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The importance of wildlife to Canadians in 1987:

Highlights of a national survey

Prepared by

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for the 1987 National Survey
on the Importance of Wildlife
to Canadians

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Summary

The sustained popularity of wildlife-related recreational activities, significant commitments of time and money to these activities, and strong public support for wildlife conservation were confirmed by a 1987 survey carried out by Statistics Canada and sponsored by federal and provincial government conservation agencies. The study, which questioned approximately 80 000 Canadians 15 years of age and over, proved a reliable instrument for assessing current participation in wildlife-related activities and drawing comparisons with a similar study in 1981.

The survey results highlight the important role wildlife plays in the lives of Canadians. In 1987, 18.3 million Canadians (91.3 percent) were involved in some form of wildlife-related activity. Participants spent a total of 1.2 billion days and $5.1 billion on wildlife-related activities. There was much public support for wildlife conservation: 83.3 percent of Canadians stated that maintaining abundant wildlife populations is important, and 85.2 percent favoured efforts to preserve endangered species.

Most Canadians (85.5 percent) participated in some sort of indirect wildlife-related activity in 1987, such as watching wildlife films or television programs, reading wildlife books or magazines, visiting zoos, game farms, aquariums, or natural history museums, purchasing wildlife art, crafts, or posters, sustaining natural areas to provide food or shelter for wildlife, and joining or contributing to wildlife organizations. They spent an estimated $73.5 million on wildlife organizations in the form of donations or membership fees and an estimated $1.3 billion on maintaining, improving, or purchasing a natural area to ensure the continued provision of habitat for wildlife. Interest in joining or contributing to wildlife organizations was six times higher than the actual current participation.

About 70.3 percent of Canadians participated in wildlife-related activities around the home or cottage, 22.0 percent took special trips to watch, study, feed, or photograph wildlife, and 45.5 percent had encounters with wildlife while on trips taken for some other purpose. Canadians committed an average of 62.2 days to residential activities, 16.9 days to special trips to see wildlife, and 19.2 days to encounters with wildlife on other trips or outings. They spent a total of $2.7 billion to watch, feed, study, or photograph wildlife around their homes or on trips. Most expenditures ($2.2 billion) were accounted for by Canadians who took special trips to see wildlife.

Hunting attracted nearly one in ten Canadians (8.4 percent) in 1987. Approximately 2.5 percent of Canadians hunted waterfowl, 4.3 percent other birds, 3.7 percent small mammals, and 5.2 percent large mammals. Hunters spent an estimated $1.1 billion, or about $630 per hunter. A total of 28.5 million hunting days were reported, with the average hunter spending about 17 days hunting during the year. Interest in participating in hunting was more than twice as high as current participation, revealing a significant potential for increasing this activity.

A large proportion of Canadians (73.0 percent) took part in a variety of wildlife-related activities. They spent more on a per activity basis when they participated in multiple wildlife activities. A dedicated core group of Canadians (17.8 percent) participated in four or five activities and were responsible for 74.2 percent of the $5.1 billion and nearly 40 percent of the 1.2 billion days expended for the enjoyment wildlife provides.

In 1987, the survey covered recreational fishing and the trapping of small mammals for the first time. An estimated 28.1 percent of the Canadian population spent 88.7 million days fishing for recreation, with each participant averaging 15.8 days. Approximately 400 000 Canadians (2 percent) trapped small mammals for such reasons as food or fur for personal use, income, or property protection.

Participants in the various wildlife-related activities included in the survey consisted of a number of distinct groups in terms of their demographic profiles and their commitment of time and money to wildlife activities. Significant provincial and regional differences were observed.

A comparison of the 1981 and 1987 survey results confirms the popularity of wildlife-related activities among Canadians. Interest in and commitment to these activities remain high and, in a number of instances, have grown.

This report highlights these and other similar findings and demonstrates in the concluding chapter how they will play a significant role in the development and implementation of policies and programs intended to promote the goal of "sustainable development" and to perpetuate the beneficial use of wildlife and habitat resources.

Preface

The 1987 National Survey on the Importance of Wildlife to Canadians was carried out by Statistics Canada under the sponsorship of the Federal–Provincial Wildlife Conference and the direction of the Canadian Wildlife Service. The results of the survey show the significant role played by wildlife in the lives of Canadians and the considerable importance Canadians attach to wildlife. They will have important implications for managers involved in the protection of wildlife and its habitat, the development of resource policies, program planning, and the evaluation of current wildlife programs and services in the context of a "sustainable development" framework.

The survey was designed to update the 1981 National Survey on the Importance of Wildlife to Canadians; together, the 1981 and 1987 results will provide strategic socioeconomic insights on trends in wildlife-related activities to managers of a wide range of federal, provincial, and international wildlife and habitat management programs.

This project represents the combined efforts and expertise of conservation agencies in the federal and provincial governments. Such an undertaking would not have been possible without the unique cooperative efforts of the agencies involved, enabling the gathering of information useful to the sponsors and other concerned researchers. However, the ultimate beneficiaries of the study will be the wildlife and people of Canada.

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Many people have contributed to the successful completion of the 1987 national survey and of this report, including the following: Anne Haining, Mike Sheridan, Jacquie Yiptong, Jill Bench, Karen Johnston, June Laverne, and Scott Buchanan (Statistics Canada); Neil Jotham, Brian Collins, Patricia Logan, Gilles Bertrand, Louis Genest, and Agathe Ledoux (Environment Canada); and Keith Brickley (Department of Fisheries and Oceans).

Table of contents

Federal and provincial survey sponsors 8

1 **Introduction** 9
1.1 Background 9
1.2 Methodology of the survey 9
1.3 Structure and scope of the report 10
1.4 Profile of the Canadian population 10

2 **Participation in wildlife-related activities** 11
2.1 Indirect wildlife-related activities 11
2.2 Nonconsumptive residential wildlife-related activities 12
2.3 Nonconsumptive wildlife-related trips or outings 13
2.3.1 Primary nonconsumptive wildlife-related trips or outings 13
2.3.2 Incidental wildlife encounters during other trips or outings 14
2.4 Consumptive wildlife-related activity — hunting 16
2.4.1 Profiles and participation rates 16
2.4.2 Success rates 18

3 **Time spent participating in wildlife-related activities** 20
3.1 Residential wildlife-related activities 20
3.2 Primary nonconsumptive wildlife-related trips or outings 21
3.3 Incidental encounters with wildlife during other trips or outings 21
3.4 Hunting 22

4 **Expenditures on wildlife-related activities** 23
4.1 Primary nonconsumptive wildlife-related trips or outings 23
4.2 Hunting 23
4.3 Other wildlife-related activities 23

5 **Attitudes toward wildlife** 27
5.1 Wildlife populations 27
5.2 Wildlife-related activities 28
5.3 Actual versus latent demand for wildlife-related activities 28

6 **Single- versus multiple-activity participation** 31
6.1 Characteristics of single- and multiple-activity participants 32
6.2 Types of single- and multiple-activity participation 33

7 **Fishing and trapping** 36
7.1 Fishing for recreation 36
7.2 Trapping small mammals 38

8 **Implications for conservation policies and programs** 39
8.1 Trends in participation in wildlife-related activities since 1981 39
8.2 Implications for sustaining the benefits of wildlife 40
8.3 Further initiatives 41

Appendices
A. Definition of terms 42
B. Profile of the Canadian population (foldout) 45

List of figures

Figure 2.1 Number and percentage of Canadians participating in wildlife-related activities during 1987 11

Figure 2.2 Number and percentage of Canadians participating in indirect wildlife-related activities in 1987 12

Figure 2.3 Percentage of Canadians participating in indirect wildlife-related activities in 1987, by province of residence 12

Figure 2.4 Number and percentage of Canadians participating in residential wildlife-related activities in 1987 12

Figure 2.5 Percentage of Canadians participating in residential wildlife-related activities in 1987, by province of residence 13

Figure 2.6 Number and percentage of Canadians participating in wildlife-related activities while on primary nonconsumptive wildlife-related trips or outings in 1987 14

Figure 2.7 Number and percentage of Canadians encountering wildlife while on primary nonconsumptive wildlife-related trips or outings in 1987 14

Figure 2.8 Profile of Canadians participating in primary nonconsumptive wildlife-related trips or outings in 1987 15

Figure 2.9 Percentage of Canadians participating in primary nonconsumptive wildlife-related trips or outings in 1987, by province of residence 16

Figure 2.10 Number and percentage of Canadians participating in trips or outings with incidental wildlife encounters in 1987 16

Figure 2.11 Number and percentage of Canadians encountering wildlife incidentally during trips or outings in 1987 16

Figure 2.12 Profile of Canadians participating in trips or outings with incidental wildlife encounters in 1987 17

Figure 2.13 Percentage of Canadians participating in trips or outings with incidental wildlife encounters in 1987, by province of residence 18

Figure 2.14 Number and percentage of Canadians hunting wildlife in 1987 18

Figure 2.15 Profile of hunters active in 1987 19

Figure 2.16 Percentage of Canadians hunting wildlife in 1987, by province of residence 20

Figure 3.1 Total and average number of days on which participants engaged in wildlife-related activities in 1987 20

Figure 3.2 Average number of days on which participants engaged in residential wildlife-related activities in 1987, by province of residence 21

Figure 3.3 Average number of days on which participants engaged in residential wildlife-related activities in 1987, by age group 21

Figure 3.4 Average number of days on which participants engaged in primary nonconsumptive trips or outings in 1987, by province of residence 21

Figure 3.5 Average number of days on which participants engaged in primary nonconsumptive trips or outings in 1987, by age group 21

Figure 3.6 Average number of days on which participants engaged in trips or outings with incidental wildlife encounters in 1987, by province of residence 22

Figure 3.7 Average number of days on which participants engaged in trips or outings with incidental wildlife encounters in 1987, by age group 22

Figure 3.8 Total and average number of days on which participants engaged in hunting wildlife in 1987 22

Figure 3.9 Average number of days on which participants engaged in hunting wildlife in 1987, by province of residence 23

Figure 3.10 Average number of days on which participants engaged in hunting wildlife in 1987, by age group 23

Figure 4.1 Total and average expenditures by participants in wildlife-related activities in 1987 24

Figure 4.2 Average expenditures per participant for primary nonconsumptive wildlife-related trips or outings in 1987, by province of residence 25

Figure 4.3 Percent distribution of $2.2 billion spent on primary nonconsumptive wildlife-related trips or outings in 1987 25

Figure 4.4 Total and average expenditures by participants in hunting in 1987 26

Figure 4.5 Average expenditures for hunting wildlife per participant in 1987, by province of residence 26

Figure 4.6 Percent distribution of $1.1 billion spent on hunting wildlife in 1987 27

Figure 5.1 Percentage of Canadians reporting that maintaining abundant wildlife is very or fairly important in 1987, by province of residence 27

Figure 5.2 Percentage of Canadians reporting that preserving endangered species is very or fairly important in 1987, by province of residence 28

Figure 5.3 Percentage of Canadians expressing great or some interest in participating in one or more nonconsumptive wildlife-related activities in 1987, by province of residence 28

Figure 5.4 Percentage of Canadians expressing great or some interest in participating in one or more consumptive wildlife-related activities (hunting, trapping, or collecting wildlife specimens) in 1987, by province of residence 29

Figure 5.5 Percentage of Canadians expressing great or some interest in participating in one or more wildlife-related organizations in 1987, by province of residence 29

Figure 5.6 Difference between actual number of participants and those interested in participating in selected wildlife-related activities in 1987 30

Figure 5.7 Difference between actual number of participants and those interested in participating in selected wildlife-related activities in 1987, by province of residence 31

Figure 6.1 Number and percentage of Canadians participating in 0–5 wildlife-related activities in 1987 32

Figure 6.2 Average number of days and dollars spent by Canadians according to the number of different types of wildlife-related activity they took part in during 1987 33

Figure 6.3 Percentage of Canadians participating in single and multiple wildlife-related activities in 1987, by province of residence 34

Figure 6.4 Number and percentage of Canadians participating in single and multiple wildlife-related activities in 1987 35

Figure 6.5 Average number of days and dollars spent by wildlife participants within single- and multiple-activity participation types in 1987 36

Figure 7.1 Profile of Canadians fishing for recreation in 1987 37

Figure 7.2 Percentage of Canadians fishing for recreation in 1987, by province of residence 38

Figure 7.3 Average number of days on which participants engaged in fishing for recreation in 1987, by province of residence 38

Figure 7.4 Average number of days on which participants engaged in fishing for recreation in 1987, by age group 38

Figure 7.5 Distribution of reasons for trapping small mammals in 1987 38

Figure 7.6 Percentage of Canadians trapping small mammals in 1987, by province of residence 39

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1 Introduction

Effective conservation requires information on the state of the environment and the dynamic nature of our dependence on natural resources for our well-being. Decision makers and members of the public employ this knowledge to ensure that renewable resources, such as wildlife, are treated as assets to be conserved for the benefit of all humanity.

This is the central philosophy underlying the notion of "sustainable development," which has been espoused by the United Nations World Commission on Environment and Development[1] and supported by Canada's National Task Force on Environment and the Economy.[2] More specifically, sustainable development implies the utilization of environmental resources, such as wildlife and habitat, to optimize economic and other societal benefits today while not damaging prospects for their use by future generations.

The need to better understand the nature, extent, and importance of the interactions between wildlife populations and human populations motivated the conducting of a major national survey on the importance of wildlife to Canadians. The objectives of the federal and provincial agencies that sponsored the survey were to monitor wildlife-related activities in order to gain socioeconomic insights on a number of vital issues. These issues include habitat enhancement, recovery of endangered species, sustainable development, state-of-the-environment reporting, legislation enforcement, management for multiple uses of wildlife resources, environmental pollution, and international and regional wildlife needs, among others. The study gauged the importance of wildlife through questions on the nature and extent of demand for wildlife, levels of commitment of time and money to wildlife-related activities, and public support for wildlife conservation.

1.1 Background

The 1987 National Survey on the Importance of Wildlife to Canadians, sponsored by the Federal–Provincial Wildlife Conference, was carried out by Statistics Canada between February and April 1988 under the direction of the Canadian Wildlife Service, Environment Canada. The 1987 national survey was designed to update information collected by Statistics Canada for 1981 under similar sponsorship arrangements. The 1981 national survey continues to provide useful socioeconomic contributions to environmental management. Key publications produced include a series of reports under the generic title *The importance of wildlife to Canadians*:

- *Highlights of the 1981 national survey*[3]
- *A user's guide to the methodology of the 1981 national survey*[4]
- *An executive overview of the recreational economic significance of wildlife*[5]
- *The recreational economic significance of wildlife*[6]
- *Demand for wildlife to 2001*[7]

and a pamphlet on *The benefits of wildlife.*[8]

Because of the importance of strategic socioeconomic insights on trends in wildlife-related activities to federal, provincial, and international wildlife and habitat management programs, the Wildlife Conservation Colloquium Task Force has recommended to Canada's national and provincial wildlife ministers that similar surveys on the importance of wildlife to Canadians be updated regularly every five years.[9]

1.2 Methodology of the survey

Statistics Canada administered the survey as a supplement to its Labour Force Survey, in order to take advantage of the multistage probability sample design on which that survey is based, the national network of interviewers in place to collect the data, and the high standards for maintaining confidentiality and privacy for individuals from whom the data are collected. The sample is representative of the entire Canadian population, with the exception of the Yukon and Northwest Territories. It covers approximately 98 percent of the entire Canadian population 15 years of age and over.

[1]United Nations World Commission on Environment and Development (Brundtland Commission). 1987. Our common future. Oxford, England.

[2]National Task Force on Environment and the Economy. 1987. Report to the Canadian Council of Resource and Environment Ministers. Downsview, Canada.

[3]Filion, F.L.; James, S.W.; Ducharme, J.L.; Pepper, W.; Reid, R.; Boxall, P.; Teillet, D. 1983. The importance of wildlife to Canadians: Highlights of the 1981 national survey. Canadian Wildlife Service, Ottawa, Canada.

[4]Filion, F.L.; Weisz, G.; Collins, B. 1985. The importance of wildlife to Canadians: A user's guide to the methodology of the 1981 national survey. Canadian Wildlife Service, Ottawa, Canada.

[5]Filion, F.L.; Jacquemot, A.; Reid, R. 1985. The importance of wildlife to Canadians: An executive overview of the recreational economic significance of wildlife. Canadian Wildlife Service, Ottawa, Canada.

[6]Jacquemot, A.; Reid, R.; Filion, F.L. 1986. The importance of wildlife to Canadians: The recreational economic significance of wildlife. Canadian Wildlife Service, Ottawa, Canada.

[7]Filion, F.L.; Parker, S.; DuWors, E. 1988. The importance of wildlife to Canadians: Demand for wildlife to 2001. Canadian Wildlife Service, Ottawa, Canada.

[8]Egan, M.; Logan, P.; DuWors, E. 1989. The benefits of wildlife. Canadian Wildlife Service, Ottawa, Canada.

[9]Federal–Provincial Wildlife Conference, Wildlife Conservation Colloquium Task Force. 1987. Report to Wildlife Ministers. Canadian Wildlife Service, Ottawa, Canada.

Residents of Indian reserves, full-time members of the Canadian Armed Forces, and inmates of institutions are excluded.

The survey questionnaire was prepared and pretested with consultation among all survey sponsors. Statistics Canada used similar key questions in the 1987 survey as in the 1981 survey to enable comparability between the results.

The questionnaire was delivered to 78 429 individuals in February 1988 under the guidance of the Special Surveys Group of Statistics Canada and its 800 interviewers across the country. Respondents were asked to answer questions regarding their activities during 1987. After two telephone followups, 55 173 surveys were returned, yielding a response rate of 70.3 percent.

Data processing of completed questionnaires included data capture under strict quality control procedures, weighting of sample results to produce population estimates, an exhaustive computer edit to ensure consistency, logic, and ease of use of the data, and a procedure to link demographic data gathered on respondents as part of their participation in the Labour Force Survey to their responses to the national survey. Measures of the statistical reliability of the data were prepared by Statistics Canada to ensure that all information released satisfied a minimum level of reliability.

