Low competition from other hunters High competition from other hunters

Option 1	Option 2	WOULD NOT GO
6 birds	3 birds	NONE: I would not go waterfowl hunting if
Moderate access that takes some effort	Easy access that takes little effort	these were my only choices.
1 hour	2 hours	
1,000 birds or more	50 birds	
Moderate competition from other hunters	No competition	
0	\bigcirc	0
►		100%
	6 birds Moderate access that takes some effort 1 hour 1,000 birds or more Moderate competition from other hunters	6 birds 3 birds Moderate access that takes some effort Easy access that takes little effort 1 hour 2 hours 1,000 birds or more 50 birds Moderate competition from other hunters No competition Image: Competition from other hunters Image: Competition from other hunters

6 birds Easy access that takes	One bird	NONE: I would not go waterfowl hunting if			
	Difficult access that				
little effort	takes a lot of effort	these were my only choices.			
30 minutes	3 hours				
500 birds	1,000 birds or more				
Low competition from other hunters	High competition from other hunters				
\bigcirc	\bigcirc	\bigcirc			
0%					
	500 birds Low competition from other hunters	500 birds 1,000 birds or more Low competition from other hunters High competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Competition from other hunters Image: Compet			

	Option 1	Option 2	WOULD NOT GO	
Harvest: Number of waterfowl you likely harvest in a day	3 birds	6 birds	NONE: I would not go waterfowl hunting if	
Access Effort: How easy or difficult it is to get into, out of and around an area in order to hunt	Moderate access that takes some effort	Moderate access that takes some effort	these were my only choices.	
Length of Travel: The time you have to travel one-way in order to hunt	4 hours	3 hours		
Quantity of Waterfowl: The number of ducks/geese that you see in a day when hunting even if not in shooting range	1,000 birds or more	250 birds		
Potential for Interference/Competition: Competition from other hunters who might interfere with your hunt	High competition from other hunters	Moderate competition from other hunters		
Choose one option	0	\bigcirc	0	
0%				

Option 1	Option 2	WOULD NOT GO			
3 birds	6 birds	NONE: I would not go waterfowl hunting if			
Easy access that takes little effort	Difficult access that takes a lot of effort	these were my only choices.			
1 hour	4 hours				
250 birds	25 birds or less				
Moderate competition from other hunters	No competition				
\bigcirc	0	\bigcirc			
0%					
	3 birds Easy access that takes little effort 1 hour 250 birds Moderate competition from other hunters	3 birds 6 birds Easy access that takes little effort Difficult access that takes a lot of effort 1 hour 4 hours 250 birds 25 birds or less Moderate competition from other hunters No competition • •			

([%CBCCURRENTTASK();%] of [%CBCTOTALTASKS();%])

	Option 1	Option 2	WOULD NOT GO
Harvest: Number of waterfowl you likely harvest in a day	3 birds	One bird	NONE: I would not go waterfowl hunting if
Access Effort: How easy or difficult it is to get into, out of and around an area in order to hunt	Easy access that takes little effort	Difficult access that takes a lot of effort	these were my only choices.
Length of Travel: The time you have to travel one-way in order to hunt	2 hours	30 minutes	
Quantity of Waterfowl: The number of ducks/geese that you see in a day when hunting even if not in shooting range	25 birds or less	500 birds	
Potential for Interference/Competition: Competition from other hunters who might interfere with your hunt	Moderate competition from other hunters	No competition	
Choose one option	0	\bigcirc	\bigcirc
0%			100%
070			******

Q18a

How much priority should provincial / territorial and federal agencies give the following when setting annual duck hunting regulations? *Select one for each*.

	Very Low	Low	Moderate	High	Very High
Having the largest bag limits possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Having the longest seasons possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Having the largest duck populations possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Avoiding different season lengths for different duck species	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Providing the simplest regulations possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Reducing the number of species-specific bag limits (i.e., bag limits that apply to specific species instead of the general duck bag limit)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Having the largest drake mallard bag limits possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		

Q18b

Of all the options listed below, please rank your top three to indicate your highest priorities. Use the numbers 1, 2, and 3, with 1 being your highest priority, 2 being your second highest priority and 3 being your third highest priority. Use each number only once.

Having the largest bag limits possible
Having the longest seasons possible
Having the largest duck populations possible
Avoiding different season lengths for different duck species
Providing the simplest regulations possible
Reducing the number of species-specific bag limits (i.e., bag limits that apply to specific species instead of the general duck bag limit)
Having the largest drake mallard bag limits possible
0%

Duck bag limits restrict how many ducks can be bagged each day. For some duck species, the bag limit per day is different than the general duck bag limit. Such bag limits are termed "species-specific" bag limits.

Q19

For the provinces / territories where you hunt, are the rules and regulations for current species-specific bag limits difficult to understand?

Yes

No

Q20

For the provinces / territories where you hunt, are the current species-specific bag limits difficult to comply with in the field?

\bigcirc	Ye	s

No

Q21

Please indicate your preferred scenario for bag limits of **duck species that typically have smaller bag limits**.

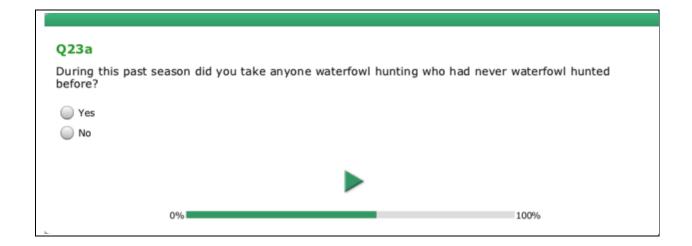
Maximize harvest opportunity by maintaining individual species bag limits.

Create simpler regulations by creating aggregate bag limits for a combination of certain species (e.g., a diving duck limit).

0%	100%

We are interested in knowing how much waterfowl hunting means to you. Please indicate how much you disagree or agree with the following statements about your personal participation in waterfowl hunting. (*Select one for each*.)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
If I couldn't go waterfowl hunting I am not sure what I would do instead	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
A lot of my life is organized around waterfowl hunting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Waterfowl hunting has a central role in my life.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Getting to enjoy the natural environment through waterfowl hunting is important.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Being in nature is an important part of waterfowl hunting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Getting my limit is important to me.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Developing my skills and abilities in waterfowl hunting is important to me.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Challenging my waterfowl hunting skills is important.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Most of my friends are in some way connected with waterfowl hunting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The sights and sounds of nature are important to waterfowl hunting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Waterfowl hunting is one of the most enjoyable activities I do.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Using new techniques, technology and equipment to improve my waterfowl hunting is important to me.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		



Q23b
If you did, who did you introduce? (Select all that apply).
My own child(ren)
Related child(ren)
Other Child(ren)
Adult close family (i.e. brother/sister)
Adult extended family (i.e. cousin/uncle)
Adult friend
Co-worker
Other (please specify)
0%

A person can think of themselves in a variety of ways. Please indicate the extent to which you identify yourself as a/an... (select one for each).

	Not at all	Slightly	Moderately	Strongly	Very strongly
Birdwatcher	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Duck Hunter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Goose Hunter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other Type of Hunter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Conservationist	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

We are interested in knowing about your "personal community" and whether you know people in certain kinds of occupations and people affiliated with certain types of organizations. Among your relatives, close friends, or acquaintances, are there people who participate in the following activities, have the following jobs or who belong to the following organizations? Also, would you classify yourself in any of the following areas? (Select all that apply for each row or leave blank for "no one" in that row.)

	Acquaintance	Close Friend	Relative	Myself		
Angler						
Birdwatcher						
Farmer/Rancher						
National park manager/employee						
Outdoor educator						
Provincial / Territorial / State park manager/employee						
Waterfowl hunter						
Other type of hunter (e.g., small/big game)						
Provincial / Territorial / State wildlife agency manager/employee						
Federal wildlife agency manager/employee						
Wildlife artist (amateur or professional)						
Wildlife biologist						
Wildlife photographer (amateur or professional)						
Q25 is continued on the next screen.						
0%			100%			

Q25 (continued)

We are interested in knowing about your "personal community" and whether you know people in certain kinds of occupations and people affiliated with certain types of organizations. Among your relatives, close friends, or acquaintances, are there people who participate in the following activities, have the following jobs or who belong to the following organizations? Would you classify yourself in any of the following areas? (Select all that apply for each row or leave blank for "no one" in that row.)

	Acquaintance	Close Friend	Relative	Myself
Member of a fishing/conservation organizations (e.g., Trout Unlimited; Izaak Walton)				
Member of birding and birdwatching groups (e.g., Bird Studies Canada)				
Member of bird conservation groups (e.g., National Audubon Society, including local chapters; American Bird Conservancy, Cornell Lab, bird observatories)				
Member of ornithological societies and groups (e.g., Western field ornithologist, National or regional ornithological societies)				
Member of Ducks Unlimited				
Member of Delta Waterfowl				
Member of provincial / territorial or regional waterfowl association				
Member of a hunting/conservation organizations not focused on waterfowl(e.g., provincial / territorial wildlife federation)				
Member of other local/regional conservation organizations				
Member of local naturalist organizations				
Member of other national/international conservation organizations (e.g., The Nature Conservancy, Sierra Club, World Wildlife Fund)				
0%			100%	

Please indicate your level of involvement with the following organizations in the past 12 months, even if you were not a member. (*Select one for each*).

	No Involvement	Slight Involvement	Moderate Involvement	High Involvement
Ducks Unlimited	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Delta Waterfowl	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Provincial / Territorial / Regional Waterfowl Association	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%	

Q27

How much trust do you have in the following organizations to keep your best interest in mind as a waterfowl hunter? (*Select one for each organization*).

	Do not trust at all	Trust a little	Trust somewhat	Trust a lot	Trust completely
Provincial / Territorial wildlife agencies	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Federal wildlife and land management agencies (e.g., Canadian Wildlife Service, Natural Resoureces Canada)	0	0	0	0	0
Elected officials	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Waterfowl hunting/conservation organizations	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Birding/bird conservation organizations	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other conservation organizations	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
University/college researchers/scientists	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Please indicate how much money you personally donated to the following causes in the past 12 months. (*Select one amount for each*).

Total amount donated in \$	\$0	Less than \$250	\$250 to \$999	\$1000 to \$2499	\$2500 to \$4999	\$5000 to \$9999	\$10,000 or more
Wetland and/or waterfowl conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Conservation of other bird species	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Birdwatching and related issues	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Waterfowl hunting and hunting related issues	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%					100%		
-							

Q29

Under the Migratory Birds Regulations, hunters must acquire both a Migratory Game Bird Hunting (MGBH) permit and a Canadian Wildlife Habitat Conservation (CWHC) stamp. Each cost \$8.50 for a combined total of \$17. Revenue from the stamp goes to Wildlife Habitat Canada to support habitat conservation. Revenue from the permit provides partial support for managing permits and monitoring waterfowl populations. The stamp and permit fees have not increased since 1991 and 1998 respectively.

Would you still be willing to buy a Migratory Game Bird Hunting permit and a Canadian Wildlife Habitat Conservation stamp if:

	Yes	No
the Stamp fee increases by \$4 for new combined fee of \$21.	\bigcirc	\odot
the Stamp fee increases by \$4 and Permit fee increases by \$4 for new combined fee of \$25.	\bigcirc	\odot
the Stamp fee increases by \$9 and Permit fee increases by \$9 for new combined fee of \$35.	\bigcirc	\bigcirc
the Stamp and Permit fees along with the combined fee remain the same (i.e., no fee increase).	\bigcirc	\odot
	•	
0%		100%

230	
n the past 12 months did you personally spend money for wetlands manageme	nt on private lands?
No No	
\bigcirc Yes — if so, how much did you spend? (Please round to the nearest \$500 if more than \$1000)	
Yes, but I'd rather not say how much	
0%	100%

Please indicate your level of involvement in the following wetlands or waterfowl conservation activities in the last 12 months. (Please select one for each activity.)

	Never	Rarely	Sometimes	Often	Very often
Worked on land improvement projects related to wetlands or waterfowl conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Attended meetings about wetlands or waterfowl conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Volunteered my personal time and effort to conserve wetlands or waterfowl	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Contacted elected officials or government agencies about wetlands or waterfowl conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Voted for candidates or ballot issues to support wetlands or waterfowl conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Advocated for political action to conserve wetlands or waterfowl	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%	-		100%		

\bigcirc		
	\bigcirc	Spending time in nature away from home (e.g., picnicking, relaxing in nature, camping
\bigcirc	\bigcirc	Viewing wildlife (e.g., wildlife watching, bird watching, bird feeding, wildlife photography
\bigcirc	\bigcirc	Learning about nature (e.g., attending festivals or lectures, visiting a nature center)
\bigcirc	\bigcirc	Backyard/at-home nature activities (e.g., gardening, landscaping)
\bigcirc	\bigcirc	Fishing
\bigcirc	\bigcirc	Hunting migratory birds other than waterfowl (e.g., doves, woodcock, rails, etc.)
\bigcirc	\bigcirc	Hunting other game birds (e.g., grouse, pheasants, turkey)
\bigcirc	\bigcirc	Hunting any other game animals (e.g., deer, elk, rabbit, etc.)
\bigcirc	\bigcirc	Other (please specify if yes)

Q33

In the **last 12 months**, which of the following activities related to **wild birds** did you participate in, if any? (*Please select "Yes" or "No" for each*).

	Yes	No
Watching birds at my home	\bigcirc	\bigcirc
Feeding birds at my home	\bigcirc	\bigcirc
Watching birds away from my home	\bigcirc	\bigcirc
Photographing or filming birds	\bigcirc	\bigcirc
Counting/monitoring birds (e.g., Christmas or Backyard Bird Count)	\bigcirc	\bigcirc
Keeping track of the birds you see on a list, online or on paper	\bigcirc	\bigcirc
Installing or maintaining nest boxes for birds	\bigcirc	\bigcirc
0%	100%	

Your Opinions about Wetlands

In this section we would like to know what you think about wetlands.

Wetlands include swamps, marshes, bogs, shallow ponds (less than 1.8 meters or 6 feet deep), and shallow areas on lakeshores and seashores. Some wetlands are only wet some of the year, while others are wet year round. They can be in cities or in rural areas and can be the size of a basketball court or cover several square miles.



Q34

Wetlands perform a variety of functions which are beneficial to people. When wetlands are lost or degraded, these benefits can be greatly reduced or disappear altogether. Below is a list of benefits that are threatened due to loss of wetlands. How concerned would you be if the following benefits were reduced in your community due to the loss of wetlands? (*Please select one for each benefit*).

Benefit	Not at all concerned	Slightly concerned	Somewhat concerned	Very concerned
A. Flooding protection	\bigcirc	\bigcirc	\bigcirc	\bigcirc
B. Erosion protection	\bigcirc	\bigcirc	\bigcirc	\bigcirc
C. Wildlife viewing and birdwatching	\bigcirc	\bigcirc	\bigcirc	\bigcirc
D. Hunting opportunities	\bigcirc	\bigcirc	\bigcirc	\bigcirc
E. Storage of greenhouse gases, such as carbon	\bigcirc	\bigcirc	\bigcirc	\bigcirc
F. Clean water	\bigcirc	\bigcirc	\bigcirc	\bigcirc
G. Clean air	\bigcirc	\bigcirc	\bigcirc	\bigcirc
H. Providing a home for wildlife	\bigcirc	\bigcirc	\bigcirc	\bigcirc
I. Providing a home for animals such as butterflies and bees that pollinate plants and crops	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J. Scenic places for inspiration or spiritual renewal	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%		1	00%	

٠

Q35

Which of the wetlands benefits listed on the previous page would you be **most** concerned about being substantially reduced in your community? Please select the benefit you are **most** concerned about losing.