Sponsors of the survey were invited to submit their information requirements to the Canadian Wildlife Service. These requirements formed the basis for tabular data requested from Statistics Canada. A Federal–Provincial Task Force chaired by the Canadian Wildlife Service was created to oversee the analysis and publication of the results. This report is the first to be published on the 1987 national survey results.

Full details of the methodology of the surveys and guidelines for analyzing survey data are available from user's guides prepared by Statistics Canada and the Canadian Wildlife Service.[10-12]

1.3 Structure and scope of the report

Chapters 2 to 5 of the report highlight survey results for a number of wildlife-related activities: indirect wildlife-related activities, residential wildlife-related activities, primary nonconsumptive trips or outings, incidental wildlife encounters, and hunting. Definitions of these activities are included in Appendix A.

Each form of wildlife-related activity was analyzed on national and provincial levels. On the national level, participation rates, demographic profiles of participants, days engaged in wildlife-related activities, expenditures, and attitudes are highlighted. An overview of provincial data is included for all major wildlife-related activities. These data represent the responses of participants grouped by their province of residence in 1987.

Chapter 6 describes multiple-activity participation, or participation in more than one wildlife-related activity. Profiles of participants in multiple activities, the time and money they spent on their activities, and their involvement in wildlife organizations are summarized in Section 6.1. An overview of provincial variations in multiple-activity participation is also presented. Section 6.2 gives a segmentation of the Canadian population by type of wildlife-related activity in order to highlight the combinations of activities that were most popular or accounted for high commitments of time and money. Key differences between provinces are highlighted.

Chapter 7 covers two wildlife-related activities that were new in the 1987 national survey. Canadians who participated in recreational fishing are profiled in Section 7.1, while trapping is discussed in Section 7.2.

The concluding chapter of the report, Chapter 8, provides an overview of trends in participation in wildlife-related activities between 1981 and 1987. Socioeconomic insights for conservation policies and programs that emerge from the findings of the national surveys are advanced, and plans for further initiatives are described.

The findings presented in this report may be revised as a result of ongoing statistical analyses.

1.4 Profile of the Canadian population

Throughout this report, the Canadian population aged 15 years and over was used as the base for the calculation of most percentages. In order to fully appreciate the significance of the profiles of participants in wildlife-related activities, it is important to be aware of the proportional breakdown of the Canadian population for key demographic factors.

Appendix B contains a foldout illustration and table that show the profile of the Canadian population by sex, age, urban–rural residence, education, personal income, and province of residence in 1987. The table shows that of the estimated 20 million Canadians 15 years of age and over, females (51.1 percent) were slightly more numerous than males (48.9 percent). The table also reveals that Canadians between the ages of 15 and 24 make up almost 20 percent of the population, those in the middle years (25–44 years) make up more than 42 percent, and those over 45 years of age make up 38 percent. The majority of Canadians had either elementary (15.6 percent) or secondary (47.9 percent) schooling and resided mostly in urban areas (73.0 percent). Canadians with personal incomes under $10 000

[10]Filion, F.L.; Weisz, G.; Collins, B. 1985. The importance of wildlife to Canadians: A user's guide to the methodology of the 1981 national survey. Canadian Wildlife Service, Ottawa, Canada.

[11]Statistics Canada. 1983. The survey on the value of wildlife to Canadians: Microdata documentation and user's guide. Ottawa, Canada.

[12]Statistics Canada and Canadian Wildlife Service. Forthcoming. The survey on the importance of wildlife to Canadians during 1987: microdata documentation and user's guide. Ottawa, Canada.

made up 41.7 percent of the population, those with incomes from $10 000 to $29 999 made up 37.7 percent, and those with incomes of $30 000 or more made up 20.6 percent.

The purpose of presenting this profile of the Canadian population is to enable the reader to distinguish between wildlife-related activities that appeal to a representative cross-section of the Canadian population and those that appeal to participants whose profile may be quite different with regard to age, sex, residence, education, or personal income. The foldout format allows the reader to compare at a glance the profile of the population as a whole with the profile of participants in various activities, such as Figure 2.8. In this report, the terms "overrepresented" and "underrepresented" are used to refer to groups whose profile differs substantially from that of the Canadian population as a whole. For example, while men constituted 48.9 percent of the Canadian population, they comprised 90.4 percent of those who hunted in 1987. Thus, it can be said that hunters were more concentrated among Canadian males than females, or that hunting was more popular with Canadian males, or that males were "overrepresented" in hunting.

The table in Appendix B provides provincial populations to enable the reader to convert percentages for provinces shown in the figures to total numbers.

2 Participation in wildlife-related activities

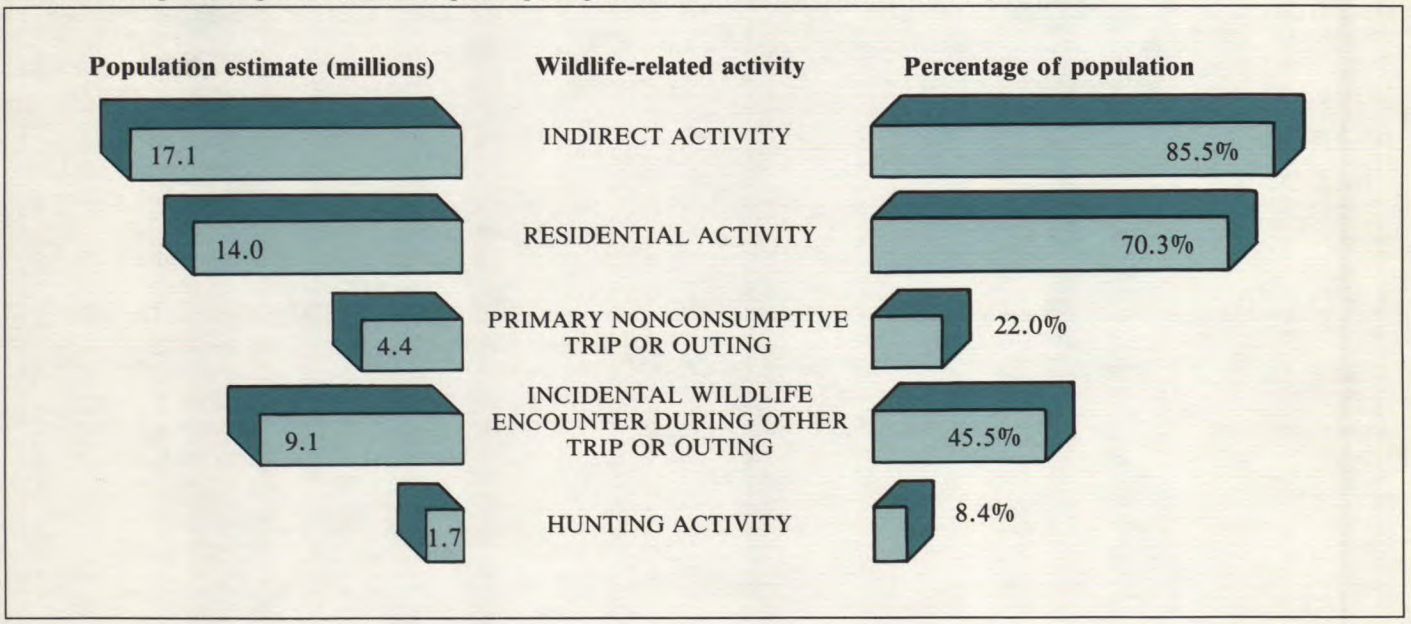
In 1987, 91.3 percent of the surveyed population, or 18.3 million Canadians, participated in a wide range of wildlife-related activities. An estimated 17.1 million Canadians participated in indirect wildlife-related activities, 14.0 million participated in residential wildlife-related activities, 4.4 million took a special primary nonconsumptive trip or outing to encounter wildlife, 9.1 million encountered wildlife incidentally during other trips or outings, and 1.7 million Canadians hunted wildlife (Figure 2.1).

2.1 Indirect wildlife-related activities

In 1987, 85.5 percent of the surveyed population, or 17.1 million Canadians, participated in some form of indirect wildlife-related activity. Watching films or television programs on wildlife was the most common form of indirect wildlife-related activity, attracting 15.7 million Canadians (Figure 2.2). Reading about wildlife was reported by 10.8 million Canadians, followed by visiting a zoo, game farm, aquarium, or natural history museum, which attracted 8.6 million Canadians. The purchase of art, crafts, and posters of wildlife was reported by 3.7 million Canadians. Wildlife organizations had 1.4 million members and contributors. Maintaining, improving, or purchasing natural areas to provide food or shelter for wildlife was reported by about 700 000 Canadians.

The profile of indirect users is very similar to that of the Canadian population, as discussed in Section 1.4 above, except for those who participated in wildlife organizations or maintained natural areas for wildlife. Involvement in wildlife organizations tended to be more popular with males and those between 25 and 44 years

Figure 2.1
Number and percentage of Canadians participating in wildlife-related activities during 1987

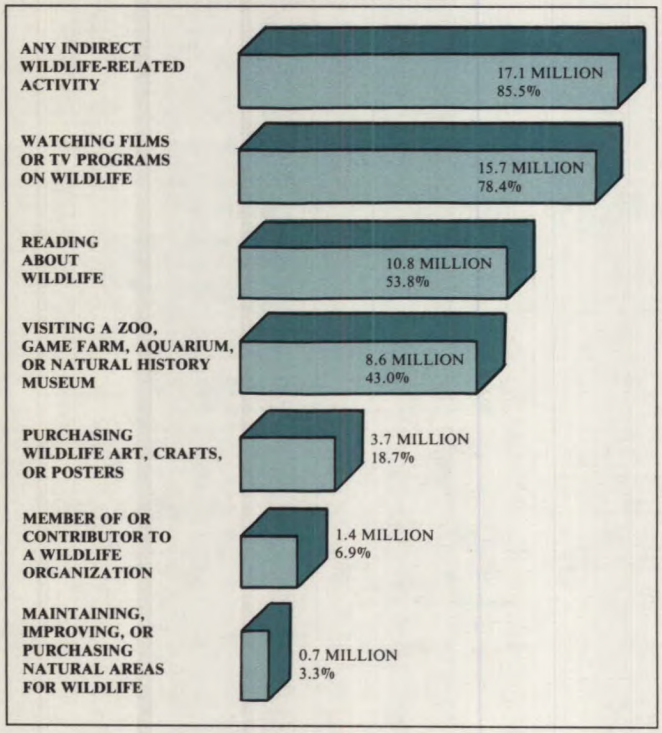


of age. Although the majority were urban residents, rural residents were overrepresented in wildlife organizations, as were Canadians with education beyond secondary school, who accounted for 52.0 percent of the members and contributors. Canadians with personal incomes of $20 000 or more were also overrepresented, while those with incomes under $10 000 were underrepresented. The profile of Canadians who maintained natural areas for wildlife closely followed the pattern for supporters of wildlife organizations, except for the age groups they represented: nearly half (48.6 percent) of these participants were over the age of 45.

Participation in indirect wildlife-related activities varied appreciably across Canada (Figure 2.3). In Newfoundland, Prince Edward Island, New Brunswick, and Quebec, participation levels fell below the national average, with Newfoundland residents recording a national low of 74.9 percent. Participation in Nova Scotia and from Ontario westward remained close to the national average, with Alberta residents recording the highest participation rate—91.7 percent.

Involvement in wildlife organizations increased from east to west. In the Atlantic region and Quebec, participation rates were below the national average of 6.9 percent, while rates in the provinces west of Quebec exceeded the national average. Over 8 percent of residents of the three Prairie provinces and British Columbia were members of or contributors to wildlife organizations.

Figure 2.2
Number and percentage of Canadians participating in indirect wildlife-related activities in 1987



2.2 Nonconsumptive residential wildlife-related activities

Nonconsumptive activities around the residence or cottage were defined to include feeding, watching, photographing, or studying wildlife, and maintaining plants or shrubs to provide food or shelter for wildlife. In 1987, about 14.0 million Canadians (70.3 percent) participated in one or more of these activities.

As illustrated in Figure 2.4, watching and feeding scraps to wildlife were the most popular of the nonconsumptive residential activities, with an estimated 11.7

Figure 2.3
Percentage of Canadians participating in indirect wildlife-related activities in 1987, by province of residence

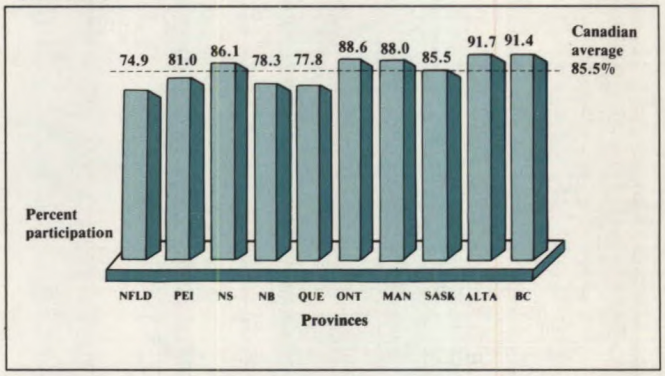
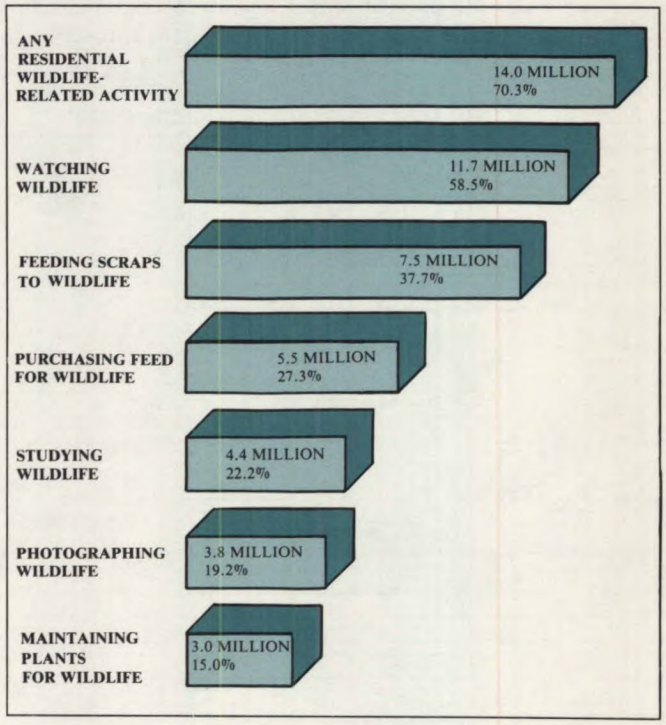


Figure 2.4
Number and percentage of Canadians participating in residential wildlife-related activities in 1987



million and 7.5 million Canadians, respectively, reporting participation in 1987. Purchasing feed for wildlife was undertaken by 5.5 million Canadians and was the third most popular activity. Studying wildlife (4.4 million), photographing wildlife (3.8 million), and maintaining plants and shrubs for wildlife (3.0 million) were other reported activities.

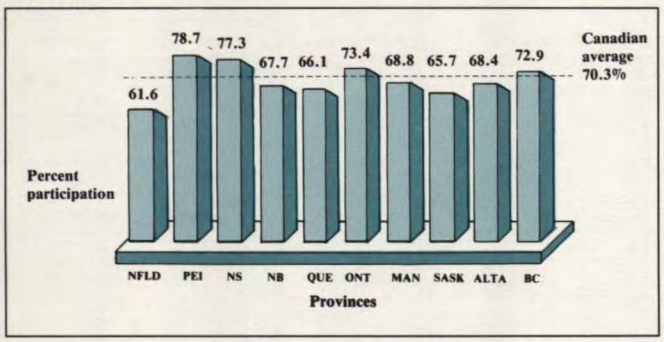
The profile of participants in nonconsumptive residential wildlife-related activities did not differ appreciably from the profile of the Canadian population shown in Appendix B. These activities were slightly more popular among Canadian women. Participants between 25 and 34 years of age were the largest single group. Canadians over 65 were underrepresented in these activities. Most participants were urban dwellers. Participants with an education beyond secondary school tended to be overrepresented in these activities, totaling 39.3 percent of participants in 1987. Participants with personal incomes of $30 000 or more were also slightly overrepresented in these activities (22.5 percent of participants).

Residents in Prince Edward Island, Nova Scotia, Ontario, and British Columbia reported participation rates in nonconsumptive residential wildlife-related activities above the national average of 70.3 percent. The other six provinces had participation rates below the national average (Figure 2.5).

2.3 Nonconsumptive wildlife-related trips or outings

Canadians frequently encounter wildlife outside the residential setting. However, the forms of these encounters may vary substantially. To distinguish between them, two types of wildlife encounters were defined. The first type, and the most common, occurs during a trip or outing taken for business or pleasure that has a primary purpose other than to encounter wildlife. This form is quite different from wildlife encounters during a special trip or outing whose main purpose is to observe, photograph, or study wildlife.

Figure 2.5
Percentage of Canadians participating in residential wildlife-related activities in 1987, by province of residence



Accordingly, the latter was classified as a primary nonconsumptive trip or outing. These two distinct forms of encounters were considered separately.

2.3.1 Primary nonconsumptive wildlife-related trips or outings

Primary nonconsumptive wildlife-related trips or outings were taken by about 4.4 million persons (22.0 percent of the Canadian population). During these trips, watching and photographing wildlife were the two most common activities. About 3.6 million Canadians watched wildlife (Figure 2.6), and 1.6 million photographed wildlife. Studying wildlife was undertaken by 1.4 million Canadians, and 1.2 million fed wildlife encountered during a primary nonconsumptive trip or outing.

Canadians taking part in primary nonconsumptive trips or outings reported watching, photographing, feeding, or studying waterfowl, other types of birds, large and small mammals, and other wildlife. On such journeys, 2.9 million Canadians reported seeing such birds as hawks and owls (Figure 2.7). Small mammals were spotted by 2.7 million Canadians, and 2.6 million reported seeing such waterfowl as ducks, geese, herons, and cranes. Large mammals and other wildlife were encountered by fewer Canadians: about 2.0 million reported encounters with large mammals, and 1.4 million sighted other forms of wildlife.

The profile of participants differed in several ways from the profile of the Canadian population. Figure 2.8 shows that primary nonconsumptive trips or outings were popular among both males and females. Participants between 15 and 44 years of age were overrepresented; those between 25 and 34 years of age represented 28.6 percent of trip takers. Most participants were urban residents and possessed a secondary school education. Participants with an education beyond secondary school (41.9 percent) were overrepresented in this activity. Canadians with personal incomes of $20 000 or more were also overrepresented in these activities, making up 41.9 percent of all participants.