Which of the wetlands benefits listed on the previous page would you be **least** concerned about being substantially reduced in your community? Please select the benefit you are **least** concerned about losing. *Be sure to select a different benefit than you selected above.*

	×	
0%		100%

About You
To help us compare your responses to those of others, we have some questions about you. Please be assured that all of your answers will remain completely confidential.
Q36
In what year were you born? (Enter last 2 digits)
Year 19:
Q37
Are you ?
Male
Female
0%

I

Q38
What is the highest level of education you have completed? Please select only one.
Q39
Is a nature-related profession (such as farming, fisheries, forestry, environmental science, or conservation) the primary source of your PERSONAL income? <i>Please select only one</i> .
Ves
No
0% 100%

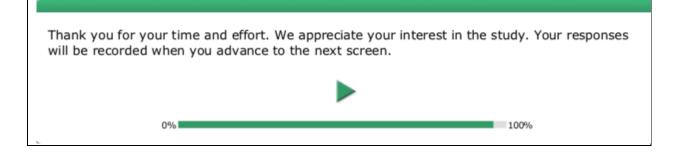
Q40		
Do you own land in a rural area	outside of an urban or suburban area)?	
Yes if so, how many acres do	ou own in total?	
No No		
0%		100%

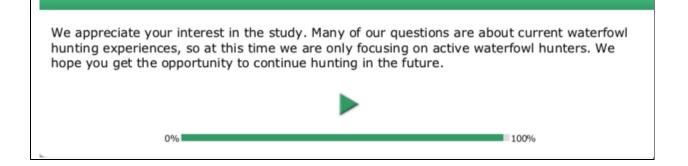
Which of these categories best describes the place where you a) live now and b) where you lived during most of the time you were growing up (that is, until age 16)? *Please select only one in each row*.

	Large urban area (population 500,000 or more)	Medium Urban area (population between 50,000 and 499,999)	Small city (population between 10,000 and 49,999)	Small town (population between 2,000 and 9,999)	Rural area (population less than 2,000)
a) Where you live now	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
b) Where you grew up	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Q42	
Please indicate which of Please select only one.	he following categories applies to your total personal income for last year?
0%	100%







Note:
When respondents take the survey in regular mode this page will not be displayed. Respondents will be redirected to the link below:
http://nawmp.wetlandnetwork.ca/
0% 100%



Étude nationale sur les chasseurs de sauvagine

Merci de participer à l'étude nationale sur les chasseurs de sauvagine. Vous êtes l'un des quelques chasseurs de sauvagine de votre province ou territoire invités à participer à cette étude. Le Service canadien de la faune participe au parrainage de cette étude puisqu'il est important pour lui de comprendre vos expériences en matière de chasse à la sauvagine et ce qui, selon vous, pourrait les améliorer. Nous collaborons étroitement avec vos gestionnaires provinciaux et territoriaux de la sauvagine ainsi qu'avec les Conseils nationaux des voies migratoires afin de réaliser cette étude. Il vous faudra environ 20 minutes pour répondre aux questions qu'elle renferme, et nous vous remercions pour votre temps et vos efforts. Vos réponses sont très importantes pour cette étude et seront utilisées pour contribuer à orienter et améliorer la gestion future de la sauvagine. Soyez assuré(e) que votre participation à cette étude ainsi que la totalité de vos réponses demeureront confidentielles. VOUS DEVEZ AVOIR 18 ANS OU PLUS POUR PARTICIPER. Merci de votre aide!

Veuillez entrer le code d'accès que nous vous avons fait parvenir par courriel dans la case ci-après :

Soumettre le code personnel d'accès :



Parmi les énoncés suivants, lequel décrit le mieux vos objectifs en matière de chasse à la sauvagine? Veuillez choisir une réponse.
 Je ne chasse que le canard Je chasse le canard et l'oie
 Je ne chasse que l'oie
Je ne chasse ni le canard ni l'oie
Q2
À quel âge avez-vous commencé à chasser la sauvagine? <i>Veuillez indiquer l'âge</i> .
Veuillez utiliser les FLÈCHES VERTES dans le bas de chaque page pour répondre à une nouvelle question, ou les flèches de recul pour revenir aux questions précédentes.
0%

Q3
Pendant combien d'années êtes-vous allé(e) à la chasse à la <u>SAUVAGINE</u> au cours des cinq dernières années? <i>Veuillez choisir une réponse.</i>
Aucune
问 1 an
2 ans
3 ans
4 ans
5 ans
0%

Q4 Canards
Au cours des cinq dernières années, environ combien de <u>CANARDS</u> avez-vous pris au cours d'une année EN MOYENNE? <i>Veuillez choisir une réponse</i> .
5 ou moins
Entre 6 et 10
Entre 11 et 20
Entre 21 et 50
Plus de 50
0%

Q4 Oies
Au cours des cinq dernières années, environ combien <u>d'OIES</u> avez-vous prises au cours d'une année EN MOYENNE? Veuillez choisir une réponse.
🔘 5 ou moins
Entre 6 et 10
Entre 11 et 20
Entre 21 et 50
Plus de 50
0%

5
u cours des cinq dernières années, environ combien de jours consacrez-vous à la chasse à la <u>AUVAGINE</u> par année? <i>Veuillez choisir une répons</i> e.
🔵 5 jours ou moins
De 6 à 10 jours
De 11 à 20 jours
De 21 à 30 jours
Plus de 30 jours
6
u cours de la saison de chasse à la sauvagine de la DERNIÈRE ANNÉE (2016) , combien de jours vez-vous consacrés à la chasse à la <u>SAUVAGINE</u> ? (Si vous n'avez pas chassé, entrez « 0 ».)
0% 100%

Combien de fois devez-vous atteindre le maximum de prises par jour de canards ou d'oies pour estimer avoir eu une saison satisfaisante? Veuillez choisir une réponse.

🔵 Jamais

Au moins à une reprise

À quelques reprises

La plupart du temps

Chaque fois que je vais chasser

Q8

Au cours de la **saison de l'année dernière (2016)**, combien de fois avez-vous atteint le maximum de prises de canards ou d'oies? *Veuillez choisir une réponse*.

Jamais		
Au moins à une reprise		
À quelques reprises		
🔵 La plupart du temps		
Chaque fois que je vais chasser		
Je n'ai pas chassé en 2016		
0%	100%	

ns quelles circonstances allez-vous habituellement chasser? Veuillez choisir une réponse.
) Lorsque je planifie moi-même la chasse
) Lorsque quelqu'un m'invite
) Lorsque je planifie moi-même la chasse ou lorsque quelqu'un m'invite
0% 100%

Q10a	
	ne est gérée au sein de quatre voies migratoires : ue. Ces voies migratoires sont illustrées ci-dessous :
	0
Dans quelle voie migratoire avez-vous le plus dernière année où vous avez chassé? <i>Veuillez</i>	souvent chassé au cours de l'an passé (2016) ou au cours de la c choisir une réponse.
1-Voie migratoire du Pacifique (CB., YU, J	AK, AZ, CA, ID, MT de l'ouest, NV, OR, UT, WA)
2-Voie migratoire du Centre (AB, NT, SK, C	CO, MT de l'est, KS, ND, NE, NM, OK, SD, TX, WY)
🔵 3-Voie migratoire du Mississippi (ON, AL, A	AR, IA, IL, IN, LA, KY, MI, MN, MO, MS, OH, TN, WI, MB, NU)
4-Voie migratoire de l'Atlantique (NB., TM SC, VA, VT, WV)	N, NÉ., PE, QC, CT, DE, FL, GA, MA, MD, ME, NC, NH, NJ, NY, PA, RI,
0%	100%

Q10b	
Dans quelle province ou quel territoire canadien ou quel État américai chassé la sauvagine au cours des cinq dernières années?	in avez-vous le plus souvent
•	
0%	100%

Lorsque vous partez à la chasse à la sauvagine, effectuez-vous principalement des déplacements d'une journée ou des voyages de deux jours ou plus? *Veuillez choisir une réponse*.

- Principalement des déplacements d'une journée
- Principalement des voyages de deux jours ou plus
- Les deux à peu près également

Q12

À quel endroit chassez-vous le plus la sauvagine? Veuillez choisir une réponse.

- Terres ou plans d'eau publics
- Propriété privée détenue par vous, votre famille ou en partenariat avec une autre personne
- 🔵 Propriété privée détenue par un ami ou un autre propriétaire qui vous donne la permission d'y chasser sans frais
- Propriété privée que vous louez ou vous payez des frais pour y chasser
- 🔵 Invité sur une propriété privée que quelqu'un d'autre loue ou paye des frais pour y chasser

0%	100%

Q13

À quel point est-il important pour vous de chasser les animaux suivants dans la voie migratoire du Centre? Choisissez une réponse pour chaque catégorie.

	Pas du tout important	Légèrement important	Moyennement important	Très important	Extrêmement important
Canards plongeurs (fuligules à collier, à dos blanc, à tête rouge, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards colverts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autres canards barboteurs (p. ex., canards chipeaux, canards pilets, sarcelles, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Oies	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	I				
0%				100%	

À quel point est-il important pour vous de chasser les animaux suivants dans la voie migratoire du Mississippi? Choisissez une réponse pour chaque catégorie.

	Pas du tout important	Légèrement important	Moyennement important	Très important	Extrêmement important
Canards plongeurs (fuligules à collier, à dos blanc, à tête rouge, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards colverts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autres canards barboteurs (p. ex., canards chipeaux, canards pilets, sarcelles, etc.)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Oies	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%	l			100%	

Q13

À quel point est-il important pour vous de chasser les animaux suivants dans la voie migratoire de l'Atlantique? *Choisissez une réponse pour chaque catégorie*.

	Pas du tout important	Légèrement important	Moyennement important	Très important	Extrêmement important
Canards plongeurs	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards de mer	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards colverts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards branchus	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards noirs	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autres canards	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Bernaches du Canada	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Oies des neiges	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Bernaches cravants	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%	0	►		100%	
4					

À quel point est-il important pour vous de chasser les animaux suivants dans la voie migratoire du Pacifique? Choisissez une réponse pour chaque catégorie.

	Pas du tout important	Légèrement important	Moyennement important	Très important	Extrêmement important
Canards plongeurs (fuligules à collier, à dos blanc, à tête rouge, etc.)	\odot	\bigcirc	\odot	\odot	\odot
Canards de mer (p. ex., macreuses, eiders, hareldes, etc.)	\bigcirc	\bigcirc	\odot	\odot	\odot
Canards colverts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Canards pilets	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autres canards barboteurs (p. ex., canards chipeaux, canards pilets, sarcelles, etc.)	\bigcirc	\bigcirc	\bigcirc	\odot	\bigcirc
Oies	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%	6			100%	
0%	0			100%	

Q14

Veuillez indiquer l'ampleur des problèmes qui suivent dans la province ou le territoire où vous chassez le plus la sauvagine. *Choisissez une réponse pour chacun*.

	Pas problématique	Légèrement problématique	Modérément problématique	Très problématique	Extrêmement problématique
Encombrement dans les sites de chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Pression exercée par la chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Interférence d'autres chasseurs de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Conflits avec d'autres chasseurs de la sauvagine aux endroits où je chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Manque d'endroits publics pour la chasse à la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Dans la province ou le territoire où vous chassez le canard le plus souvent, quel est votre niveau d'insatisfaction ou de satisfaction à l'égard de ce qui suit? *Choisissez une réponse pour chacun*.

	Très in <i>s</i> atisfait	Plutôt insatisfait	Neutre	Plutôt satisfait	Très satisfait
Le nombre de canards que vous voyez au cours de la saison	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Le nombre de canards que vous prenez au cours de la saison	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Le nombre de jours de la saison du canard	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Le nombre de canards imposé par le maximum de prises par jour	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Le nombre de canards habituellement présents pendant la saison de la chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
La qualité de l'habitat où vous chassez	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Votre expérience générale de chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		

Q16a
Quel est le plus petit nombre de canards que vous devez prendre en une journée pour vous sentir satisfait de votre chasse?
Q16b
Quel est le plus petit maximum de prises par jour que vous accepteriez avant de décider de ne plus aller à la chasse au canard?
Q16c
Quel est le nombre minimal de jours pendant une saison de chasse à la sauvagine que vous accepteriez avant de décider de ne plus chasser le canard?
0%

CHOIX DE CHASSE À LA SAUVAGINE

Les expériences en matière de chasse à la sauvagine peuvent varier selon différentes régions et situations. Vous pourriez chasser très près de votre domicile, ou vous rendre à quelques heures de distance pour chasser. Vous pourriez chasser gratuitement sur des terres publiques ou payer des frais saisonniers pour chasser sur des terres privées. Nous aimerions savoir quelles expériences et conditions influencent votre décision de chasser au cours d'un déplacement en particulier. Sur les peu prochaines pages, nous présentons 10 différentes comparaisons hypothétiques d'expériences de chasse à la sauvagine que vous pourriez choisir de vivre. Ces expériences varient en fonction de cinq conditions :

1) Prises : Le nombre probable de sauvagines que vous prendrez en une journée;

2) Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser;

3) Durée du voyage : La durée d'un déplacement, aller seulement, afin d'aller chasser;

4) **Quantité de sauvagines :** Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir;

5) **Possibilité d'interférence ou de concurrence :** Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.

Certains de ces scénarios peuvent vous sembler peu probables, ou aucune option ne correspond aux endroits où vous chassez à l'heure actuelle, mais nous souhaitons quand même comprendre quelles sont les expériences de chasse décrites que vous choisiriez. Vos opinions au sujet de ces comparaisons aideront les gestionnaires à mieux comprendre les préférences en matière de chasse à la sauvagine.

Pour chaque scénario, sélectionnez le choix que vous feriez s'ils constituaient les seules options de chasse, en supposant que toutes les autres conditions sont les mêmes.



Indiquez votre choix en cliquant sur l'un des boutons ci-après :

Option 1	Option 2	N'IRAIS PAS
Un oiseau	3 oiseaux	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Accès facile nécessitant peu d'effort	Accès modérément facile nécessitant un peu d'effort	choix.
3 heures	30 minutes	
50 oiseaux	1 000 oiseaux ou plus	
Grande concurrence d'autres chasseurs	Concurrence modérée d'autres chasseurs	
\bigcirc	\bigcirc	\bigcirc
		100%
	Un oiseau Accès facile nécessitant peu d'effort 3 heures 50 oiseaux Grande concurrence	Un oiseau 3 oiseaux Accès facile nécessitant peu d'effort Accès modérément facile nécessitant un peu d'effort 3 heures 30 minutes 50 oiseaux 1 000 oiseaux ou plus Grande concurrence d'autres chasseurs Concurrence modérée d'autres chasseurs

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	3 oiseaux	6 oiseaux	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès difficile nécessitant beaucoup d'effort	Accès facile nécessitant peu d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	4 heures	4 heures	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	250 oiseaux	25 oiseaux ou moins	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Aucune concurrence	Peu de concurrence d'autres chasseurs	
Choisissez une option	0	\bigcirc	0
0%			100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

6 oiseaux Accès difficile nécessitant beaucoup d'effort	3 oiseaux Accès modérément facile	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls choix.
needs annene needsbreane	ricees moderenteric reene	choix.
	nécessitant un peu d'effort	
2 heures	1 heure	
500 oiseaux	500 oiseaux	
Grande concurrence d'autres chasseurs	Peu de concurrence d'autres chasseurs	
\bigcirc	\bigcirc	\bigcirc
		100%
	Grande concurrence	Grande concurrence d'autres chasseurs d'autres chasseurs

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	Un oiseau	Un oiseau	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès facile nécessitant peu d'effort	Accès modérément facile nécessitant un peu d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	3 heures	2 heures	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	250 oiseaux	25 oiseaux ou moins	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Concurrence modérée d'autres chasseurs	Aucune concurrence	
Choisissez une option	\bigcirc	\bigcirc	0
0%			100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	Un oiseau	6 oiseaux	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès difficile nécessitant beaucoup d'effort	Accès difficile nécessitant beaucoup d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	30 minutes	1 heure	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	25 oiseaux ou moins	50 oiseaux	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Peu de concurrence d'autres chasseurs	Grande concurrence d'autres chasseurs	
Choisissez une option	\bigcirc	\bigcirc	\bigcirc
0%	►		100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	6 oiseaux	3 oiseaux	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès modérément facile nécessitant un peu d'effort	Accès facile nécessitant peu d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	1 heure	2 heures	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	1 000 oiseaux ou plus	50 oiseaux	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Concurrence modérée d'autres chasseurs	Aucune concurrence	
Choisissez une option	0	\bigcirc	0
0%			100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	6 oiseaux	Un oiseau	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès facile nécessitant peu d'effort	Accès difficile nécessitant beaucoup d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	30 minutes	3 heures	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	500 oiseaux	1 000 oiseaux ou plus	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Peu de concurrence d'autres chasseurs	Grande concurrence d'autres chasseurs	
Choisissez une option	\bigcirc	\bigcirc	\bigcirc
0%	►		100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

3 oiseaux Accès modérément facile nécessitant un peu d'effort 4 heures	6 oiseaux Accès modérément facile nécessitant un peu d'effort	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls choix.
nécessitant un peu d'effort	nécessitant un peu	choix.
4 heures	denort	
- neares	3 heures	
1 000 oiseaux ou plus	250 oiseaux	
Grande concurrence d'autres chasseurs	Concurrence modérée d'autres chasseurs	
0	\bigcirc	0
		100%
	Grande concurrence	Grande concurrence d'autres chasseurs Concurrence modérée d'autres chasseurs

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	3 oiseaux	6 oiseaux	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès facile nécessitant peu d'effort	Accès difficile nécessitant beaucoup d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	1 heure	4 heures	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	250 oiseaux	25 oiseaux ou moins	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Concurrence modérée d'autres chasseurs	Aucune concurrence	
Choisissez une option	\bigcirc	\bigcirc	\bigcirc
0%			100%

Indiquez votre choix en cliquant sur l'un des boutons ci-après :

	Option 1	Option 2	N'IRAIS PAS
Prises : Le nombre probable de sauvagines que vous prendrez en une journée.	3 oiseaux	Un oiseau	AUCUNE : Je n'irais pas si ces scénarios constituaient mes seuls
Effort d'accès : Facilité ou difficulté d'entrée, de sortie et de circulation dans une région afin d'y chasser.	Accès facile nécessitant peu d'effort	Accès difficile nécessitant beaucoup d'effort	choix.
Durée du voyage : La durée d'un déplacement aller seulement afin d'aller chasser.	2 heures	30 minutes	
Quantité de sauvagines : Le nombre de canards ou d'oies que vous voyez en une journée lorsque vous chassez, même s'ils ne sont pas à portée de tir.	25 oiseaux ou moins	500 oiseaux	
Possibilité d'interférence ou de concurrence : Concurrence d'autres chasseurs qui peuvent interférer avec votre chasse d'une certaine façon comme en vous donnant une impression d'encombrement ou de concurrence pour des endroits de chasse ou des oiseaux.	Concurrence modérée d'autres chasseurs	Aucune concurrence	
Choisissez une option	0	\bigcirc	0
0%			100%
0.0			

Q18a

Quelle priorité est-ce que les organismes provinciaux ou territoriaux et fédéraux devraient accorder à ce qui suit lorsqu'ils établissent les règlements de la chasse annuelle à la sauvagine? *Choisissez une réponse pour chacun*.