Figure 2.6
Number and percentage of Canadians participating in wildlife-related activities while on primary nonconsumptive wildlife-related trips or outings in 1987

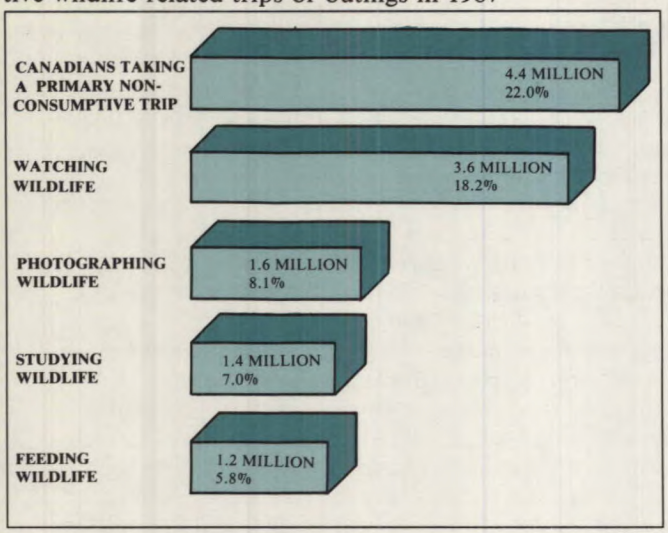
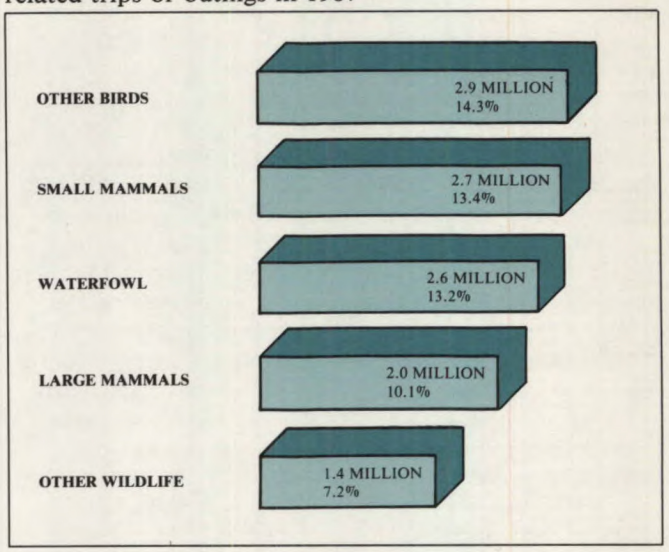


Figure 2.7
Number and percentage of Canadians encountering wildlife while on primary nonconsumptive wildlife-related trips or outings in 1987



Participation in primary nonconsumptive wildlife-related trips or outings varied among the provinces (Figure 2.9). Residents of Nova Scotia, New Brunswick, Quebec, Alberta, and British Columbia recorded participation rates above the national average of 22.0 percent. Newfoundland, Prince Edward Island, and Saskatchewan residents recorded participation rates appreciably below the national average; Newfoundland recorded the lowest, at 16.6 percent.

2.3.2 Incidental wildlife encounters during other trips or outings

In 1987, an estimated 9.1 million persons (45.5 percent of the Canadian population) encountered wildlife incidentally while on trips or outings taken for business or pleasure. An increased level of enjoyment as a result of these encounters was reported by 93.0 percent of participants. As shown in Figure 2.10, Canadians who encountered wildlife during these other trips or outings took part in a number of activities related to wildlife. An estimated 8.2 million persons watched wildlife, 3.2 million photographed wildlife, 2.8 million fed wildlife, and 2.0 million studied the wildlife they encountered.

During these incidental encounters, Canadians observed, photographed, fed, or studied a variety of wildlife (Figure 2.11). Some 6.2 million persons reported seeing such birds as hawks and owls, and 5.4 million Canadians reported sighting waterfowl, including ducks, geese, herons, and cranes. Small mammals, such as rabbits, squirrels, raccoons, and foxes, were seen by 6.2 million Canadians, and large mammals, such as deer, bears, moose, and mountain sheep, were sighted by 3.5 million Canadians. Other types of wildlife were encountered by 2.5 million Canadians.

These activities were popular among both males and females (Figure 2.12). Canadians under 45 years of age were overrepresented in this activity, while those over 45 years of age were underrepresented. Participants who possessed an education beyond secondary school were overrepresented and comprised 45.7 percent of those who encountered wildlife incidentally in 1987. Most participants were urban residents. Canadians with personal incomes of $20 000 or more were overrepresented, making up 42.4 percent of participants.

Participation in trips and outings with incidental wildlife encounters showed an increase across Canada from east to west (Figure 2.13). Residents of the Atlantic provinces, Quebec, Ontario, and Manitoba reported participation rates below the national average of 45.5 percent. Residents of Saskatchewan, Alberta, and British Columbia reported participation rates above the national average. The highest rate of incidental encounters with wildlife was 57.1 percent, recorded by Alberta residents.

Figure 2.8
Profile of Canadians participating in primary nonconsumptive wildlife-related trips or outings in 1987

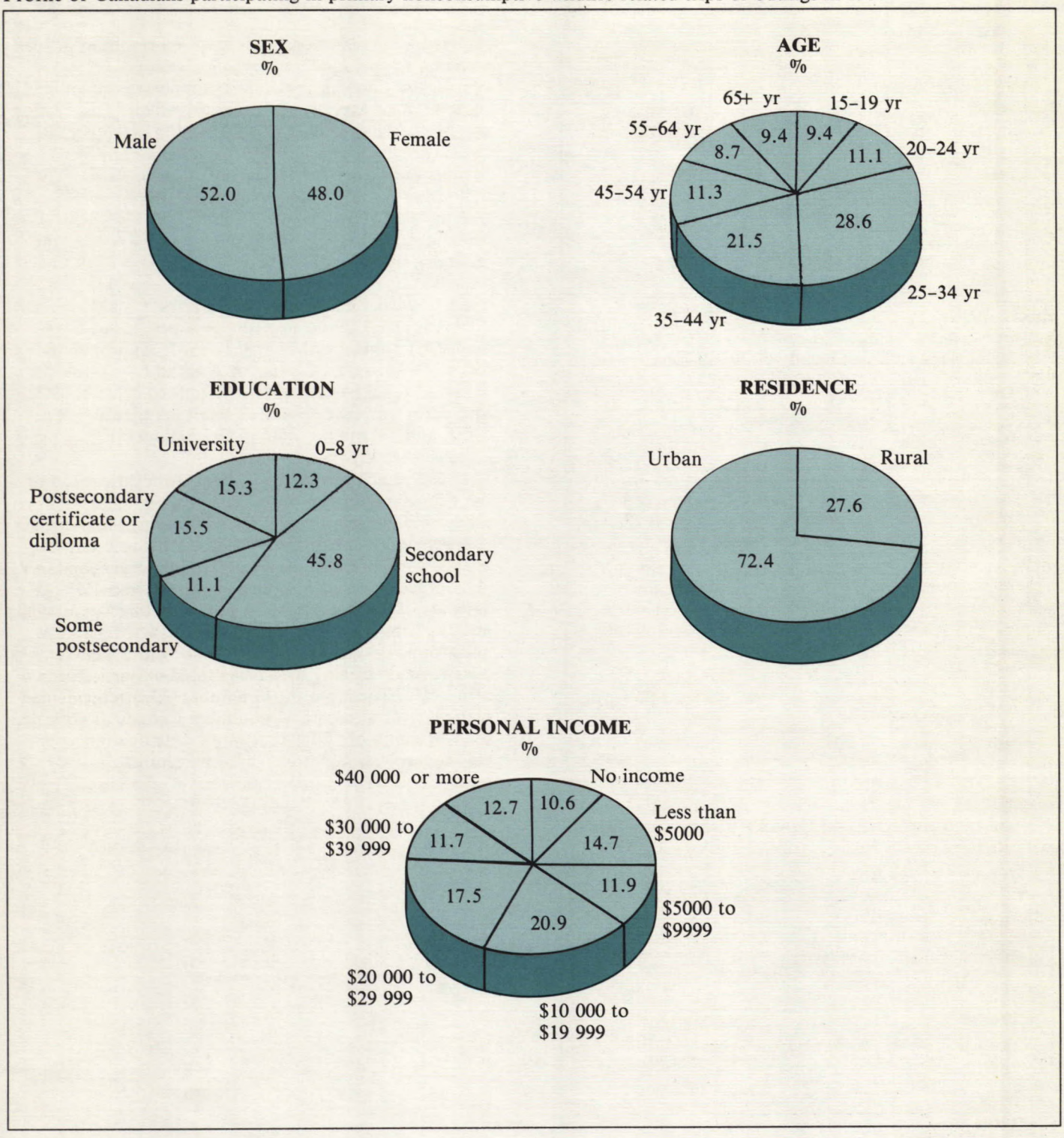


Figure 2.9
Percentage of Canadians participating in primary non-consumptive wildlife-related trips or outings in 1987, by province of residence

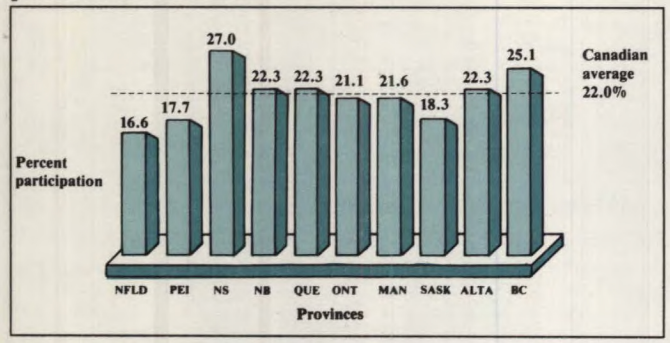


Figure 2.10
Number and percentage of Canadians participating in trips or outings with incidental wildlife encounters in 1987

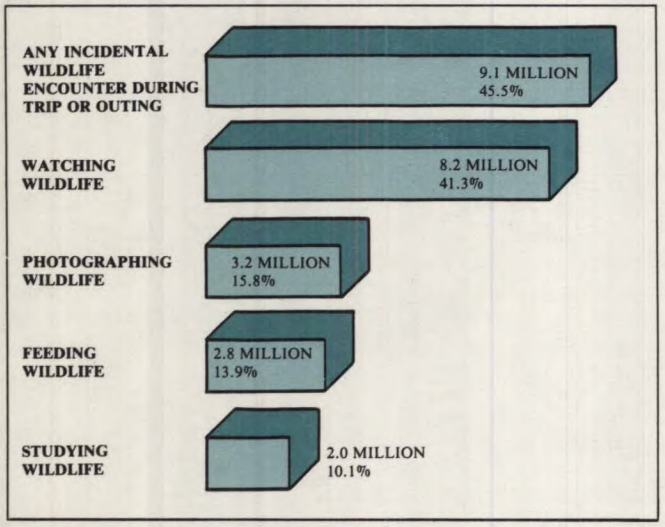
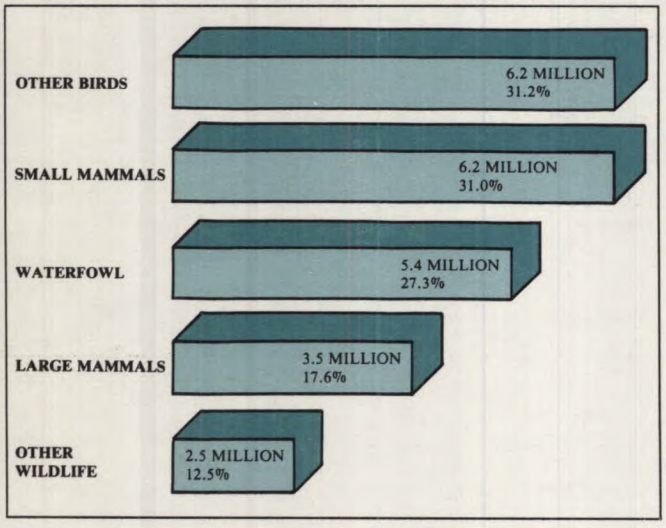


Figure 2.11
Number and percentage of Canadians encountering wildlife incidentally during trips or outings in 1987



2.4 Consumptive wildlife-related activity—hunting[13]

Hunting wildlife is an established tradition in Canada. In this survey, 4.7 million persons (23.4 percent of the Canadian population) reported having had some hunting experience during their lives. This section will provide information on the profile of hunters in 1987, their participation rates, and the extent to which hunters are successful at harvesting game. Both national and provincial participation rates are presented, as well as rates of participation in hunting four types of wildlife: waterfowl, other birds, small mammals, and large mammals.

2.4.1 Profiles and participation rates

About 1.7 million persons (8.4 percent of the Canadian population) hunted in 1987. Approximately 500 000 Canadians 15 years of age and over hunted waterfowl (2.5 percent), 900 000 hunted other birds (4.3 percent), 700 000 hunted small mammals (3.7 percent), and 1.0 million hunted large mammals (5.2 percent) (Figure 2.14).

The profile of hunters differs from the profile of the Canadian population in several ways. Hunting was more popular among males (90.4 percent) than females (9.6 percent) in 1987 (Figure 2.15). Participants were equally divided between urban (50.1 percent) and rural (49.9 percent) residents. Participants between 15 and 34 years of age comprised 53.2 percent of those who hunted, showing the popularity of the activity in this age group. Hunting was less popular with Canadians over 45 years of age, who constituted only 25.2 percent of hunters. The majority of hunters (72.0 percent) had secondary or elementary schooling. Canadians with personal incomes of $20 000 or more were overrepresented among hunters, making up 51.1 percent of all who hunted.

[13]The consumptive wildlife-related activities of fishing and trapping are dealt with in Chapter 7 because they were new in the 1987 national survey.

Figure 2.12
Profile of Canadians participating in trips or outings with incidental wildlife encounters in 1987

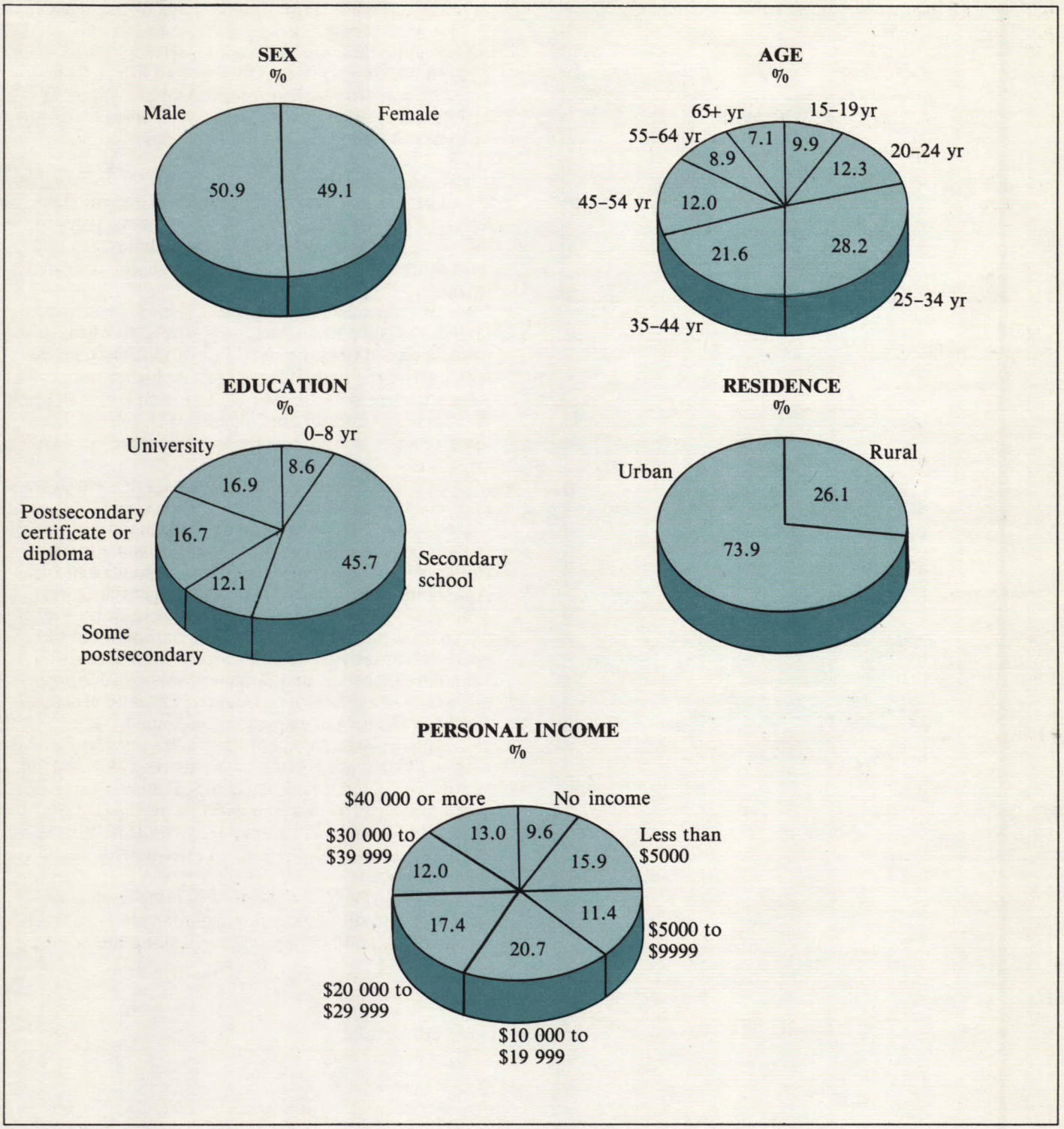


Figure 2.13
Percentage of Canadians participating in trips or outings with incidental wildlife encounters in 1987, by province of residence

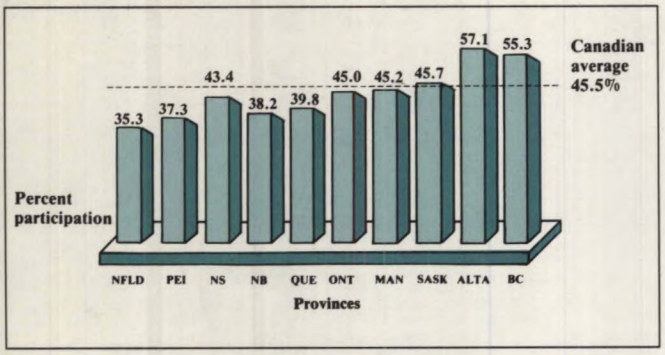
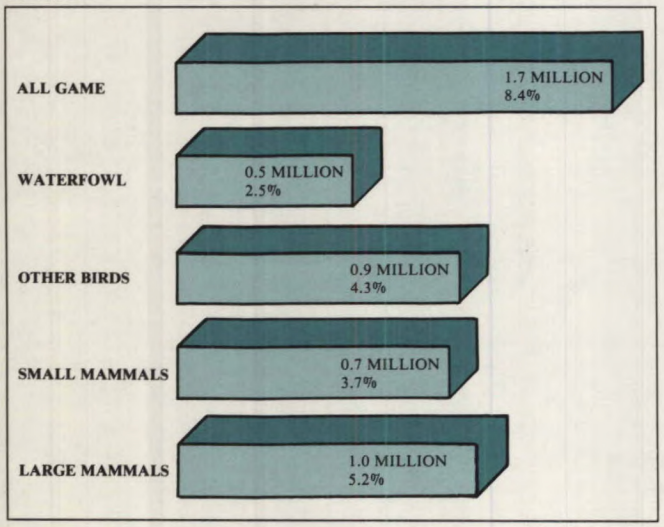


Figure 2.14
Number and percentage of Canadians hunting wildlife in 1987



Residents of Newfoundland, Nova Scotia, and New Brunswick recorded the highest participation rates in hunting (Figure 2.16). The residents of the three Prairie provinces and Prince Edward Island all recorded participation rates above the national average of 8.4 percent. Residents of Quebec, Ontario, and British Columbia recorded rates lower than the national average. The high levels of urbanization in these provinces (74 percent or more) likely affect participation rates in hunting.