	Très bas	Faible	Modéré	Élevé	Très élevé
Établir les plus grands maximums de prises possibles	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Établir la saison la plus longue possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Établir les plus grandes populations de canards possibles	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Éviter d'établir des durées de saisons différentes pour différentes espèces de canards	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Établir des règlements les plus simples possible	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Réduire le nombre de maximums de prises spécifiques aux espèces (cà-d, des maximums de prises qui s'appliquent à des espèces précises plutôt qu'un maximum de prises pour l'ensemble des canards)	\bigcirc	\odot	\bigcirc	\bigcirc	\bigcirc
Établir le plus grand nombre de maximums de prises possibles de canards colverts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		

Q18b

Parmi toutes les options énumérées ci-après, veuillez noter vos trois préférences pour indiquer vos	
principales priorités. Utilisez les chiffres 1, 2 et 3, le chiffre 1 indiquant votre première priorité, 2, votre	3
deuxième priorité, et 3, votre troisième priorité. N'utilisez chaque nombre qu'une seule fois.	

Établir les plus grands maximums de prises possibles
Établir la saison la plus longue possible
Établir les plus grandes populations de canards possibles
Éviter d'établir des durées de saisons différentes pour différentes espèces de canards
Établir des règlements les plus simples possible
Réduire le nombre de maximums de prises spécifiques aux espèces (cà-d, des maximums de prises qui s'appliquent à des espèces précises plutôt qu'un maximum de prises pour l'ensemble des canards)
Établir le plus grand nombre de maximums de prises possibles de canards colverts
0%

Les maximums de prises de canards limitent le nombre de canards que vous pouvez prendre chaque jour. Pour certaines espèces de canards, le maximum de prises par jour peut différer du maximum de prises de canards en général. Ces maximums de prises sont appelés des maximums de prises « propres à une espèce ».

Q19

Dans les provinces ou territoires où vous chassez, les règles et règlements à l'égard des maximums de prises propres à une espèce sont-ils difficiles à comprendre?

0	0.1
	OUL

Non

Q20

Dans les provinces ou les territoires où vous chassez, est-ce que les maximums de prises actuelles, propres à une espèce, sont difficiles à respecter sur le terrain?

	Ou	i
~		

Non

Q21

Veuillez indiquer votre scénario préféré en matière de maximums de prises par **espèces de canards qui** comportent habituellement des maximums de prises plus basses.

Maximiser les occasions de prises en maintenant les maximums de prises individuelles propres à une espèce.

Créer des règles plus simples en établissant des maximums de prises générales pour une combinaison de certaines espèces (p. ex., un maximum de prises pour les canards plongeurs).

0%	100%

Nous souhaitons connaître dans quelle mesure la chasse à la sauvagine est importante pour vous. Veuillez indiquer dans quelle mesure vous êtes en désaccord ou en accord avec les énoncés suivants au sujet de votre participation personnelle à la chasse à la sauvagine. (*Choisissez une réponse pour chacun*.)

	Tout à fait en désaccord	En désaccord	Neutre	D'accord	Tout à fait d'accord
Si je ne pouvais pas m'adonner à la chasse à la sauvagine, je ne suis pas certain(e) de ce que je ferais à la place.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Une grande partie de ma vie s'articule autour de la chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
La chasse à la sauvagine occupe un rôle central dans ma vie.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Il est important de pouvoir profiter de l'environnement naturel par l'intermédiaire de la chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Se retrouver en nature est une composante importante de la chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Se rendre à mon maximum de prises est important pour moi.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Je considère important de développer mes compétences et mes habiletés en matière de chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Il est important pour moi de mettre mes compétences en chasse à la sauvagine au défi.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
La plupart de mes amis sont liés d'une façon ou d'une autre à la chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
La vue et les sons de la nature sont importants à la chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
La chasse à la sauvagine est une des activités les plus agréables que j'exerce.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Il est important pour moi d'utiliser de nouvelles techniques et technologies et de nouveaux équipements pour améliorer ma chasse à la sauvagine.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		

-			
Q23a			
Au cours de l jamais été à	a saison dernière, avez la chasse à la sauvagir	z-vous amené une personne a ne auparavant?	à la chasse à la sauvagine qui n'avait
🔘 Oui			
Non			
	0%		100%

Q23b				
Dans l'affirmative, qui était cette personne? (Choisir tous ceux qui s'appliquent.)				
Mon (mes) enfant(s)				
Un (des) enfant(s) de ma parenté				
D'autres enfants				
Adulte de ma famille proche (cà-d., frère ou sœur)				
Adulte de ma famille élargie (cà-d., cousin(e) ou oncle (tante)				
Ami(e) adulte				
Collègue				
Autre (veuillez préciser) [Précision du répondant]				
0%				
0%				

Une personne peut se percevoir de nombreuses façons. Veuillez indiquer la mesure dans laquelle vous vous identifiez comme un(une)... (indiquez une réponse pour chaque choix.)

	Pas du tout	Un peu	Moyennement	Beaucoup	Énormément
Ornithologue	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Chasseur de canard	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Chasseur d'oie	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autre type de chasseur	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Conservationniste	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Nous souhaitons connaître votre « communauté personnelle », et si vous connaissez des personnes exerçant différentes activités, et des personnes liées à certains types d'organismes. Au sein de votre parenté, de vos amis proches ou de vos connaissances, y a-t-il des personnes qui participent aux activités suivantes, occupent les postes suivants ou appartiennent aux organismes suivants? De même, vous classeriez-vous dans un ou l'autre des domaines suivants? (<u>Choisissez toutes les réponses qui s'appliquent pour chaque rangée, ou laissez la rangée vide pour « personne »</u>.)

	Connaissance	Ami proche	Parent	Moi-même	
Pêcheur					
Ornithologue					
Agriculteur/éleveur					
Gestionnaire ou employé d'un parc national					
Éducateur en plein air					
Gestionnaire ou employé d'un parc provincial, territorial ou d'État					
Chasseur de sauvagine					
Autre type de chasseur (p. ex., grand ou petit gibier)					
Gestionnaire ou employé d'un organisme de la faune provincial, territorial ou d'État					
Gestionnaire ou employé d'un organisme de la faune fédéral					
Artiste faunique (amateur ou professionnel)					
Biologiste de la faune					
Photographe faunique (amateur ou professionnel)					
Q25 se poursuit sur l'écran suivant.					
0%			100%		

Q25 (suite)

Nous souhaitons connaître votre « communauté personnelle », et si vous connaissez des personnes exerçant différentes activités, et des personnes liées à certains types d'organismes. Au sein de votre parenté, de vos amis proches ou de vos connaissances, y a-t-il des personnes qui participent aux activités suivantes, occupent les postes suivants ou appartiennent aux organismes suivants? Vous classeriez-vous dans un ou l'autre des domaines suivants? (<u>Choisissez toutes les réponses qui s'appliquent pour chaque rangée, ou laissez la rangée vide pour « personne »</u>.)

	Connaissance	Ami proche	Parent	Moi-même
Membre d'un organisme de pêche ou de conservation (p. ex., Truites Illimitées, Izaak Walton)				
Membre de groupes d'observation d'oiseaux et d'ornithologie (p. ex., Études d'oiseaux Canada)				
Membre de groupes de conservation des oiseaux (p. ex., la Société nationale Audubon, y compris les chapitres locaux, American Bird Conservancy, Cornell Lab, observatoires d'oiseaux)				
Membre de sociétés et de groupes ornithologiques (p. ex., Western field ornithologist, sociétés ornithologiques nationales ou régionales)				
Membre de Canards Illimités				
Membre de Sauvagine de Delta				
Membre d'une association de la sauvagine provinciale ou territoriale ou régionale				
Membre d'organismes de chasse ou de conservation non axés sur la sauvagine (p. ex., fédérations de la faune provinciales ou territoriales)				
Membre d'autres organismes de conservation locaux ou régionaux				
Membre d'organismes naturalistes locaux				
Membre d'autres organismes de conservation nationaux ou internationaux (p. ex., The Nature Conservancy, Sierra Club, Fonds mondial pour la nature)				
0%			100%	

Veuillez indiquer votre niveau de participation dans les organismes qui suivent au cours des 12 derniers mois, même si vous n'en êtes pas membre. (*Choisissez une réponse pour chacun*.)

	Pas de participation	Légère participation	Participation modérée	Grande participation
Canards Illimités	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fondation Sauvagine de Delta	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Membre d'une association de la sauvagine provinciale ou territoriale ou régionale	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%	

Q27

Dans quelle mesure faites-vous confiance aux organismes qui suivent afin qu'ils s'assurent de votre intérêt supérieur à titre de chasseur de sauvagine? (*Choisissez une réponse pour chaque organisme*.)

	Aucunement confiance	Légère confiance	Confiance modérée	Grande confiance	Confiance totale
Organismes provinciaux ou territoriaux de conservation de la faune	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Membre d'organismes de la faune et de gestion des terres (p. ex., Service canadien de la faune, Ressources naturelles Canada)	0	0	0	0	0
Représentants élus	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Organismes de chasse et de conservation de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Organismes d'ornithologie et de conservation des oiseaux	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Autres organismes de conservation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Chercheurs ou scientifiques universitaires	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

Veuillez indiquer la somme de vos dons personnels aux causes qui suivent au cours des 12 derniers mois. (*Choisissez un montant pour chacune*.)

		0	0	\bigcirc	0
0	0	0	0	\bigcirc	\bigcirc
\bigcirc					
		\cup	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%					
	►			100%	100%

En vertu de la règlementation sur les oiseaux migratoires, les chasseurs doivent se procurer un permis de chasse aux oiseaux migrateurs (PCOM) et un timbre sur la conservation des habitats fauniques au Canada (CHFC). Chacun coûte 8,50 \$, pour un total combiné de 17,00 \$. Les revenus tirés du timbre sont remis à Habitat faunique Canada au soutien de la conservation des habitats. Les revenus tirés des permis offrent un soutien partiel à la gestion des permis et au suivi des populations de sauvagine. Le prix du timbre et du permis n'a pas augmenté depuis 1991 et 1998, respectivement.

Consentiriez-vous toujours à acheter un permis de chasse aux oiseaux migrateurs et un timbre sur la conservation des habitats fauniques du Canada si :

	Oui	Non
le prix du timbre augmentait de 4 \$ pour de nouveaux frais combinés de 21 \$?	\bigcirc	\bigcirc
le prix du timbre augmentait de 4 \$ et le prix du permis augmentait de 4 \$ pour de nouveaux frais combinés de 25 \$?	\odot	0
… le prix du timbre augmentait de 9 \$ et le prix du permis augmentait de 9 \$ pour de nouveaux frais combinés de 35 \$?	\odot	\odot
… le prix du timbre et du permis et les frais combinés demeuraient les mêmes (cà-d., pas d'augmentation des frais)?	\odot	0
0%		100%

Q30

Au cours des 12 derniers mois, avez-vous personnellement déboursé de l'argent à l'égard de la gestion de milieux humides sur des terres privées?

🔘 Non

\bigcirc Oui Dans l'affirmative, combien avez-vous dépensé? (Veuillez arrondir au 500 $\$ le plus près si plus de 1 000 $\$.)	
Oui, mais je préfère ne pas dire combien.	
0%	100%

Veuillez indiquer votre niveau de participation dans les activités **LIÉES À LA CONSERVATION DES MILIEUX HUMIDES OU DE LA SAUVAGINE** qui suivent **AU COURS DES 12 DERNIERS MOIS.** (*Ne sélectionnez qu'une seule réponse pour chaque catégorie*.)

	Jamais	Rarement	Quelques fois	Souvent	Très souvent
J'ai travaillé sur des projets d'amélioration des terres liés à la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J'ai assisté à des rencontres au sujet de la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J'ai bénévolement consacré du temps et des efforts à la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J'ai communiqué avec des représentants élus ou des organismes gouvernementaux au sujet de la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J'ai voté pour des candidats ou à des scrutins au soutien de la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J'ai plaidé pour des mesures politiques aux fins de la conservation des milieux humides ou de la sauvagine	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%		

Au cours des 12 derniers mois, avez-vous participé aux activités de plein air qui suivent? (Veuillez cocher « Oui » ou « Non » pour chacune.) Oui Non Passer du temps dans la nature à l'extérieur du domicile (p. ex., pique-niques, relaxation \bigcirc \bigcirc en nature, camping) Observation de la faune (p. ex., observation d'animaux, ornithologie, nourrir des oiseaux, \bigcirc photographie de la faune) Apprentissage au sujet de la nature (p. ex., participation à des festivals ou des conférences, visites de centres de la nature) \bigcirc \bigcirc Activités en nature à domicile (p. ex., jardinage et aménagement paysager) Pêche \bigcirc \bigcirc Chasse d'autres oiseaux migratoires (p. ex., tourterelles, bécasses, râles, etc.) Chasse d'autres gibiers (p. ex., gélinottes/tétras, faisans, dindons, etc.) \bigcirc \bigcirc Chasse d'autres animaux (p ex., chevreuils, wapitis, lièvres, etc.) \bigcirc Autre (veuillez préciser si la réponse est « Oui ») 100% 0% 🗖

Q33

Au cours des 12 derniers mois, à quelles activités suivantes liées à des oiseaux sauvages avez-vous participé? (*Veuillez cocher « Oui » ou « Non » pour chacune.*)

	Oui	Non
Observer des oiseaux à mon domicile	\bigcirc	\bigcirc
Nourrir des oiseaux à mon domicile	\bigcirc	\bigcirc
Observer des oiseaux à l'extérieur de mon domicile	\bigcirc	\bigcirc
Photographier ou filmer des oiseaux	\bigcirc	\bigcirc
Recenser ou surveiller des oiseaux (p. ex., recensement des oiseaux de Noël ou dans la cour)	\bigcirc	\bigcirc
Faire le suivi des oiseaux que vous voyez sur une liste, en ligne ou sur papier	\bigcirc	\bigcirc
Installer ou entretenir des nichoirs pour oiseaux	\bigcirc	\bigcirc
0%	100%	

- -

Vos Opinions au Sujet des Milieux Humides

Dans cette section, nous souhaitons savoir ce que vous pensez au sujet des milieux humides.