2.4.2 Success rates

The extent to which hunters are successful at harvesting game is of importance both in assessing the impact of hunting on wildlife populations and in understanding one of the numerous benefits provided by the activity.

An estimated 64.6 percent of waterfowl hunters (about 320 000 participants) were successful. Residents of Quebec and the provinces west of Ontario recorded levels above the national average; the highest rates were reported by waterfowl hunters in Saskatchewan (74.4 percent) and British Columbia (71.2 percent). Ontario and the Atlantic provinces recorded success rates below the national average.

About 52.5 percent of participants (some 450 000 people) who hunted birds other than waterfowl reported success. Success rates were above the national average in Ontario, the three Prairie provinces, and British Columbia and lower than the national average in the Atlantic provinces and Quebec. Hunters in Saskatchewan recorded the highest level—70.8 percent.

The success rate for small mammal hunters was 58.1 percent (about 425 000 people). Hunters in Newfoundland, Quebec, and Saskatchewan exceeded the national average, while residents of all other provinces recorded success rates below the national average.

An estimated 35.6 percent of large mammal hunters (about 370 000 participants) were successful. Residents of Newfoundland, Manitoba, and Saskatchewan recorded much higher levels than the national average, at 61.3, 56.1, and 67.0 percent, respectively, while hunters in all other provinces recorded success rates near or below the national average.

The provincial variations in hunting success are due in part to differences in regulatory practices, such as bag limits and hunting seasons, among the provinces.

Figure 2.15
Profile of hunters active in 1987

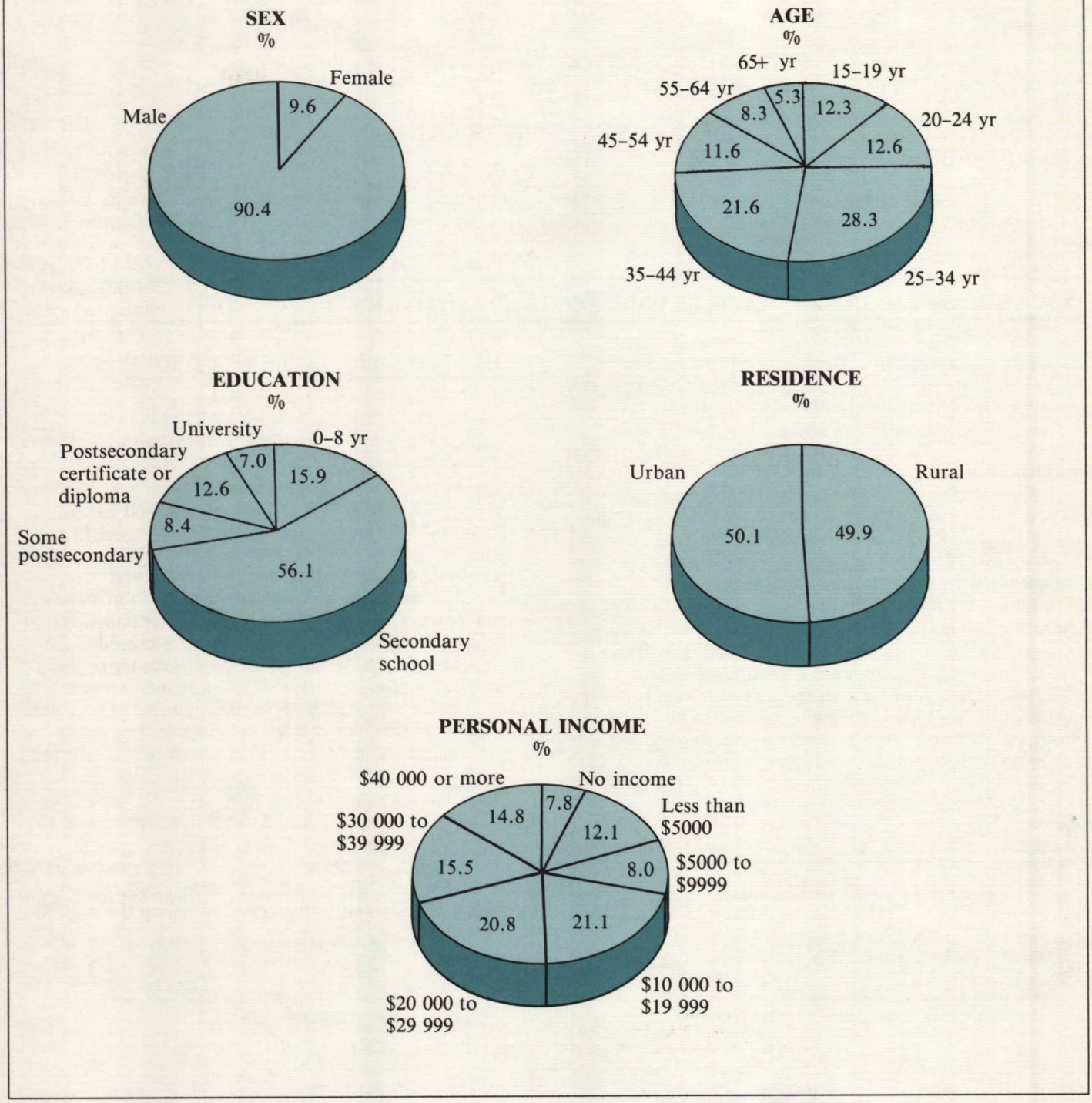
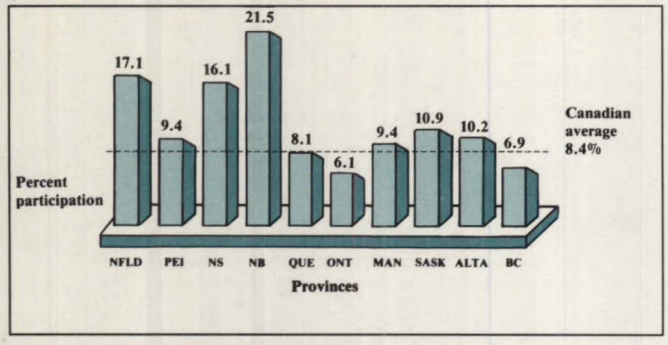


Figure 2.16
Percentage of Canadians hunting wildlife in 1987, by province of residence



3 Time spent participating in wildlife-related activities

The amount of time engaged in an activity provides some measure of the extent of involvement in that activity. This information allows differentiation between simple involvement and a commitment to the activity. In this study, a day includes any part of a day spent participating in a given activity.

Data outlining the total and average number of days engaged in wildlife-related activities are presented on national and provincial levels in this chapter. A profile by age is presented to identify variations in time engaged in different wildlife-related activities.

Figure 3.1 presents an overview of the total and average number of days on which Canadians took part in wildlife-related activities. In 1987, Canadians spent approximately 1.2 billion days on wildlife-related activities. They spent most time on residential wildlife-related activities, followed by incidental encounters during a business or pleasure trip or outing, primary nonconsumptive trips or outings, and hunting.

3.1 Residential wildlife-related activities

In 1987, Canadians recorded approximately 873.4 million days engaged in residential wildlife-related activities around their residence or cottage—an average of 62.2 days per participant (Figure 3.1). Residents in Prince Edward Island, Nova Scotia, Ontario, and British Columbia recorded mean days above the national average, with Prince Edward Island residents recording a national high of 80.0 days (Figure 3.2). The number of days spent by Newfoundland residents on residential wildlife-related activities (41.4 days) was well below the national average.

The average number of days in which different age groups engaged in residential wildlife activities tended to increase with age (Figure 3.3). Younger participants tended to spend fewer days than others engaged in these activities, with those 15–24 years of age averaging

Figure 3.1
Total and average number of days on which participants engaged in wildlife-related activities in 1987

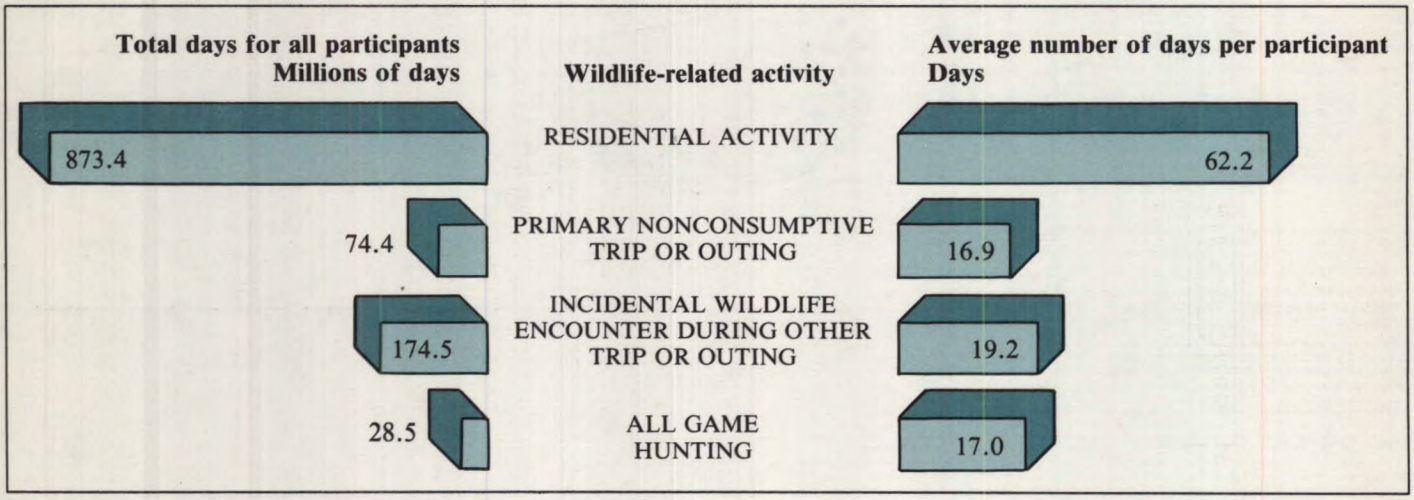


Figure 3.2
Average number of days on which participants engaged in residential wildlife-related activities in 1987, by province of residence

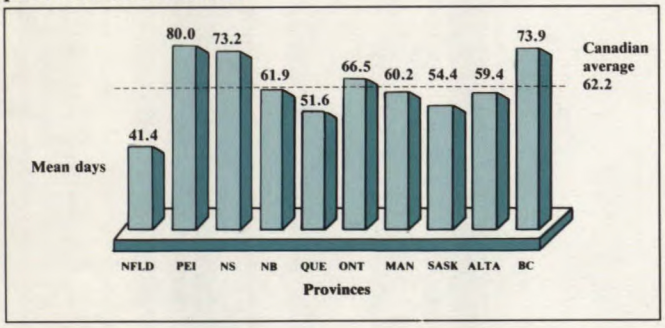
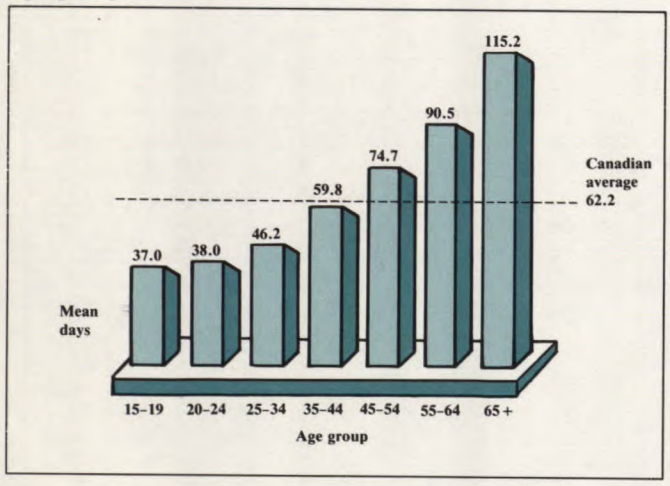


Figure 3.3
Average number of days on which participants engaged in residential wildlife-related activities in 1987, by age group



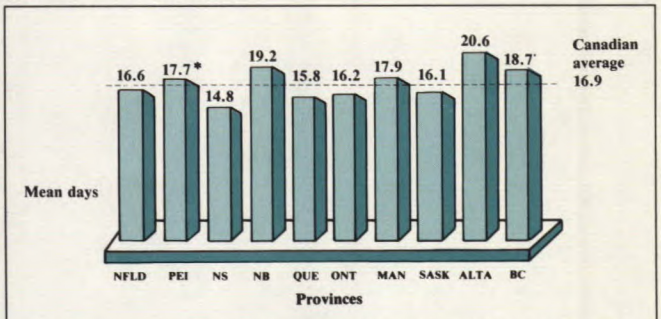
38 days. Participants in older age groups show a tendency to devote increasing amounts of time to these activities, with those over 65 years of age averaging 115.2 days per year.

3.2 Primary nonconsumptive wildlife-related trips or outings

Canadians spent an estimated 74.4 million days engaged in primary nonconsumptive trips in 1987, with each participant averaging 16.9 days (see Figure 3.1). Residents of the provinces recorded averages similar to the national mean (Figure 3.4); residents of Alberta recorded the highest average number of days engaged in such trips (20.6 days), while Nova Scotia residents averaged the lowest (14.8 days).

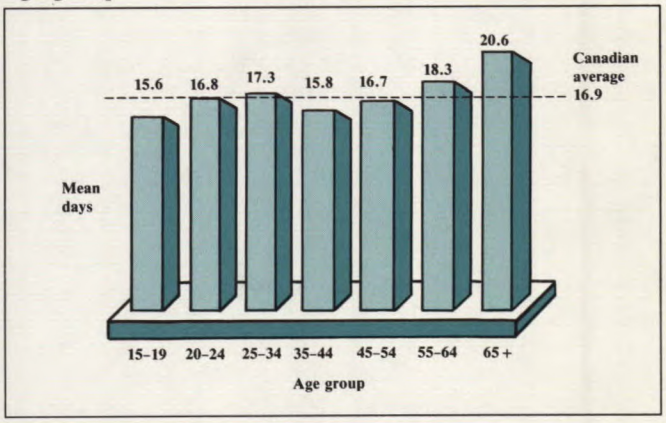
The average number of days engaged in primary nonconsumptive trips showed little variation across age groups (Figure 3.5), although Canadians over 65 years of age tended to devote more time to these activities, averaging 20.6 days per year.

Figure 3.4
Average number of days on which participants engaged in primary nonconsumptive trips or outings in 1987, by province of residence



* The sampling variability of this estimate is slightly higher than that for other provinces for such reasons as small sample size or low participation.

Figure 3.5
Average number of days on which participants engaged in primary nonconsumptive trips or outings in 1987, by age group



3.3 Incidental encounters with wildlife during other trips or outings

About 174.5 million days were spent by Canadians in 1987 on incidental wildlife encounters during trips or outings taken for business or pleasure, for an average of 19.2 days per participant (see Figure 3.1). Residents of Prince Edward Island, New Brunswick, and British Columbia surpassed the national average (Figure 3.6), with Prince Edward Island recording the highest number, an average of 22.8 days. Residents of other provinces recorded averages similar to the national mean, with the exception of Newfoundland residents, who recorded the lowest provincial rate—15.4 days.

The average number of days Canadians were involved in incidental wildlife encounters on trips or outings tended to increase with age (Figure 3.7). The average number of days grew from 16.8 days for the 15- to 19-year age group to 26.5 days for those 65 and over, a gain of nearly 10 days.