Les milieux humides comprennent les marais, les marécages, des étangs d'eau peu profonde (moins de 1,8 mètre ou 6 pieds de profondeur), et les zones peu profondes des rives de lacs ou des bords de mer. Certains milieux humides ne le sont qu'une partie de l'année, alors que d'autres le sont pendant toute l'année. Ils peuvent se trouver dans des villes ou des régions rurales et peuvent avoir la taille d'un terrain de basketball ou couvrir de nombreux kilomètres carrés.



Les milieux humides remplissent un grand nombre de fonctions qui sont avantageuses pour tous. Lorsque des milieux humides sont perdus ou se dégradent, ces avantages peuvent être grandement réduits ou disparaître. Voici une liste d'avantages qui sont menacés en raison de la perte de milieux humides. Dans quelle mesure seriez-vous préoccupé(e) si les avantages qui suivent étaient réduits au sein de votre collectivité en raison de la perte de milieux humides? (*Ne sélectionnez qu'une seule réponse pour chaque avantage*.)

Avantage	Pas du tout préoccupé(e)	Légèrement préoccupé(e)	Plutôt préoccupé(e)	Très préoccupé(e)
A. Protection contre les inondations	\bigcirc	\bigcirc	\bigcirc	\bigcirc
B. Protection contre l'érosion	\bigcirc	\bigcirc	\bigcirc	\bigcirc
C. Observation de la faune et ornithologie	\bigcirc	\bigcirc	\bigcirc	\bigcirc
D. Occasions de chasse	\bigcirc	\bigcirc	\bigcirc	\bigcirc
E. Stockage de gaz à effet de serre, comme le carbone	\bigcirc	\bigcirc	\bigcirc	\bigcirc
F. Eau propre	\bigcirc	\bigcirc	\bigcirc	\bigcirc
G. Air sain	\bigcirc	\bigcirc	\bigcirc	\bigcirc
H. Fournir un habitat pour la faune	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Fournir un habitat pour des animaux comme les papillons et les abeilles qui pollinisent les plantes et les récoltes 	\bigcirc	\bigcirc	\bigcirc	\bigcirc
J. Endroits pittoresques pour l'inspiration ou le renouvellement spirituel	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%			100%	

Dans votre collectivité, quelle réduction importante des avantages énumérés sur la page précédente vous préoccuperait-elle le **plus**? Veuillez choisir l'avantage dont la perte vous préoccupe le **plus**.

Dans votre collectivité, quelle réduction importante des avantages énumérés sur la page précédente vous préoccuperait-elle le **moins**? Veuillez choisir l'avantage dont la perte vous préoccupe le **moins**. *Assurez-vous de choisir un avantage différent de celui choisi plus haut*.

		•
0%	-	100%

Au Propos de Vous
Pour nous aider à comparer vos réponses à celles d'autres personnes, nous avons quelques questions à votre sujet. Soyez assuré que toutes vos réponses resteront confidentielles.
Q36
En quelle année êtes-vous né(e)? (Entrez les deux derniers chiffres)
Année 19 :
Q37
Êtes-vous ?
Un homme
Une femme
0%

•

Q38	
Quel est le plu	s haut niveau de scolarité que vous avez atteint? Choisissez une seule réponse.
Q39	
environnement	profession liée à la nature (comme l'agriculture, les pêches, la foresterie, les sciences ales ou la conservation) constitue la principale source de votre revenu PERSONNEL ? seule réponse.
🔘 Oui	
🔘 Non	
	0% 100%

Q40
Êtes-vous propriétaire de terrains dans une région rurale (à l'extérieur d'une zone urbaine ou de banlieue)?
Oui Dans l'affirmative, quel est le nombre total d'acres dont vous êtes propriétaire?
Non
0%

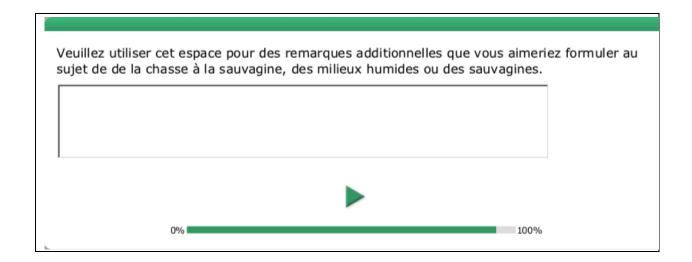
Laquelle de ces catégories décrit le mieux l'endroit où vous vivez maintenant et où vous avez vécu pendant la plus grande partie de votre enfance (c'est-à-dire jusqu'à l'âge de 16 ans)? Veuillez n'indiquer qu'un choix dans chaque rangée.

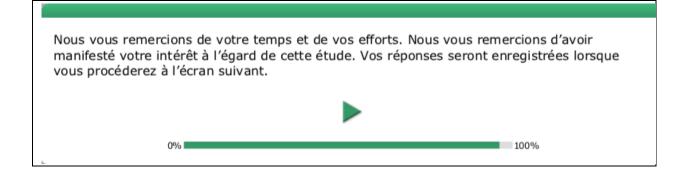
	Grand centre urbain (population de 500 000 habitants ou plus)	Centre urbain moyen (population de 50 000 à 499 999 habitants)	Petite ville (population de 10 000 à 49 999 habitants)	Petit village (population de 2 000 à 9 999 habitants)	Région rurale (population de moins de 2 000 habitants)
a) Où vous vivez maintenant	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
b) Où vous avez grandi	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
0%				100%	

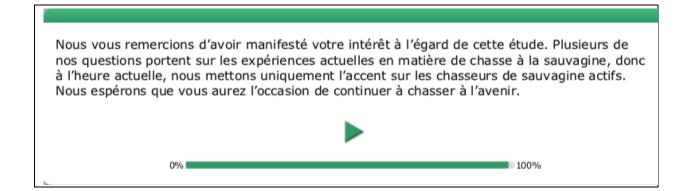
Q42

Veuillez indiquer à quelle catégorie correspond votre revenu total **PERSONNEL** pour la dernière année. Choisissez une seule réponse.

×	
0%	100%







r.	
	Note:
	When respondents take the survey in regular mode this page will not be displayed. Respondents will be redirected to the link below:
	http://nawmp.wetlandnetwork.ca/
	0%

Appendix B

North American Waterfowl Hunting Non-Response Questionnaire

National Survey of Waterfowl Hunters	
This project was undertaken with the financial support of:	
Canada Canada Canada Brunswick Contario	
1. Which of the following statements best describes your pursuits in waterfowl hunting? (Check one.) I hunt only ducks I hunt only geese I hunt ducks and geese I hunt neither ducks nor geese	
2. How old were you when you started waterfowl hunting? Age (Write in number.)	$\Big)$
 3. How many of the last 5 years have you hunted WATERFOWL? (Circle one number below or check the box for "0".) 1 2 3 4 5 Years ○ 0 (None) → GO TO QUESTION 17 	ie
4. Over the last five years, about how many days did you usually hunt WATERFOWL in a year?	
(Check one)	
 ☐ 6 to 10 days ☐ 21 to 30 days 	
 5. Under what circumstances do you typically go hunting? (Check one.) When I plan the hunt myself When someone else invites me 	
Both when I plan the hunt or someone else invites me	
6. In which province/state have you hunted ducks most over the last 5 years?	
	ノ
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 How important is it to you to hunt the following? (Circle one number for each.) 	Not at all	hortant	uightiy Importan	Moderater	Very 1.	Extremely Important
Diving ducks (scaup/bluebills, canvasback, redheads, etc.)	1		2	3	4	5
Mallards	1		2	3	4	5
Pintails	1		2	3	4	5
Other dabbling ducks (teal, wood ducks, gadwall, etc.)	1		2	3	4	5
Geese	1		2	3	4	5
B. Please indicate how much of a problem the following are in the province where you hunt ducks most. (Circle one number for each OR check the 'Don't Know' box.)	Not at a	Slight D	Moderate Prohierate	Severa L	Prok. Seven	Don't Know
Crowding at hunting areas	1	2	3	4	5	\bigcirc
Hunting pressure	1	2	3	4	5	Ο
Interference from other hunters	1	2	3	4	5	Ō
Conflict with other hunters in places I hunt	1	2	3	4	5	Ο
Lack of public places for waterfowl hunting	1	2	3	4	5	0
In the province where you hunt ducks most often, how satisfied or dissatisfied are you with each of the following? (Circle one number for each.)		ery c.	Somewhar	Neutro at	Somewhar Disc what	Very Dissation
The number of ducks you see during the season.		1	2 2	3	ッ な 4	5
Number of ducks you harvest during the season.		1	2	3	4	5
The number of days in the duck season.		1	2	3	4	5
The number of ducks in the daily limit.		1	2	3	4	5
Your overall hunting experience.		1	2	3	4	5
The number of ducks typically present during the hunting season.		1	2	3	4	5
Quality of habitat where you hunt.		1	2	3	4	5
	y to	feel	satis	fied	with	the hur

(Circle one number below or check the box.)					
1 2 3 4 5 6 DUCKS or ∐ I'll h	hunt with a	any size	daily ba	ag limit	
12. What is the minimum number of days in a waterfowl hunting sea would no longer hunt ducks? (Circle one number below or chec 10 15 20 25 30 35 40 45 50 or I'll hunt with any season length	k the box		accep Da		re yo
13. Do you primarily take day trips or overnight/multi-day trips when		torfowl	hunt?	Chor	ck or
Primarily day trips Primarily overnight or multi-day trips				equally	
14. Please indicate where you do most of your waterfowl hunting? (Check or	ne.)			
 Public land or waters Private property owned by you, your family or in partnership with someon Private property owned by a friend or another landowner who gives you p Private property you lease or pay to hunt on 		to hunt	for free	9	
 15. How much priority should provincial/territorial and federal agence give the following when setting annual duck hunting regulations 		⁴ 0h		state	Hiat
 15. How much priority should provincial/territorial and federal agence give the following when setting annual duck hunting regulations (Circle one number for each.) 				high	
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. 		1	2 3	3 4	5
 15. How much priority should provincial/territorial and federal agence give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. 		1 1	2 3 2 3	3 4 3 4	5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. 		1 1 1	2 3 2 3 2 3	3 4 3 4 3 4	5 5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. Maintaining unique hunting traditions (<i>e.g.</i>, diving duck hunting). 		1 1 1	2 3 2 3 2 3 2 3	3 4 3 4 3 4 3 4 3 4	5 5 5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. 		1 1 1	2 3 2 3 2 3	3 4 3 4 3 4 3 4 3 4 3 4	5 5 5
 15. How much priority should provincial/territorial and federal agence give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. Maintaining unique hunting traditions (<i>e.g.</i>, diving duck hunting). Reducing the number of species-specific bag limits. 	s? ns to you ing	1 1 1 1 1 1	2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	3 4 3 4 3 4 3 4 3 4 3 4 3 4	5 5 5 5 5 5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. Maintaining unique hunting traditions (<i>e.g.</i>, diving duck hunting). Reducing the number of species-specific bag limits. Having as large of mallard drake bag limits as possible. 16. We are interested in knowing how much waterfowl hunting mean Please indicate how much you disagree or agree with the followi statements about your involvement in waterfowl hunting. (Circle 	s? ns to you ing	1 1 1 1 1	2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	4 4 4 4 4 4 4 4 4 4 4 4 4 4	5 5 5 5 5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Having the longest seasons possible. Avoiding different season lengths for different duck species. Maintaining unique hunting traditions (<i>e.g.</i>, diving duck hunting). Reducing the number of species-specific bag limits. Having as large of mallard drake bag limits as possible. 16. We are interested in knowing how much waterfowl hunting mean Please indicate how much you disagree or agree with the followi statements about your involvement in waterfowl hunting. (Circle number for each.) 	s? ns to you ing	1 1 1 1 1	Disagree 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5 5 5 5 5 5 5 5 5 5 5
 15. How much priority should provincial/territorial and federal agend give the following when setting annual duck hunting regulations (Circle one number for each.) Having the largest bag limits possible. Avoiding different season lengths for different duck species. Maintaining unique hunting traditions (<i>e.g.</i>, diving duck hunting). Reducing the number of species-specific bag limits. Having as large of mallard drake bag limits as possible. 16. We are interested in knowing how much waterfowl hunting mean Please indicate how much you disagree or agree with the followi statements about your involvement in waterfowl hunting. (Circle number for each.) Waterfowl hunting is one of the most enjoyable activities I do. 	s? ns to you ing	1 1 1 1 1 1 1 1 1 1	2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 3 2 3 2 3	 4 4	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
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		Not	at All		Moderate	ely	C	Completely
Birdwate	cher		1 2	3	4	5	6	7
Duck H	unter		1 2	3	4	5	6	7
Goose I	Hunter		1 2	3	4	5	6	7
Other h	unter		1 2	3	4	5	6	7
Conserv	/ationist		1 2	3	4	5	6	7
~	0	. 0	-		0.	, C	-	
) Yes	O No	Spending time in na	ature away	from home (<i>e</i>	g., picnicking	, relaxing in r	nature, car	nping, hiking
) Yes	🔵 No	Viewing wildlife (e.g	g., wildlife v	watching, bird	watching, bird	feeding, wild	llife photog	graphy)
) Yes	🔵 No	Learning about natu	ure (<i>e.g</i> ., a	ttending festive	als or lectures	s, visiting a na	ature cente	er)
) Yes	🔵 No	Backyard/at-home	nature act	ivities (<i>e.g</i> ., ga	rdening, land	scaping)		
) Yes	🗌 No	Fishing						
) Yes	🗌 No	Hunting other migra	atory birds	(doves, woodd	ock, rail, <i>etc.</i>))		
) Yes	🔵 No	Hunting other game	e birds (gro	ouse, pheasant	s)			
) Yes	🔵 No	Hunting all other ga	me anima	ls (deer, elk, ra	bbit, <i>etc</i> .)			
) Yes	🔵 No	Watching birds at m	ny home					
) Yes	🔵 No	Feeding birds at my	home					
) Yes	🔵 No	Watching birds awa						
) Yes	O No	Photographing or fil	ming birds	3				
) Yes	🔵 No	Counting/monitoring	g birds (<i>e.g</i>	g. Christmas or	Backyard Bi	rd Count)		
	🔵 No	Recording the birds	you see c	on a list, online	or on paper			
) Yes	🗌 No		nina nest l	boxes for birds				

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19.	In what year were you born? 19	20. Are you 🔵 Male 🛛 Female
21.	What is the highest level of education that you have	completed? (Please check one.)
	O Some High School O Some University/College	Graduate degree
	High School University/College Degree	Other (specify):
22.	Do you own land in a rural area (outside of an urban	
	○ No ○ Yes → If YES how many acres do yo	ou own in total?ACRES
23.	Which of these categories best describes the place	where you live now? (Check one)
	 Large urban area (population of 500,000 or more) Medium urban area (population between 50,000 and 499 	000)
	Small city (population between 10,000 and 49,999)	,555)
	Small town (population between 2,000 and 9,999)	
	Rural area (population less than 2,000)	
24.	Please indicate which of the following categories ap 12 months? (Check one).	plies to your personal income for the last
	Less than \$24,999 \$75,000 - \$99,9	999 🔘 \$200,000 - \$249,999
		9,999 — \$250,000 - \$299,999
	\$50,000 - \$74,999 \$150,000 - \$199	9,999 🔘 \$300,000 or more
25.	Please let us know why you chose not to complete t	he survey online earlier? (Check all that app
	I didn't receive the invitation in the mail	I don't like to answer questions online
	 I don't have access to the internet I have internet access, but couldn't open the website 	 I don't hunt ducks or geese I didn't think the survey applied to me
	 I didn't have time to complete the study earlier 	