Figure 3.6
Average number of days on which participants engaged in trips or outings with incidental wildlife encounters in 1987, by province of residence

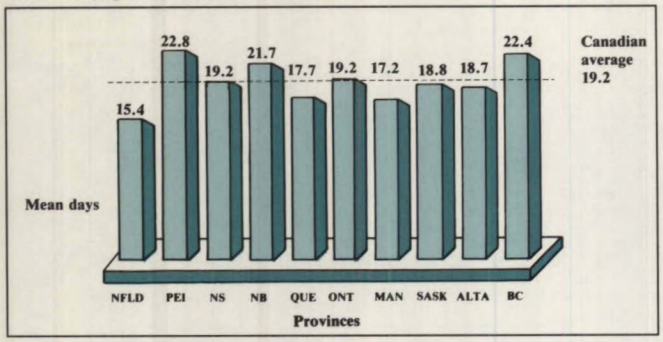
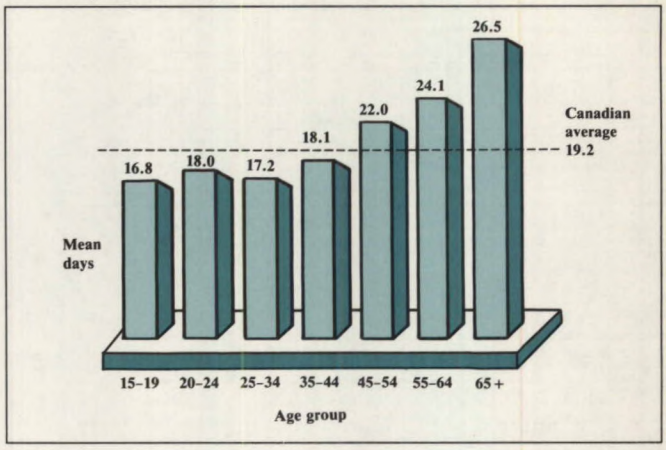


Figure 3.7
Average number of days on which participants engaged in trips or outings with incidental wildlife encounters in 1987, by age group



3.4 Hunting

In 1987, Canadians spent an estimated 28.5 million days hunting (Figure 3.8). The average amount of time spent hunting specific types of game was about 11 or 12 days during the year. The average time engaged in hunting for all game categories combined was almost twice as high, at 17 days. An examination of the total days spent hunting indicated that Canadians hunted more than one type of wildlife during a hunting trip: the sum of the reported hunting days for each wildlife type was considerably larger (35.5 million days) than the total number of days spent hunting (28.5 million days).

Hunters residing in eastern provinces averaged more days hunting than did hunters in western Canada (Figure 3.9). Newfoundland hunters recorded the highest average (21.7 days), while hunters residing in Saskatchewan recorded the lowest average (13.0 days).

Younger Canadians tended to hunt for more days on average than other Canadians (Figure 3.10). The average number of days spent hunting in 1987 peaked at 19.2 days for those in the 15- to 19-year age group and declined steadily, reaching a low of 14.7 days for those in the 55- to 64-year age group.

Figure 3.8
Total and average number of days on which participants engaged in hunting wildlife in 1987

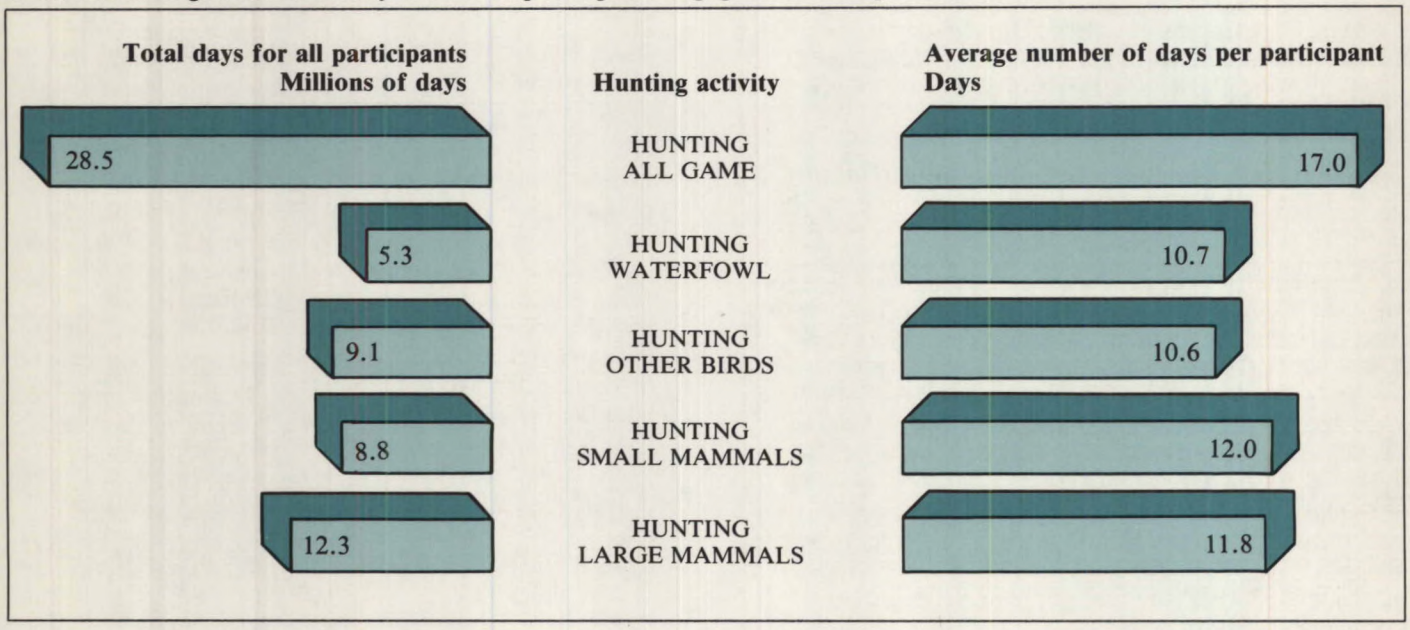
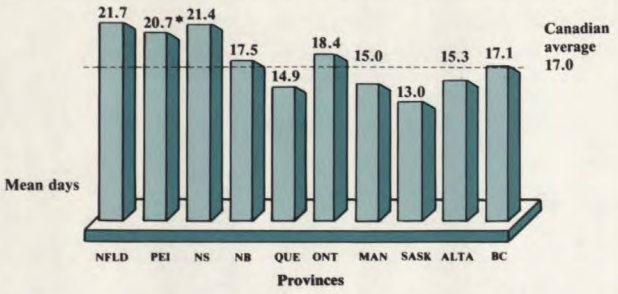
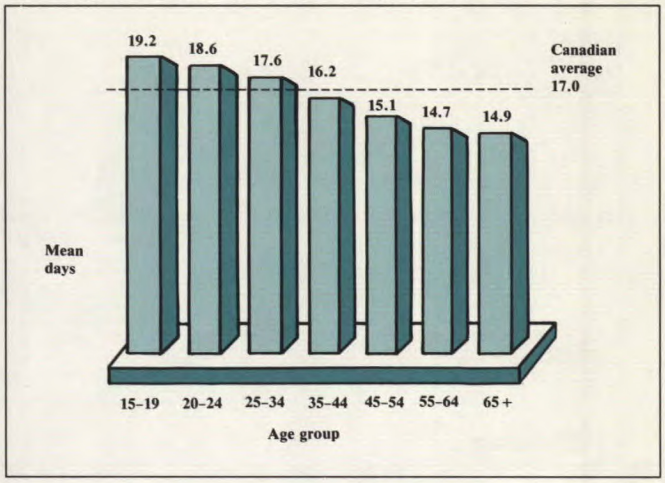


Figure 3.9
Average number of days on which participants engaged in hunting wildlife in 1987, by province of residence



* The sampling variability of this estimate is slightly higher than that for other provinces for such reasons as small sample size or low participation.

Figure 3.10
Average number of days on which participants engaged in hunting wildlife in 1987, by age group



4 Expenditures on wildlife-related activities

In this chapter, the total and average expenditures by participants in a number of wildlife-related activities are examined. Expenditures are also reported according to their distribution across five categories: equipment, transportation, food, accommodation, and other items. Examples of expenditures that are included in each of these categories are provided in Appendix A.

In 1987, Canadians spent approximately $5.1 billion on various wildlife-related activities (Figure 4.1). Primary nonconsumptive wildlife-related trips or outings accounted for 43.8 percent of expenditures. Hunting claimed 20.8 percent of expenditures, and other wildlife-related activities accounted for 35.4 percent.

4.1 Primary nonconsumptive wildlife-related trips or outings

Canadians spent about $2.2 billion (Figure 4.1) on primary nonconsumptive wildlife-related trips or outings in 1987. Each participant spent on average $507 a year, or about $30 per trip day (Figure 4.2). Residents of Saskatchewan, Alberta, and British Columbia exceeded the national average for yearly expenditures and per trip day expenditures, while the lowest averages were recorded by residents of Prince Edward Island and Nova Scotia.

In 1987, about 39.1 percent of the $2.2 billion spent on primary nonconsumptive wildlife-related trips was used to purchase equipment (Figure 4.3). The remaining expenditures were split between transportation (27.2 percent), food (15.5 percent), accommodation (11.4 percent), and other purchases (6.8 percent).

4.2 Hunting

In 1987, Canadians spent about $1.1 billion hunting wildlife, or $630 per hunter (Figure 4.4). Waterfowl hunting accounted for $194.0 million, or $390 per hunter; hunting other birds $191.2 million, or $223 per hunter; small mammal hunting $124.7 million, or $170 per hunter; and large mammal hunting $550.4 million, or $529 per hunter.

Average yearly expenditures for hunting ranged from a high of $861 in British Columbia to a low of $453 in Nova Scotia (Figure 4.5). Residents of Ontario, Manitoba, Alberta, and British Columbia exceeded the national average of $630 for yearly expenditures. Expenditures per hunting day exceeded the national average of $37 in all provinces west of Quebec.

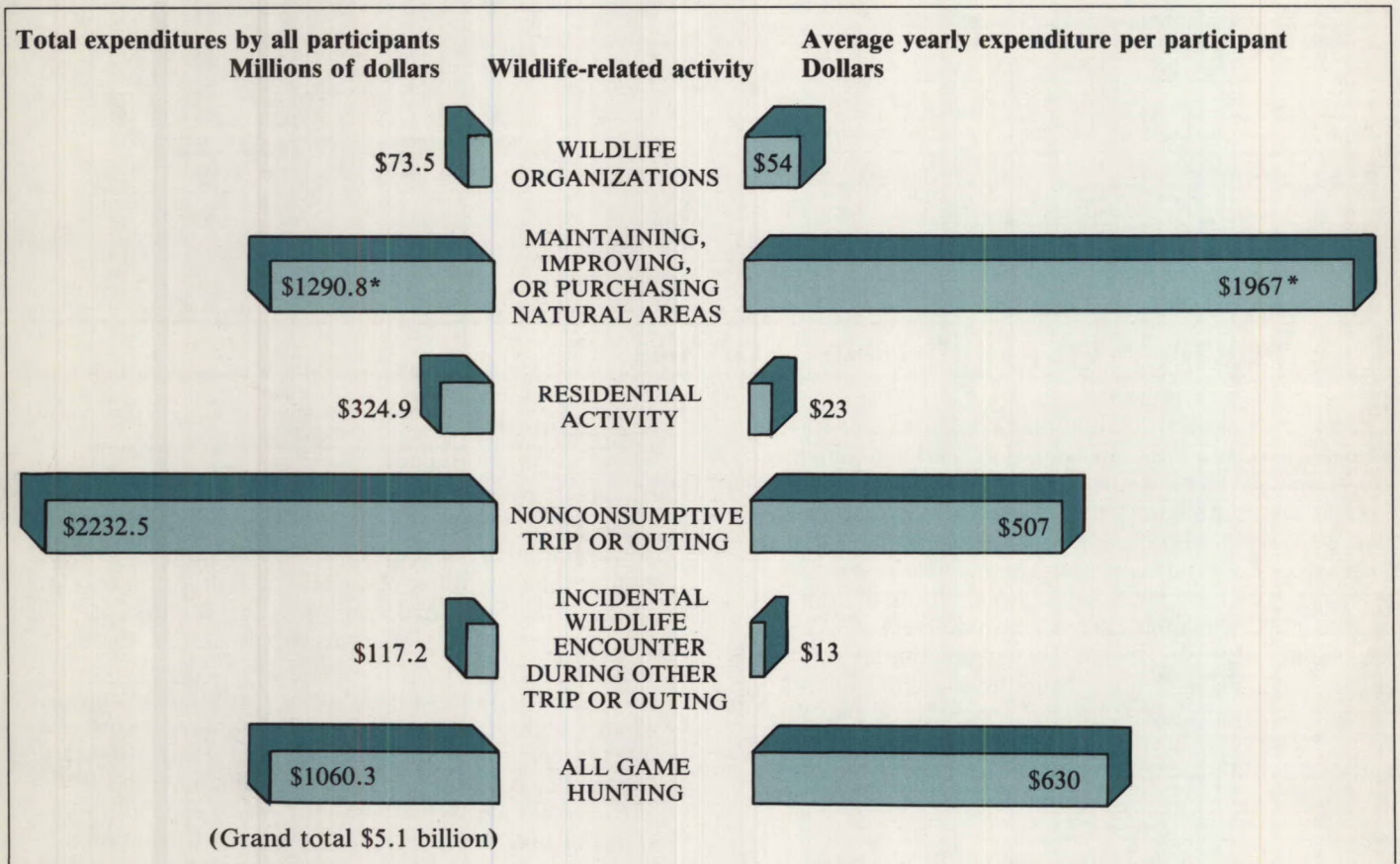
The $1.1 billion spent hunting wildlife was distributed as follows: 39.5 percent for equipment purchases, 25.4 percent for transportation, 12.8 percent for food, 5.6 percent for accommodation, and 16.7 percent for other items (Figure 4.6).

4.3 Other wildlife-related activities

Expenditures on other wildlife-related activities accounted for 35.4 percent of the $5.1 billion spent on wildlife during 1987. The largest amount in this category (see Figure 4.1), accounting for 25.3 percent of total expenditures, or $1.3 billion, was spent on maintaining, improving, or purchasing natural areas for wildlife. These participants spent an average of $1967 each during the year. Residential wildlife-related activity,

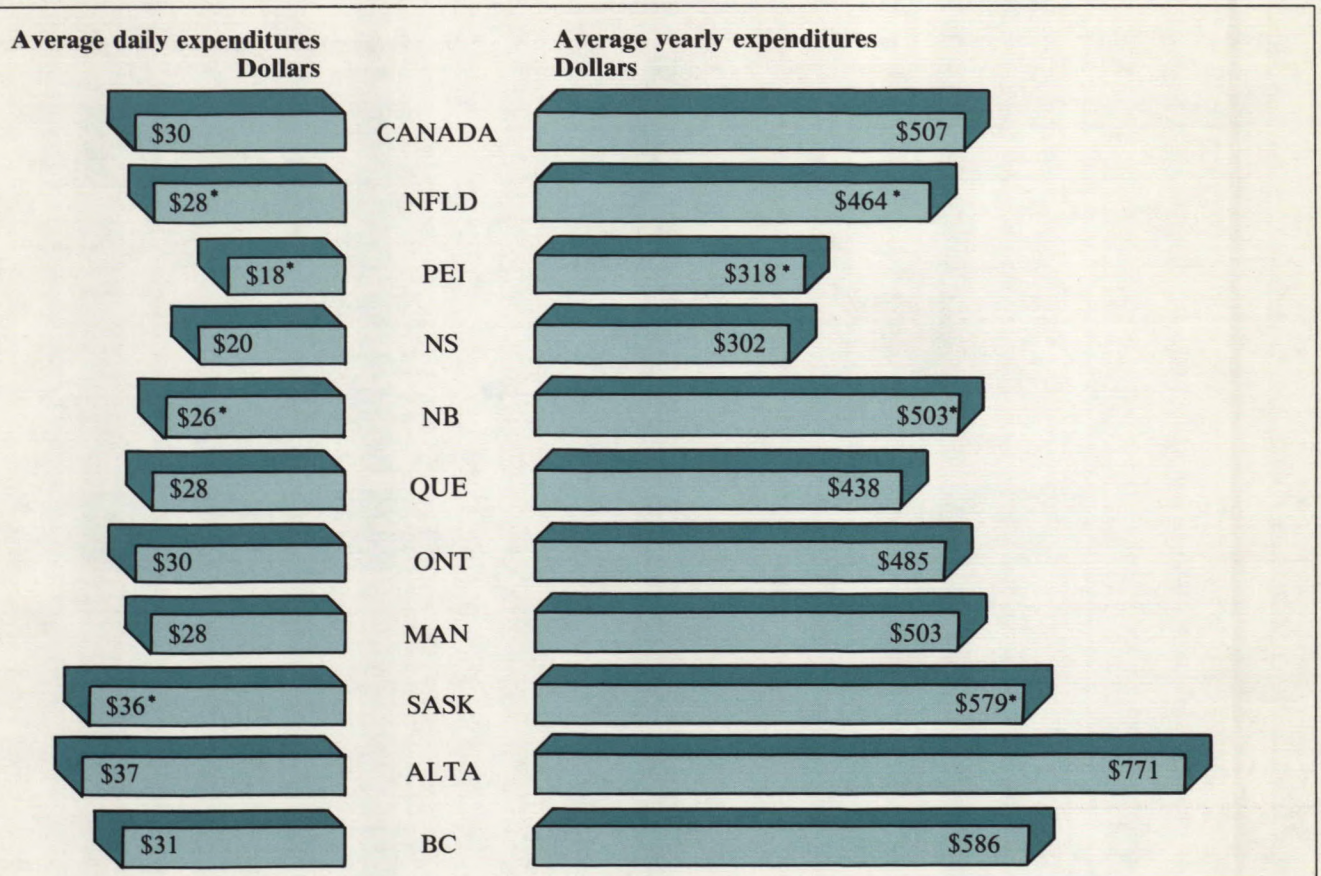
while having a low yearly expenditure per participant of $23, accounted for $324.9 million, or 6.4 percent of total wildlife-related expenditures. Contributions to wildlife organizations and expenditures related to incidental wildlife encounters during other trips or outings accounted for a further 3.7 percent of wildlife-related expenditures. About $73.5 million, an average of $54 per participant, was spent on wildlife organizations in the form of donations or membership fees. A further $117.2 million was spent by Canadians who encountered wildlife incidentally while on an outing or trip, with each participant spending $13 per year on average.

Figure 4.1
Total and average expenditures by participants in wildlife-related activities in 1987



* The sampling variability of these estimates is slightly higher than that for other activities for such reasons as small sample size or low participation.

Figure 4.2
Average expenditures per participant for primary nonconsumptive wildlife-related trips or outings in 1987, by province of residence



* The sampling variability of these estimates is slightly higher than that for other provinces for such reasons as small sample size or low participation.

Figure 4.3
Percent distribution of $2.2 billion spent on primary nonconsumptive wildlife-related trips or outings in 1987

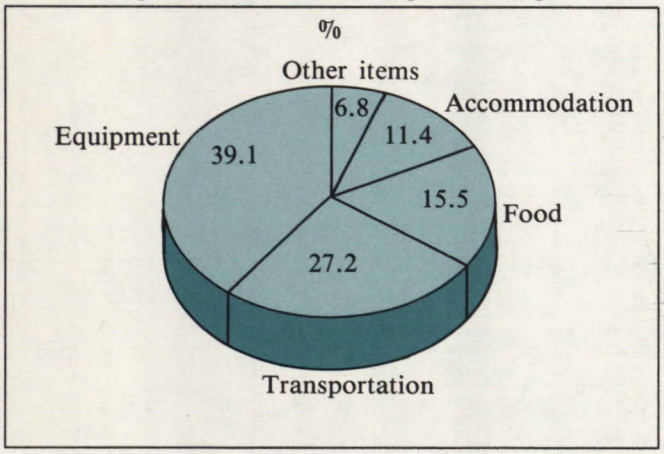


Figure 4.4
Total and average expenditures by participants in hunting in 1987

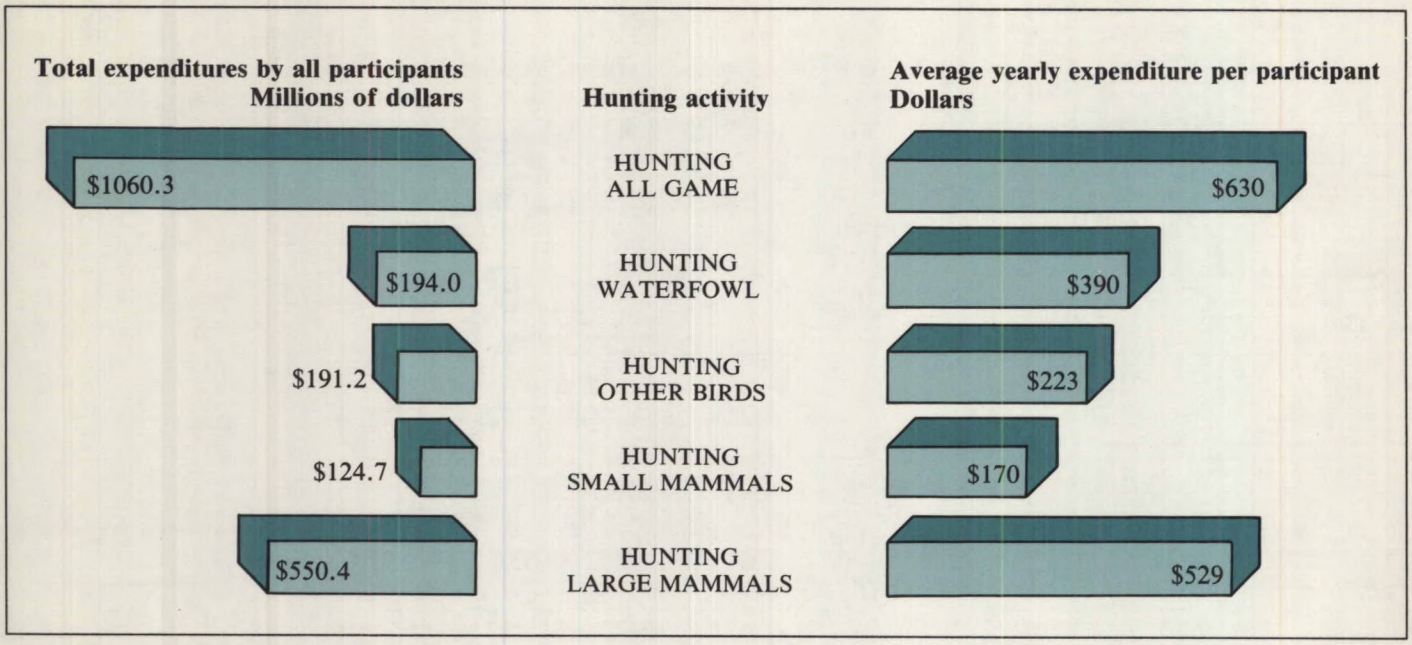


Figure 4.5
Average expenditures for hunting wildlife per participant in 1987, by province of residence

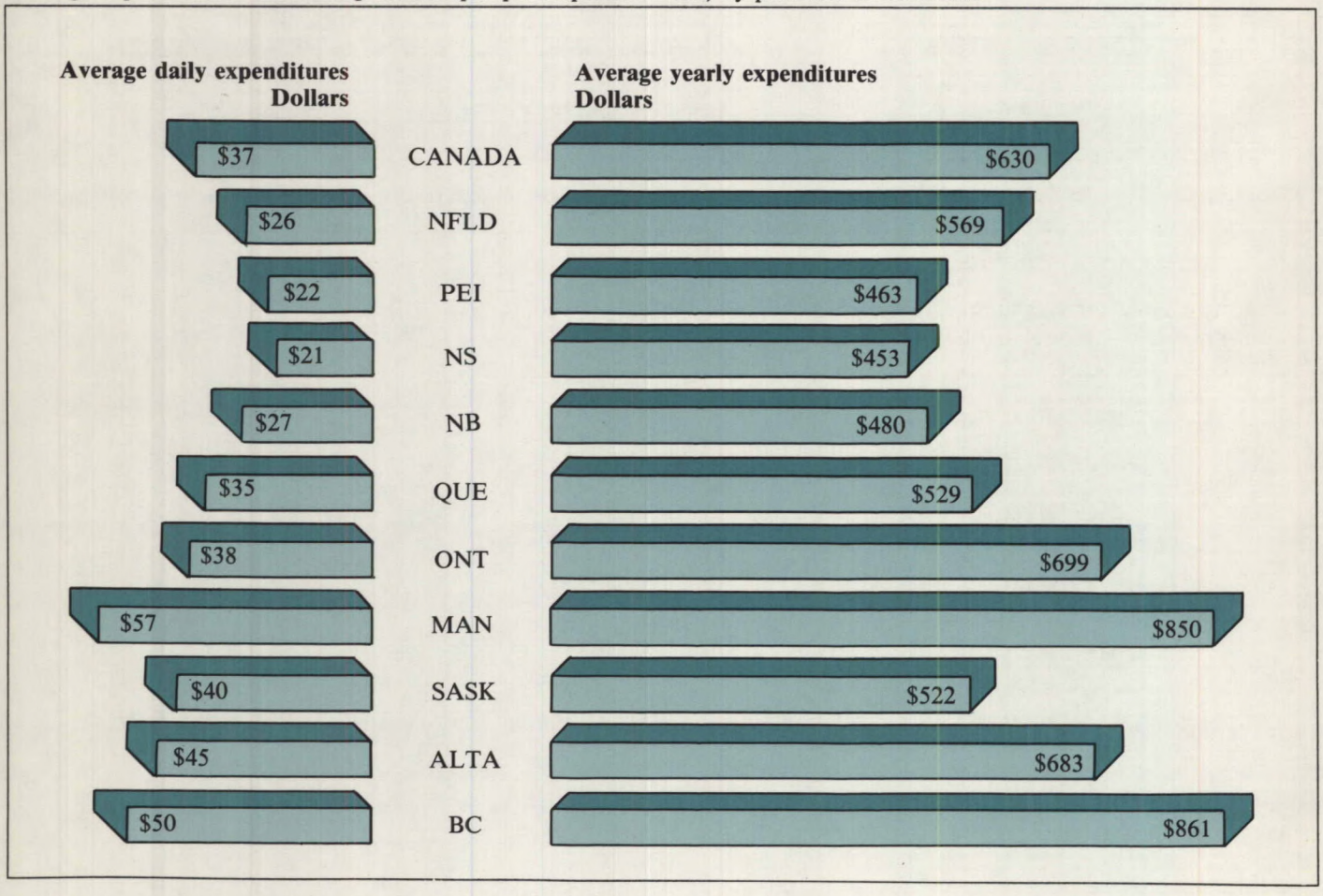
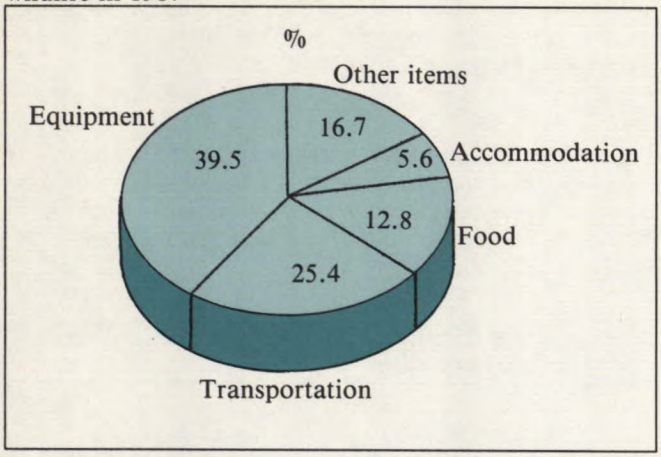


Figure 4.6
Percent distribution of $1.1 billion spent on hunting wildlife in 1987



5 Attitudes toward wildlife

The attitudes held by Canadians toward wildlife were one of the concerns of this survey. In this chapter, respondents' attitudes toward maintaining abundant wildlife and preserving endangered species are presented. Respondents were asked to indicate how important these issues were to them. The results of these questions are presented for the Canadian population as a whole and also by province.

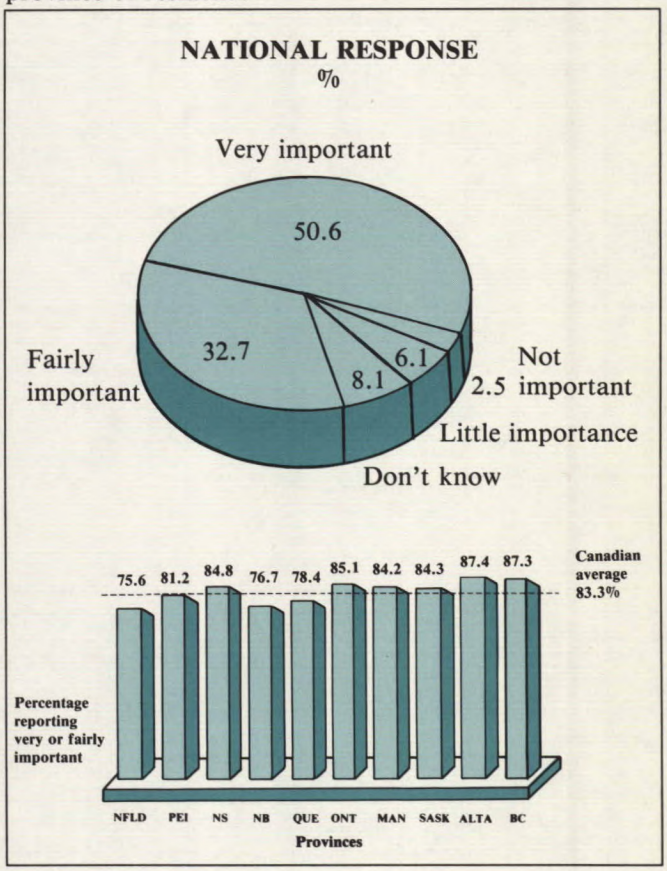
This chapter also presents the level of interest shown in participating in nonconsumptive or consumptive activities and in supporting wildlife organizations. Respondents were asked to indicate if they would be interested in participating in such nonconsumptive activities as watching, feeding, photographing, or studying wildlife. In a similar manner, respondents were asked about consumptive activities, such as collecting wildlife specimens, hunting, or trapping, and organizational activities, such as joining a club or contributing to organizations that protect or maintain abundant wildlife.

The chapter concludes with an estimation of the potential demand for wildlife-related activities, obtained by contrasting interest shown in participating in these activities with actual participation.

5.1 Wildlife populations

In 1987, about 83.3 percent of the Canadian population indicated they felt it was very or fairly important to maintain abundant wildlife (Figure 5.1). This feeling was strong across Canada, with over 75 percent of residents of all provinces stating that maintaining abundant wildlife was important. At the provincial level, the percentage reporting that maintaining abundant wildlife was very or fairly important ranged from 75.6 percent in Newfoundland to 87.4 percent in Alberta.

Figure 5.1
Percentage of Canadians reporting that maintaining abundant wildlife is very or fairly important in 1987, by province of residence



When asked to indicate how important preserving endangered species was to them, 85.2 percent of respondents reported it was very or fairly important (Figure 5.2). Once again, this strong support was reflected across Canada, with all provinces exceeding the 75 percent level. The percentage of provincial residents stating that preserving endangered species was very important or fairly important ranged from 78.1 percent in Newfoundland to 89.3 percent in Alberta.

5.2 Wildlife-related activities

The survey indicated high levels of interest in wildlife-related activities by Canadians. Nonconsumptive wildlife-related activities were the most popular, with 84.9 percent of Canadians expressing some or great interest in participating (Figure 5.3). This high level of interest was evident across the country.

In 1987, about 26.7 percent of Canadians indicated some or great interest in participating in three consumptive wildlife-related activities—hunting, trapping, or collecting wildlife specimens (Figure 5.4). The appeal was strongest among residents of Newfoundland, Nova Scotia, and New Brunswick, who reported levels substantially above the national average. The findings indicate that these consumptive wildlife-related activities are supported by many Canadians.

About 46.0 percent of Canadians indicated some or great interest in participating in a wildlife-related organization (Figure 5.5). Strong support for these organizations was demonstrated by about half of Canadians in all provinces; interest in joining or contributing to wildlife-related organizations was highest in Alberta and British Columbia.

5.3 Actual versus latent demand for wildlife-related activities

Figure 5.6 shows the difference in numbers between those who would like to take part in wildlife-related activities and those who actually do. The high levels of interest suggest a latent demand for wildlife that could be tapped, given appropriate management or marketing strategies.

Figure 5.2
Percentage of Canadians reporting that preserving endangered species is very or fairly important in 1987, by province of residence

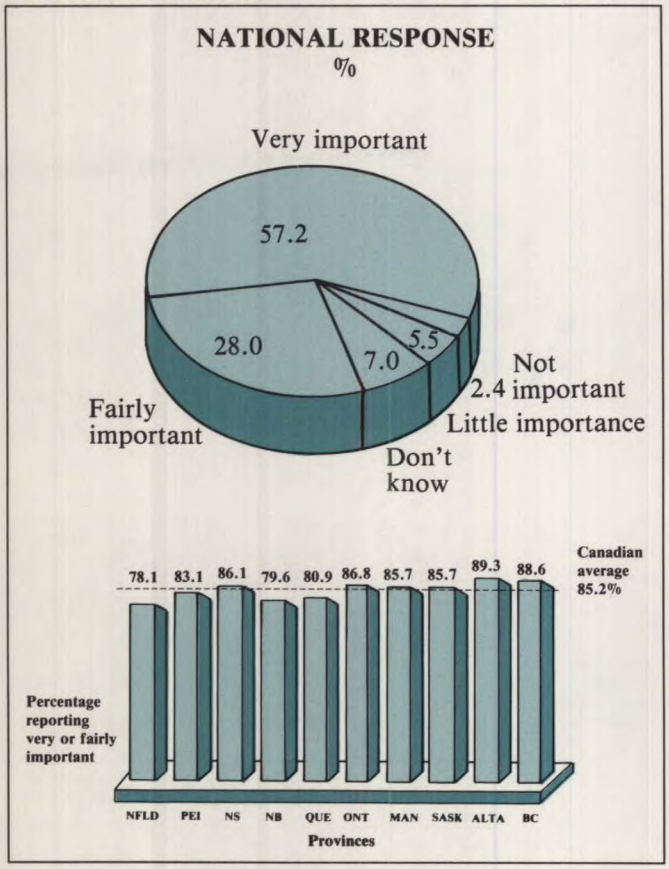
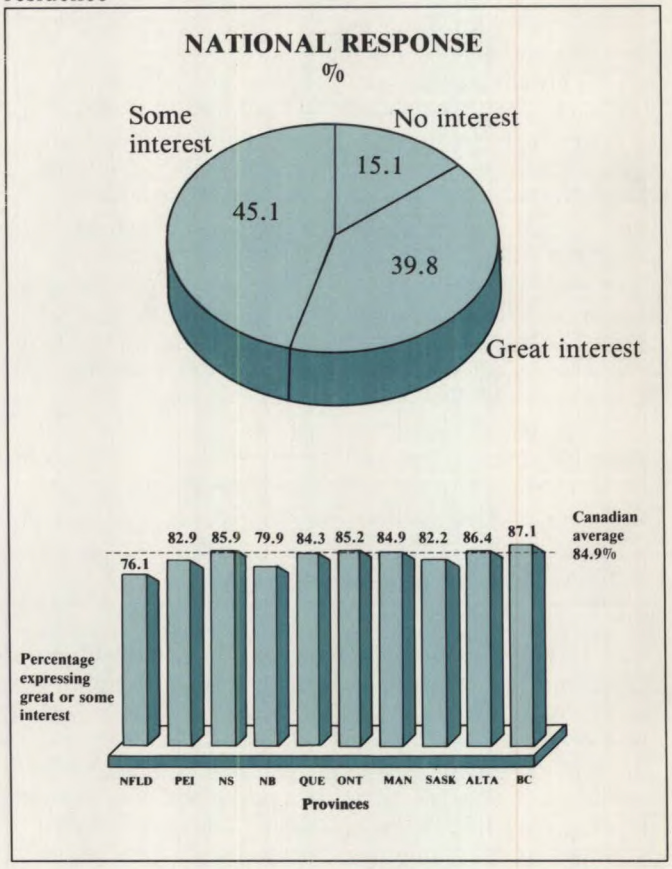


Figure 5.3
Percentage of Canadians expressing great or some interest in participating in one or more nonconsumptive wildlife-related activities in 1987, by province of residence



Interest in hunting was 121.4 percent greater than current participation—a difference of 2 million people. This difference was most apparent among urban residents, women, more highly educated groups, and groups with lower personal incomes (less than $10 000). The levels of interest expressed in hunting were highest in Newfoundland, Nova Scotia, New Brunswick, Saskatchewan, and Alberta. By expressing the difference between actual participation and declared interest as a proportion of current participation rates, we can identify those provinces that demonstrate the greatest potential for increase in an activity. Figure 5.7 reveals that this potential is highest in Ontario (162.2 percent) and British Columbia (147.5 percent).