Étude nationale sur les chasseurs de sauvagine
Ce projet a été réalisé avec le soutien financier de : Canada Contraction Cont
1. Parmi les énoncés suivants, lequel décrit le mieux vos objectifs en matière de chasse à la sauvagine? (Cochez une seule réponse.) □ Je ne chasse que le canard □ Je ne chasse que l'oie □ Je chasse le canard et l'oie □ Je ne chasse ni le canard ni l'oie
 2. À quel âge avez-vous commencé à chasser la sauvagine? ans (inscrivez un chiffre) 3. Pendant combien d'années êtes-vous allé(e) à la chasse à la SAUVAGINE au cours des cinq dernières années? (Encerclez un des chiffres ci-après ou cochez la case qui indique « 0 ».) 1 2 3 4 5 année(s) 0 (Aucune) → PASSEZ À LA QUESTION 17
 4. Au cours des cinq dernières années, environ combien de jours consacrez-vous à la chasse à la SAUVAGINE par année? (Cochez une seule réponse.) 5 jours ou moins de 11 à 20 jours Plus de 30 jours de 6 à 10 jours de 21 à 30 jours
 5. Dans quelles circonstances allez-vous habituellement chasser? (Cochez une seule réponse.) Lorsque je planifie moi-même d'y aller Lorsque quelqu'un m'invite Lorsque je planifie moi-même d'y aller ou lorsque quelqu'un m'invite
6. Dans quelle province ou quel état avez-vous chassé le plus au cours des cinq dernières années?
Version: 2 mai 2017 Page 1 su

	int est-il importa (Cochez une ré				Pas im.	^{-u tout portant}	Important M.	important Tr:	Extrêmentant Important
Canards plonge	eurs (fuligules, fuli	gules à dos bla	anc, fuligules à têt	e rouge, <i>etc</i> .	.) 1	2		3 4	
Canards colver	rts				1	2	2	3 4	5
Canards pilets					1	2	2	3 4	- 5
Autres canards	barboteurs (sarce	elles, canards l	oranchus, canards	s chipeaux, <i>e</i>	etc.) 1	2	2	3 4	5
Oie					1	2	2	3 4	5
province/l'é réponse por	iquer l'ampleur tat où vous cha ur chaque énor t dans les sites de	assez le plus ncé.)			N Légèrement Drobié men	© Modérém Drohiérém	4 Assez	^{- Ulématique} 7 řès	
	ée par la chasse	0110000		1	2	3	4	5	0
	autres chasseurs			1	2	3	4	5	0
	'autres chasseurs	aux endroits o	ù ie chasse	1	2	3	4	5	0
	oits publics pour l		•	1	2	3	4	5	Ö
Manque d'endr					L	3	4	5	0
9. Dans la pro quel est vot	vince/l'État où t tre niveau de sa e pour chaque d	vous chasse	z le canard le p	lus souver			hent .		satistrement ^{res insati}
9. Dans la pro quel est vot une réponse	vince/l'État où tre niveau de sa e pour chaque e	vous chasse itisfaction à l énoncé.)	z le canard le p l'égard de ce qu	lus souver		Irès satist.	Relativenent Satisfair Satisfair	Neutre Relati	neatistait Très insati
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 9. Dans la proquel est vot une réponse Le nombre de p Le nombre de j Le nombre de j 	vince/l'État où t tre niveau de sa e pour chaque d canards que vous prises au cours de jours de la saison canards imposé pa	vous chasse ttisfaction à l énoncé.) voyez au cour e la saison. du canard. ar le maximum	z le canard le p l'égard de ce qu s de la saison.	lus souver ui suit? (Co		1 1 1 1 1 1 1	2 2 2 7 elativement	b b b b b c b c b c c c c c c c c c c	5 5 5 5
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plus aller à la chasse au canard? (Encerclez un chiffre ou cochez la cas	e.)				
1 2 3 4 5 6 CANARDS ou 🗍 Je chasserai quel que so	oit le ma	ximur	n de p	orises	s par
12. Quel est le nombre minimal de jours pendant une saison de chasse à la accepteriez avant de décider de ne plus chasser le canard? (Encerclez u					
10 15 20 25 30 35 40 45 50 55			jours		iu o
ou O Je chasserai quelle que soit la durée de la saisor			jouro		
13. Lorsque vous partez à la chasse à la sauvagine, effectuez-vous principa	alemen	t des	dép	lace	men
d'une journée ou des voyages de deux jours ou plus? (Cochez une seul	e répo	nse.)			
 Principalement des déplacements d'une journée Principalement des voyages de deux jours ou plus 	L'un ou près ég			eu	
déplacements d'une journée de deux jours ou plus	pies ei	Jaiem			
14. À quel endroit chassez-vous le plus la sauvagine? (Cochez une seule ré	ponse	.)			
Terres ou plans d'eau publics		-,			
 Propriété privée détenue par vous, votre famille ou en partenariat avec une autre 	personn	е			
Propriété privée détenue par un ami ou un autre propriétaire qui vous donne la pe			hass	er sa	ns fra
Propriété privée que vous louez ou à l'égard de laquelle vous payez des frais pou		-			
devraient-ils accorder à ce qui suit lorsqu'ils établissent les règlements	,	je .		ຍ	Ś
devraient-lis accorder à ce qui suit lorsqu'ils établissent les regiements de la chasse annuelle à la sauvagine? (Veuillez établir la priorité de chacun en cochant une case.)	Très r	Faible Faible	Modérá	Élevée	Très éle.
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de la chasse annuelle à la sauvagine? (Veuillez établir la priorité de chacun en cochant une case.)					
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17. Une personne peut se percevoir de nombreuses façons. Sur une échelle de « 1 » à « 7 », où « 1 » correspond à « Pas du tout » et « 7 » correspond à « Tout à fait », dans quelle mesure vous identifiez-vous à ce qui suit?

	Pas du to	out	N	lodéréme	nt	То	out à fait
Ornithologue	1	2	3	4	5	6	7
Chasseur de canard	1	2	3	4	5	6	7
Chasseur d'oie	1	2	3	4	5	6	7
Chasseur d'autre gibier	1	2	3	4	5	6	7
Conservationniste	1	2	3	4	5	6	7

18. Au cours des 12 derniers mois, avez-vous participé aux activités de plein air qui suivent? *Veuillez cocher « Oui » ou « Non » pour chacune.*

🗋 Oui	O Non	Passer du temps en plein air à l'extérieur du domicile (<i>p. ex.</i> , pique-niques, relaxation en nature, camping, randonnée)
🔵 Oui	🔵 Non	Observation de la faune (<i>p. ex.</i> , observation d'animaux, ornithologie, nourrir des oiseaux, photographie de la faune)
Oui	O Non	Apprentissage au sujet de la nature (<i>p. ex.</i> , participation à des festivals ou à des conférences, visites de centres de la nature)
🔵 Oui	🔵 Non	Activités en nature à domicile (p. ex., jardinage et aménagement paysager)
🗌 Oui	🗌 Non	Pêche
🔵 Oui	🔘 Non	Chasse d'autres oiseaux migratoires (tourterelles, bécasses, râles, etc.)
🗌 Oui	🗌 Non	Chasse d'autres gibiers (gélinottes/tétras, faisans, etc.)
🔵 Oui	🔘 Non	Chasse d'autres animaux (chevreuils, wapitis, lièvres, etc.)
🗌 Oui	🗌 Non	Observer des oiseaux à mon domicile
🔵 Oui	🗌 Non	Nourrir des oiseaux à mon domicile
🗌 Oui	🗌 Non	Observer des oiseaux à l'extérieur de mon domicile
🔵 Oui	O Non	Photographier ou filmer des oiseaux
🔵 Oui	O Non	Recenser ou surveiller des oiseaux (p. ex., recensement des oiseaux de Noël ou dans la cour)
🗌 Oui	🔘 Non	Faire le suivi des oiseaux que vous voyez sur une liste, en ligne ou sur papier
Oui	O Non	Installer ou entretenir des nichoirs pour oiseaux

Version: 2 mai 2017

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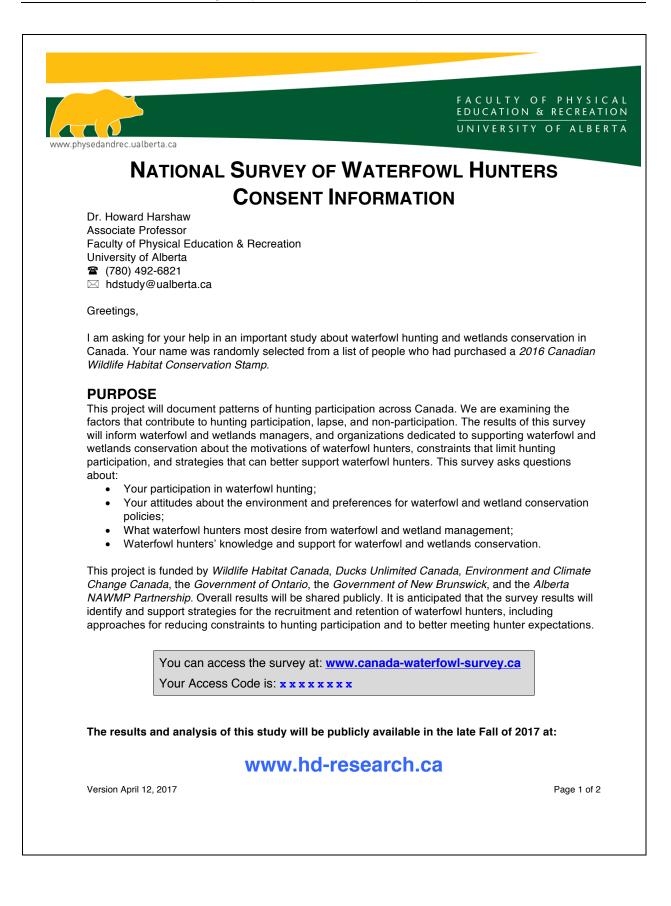
19.	En quelle année êtes-vous né(e)? 19	20. Êtes-vous? O Un homme O Une femm
21.	Quel est le plus haut niveau de scolarité que vo	ous avez atteint? (Cochez une réponse.)
	Quelques années d'études secondaires	Diplôme universitaire ou collégial
	Études secondaires	Diplôme d'études supérieures
	Quelques années d'études universitaires ou collégiales (pas de diplôme)	Autres:
22.	Êtes-vous propriétaire de terrains dans une rég de banlieue)?	gion rurale (à l'extérieur d'une zone urbaine ou
	○ Non ○ Oui → Dans l'affirmative, quel propriétaire?	est le nombre total d'acres dont vous êtes ACRES
23.	Laquelle de ces catégories décrit le mieux l'en	droit où vous vivez maintenant? (Cochez une rép
	Grand centre urbain (population de 500 000 habita	nts ou plus)
	Centre urbain moyen (population de 50 000 à 499	999 habitants)
	Petite ville (population de 10 000 à 49 999 habitant	is)
	Petit village (population de 2 000 à 9 999 habitants	, ,
	Région rurale (population de moins de 2 000 habita	ants)
24.	Veuillez indiquer à quelle catégorie correspond mois. (Cochez une réponse)	l votre revenu total personnel pour les 12 dernier
	Moins de 24 999 \$ de 75 000 \$	ià 99 999 \$ 🛛 de 200 000 \$ à 249 999 \$
		\$ à 149 999 \$ 🔘 de 250 000 \$ à 299 999 \$
	☐ de 50 000 \$ à 74 999 \$ ☐ de 150 000	\$ à 199 999 \$ 🗍 300 000 \$ ou plus
25.	Veuillez nous dire la raison pour laquelle vous plus tôt. (Cochez tous les choix qui s'applique	avez choisi de ne pas remplir le sondage en ligne nt.)
C) Je n'ai pas reçu l'invitation par courriel	Je n'aime pas répondre à des questions en ligne
C) Je n'ai pas accès à Internet	Je ne chasse pas le canard ou l'oie
C) J'ai accès à Internet, mais je n'ai pas été en mesure d'accéder au site Web	Je ne croyais pas que cette étude me concernait
) Je n'ai pas eu le temps de participer à l'étude plus tôt	

Appendix C

Respondent Contact Letters

WILDLIFE HABITAT	2039 Robertson Road, Suite 247, Ottawa, ON K2H 8R2
CANADA HABITAT FAUNIQUE	2039 chemin Robertson, bureau 247, Ottawa (ON) K2H 8R2 T: 613-722-2090 F: 613-722-3318 www.whc.org
	Celebrating Over 30 Years of Wildlife Habitat Conservation Célébrons plus de 30 ans de conservation des habitats fauniques
Dear Canadian	Hunter,
	ing this letter because you agreed to share your contact information with Wildlife Habitat) when you purchased your Migratory Game Bird Hunting (MGBH) Permit.
across Canada. allocated to WF Stamp funds ar Canada. One such proje	Irchase of your MGBH Permit, you contribute to waterfowl and waterfowl habitat conservation. The revenue generated from the Canadian Duck Stamp (\$8.50 from every Permit sold) is HC, a not-for-profit conservation organization. Through WHC's grant program, Canadian Duck re invested in habitat conservation projects and hunter education and recruitment projects across ext that was supported by Canadian Duck Stamp funds is a research study by Dr. Howard
<i>interactions wi</i> , study is part of understand the	stant Professor at the University of Alberta, titled, "Understanding the dynamics of people's ith waterfowl: Assessing hunters' preferences for waterfowl management in Canada." This 'a larger North American initiative to examine public interactions with waterfowl in order to dynamics of people's interactions with waterfowl.
	nd are expected to influence national (and international) policy and management strategies for
Further informa	ation on the study is enclosed.
research study.	courage you to consider completing and returning the enclosed survey for Dr. Harshaw's Please note that your participation is entirely voluntary and that your contact information has ed by WHC for the purposes of this study.
Best regards,	
Cameron Mack Executive Direc Wildlife Habita	ctor





STUDY PROCEDURES

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Thank you very much for helping with this important study.

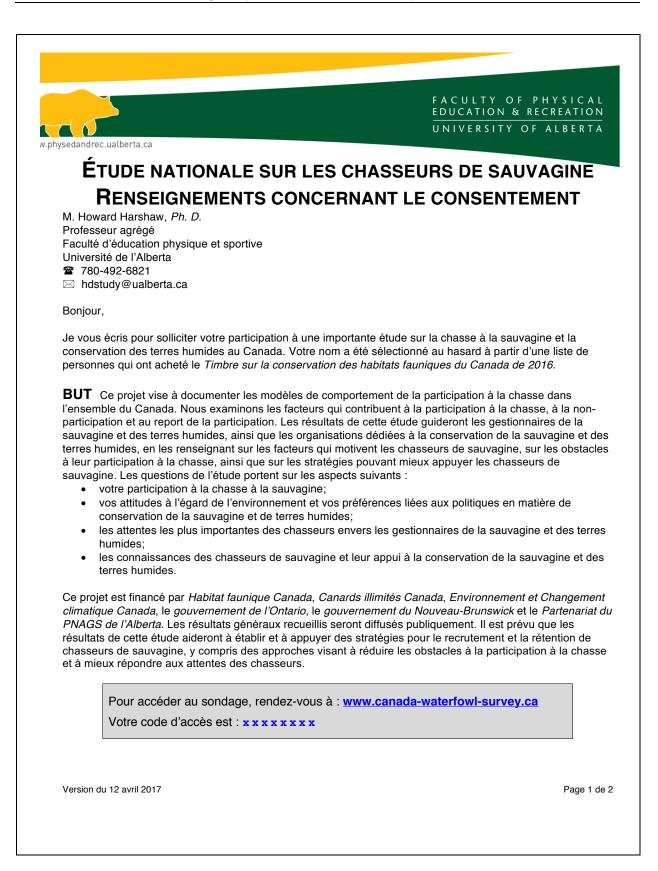
Sincerely,

Securit Halice

Howard Harshaw

Version April 12, 2017

Page 2 of 2



Les résultats et l'analyse de cette étude seront publiés à l'automne 2017 à :

www.hd-research.ca

PROCÉDURES DE L'ÉTUDE Il vous faudra de 20 à 30 minutes pour remplir ce sondage en ligne. Veuillez prendre le temps de bien considérer vos réponses aux questions. Rappelez-vous qu'il n'y a pas de bonnes ou de mauvaises réponses. Lorsque vous aurez terminé, veuillez envoyer le formulaire en cliquant sur le bouton « Soumettre » qui se trouve à la fin du sondage en ligne.

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Je vous remercie grandement de votre collaboration à cette importante étude.