Figure 5.6 shows that most people who were interested in direct nonconsumptive activities (defined in Appendix A) already participated in them. The highest levels of interest in direct nonconsumptive activities were found in Nova Scotia, Alberta, and British Columbia. However, Figure 5.7, which shows the percent difference between declared interest and actual participation in nonconsumptive activities, reveals a different picture. The potential for increases in the demand for nonconsumptive activities is seen to be above the national average in Newfoundland, Quebec, Manitoba, and Saskatchewan. Potential nonconsumptive demand in Quebec appears to be nearly twice as high as the national average.

Figure 5.6 shows that interest in sponsoring wildlife organizations was 571.4 percent greater than actual levels of sponsorship—a difference of 7.8 million people. This difference between interest in sponsorship and actual support was particularly noticeable among women, people under the age of 25, urban residents, those with secondary schooling, and those with personal incomes under $20 000. Although interest in belonging or contributing to a wildlife organization was highest in Manitoba, Alberta, and British Columbia, Figure 5.7 shows that the greatest potential gains in support are likely to be made in Quebec and the Atlantic provinces, with Newfoundland and New Brunswick leading the way. Specifically, memberships and contributors could potentially be increased from 8200 to 182 700 in Newfoundland, from 5000 to 44 200 in Prince Edward

Figure 5.4
Percentage of Canadians expressing great or some interest in participating in one or more consumptive wildlife-related activities (hunting, trapping, or collecting wildlife specimens) in 1987, by province of residence

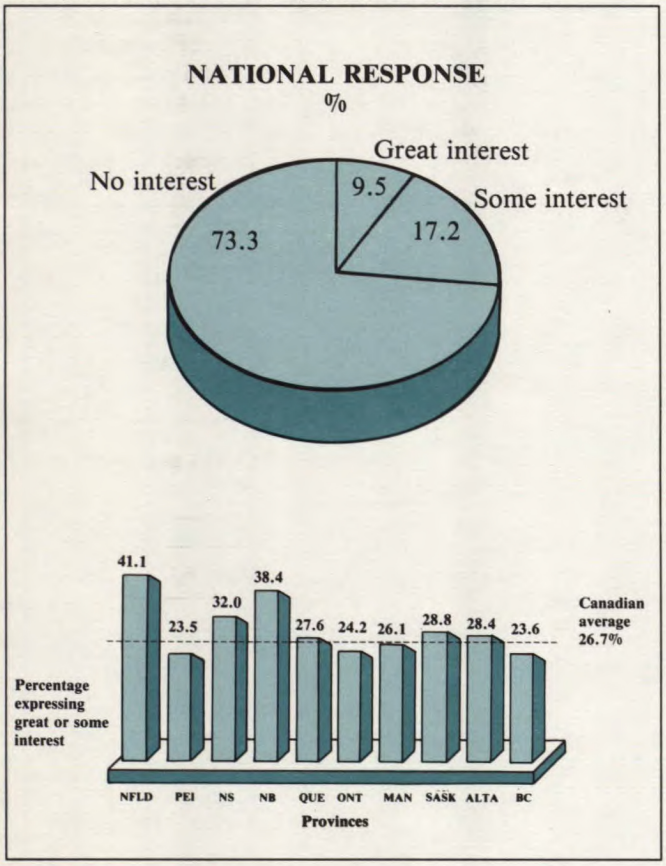


Figure 5.5
Percentage of Canadians expressing great or some interest in participating in one or more wildlife-related organizations in 1987, by province of residence

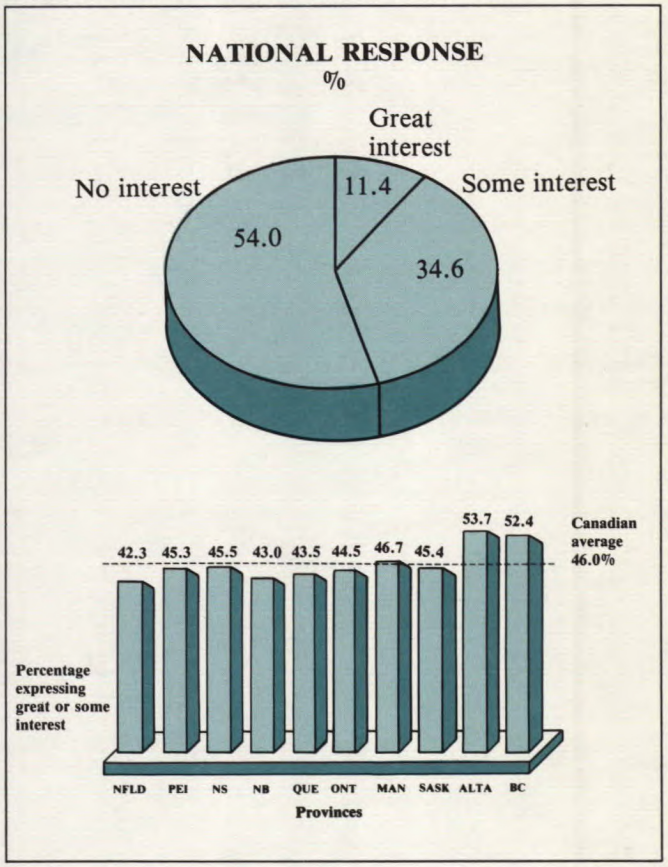
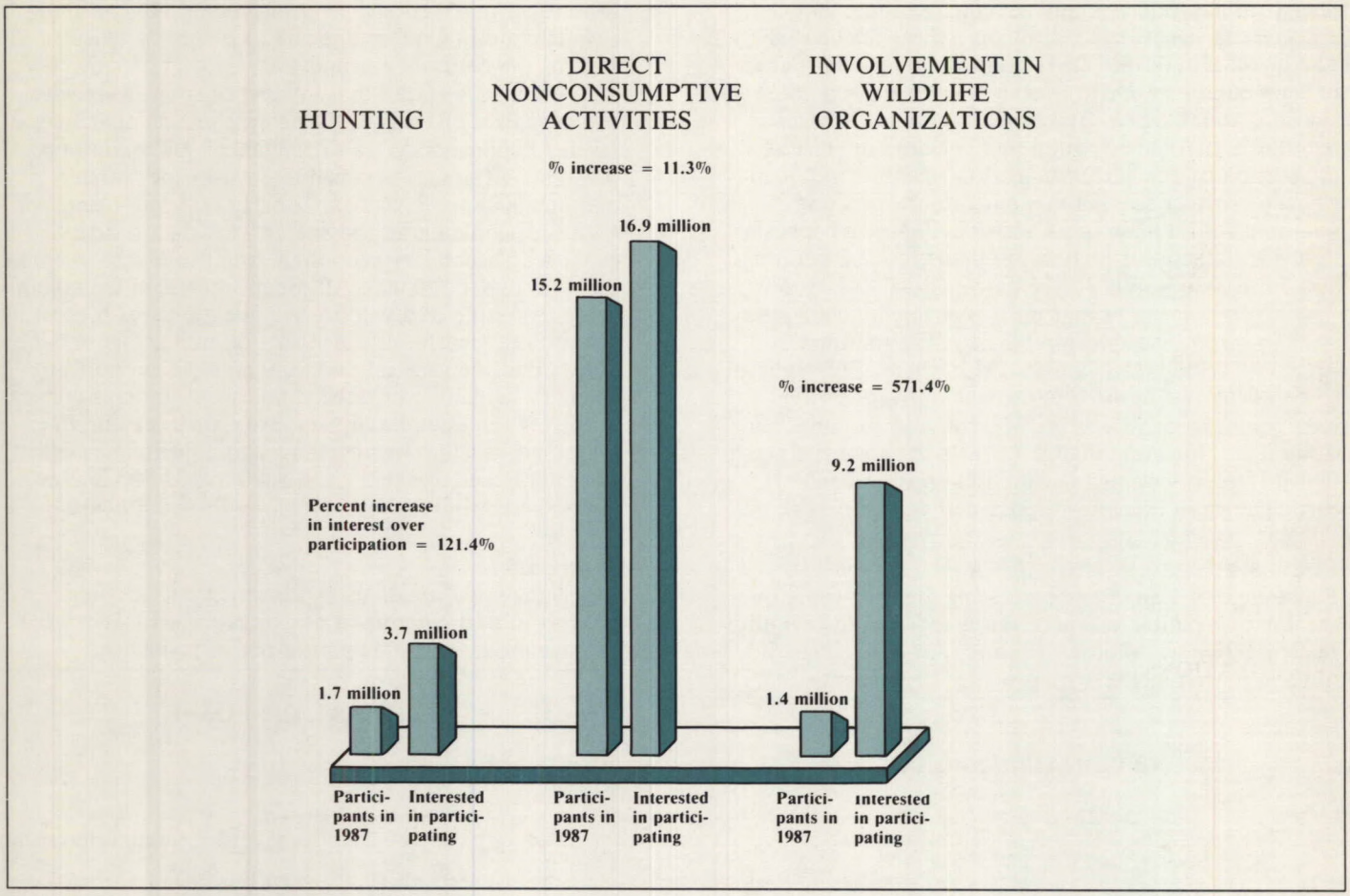
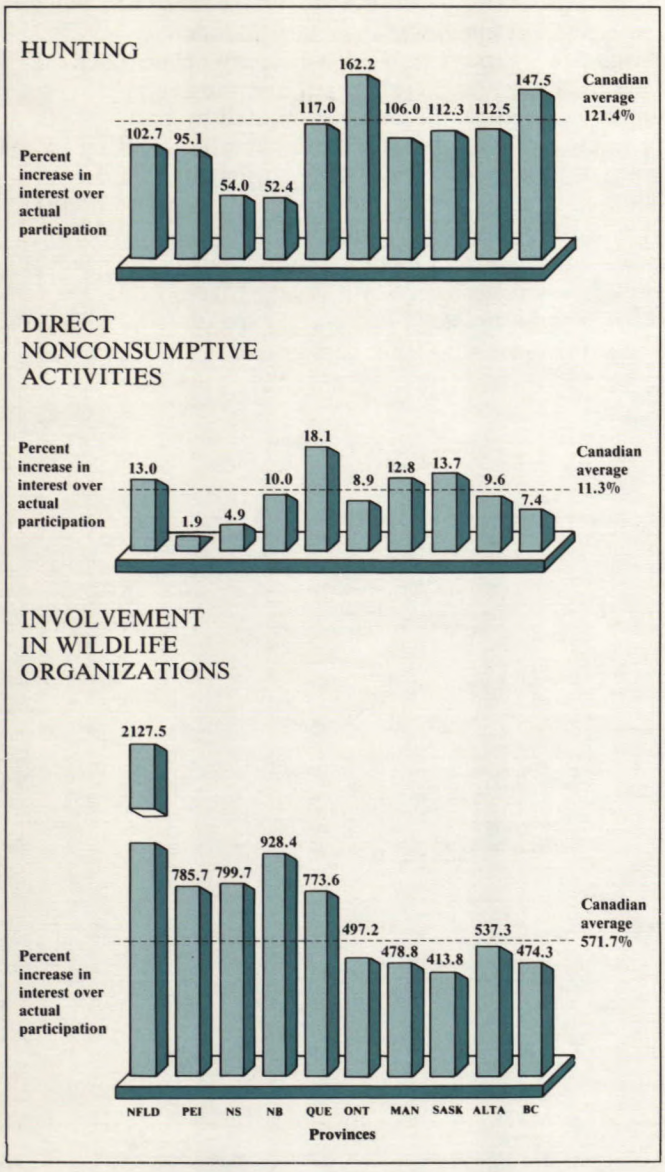


Figure 5.6
Difference between actual number of participants and those interested in participating in selected wildlife-related activities in 1987



Island, from 34 000 to 309 700 in Nova Scotia, from 23 000 to 236 100 in New Brunswick, from 260 800 to 2 278 100 in Quebec, from 548 900 to 3 277 700 in Ontario, from 65 500 to 379 500 in Manitoba, from 65 500 to 336 800 in Saskatchewan, from 149 600 to 953 100 in Alberta, and from 209 600 to 1 203 600 in British Columbia.

Figure 5.7
Difference between actual number of participants and those interested in participating in selected wildlife-related activities in 1987, by province of residence



6 Single- versus multiple-activity participation

Our understanding of demand for wildlife-related recreational activities can be improved by taking into account important differences between groups or segments of wildlife users. Wildlife participants include consumptive participants, such as hunters, and non-consumptive participants. The latter category includes those who take primary nonconsumptive trips, those who enjoy incidental wildlife encounters during trips or outings taken for another purpose, those who take part in residential wildlife activities, and those who take part in indirect wildlife activities. A drawback of this user segmentation is that decision makers may incorrectly conclude that Canadians who take part in one of these types of activities do not participate in any others, when in reality they do. Therefore, in this chapter, national survey results are recast to permit examination of multiple-activity participation.

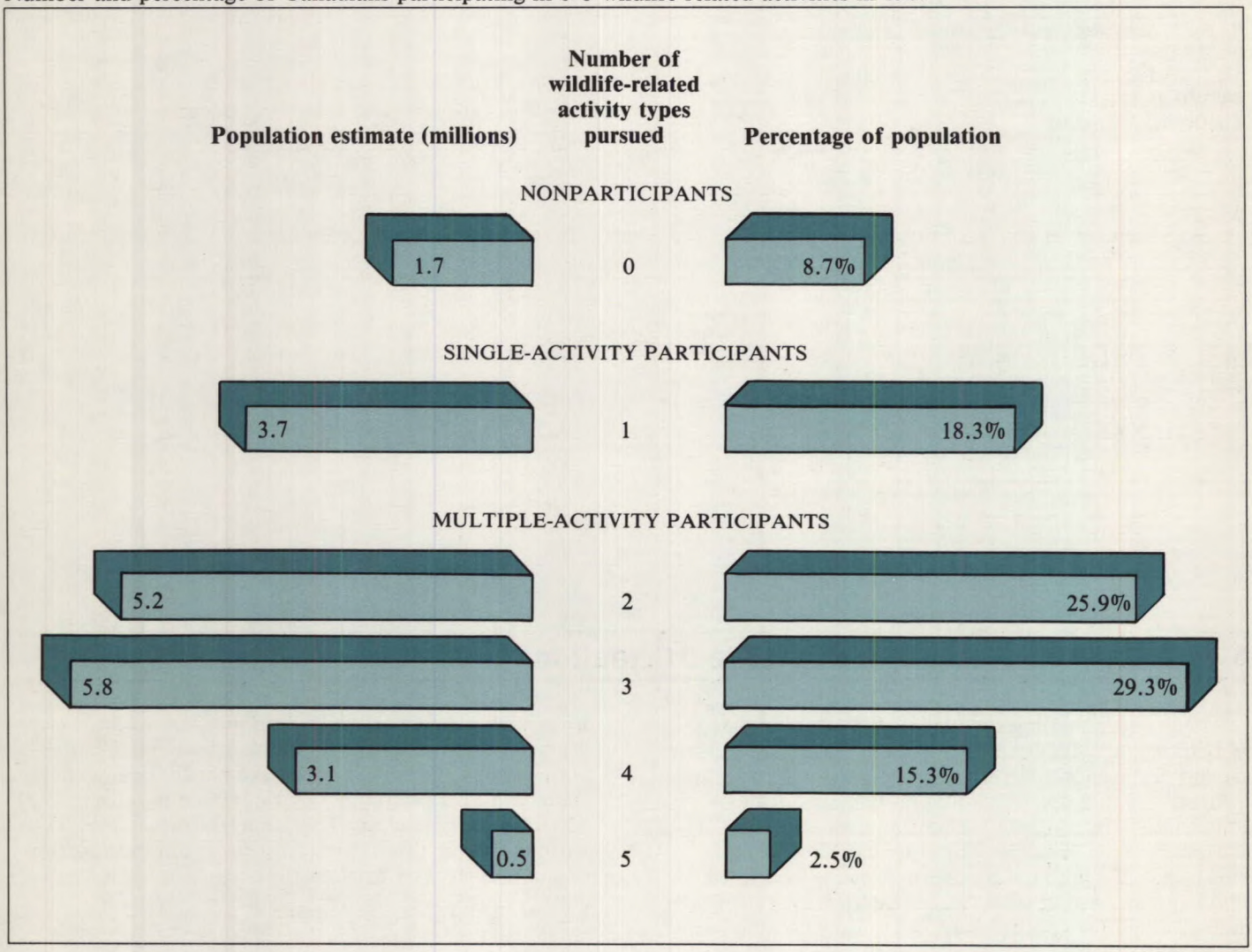
6.1 Characteristics of single- and multiple-activity participants

Multiple-activity participation is a predominant feature of recreational wildlife use in Canada. More than 90 percent of the Canadian population aged 15 years or over participated in one or more types of wildlife-related activities (Figure 6.1). A large majority (73.0 percent) engaged in two or more types of activities, and 47.1 percent took part in three or more.

Multiple-activity participants were younger and better educated than average. They included representative numbers of men and women, as well as rural and urban residents. The distribution of their personal incomes was similar to that for the Canadian population as a whole. On the other hand, nonparticipants and single-activity participants were slightly older than average and tended to include fewer men and fewer people with high levels of education. They tended to be overrepresented in the lower personal income groups. These trends generally apply to all 10 provinces, without notable exceptions.

Canadian commitment to wildlife-related activities, expressed in time and money spent, tended to increase dramatically per capita as the diversity of the activities pursued increased. Figure 6.2 shows the average amount of time and money committed by participants in wildlife-related activities as the number of different types of activities in which they participated increased. The average number of days spent by people who took part in four or five types of activities was more than twice that spent by people who took part in only one or two. The average expenditure ranged from $29 for those who participated in a single type of activity to $2266 for those who took part in five types of activities.

Figure 6.1
Number and percentage of Canadians participating in 0–5 wildlife-related activities in 1987



Single-activity participants comprised 18.3 percent of the adult population of Canada but accounted for only 2.7 percent of total participation days and less than 1 percent of the total money spent in 1987. Canadians involved in two to five wildlife-related activities (73.0 percent of the population) accounted for 97.3 percent of the time and over 99 percent of the money spent on those activities, as well as constituting 96.6 percent of the 1.4 million supporters of wildlife organizations. Most significant were the 17.8 percent of adult Canadians who participated in four or five wildlife-related activities. This core group was responsible for nearly 40 percent of the 1.2 million days and 74.2 percent of the $5.1 billion spent on wildlife activities.