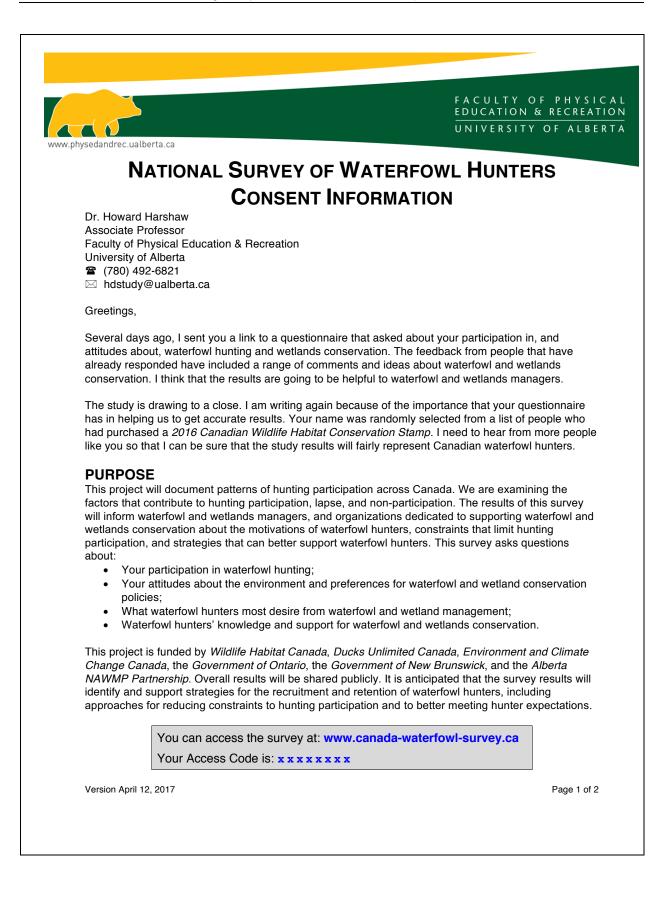
Je vous prie d'agréer mes salutations distinguées.

Accut Hake

Howard Harshaw

Version du 12 avril 2017

Page 2 de 2



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Thank you very much for helping with this important study.

Sincerely,

Accus Hake

Howard Harshaw

Version April 12, 2017

Page 2 of 2



RENSEIGNEMENTS CONCERNANT LE CONSENTEMENT

M. Howard Harshaw, *Ph. D.*Professeur agrégé
Faculté d'éducation physique et sportive
Université de l'Alberta
780-492-6821
Mdstudy@ualberta.ca

Bonjour,

Il y a plusieurs jours, je vous ai envoyé un lien menant à un questionnaire visant à obtenir de l'information sur votre participation et vos attitudes relatives à la chasse à la sauvagine et à la conservation des terres humides. La rétroaction des personnes qui ont déjà répondu comprenait un éventail de commentaires et d'idées sur la conservation de la sauvagine et des terres humides. J'estime que les résultats de cette étude seront utiles aux gestionnaires de la sauvagine et des terres humides.

L'étude tire maintenant à sa fin. Je vous écris à nouveau en raison de l'importance de vos réponses à ce questionnaire. Votre contribution nous aidera à obtenir des résultats précis. Votre nom a été sélectionné au hasard à partir d'une liste de personnes qui ont acheté le *timbre sur la conservation des habitats fauniques du Canada de 2016.* J'ai besoin de l'aide d'un plus grand nombre de personnes comme vous, afin de veiller à ce que les résultats de cette étude représentent de façon juste les points de vue des chasseurs de sauvagine.

BUT Ce projet vise à documenter les modèles de comportement de la participation à la chasse dans l'ensemble du Canada. Nous examinons les facteurs qui contribuent à la participation à la chasse, à la non-participation et au report de la participation. Les résultats de cette étude guideront les gestionnaires de la sauvagine et des terres humides, ainsi que les organisations dédiées à la conservation de la sauvagine et des terres humides, en les renseignant sur les facteurs qui motivent les chasseurs de sauvagine, sur les obstacles à leur participation à la chasse, ainsi que sur les stratégies pouvant mieux appuyer les chasseurs de sauvagine. Les questions de l'étude portent sur les aspects suivants :

- votre participation à la chasse à la sauvagine;
- vos attitudes à l'égard de l'environnement et vos préférences liées aux politiques en matière de conservation de la sauvagine et de terres humides;
- les attentes les plus importantes des chasseurs envers les gestionnaires de la sauvagine et des terres humides;
- les connaissances des chasseurs de sauvagine et leur appui à la conservation de la sauvagine et des terres humides.

Ce projet est financé par *Habitat faunique Canada, Canards illimités Canada, Environnement et Changement climatique Canada,* le *gouvernement de l'Ontario,* le *gouvernement du Nouveau-Brunswick* et le *Partenariat du PNAGS de l'Alberta.* Les résultats généraux recueillis seront diffusés publiquement. Il est prévu que les résultats de cette étude aideront à établir et à appuyer des stratégies pour le recrutement et la rétention de chasseurs de sauvagine, y compris des approches visant à réduire les obstacles à la participation à la chasse et à mieux répondre aux attentes des chasseurs.

Version du 12 avril 2017

Page 1 de 2

Pour accéder au sondage, rendez-vous à : <u>www.canada-waterfowl-survey.ca</u> Votre code d'accès est : <u>x x x x x x x x</u>

Les résultats et l'analyse de cette étude seront publiés à l'automne 2017 à :

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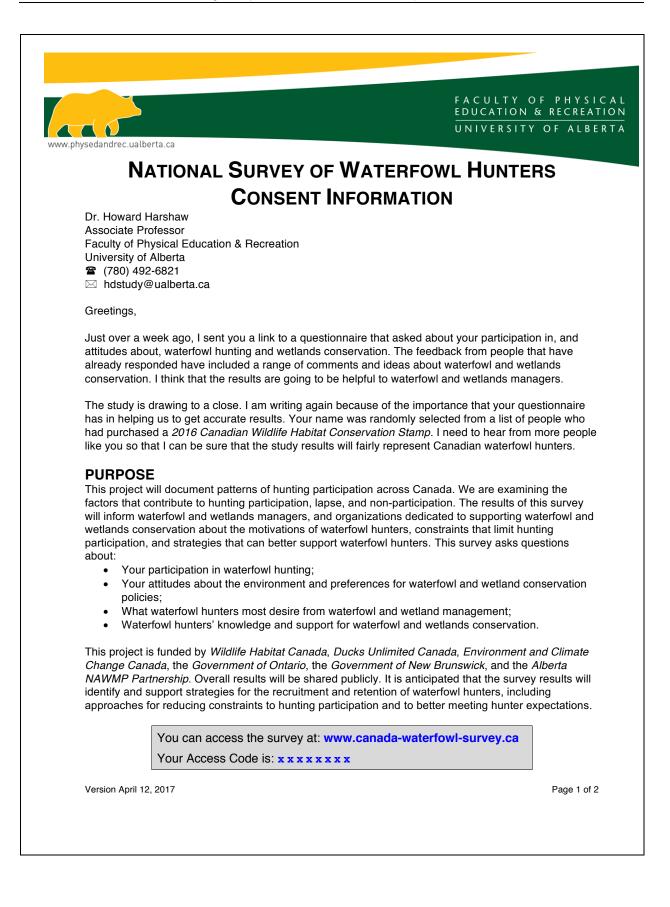
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Howard Harshaw

Version du 12 avril 2017

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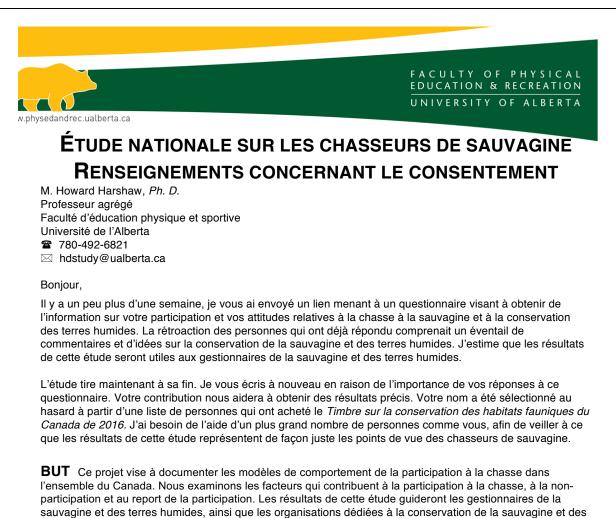
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Version April 12, 2017

Page 2 of 2



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Version du 12 avril 2017

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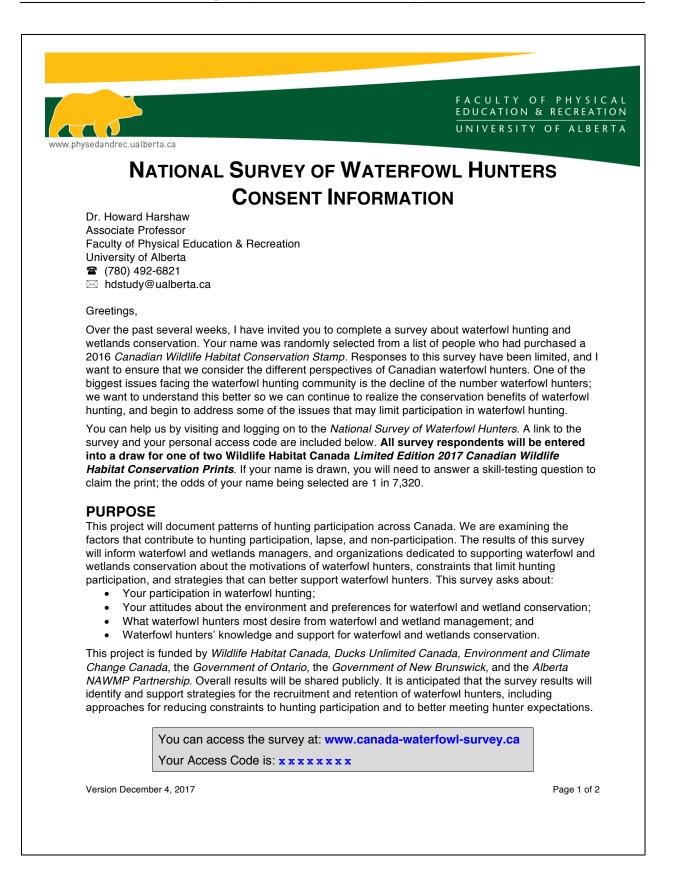
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Howard Harshaw

Version du 12 avril 2017

Page 2 de 2



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If you have any questions about the research, or would like further information, please do not hesitate to contact Dr. Harshaw at the phone number listed at the top of the first page. The plan for this study has been reviewed for its adherence to ethical guidelines by a *Research Ethics Board* at the *University of Alberta*. For questions regarding participant rights and ethical conduct of research, please contact the *Research Ethics Office* at (780) 492-2615. If you wish to opt out of this survey, please contact *Wildlife Habitat Canada* at (613) 722-2090.

CONSENT

Participation in this study is completely voluntary, and you may refuse to participate at any time without penalty. You may skip any question if you do not feel comfortable answering it, though we encourage you to complete all questions if possible. By completing and submitting this survey, you grant your consent to participate in this study. As the information that will be collected in this survey is anonymous, we will not be able to attribute any comments to individuals; as a result, the information that you provide cannot be withdrawn after you have submitted your survey.

Thank you very much for helping with this important study.

Sincerely,

Accus Hake

Howard Harshaw

Version December 4, 2017

Page 2 of 2



ETUDE NATIONALE SUR LES CHASSEURS DE SAUVAGINE RENSEIGNEMENTS CONCERNANT LE CONSENTEMENT

M. Howard Harshaw, *Ph. D.*Faculté d'éducation physique et sportive Université de l'Alberta
780-492-6821
hdstudy@ualberta.ca

Bonjour,

Au cours des quelques dernières semaines, je vous ai invité à répondre aux questions de l'Étude nationale sur les chasseurs à la sauvagine et la conservation des milieux humides. Votre nom a été choisi au hasard à partir d'une liste de personnes qui ont acheté le *Timbre sur la conservation des habitats fauniques du Canada* de 2016. Comme la participation à l'Étude a été limitée, je souhaite veiller à ce que nous considérions les divers points de vue des chasseurs à la sauvagine canadiens. Un des principaux enjeux auxquels fait face la collectivité des chasseurs à la sauvagine est le déclin du nombre de chasseurs de sauvagine ; nous souhaitons mieux comprendre cette situation, afin de pouvoir continuer à tirer parti des avantages de la chasse à la sauvagine pour la conservation, et de pouvoir nous attaquer à certaines des questions pouvant limiter la participation à cette chasse.

Vous pouvez nous aider en visitant le site de l'Étude nationale sur les chasseurs à la sauvagine et en ouvrant une session. Vous trouverez ci-dessous un lien menant à l'Étude et votre code d'accès personnel. **Tous les répondants à cette étude seront inscrits à un tirage leur permettant de gagner l'une de deux** *lithographies à tirage limité de 2017 des habitats fauniques canadiens* d'Habitat faunique Canada. Si votre nom est pigé, vous devrez répondre à une question d'aptitude pour réclamer votre lithographie ; vous avez une (1) chance sur 7 320 que votre nom soit pigé.

BUT Ce projet vise à documenter les modèles de comportement de la participation à la chasse dans l'ensemble du Canada. Nous examinons les facteurs qui contribuent à la participation à la chasse, à la non-participation et au report de la participation. Les résultats de cette étude guideront les gestionnaires de la sauvagine et des terres humides, ainsi que les organisations dédiées à la conservation de la sauvagine et des terres humides, en les renseignant sur les facteurs qui motivent les chasseurs de sauvagine, sur les obstacles à leur participation à la chasse, ainsi que sur les stratégies pouvant mieux appuyer les chasseurs de sauvagine. Les guestions de l'étude portent sur les aspects suivants :

- votre participation à la chasse à la sauvagine ;
- vos attitudes à l'égard de l'environnement et vos préférences liées aux politiques en matière de conservation de la sauvagine et de terres humides;
- les attentes les plus importantes des chasseurs envers les gestionnaires de la sauvagine et des terres humides ;

Ce projet est financé par Habitat faunique Canada, Canards illimités Canada, Environnement et Changement climatique Canada, le gouvernement de l'Ontario, le gouvernement du Nouveau-Brunswick et le Partenariat du PNAGS de l'Alberta. Les résultats généraux recueillis seront diffusés publiquement. Il est prévu que les résultats de cette étude aideront à établir et à appuyer des stratégies pour le recrutement et la rétention de chasseurs de sauvagine, y compris des approches visant à réduire les obstacles à la participation à la chasse et à mieux répondre aux attentes des chasseurs.

Version du 4 décembre 2017

Page 1 de 2

Pour accéder au sondage, rendez-vous à : <u>www.canada-waterfowl-survey.ca</u> Votre code d'accès est : x x x x x x x

Les résultats et l'analyse de cette étude seront publiés au début de 2018 à :

www.hd-research.ca

PROCÉDURES DE L'ÉTUDE Il vous faudra de 20 à 30 minutes pour remplir ce sondage en ligne. Veuillez prendre le temps de bien considérer vos réponses aux questions. Rappelez-vous qu'il n'y a pas de bonnes ou de mauvaises réponses. Lorsque vous aurez terminé, veuillez envoyer le formulaire en cliquant sur le bouton « Soumettre » qui se trouve à la fin du sondage en ligne.

RISQUES ET AVANTAGES Aucun risque prévisible n'est associé à la participation à cette recherche. Il est peu probable que vous éprouviez un inconfort à la suite de votre participation à cette étude. Bien que votre participation à cette recherche ne vous procure pas des avantages directs, il est prévu que les résultats nous aideront à comprendre pourquoi les personnes choisissent (ou non) de chasser la sauvagine.

CONFIDENTIALITÉ Votre identité demeurera strictement confidentielle. Votre nom ne figurera pas dans les rapports relatifs à l'étude. Tous les documents seront identifiés uniquement par un code numérique et conservés dans un classeur sous clé et dans un dossier informatique protégé par un mot de passe. Les données recueillies pour cette étude seront conservées aux fins d'utilisation future concernant les opinions et les attitudes du public à propos de la gestion de la sauvagine et des terres humides. Personne en dehors de l'équipe de recherche n'aura accès aux réponses individuelles.

PERSONNES-RESSOURCES Si vous avez des questions au sujet de cette recherche ou si vous souhaitez obtenir des renseignements supplémentaires, n'hésitez pas à communiquer avec H. Harshaw, *Ph. D.* au numéro de téléphone qui apparaît en haut de la première page. Le *Comité de l'éthique de la recherche de l'Université de l'Alberta* a analysé le plan de cette étude pour veiller à ce qu'il respecte les lignes directrices en matière d'éthique. Si vous avez des questions au sujet des droits des participants et du respect des principes relatifs à l'éthique de la recherche, veuillez communiquer avec le *Bureau de l'éthique de la recherche* au **780-492-2615**. Si vous souhaitez ne pas participer à ce sondage, veuillez communiquer avec *Habitat faunique Canada* au **613-722-2090**.

CONSENTEMENT La participation à cette étude est tout à fait volontaire, et vous pouvez refuser d'y participer sans subir de pénalité. Vous pouvez sauter une question si vous n'êtes pas à l'aise d'y répondre, mais nous vous invitons à répondre à toutes les questions, si possible. Lorsque vous remplissez et soumettez ce sondage, vous consentez à participer à cette étude. Comme l'information sera recueillie de façon anonyme dans le cadre de cette recherche, nous ne pourrons attribuer des commentaires à des personnes en particulier et c'est pourquoi vous ne pourrez retirer vos contributions une fois que vous aurez soumis vos réponses.

Je vous remercie grandement de votre collaboration à cette importante étude.

Je vous prie d'agréer mes salutations distinguées.

Howard Harshaw

Version du 4 décembre 2017

Page 2 de 2

The survey website address is:

www.canada-waterfowl-survey.ca

Please check the enclosed letter for your personalized Access Code.

You will need to enter the survey website address in your web browser (Internet Explorer, Mozilla Firefox, Safari, Chrome). Typically, you will enter this address in the web address bar located in the upper left corner of your web browser screen. You **CANNOT** get to the survey website by searching for it on a search engine such as Google or Yahoo.

If you have trouble getting to the web address please e-mail us at: hdstudy@ualberta.ca and we will forward a link to the survey website.

L'adresse Internet du sondage est :

www.canada-waterfowl-survey.ca

SVP vérifiez votre lettre ci-jointe pour connaître votre code d'accès personnalisé.

Vous aurez à mettre l'adresse Internet du sondage dans votre navigateur Web (Internet Explorer, Mozilla Firefox, Safari, Chrome). Pour ce faire, inscrivez l'adresse dans la barre d'adresses située en haut à gauche de l'écran de votre navigateur Web. Vous ne pouvez **PAS** atteindre la page internet du sondage en effectuant une recherche à partir d'un moteur de recherches comme Google ou Yahoo.

Si vous avez de la difficulté à accéder l'adresse Internet du sondage, SVP écrivez-nous à hdstudy@ualberta.ca et nous vous fournirons un lien vers le site Internet du sondage.

Version: October 10, 2017

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PURPOSE

This project will document hunting participation across Canada. We are examining the factors that contribute to hunting participation, lapse, and non-participation. The results of this survey will inform waterfowl and wetlands managers, and organizations dedicated to supporting waterfowl and wetlands conservation about the motivations of waterfowl hunters, constraints that limit hunting participation, and strategies that can better support waterfowl hunters. This survey asks about:

- Your participation in waterfowl hunting;
- Your attitudes about the environment, and preferences for waterfowl & wetland conservation policies;
- · What waterfowl hunters most desire from waterfowl and wetland management;
- · Waterfowl hunters' knowledge and support for waterfowl and wetlands conservation.

This project is funded by *Wildlife Habitat Canada, Ducks Unlimited Canada, Environment and Climate Change Canada,* the *Government of Ontario,* the *Government of New Brunswick,* and the *Alberta NAWMP Partnership.* Overall results will be shared publicly. It is anticipated that the survey results will identify and support strategies for the recruitment and retention of waterfowl hunters, including approaches for reducing constraints to hunting participation and to better meeting hunter expectations.

STUDY PROCEDURES

The web-based survey will take about 20 to 30 minutes to complete. Please take your time as you consider your answers to the questions. Remember, there are no right or wrong answers. Please return the completed survey using the enclosed stamped return envelope.

RISKS AND BENEFITS

There are no foreseeable risks to you associated with research. You are you unlikely to experience any discomfort as a result of this research. Although participation in this research will not provide direct benefits to you, it is anticipated that the results of this research will help us to understand why people choose to hunt or not to hunt waterfowl.

CONFIDENTIALITY

Your identity will be kept strictly confidential. You will not be identified by name in any reports of the completed study. All documents will be identified only by a code number and kept in a locked filing cabinet and a password protected computer file. The data that is collected in this research project will be kept for future use regarding public opinions and beliefs about waterfowl and wetlands management. Individual responses will not be made available to anyone outside the research team.

CONTACT INFORMATION

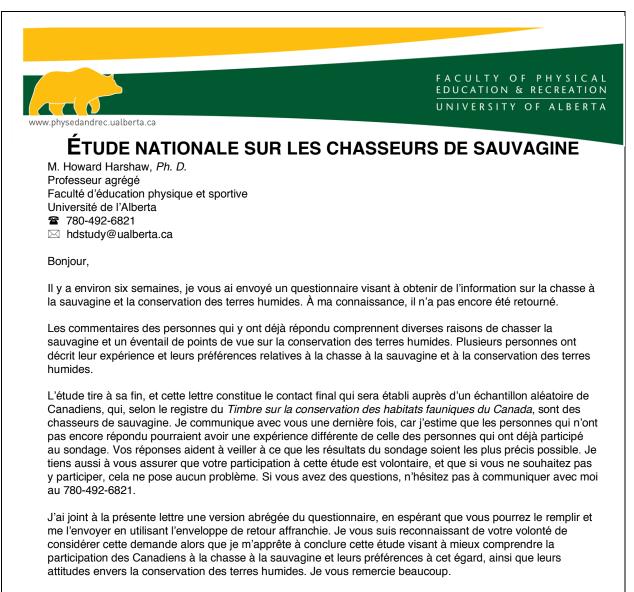
If you have any questions about the research, or would like further information, please do not hesitate to contact Dr. Harshaw at the phone number listed at the top of the first page. The plan for this study has been reviewed for its adherence to ethical guidelines by a *Research Ethics Board* at the *University of Alberta*. For questions regarding participant rights and ethical conduct of research, please contact the *Research Ethics Office* at (780) 492-2615.

CONSENT

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Version April 12, 2017

Page 2 of 2



Les résultats et l'analyse de cette étude seront publiés au printemps 2018 sur :

www.hd-research.ca

BUT Ce projet vise à documenter la participation à la chasse dans l'ensemble du Canada. Nous examinons les facteurs qui contribuent à la participation à la chasse, à la non-participation et au report de la participation. Les résultats de cette étude guideront les gestionnaires de la sauvagine et des terres humides, ainsi que les organisations dédiées à la conservation de la sauvagine et des terres humides, en les renseignant sur les facteurs qui motivent les chasseurs de sauvagine, sur les obstacles à leur participation à la chasse, ainsi que sur les stratégies pouvant mieux appuyer les chasseurs de sauvagine. Les questions de l'étude portent sur les aspects suivants :

Version du 12 avril 2017

Page 1 de 2

- votre participation à la chasse à la sauvagine;
- vos attitudes à l'égard de l'environnement et vos préférences liées aux politiques en matière de conservation de la sauvagine et de terres humides;
- les attentes les plus importantes des chasseurs envers les gestionnaires de la sauvagine et des terres humides;
- les connaissances des chasseurs de sauvagine et leur appui à la conservation de la sauvagine et des terres humides.

Ce projet est financé par Habitat faunique Canada, Canards illimités Canada, Environnement et Changement climatique Canada, le gouvernement de l'Ontario, le gouvernement du Nouveau-Brunswick et le Partenariat du PNAGS de l'Alberta. Les résultats généraux recueillis seront diffusés publiquement. Il est prévu que les résultats de cette étude aideront à établir et à appuyer des stratégies pour le recrutement et la rétention de chasseurs de sauvagine, y compris des approches visant à réduire les obstacles à la participation à la chasse et à mieux répondre aux attentes des chasseurs.

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RISQUES ET AVANTAGES Aucun risque prévisible n'est associé à la participation à cette recherche. Il est peu probable que vous éprouviez un inconfort à la suite de votre participation à cette étude. Bien que votre participation à cette recherche ne vous procure pas des avantages directs, il est prévu que les résultats nous aideront à comprendre pourquoi les personnes choisissent (ou non) de chasser la sauvagine.

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Je vous prie d'agréer mes salutations distinguées.

There Hake

Howard Harshaw Version du 12 avril 2017

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Appendix D

University of Alberta Research Ethics Office Project Approval

ALBERTA

2018-07-26, 2:16 PM

RESEARCH ETHICS OFFICE

308 Campus Tower Edmonton, AB, Canada T6G 1K8 Tel: 780.492.0459 Fax: 780.492.9429 www.reo.ualberta.ca

		Notifica	ation of Approval		
Date:	September 2	2, 2015			
Study ID:	Pro0005425	5			
Principal Investigator:	Howard Hars	shaw			
Study Title:			ple's interactions with waterfowl: Assowl management in Canada.	sessing stal	keholder and
Approval Expiry Date:	Thursday, Se	eptember 1, 2016			
Approved Consent Form:	Approval Da	te	Approved Document		
Sponsor/Funding Agency:	Ducks Unlim Environmen	iited Canada (PRO) t Canada		5268 5278	
Sponsor/Funding Agency:	Wildlife Hab	itat Canada			
	Project ID	Project Title			Speed Other Code Information
	RES002585		namics of people's interactions with r and professionals preferences for da		
RSO-Managed Funding:	RES002542		namics of people's interactions with r and professionals preferences for da		
	RES002765	1 Understanding the dyn Assessing stakeholde management in Canad	namics of people's interactions with r and professionals preferences for da	waterfowl: waterfowl	
		ove study to the Resea alf of the committee.	rch Ethics Board 2 . Your applicatior	ו has been	
			he expiry of this approval if your stud e, you will have to re-submit an ethic		
		s Board does not encor r the purposes of the re	mpass authorization to access the steerch.	aff, student	ts, facilities or
https://remo.ualberta.ca/F	REMO/Doc/0/NJS3	VFBDDI34PB4P3G0BSTQHA2/	fromString.html		Page 1 of 2

2018-07-26, 2:16 PM

Sincerely,

Stanley Varnhagen, PhD Chair, Research Ethics Board 2

Note: This correspondence includes an electronic signature (validation and approval via an online system).

https://remo.ualberta.ca/REMO/Doc/0/NJS3VFBDDI34PB4P3G0BSTQHA2/fromString.html

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Appendix E

North American Waterfowl Hunting Non-Response Results

Question E1: "Which of the following best describes your pursuits in waterfowl hunting?

Beenenee		Data so	ource		242			•
Response –	Full Survey		NR Survey		X²	DF	p-value	Φα
I hunt only ducks	12	6.0%	11	5.6%				
I hunt ducks and geese	178	88.6%	159	81.5%				
I hunt only geese	11	5.5%	9	4.6%	17.228	3	< .05	0.209
I hunt neither ducks nor geese	0	0.0%	16	8.2%				
Total	201	100.0%	195	100.0%				

Question E2: How old were you when you started waterfowl hunting?

Data Source	n	Mean	SD	t	DF	p-value	d
Full Survey	201	22.43	13.260	4.219	400	< 001	0.420
NR Survey	201	16.64	14.267	4.219	400	< .001	0.420

Question E3: How many of the last 5 years have you hunter waterfowl?

		Data so	urce		X ²			
Response –	Full S	urvey	NR Sı	NR Survey		DF	p-value	Φc
None	0	0.0%	12	6.5%				
1 year	14	7.0%	9	4.9%				
2 years	20	10.0%	13	7.0%				
3 years	33	16.4%	23	12.4%	18.755	5	< .05	0.220
4 years	23	11.4%	33	17.8%				
5 years	111	55.2%	95	51.4%				
Total	201	100.0%	185	100.0%				

Table E3. How many of the last 5 years have you hunter waterfowl?

Question E4: Over the last five years, about how many days did you usually hunt waterfowl in a year?

Deepense		Data so	ource		X2	DE	n voluo	•
Response —	Full St	urvey	NR Su	NR Survey		DF	p-value	Φc
5 days or less	95	48.2%	66	37.7%				
6 to 10 days	54	27.4%	58	33.1%				
11 to 20 days	35	17.8%	25	14.3%	11.245		. 05	0 174
21 to 30 days	8	4.1%	11	6.3%	11.240	4	< .05	0.174
More than 30 days	5	2.5%	15	8.6%				
Total	197	100.0%	175	100.0%				

Table E4. Over the last five years, about how many days did you usually hunt waterfowl in a year?

Question E5: Under what circumstances do you typically go hunting?

Table E5. Under what circumstances do you typically go hunting?

Beenenee	Data source				2		n voluo	•
Response –	Full S	urvey	NR S	Survey	X ²	DF	p-value	Φc
When I plan the hunt myself	58	28.9%	61	8.6%				
When someone else invites me	20	10.0%	19	2.7%				
Both when I plan the hunt or someone else invites me	123	61.2%	97	13.6%	1.657	2	> .05	_
Total	201	100.0%	177	24.9%				

Question E6: In which Canadian Province/Territory or US State have you hunted waterfowl most often over the past 5 years?

 Table E6. In which Canadian Province/Territory or US State have you hunted waterfowl most often over the past 5 years?¹

Despense		X2	DE	n volue				
Response –	Full Survey		NR Su	NR Survey		DF	p-value	Φο
Alberta	43	21.4%	37	21.5%				
British Columbia	20	10.0%	18	10.5%				
Manitoba	6	3.0%	8	4.7%				
New Brunswick	4	2.0%	3	1.7%				
Newfoundland & Labrador	8	4.0%	7	4.1%				
Nova Scotia	1	0.5%	4	2.3%				
Northwest Territories	0	0.0%	0	0.0%	7 000	10	. 05	
Nunavut	0	0.0%	0	0.0%	7.902	10	> .05	_
Ontario	53	26.4%	45	26.2%				
Prince Edward Island	1	0.5%	2	1.2%				
Québec	29	14.4%	28	16.3%				
Saskatchewan	36	17.9%	19	11.0%				
Yukon	0	0.0%	1	0.6%				
Total	201	100.0%	172	100.0%				

¹ No US States were identified by respondents.

Question E8: Please indicate how much of a problem the following are in the province where you hunt ducks most.

Table E8a. Crowding at hunting areas.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	1.78	0.976	-2.272	356	< .05	0.242
NR Survey	160	2.03	1.090	-2.212	300	< .05	0.242

Table E8b. Hunting pressure.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	1.81	1.003	-2.095	354	< .05	0.221
NR Survey	158	2.04	1.073	-2.095	354	< .05	0.221

Table E8c. Interference from other waterfowl hunters.

Data source	n	Mean SD		t	DF	p-value	d
Full Survey	199	1.74	0.943	-2.268	361	< .05	0.247
NR Survey	164	1.99	1.108	-2.200	301	< .05	0.247

Table E8d. Conflict with other waterfowl hunters in places I hunt.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	199	1.44	0.795	-2.490	317.423	< .05	
NR Survey	164	1.67	0.954	-2.490	317.423	< .05	_

Table E8e. Lack of public places for waterfowl hunting

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	199	2.52	1.466	-1.098	363	> .05	
NR Survey	166	2.69	1.484	-1.090	303	00. ح	—

Question E9: In the province where you hunt ducks most often, how satisfied or dissatisfied are you with each of the following?

Table E9a. Satisfaction with: The number of ducks you see during the season.

Data source	n	Mean	SD	SD t		p-value	d
Full Survey	188	3.37	1.241	-0.237	257	> .05	_
NR Survey	171	3.4	1.244	-0.237	357	2.05	_

Table E9b. Satisfaction with: The number of ducks you harvest during the season.

Data source	n	Mean	Mean SD		DF	p-value	d
Full Survey	186	3.33	1.188	0.253	252	> .05	
NR Survey	169	3.3	1.203	0.255	353	>.05	—

Table E9c. Satisfaction with: The number of days in the duck season.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	185	4	1.016	1 001	054	> 0E	
NR Survey	171	3.89	1.037	1.021	354	> .05	—

Table E9d. Satisfaction with: The number of ducks in the daily limit.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	186	4.15	0.956	2.219	254	< .05	0.236
NR Survey	170	3.91	1.078	2.219	354	< .05	0.230

Table E9e. Satisfaction with: The number of ducks typically present during the hunting season.

Data source	n	Mean	SD t		DF	p-value	d
Full Survey	188	3.38	1.233	-0.516	257	> .05	_
NR Survey	171	3.44	1.218	-0.510	357	<i>></i> .05	—

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	188	3.76	1.085	-0.734	358	> .05	
NR Survey	172	3.84	1.039	-0.734	300	2.05	—

 Table E9f. Satisfaction with: Quality of habitat where you hunt.

 Table E9g. Satisfaction with: Your overall duck hunting experience.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	188	3.84	1.107	-2.702	353.553	< .05	0.286
NR Survey	171	4.13	0.911	-2.702	303.003	< .05	0.200

Question E10: What is the minimum number of ducks you have to harvest in a day to feel satisfied with the hunt?

Table E10. What is the minimum number of ducks you have to harvest in a day to feel satisfied with the hunt?

Response —		Data so	urce		v ²	DF	p-value	Фс
nesponse	Full Su	irvey	NR Su	rvey	X ²	DF	p-value	
0	41	21.9%	21	12.3%				
1	35	18.7%	19	11.1%				
2	50	26.7%	26	15.2%				0.321
3	17	9.1%	24	14.0%	00.700			
4	18	9.6%	26	15.2%		8	.001 <	
5	10	5.3%	33	19.3%	36.796	c	o < .001	
6	12	6.4%	16	9.4%				
7	0	0.0%	3	1.8%				
>7	4	2.1%	3	1.8%				
Total	187	100.0%	171	100.0%				

Question E11: What is the smallest daily bag limit you would accept before you would no longer hunt ducks?

Paapapaa		Data so	ource		¥2	DF	p-value	•
Response –	Full Survey		NR Survey		X²	DF	p-value	Φα
6 ducks	30	16.0%	11	6.4%				
5 ducks	23	12.2%	14	8.2%	18.761 6			
4 ducks	28	14.9%	34	19.9%				
3 ducks	23	12.2%	18	10.5%		< .05	0.229	
2 ducks	21	11.2%	14	8.2%		0	< .05	0.229
1 duck	8	4.3%	3	1.8%				
I'll hunt with any size daily bag limit	55	29.3%	77	45.0%				
Total	188	100.0%	171	100.0%				

Question E12: What is the minimum number of days in a waterfowl hunting season you would accept before you would no longer hunt ducks?

Table E12. What is the minimum number of days in a waterfowl hunting season you would accept before you would no longer hunt ducks?

Desmona		Data so	urce		9	DE		
Response –	Full Survey		NR Survey		X²	DF	p-value	Φα
60 days	52	27.5%	32	18.8%				
55 days	1	0.5%	1	0.6%				
50 days	8	4.2%	3	1.8%	20.307 10			0.238
45 days	13	6.9%	5	2.9%			< .05	
40 days	12	6.3%	4	2.4%				
30 days	30	15.9%	23	13.5%		10		
25 days	2	1.1%	2	1.2%		10		
20 days	4	2.1%	5	2.9%				
15 days	1	0.5%	3	1.8%				
10 days	6	3.2%	6	3.5%				
I'll hunt with any season length	60	31.7%	86	50.6%				
Total	189	100.0%	170	100.0%				

Question E13: Do you primarily take day trips or overnight/multi-day trips when you waterfowl hunt?

Table E13. Do you primarily take day trips or overnight/multi-day trips when you waterfowl hunt?

Paapapaa	Data source				¥2	DF	n voluo	•
Response –	Full S	urvey	NR S	urvey	X²	DF	p-value	Φc
Primarily day trips	155	77.1%	138	79.3%				
Primarily overnight or multi-day trips	32	15.9%	23	13.2%	0.555	2	> .05	0.038
Both about equally	14	7.0%	13	7.5%		2	> .05	0.038
Total	201	100.0%	174	100.0%				

Question E14: Please indicate where you do most of your waterfowl hunting.

Table E14. Please indicate where you do most of your waterfowl hunting	

Paananaa		ource		?	DE		•	
Response	Full Survey		NR Survey		X²	DF	p-value	Φc
Public lands or waters	82	40.8%	57	38.3%				
Private property owned by you, your family or in partnership with someone else	20	10.0%	18	12.1%	3.171 4		> .05	0.095
Private property owned by a friend or another landowner who gives you permission to hunt for free	93	46.3%	67	45.0%		4		
Private property you lease or pay to hunt on	3	1.5%	6	4.0%				
Guest on private property someone else leases or pays to hunt on	3	1.5%	1	0.7%				
Total	201	100.0%	149	100.0%				

Question E15: How much priority should provincial/territorial and federal agencies give the following when setting annual duck hunting regulations?

Table E15a. Having the largest bag limits possible.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	199	2.8	1.127	1 716	265	> .05	_
NR Survey	168	2.61	1.056	1.716	365	> .05	—

Table E15b. Having the longest seasons possible.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	3.27	1.015	0.945	364	> .05	_
NR Survey	168	3.17	1.025	0.945	304	>.00	_

Table E15c. Having the largest duck populations possible.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	199	3.97	0.881	0.741	220 272	> .05	
NR Survey	170	3.89	1.055	0.741	330.372	>.00	_

Table E15d. Avoiding different season lengths for different duck species.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	3.59	1.153	1.912	265	> 05	
NR Survey	169	3.34	1.277	1.912	365	> .05	—

 Table E15e.
 Providing the simplest regulations possible.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	3.97	0.934	0.250	366	> .05	
NR Survey	170	3.99	0.933	-0.250	300	× .00	—

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	198	3.17	1.057	3.092	365	< .05	0.321
NR Survey	169	2.83	1.064	3.092	303	< .05	0.321

Table E15f. Reducing the number of species-specific bag limits.

Table E15g. Having the largest drake mallard bag limits possible.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	199	2.9	1.076	-0.123	368	> .05	
NR Survey	171	2.92	1.037	-0.123	300	≥.00	_

Question E16: We are interested in knowing how much waterfowl hunting means to you. Please indicate how much you disagree or agree with the following statements about your involvement in waterfowl hunting.

Table E16a. Waterfowl hunting is one of the most enjoyable activities I do.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	195	3.76	0.993	2 066	366.193	< .05	0.325
NR Survey	174	4.06	0.845	-3.066	300.193	< .05	0.325

 Table E16b. Most of my friends are in some way connected with waterfowl hunting.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	194	2.81	1.100	-3.186	366	< .05	0.333
NR Survey	174	3.18	1.123	-3.100	300	< .05	0.333

Table E16c. Waterfowl hunting has a central role in my life.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	193	2.70	1.187	-4.152	363	< 001	0.433
NR Survey	172	3.20	1.124	-4.152	303	< .001	0.433

Table E16d. A lot of my life is organized around waterfowl hunting.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	196	2.63	1.154	-0.319	367	> .05	_
NR Survey	173	2.67	1.121	-0.319	307	2.05	—

Table E16e. If I couldn't go waterfowl hunting I am not sure what I would do instead.

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	196	2.76	1.207	1.563	367	> .05	
NR Survey	173	2.55	1.25	1.005	307	>.05	—

Question E17: A person can think of themselves in a variety of ways. On a scale of 1 to 5, where 1 is "not at all" and 5 is "very strongly", how much would you identify yourself as the following?

 Table E17a.
 Identify yourself as a Birdwatcher

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	185	2.62	1.184	0 472	274	> 05	
NR Survey	191	2.56	1.112	0.473	374	> .05	—

Table E17b. Identify yourself as a Duck Hunter

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	191	3.46	1.014	0.721	368.884	> .05	
NR Survey	190	3.38	1.192	0.721	300.004	≥.00	_

Table E17c. Identify yourself as Goose Hunter

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	192	3.35	1.078	-0.459	374.26	> .05	
NR Survey	191	3.41	1.227	-0.459	374.20	>.05	—

Table E17d. Identify yourself as an Other (type of) hunter

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	192	3.76	1.076	0.057	270	> 05	
NR Survey	189	3.77	1.224	-0.057	379	> .05	—

 Table E17e.
 Identify yourself as a Conservationist

Data source	n	Mean	SD	t	DF	p-value	d
Full Survey	192	3.85	1.002	0.014	200	> 05	
NR Survey	190	3.85	1.154	0.014 380	360	> .05	—

Question E18: In the last 12 months, have you participated in the following nature-based activities?

Response -		Data s	ource		vî	DF	p-value	φ
	Full	Survey	NR	Survey	χ2			
Yes	184	95.8%	168	85.3%				
No	8	4.2%	29	14.7%	12.584	1	< .001	0.180
Total	192	100.0%	197	100.0%				

Table E18a. Spending time in nature away from home

Table E18b.
 Viewing wildlife

Response		Data s	ource		v 2	DF	p-value	•
	Full	Survey	NR	Survey	χ2	ы	p-value	φ
Yes	153	80.5%	157	79.7%				
No	37	19.5%	40	20.3%	0.042	1	> .05	
Total	190	100.0%	197	100.0%				

Table E18c. Learning about nature

Posponso		Data s	ource		vO	DF	n voluo	*
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	96	51.3%	81	41.8%				
No	91	48.7%	113	58.2%	3.516	1	> .05	
Total	187	100.0%	194	100.0%				

Table E18d. Backyard/at-home nature activities

Deenenee		Data s	ource		20	DF	F p-value d			
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ		
Yes	177	93.2%	180	91.4%						
No	13	6.8%	17	8.6%	0.432	1	> .05			
Total	190	100.0%	197	100.0%						

Deenenee		Data s	ource			DE	n-valua	•
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	167	87.9%	177	90.3%				
No	23	12.1%	19	9.7%	0.579	1	> .05	
Total	190	100.0%	196	100.0%				

Table E18e. Fishing

Table E18f. Hunting migratory birds other than waterfowl

Response -		Data s	ource		v 0	DF	p-value	•
	Full	Survey	NR	Survey	χ2	ы	p-value	φ
Yes	64	33.9%	37	18.8%				
No	125	66.1%	160	81.2%	11.255	1	< .01	0.172
Total	189	100.0%	197	100.0%				

Table E18g. Hunting other game birds

Deenenee		Data s	ource		20	DF	n voluo	•
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	160	84.2%	144	73.5%				
No	30	15.8%	52	26.5%	6.653	1	< .05	0.131
Total	190	100.0%	196	100.0%				

Table E18h. Hunting any other game animals

Response		Data s	ource		2 2	DF	n voluo	•
	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	160	83.8%	166	84.7%				
No	31	16.2%	30	15.3%	0.062	1	> .05	
Total	191	100.0%	196	100.0%				

Deenenee		Data s	ource			DE	n voluo	•
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	156	81.7%	165	84.2%				
No	35	18.3%	31	15.8%	0.430	1	> .05	
Total	191	100.0%	196	100.0%				

Table E18i. Watching birds at my home

Table E18j. Feeding birds at my home

Boononoo		Data s	ource		v 2	DF	p-value	•
Response	Full	Survey	NR	Survey	χ2	DF	p-value	φ
Yes	121	63.7%	132	67.3%				
No	69	36.3%	64	32.7%	0.573	1	> .05	
Total	190	100.0%	196	100.0%				

Table E18k. Watching birds away from my home

Boononco		Data s	source		v 0	DF	p-value	•
Response	Full	Survey	NR	Survey	χ2		p-value	φ
Yes	139	73.2%	134	68.4%				
No	51	26.8%	62	31.6%	1.069	1	> .05	
Total	190	100.0%	196	100.0%				

Table E18I. Photographing or filming birds

Response		Data s	ource		20	DF	n voluo	•
	Full	Survey	NR	Survey	χ2		p-value	φ
Yes	65	35.1%	45	23.1%				
No	120	64.9%	150	76.9%	6.711	1	< .05	0.133
Total	185	100.0%	195	100.0%				

Response		Data s	ource		- x ² DF p-value				
	Full	Survey	NR	Survey	X ²	DF	p-value	φ	
Yes	21	11.4%	19	9.6%					
No	164	88.6%	178	90.4%	0.296	1	> .05		
Total	185	100.0%	197	100.0%					

Table F18 m	Counting/monitoring birds
	Counting/monitoring birds

Table E18n. Recording the birds you see on a list, online or on paper

Boononoo		Data s	ource		v 2	DF	p-value	•
Response	Full	Survey	NR	Survey	χ2	ы		φ
Yes	22	11.9%	13	6.6%				
No	163	88.1%	183	93.4%	3.155	1	> .05	
Total	185	100.0%	196	100.0%				

Boononco		Data s	ource		vO	DF	p-value	*
Response -	Full	Survey	NR	Survey	χ2		p-value	φ
Yes	68	36.2%	66	33.8%				
No	120	63.8%	129	66.2%	0.227	1	> .05	
Total	188	100.0%	195	100.0%				

Question E19: Age.

Table E19. Calculated age									
Data source	n	Mean	SD	t	DF	p-value	d		
Full Survey	190	53.13	17.042	-0.714	077	> 0F			
NR Survey	189	54.34	15.983		3//	> .05			

Question E20: Gender.

Table E20. Gender										
Deenenee		Data s	ource		χ2	DF	n voluo	*		
Response -	Full	Full Survey		NR Survey		DF	p-value	φ		
Male	188	97.9%	186	97.9%						
Female	4	2.1%	4	2.1%	0.000	1	> .05			
Total	192	100.0%	190	100.0%						

Question E21: What is the highest level of education that you have completed?

Deenenee		Data s	ource					**	
Response	Full Survey		NR Survey		χ2	DF	p-value	фС	
Some high school	7	3.6%	19	10.0%					
High school	33	17.2%	50	26.3%					
Some university/college	36	18.8%	22	11.6%					
University/college degree	69	35.9%	68	35.8%	21.05	5	< .01	0.235	
Graduate degree	31	16.1%	12	6.3%					
Other	16	8.3%	19	10.0%					
Total	192	100.0%	190	100.0%					

Table E21. What is the highest	level of ec	ducation that y	ou have completed?

Question E22: Do you own land in a rural area?

Boononoo		Data s	ource		v 2	DE	n voluo	•
Response	Full	urvey NR Survey χ2		χz	DF	p-value	φ	
No	91	47.4%	103	54.5%				
Yes	101	52.6%	86	45.5%	1.922	1	> .05	
Total	192	100.0%	189	100.0%				

Table E22. Do you own land in a rural area?

Question E23: Which of these categories best describes the place where you live now?

Deenenee		Data s	ource		χ2			••
Response	Full	Full Survey		NR Survey		DF	p-value	фс
Large urban area	41	21.4%	25	13.2%			> .05	
Medium urban area	32	16.7%	37	19.5%				
Small city	30	15.6%	35	18.4%	7.010	4		
Small town	35	18.2%	47	24.7%	7.012 4	2 4		
Rural area	54	28.1%	46	24.2%				
Total	192	100.0%	190	100.0%				

Table E23. Which of these categories best describes the place where you live now?

Question E24: Please indicate which of the following categories applies to your personal income for the last 12 months?

Table E24. Please indicate which of the following categories applies to your personal income for the last 12 months?

Boononco		Data s	ource		vO	DF	n voluo	* •		
Response Full Survey NR Survey		χ2	DF	p-value	фс					
Less than \$24,999	15	8.1%	25	13.7%						
\$25,000 to \$49,999	36	19.5%	42	23.1%						
\$50,000 to \$74,999	45	24.3%	37	20.3%						
\$75,000 to \$99,999	30	16.2%	33	18.1%		10.874 9	> .05			
\$100,000 to \$124,999	20	10.8%	21	11.5%						
\$125,000 to \$149,999	16	8.6%	7	3.8%	10.874					
\$150,000 to \$199,999	10	5.4%	10	5.5%						
\$200,000 to \$249,999	4	2.2%	1	0.5%						
\$250,000 to \$299,999	1	0.5%	2	1.1%						
\$300,000 or more	8	4.3%	4	2.2%						
Total	185	100.0%	182	100.0%						

Question E25: Please let us know why you chose not to complete the survey online earlier.

Table E25. Please let us know why you chose not to complete the survey online earlier.

Response	Frequency	%
I didn't receive the invitation in the mail	31	15.4%
I don't have access to the internet	24	11.9%
I have internet access, but couldn't open the website	6	3.0%
I didn't have time to complete the study earlier	87	43.3%
I don't like to answer questions online	50	24.9%
I don't hunt ducks or geese	4	2.0%
I didn't think the survey applied to me	13	6.5%