Figure 6.3 shows that single- and multiple-activity participation and nonparticipation in wildlife-related activities varied from province to province in 1987. Nonparticipation was above average in Newfoundland, New Brunswick, Quebec, and Saskatchewan; the rate ranged from 9.6 percent in Saskatchewan to 15.2 percent in Newfoundland. Alberta and British Columbia had the lowest rates of nonparticipation, with 4.7 and 4.9 percent, respectively. Most provinces demonstrated a rate of single-activity participation close to the national average of 18.3 percent. Rates of multiple-activity participation ranged from a low of 63.2 percent in Newfoundland to a high of 78.8 percent in British Columbia.

6.2 Types of single- and multiple-activity participation

Wildlife activities may be classified according to the kind of contact occurring between participants and wildlife. Hunting generally takes participants into woods, fields, marshes, or other natural areas where wildlife may be observed and harvested. Direct nonconsumptive activities, such as watching deer or putting out feed in winter to attract animals, may take place in a natural area, such as woods or parks, but always involve an attempt to actually see wildlife. Indirect activities, such as reading books on wildlife, watching a nature program on television, or visiting a museum, involve an appreciation of wildlife that does not necessarily entail an actual encounter with a live animal.

Figure 6.4 shows the specific combinations of activities in which people engage. Most single-activity participants engaged in indirect activities in a developed environment, such as a home, auditorium, museum, or zoo. Multiple-activity participation tended to bring people into direct contact with wildlife outdoors. Most multiple-activity participants took part in nonconsumptive activities exclusively, such as observing, feeding, or photographing wildlife on trips or around the home. Most hunters were also active in nonconsumptive activities that brought them into direct contact with wildlife.

Figure 6.2
Average number of days and dollars spent by Canadians according to the number of different types of wildlife-related activity they took part in during 1987

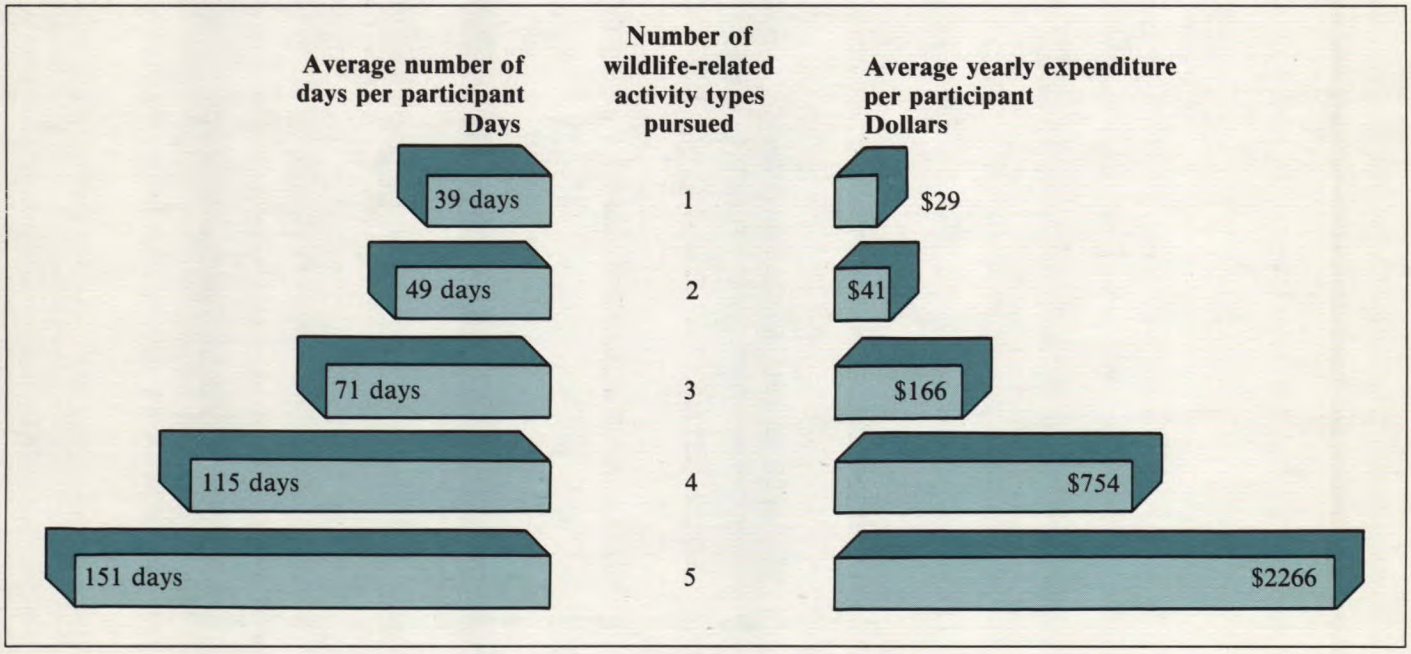


Figure 6.5 shows the average time and money spent by participants on single and multiple wildlife activities. Among people who limited themselves to a single activity, hunters spent significantly more money than did participants in nonconsumptive and indirect wildlife activities, whereas participants in nonconsumptive activities spent more time on wildlife-related activities than did hunters. Among those who took part in several activities, hunters spent more money per capita than did other groups of participants. This is especially true of those who took part in both hunting and nonconsumptive activities during 1987: they had the highest mean expenditure ($1214) and average number of days spent (103).

People with several interests in wildlife accounted for the vast majority of time and money spent on wildlife-related activities in 1987. Most significant are the 8.2 percent of Canadians who engaged in hunting plus other activities. These hunters spent 14.0 percent of all days and more than 40 percent of all dollars. They spent nearly as much money on nonconsumptive activities as they did on hunting. This core group also formed 29.3 percent of the supporters of wildlife organizations. Hunters with additional wildlife interests accounted for over 20 percent of all days spent on wildlife-related activities in Newfoundland, Nova Scotia, and New Brunswick. They accounted for between 60 and 80 percent of all expenditures on activities in these three provinces. In the Atlantic region and in Saskatchewan, these hunters formed between 40 and 50 percent of supporters of wildlife organizations. The 64.8 percent of adult Canadians who engaged in several wildlife activities, but not hunting, accounted for 83.2 percent of all days and 56.7 percent of all expenditures on wildlife activities. These nonconsumptive users also formed more than 67.4 percent of all supporters of wildlife organizations.

Figure 6.3
Percentage of Canadians participating in single and multiple wildlife-related activities in 1987, by province of residence

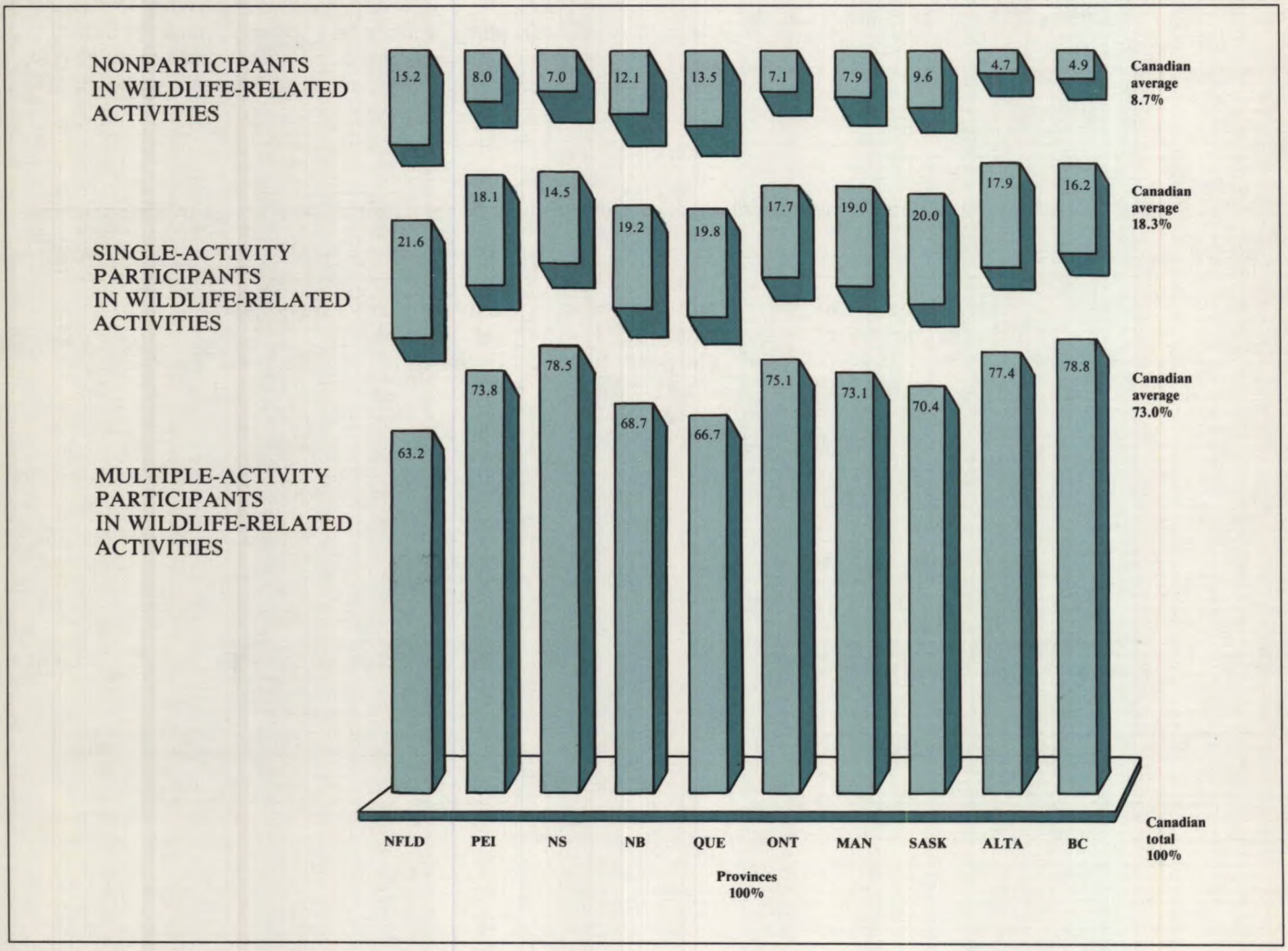


Figure 6.4
Number and percentage of Canadians participating in single and multiple wildlife-related activities in 1987

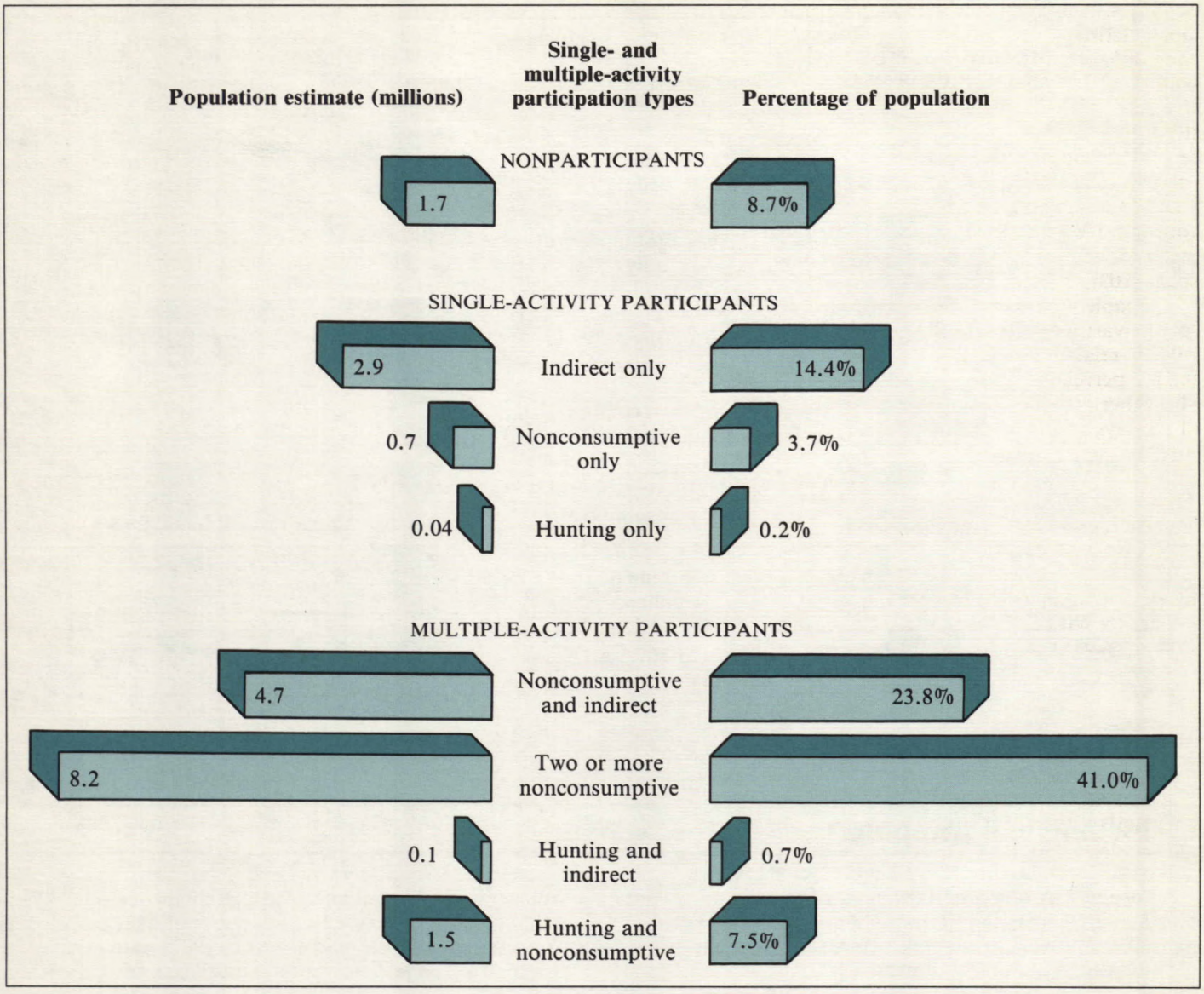
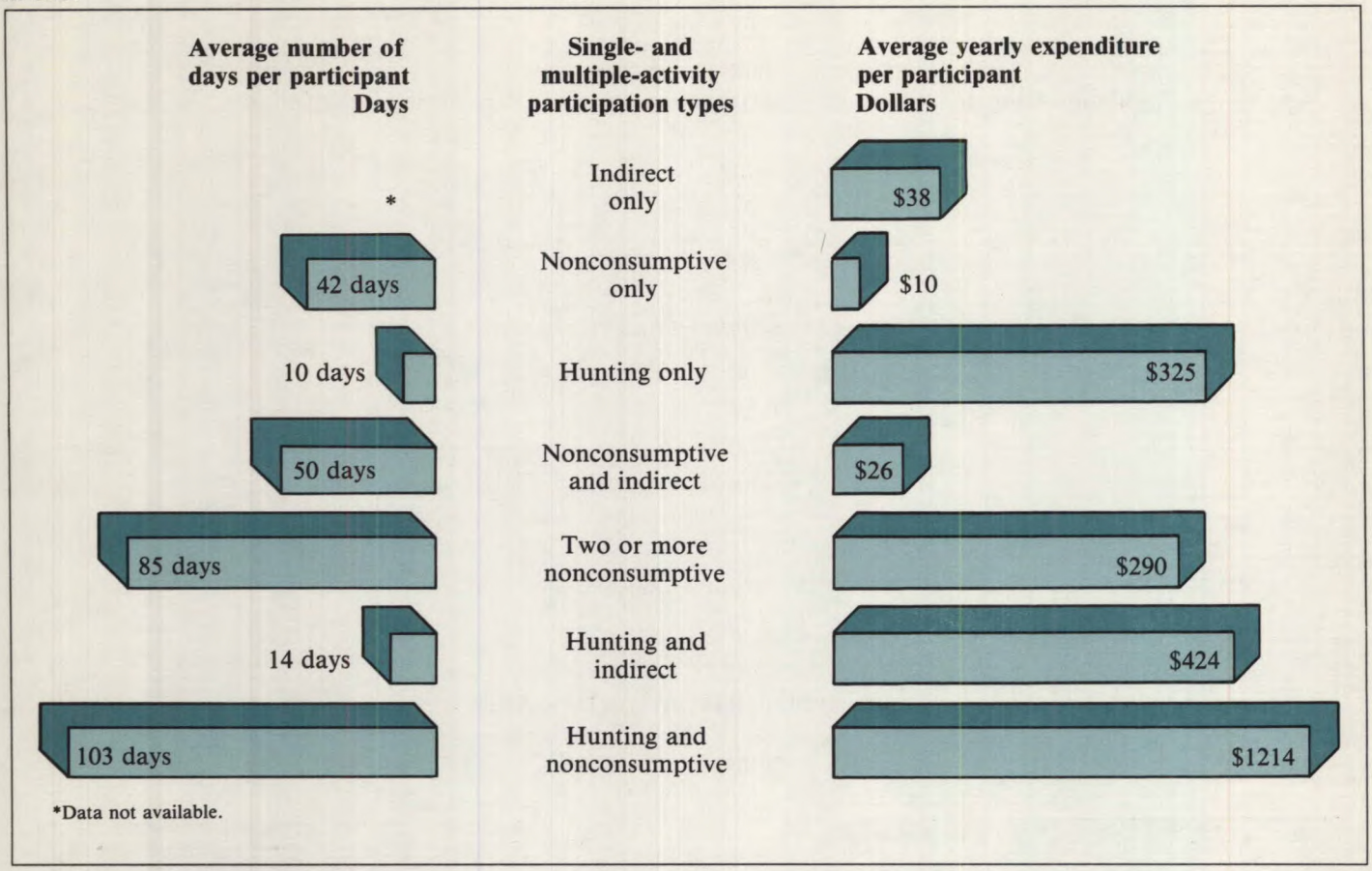


Figure 6.5
Average number of days and dollars spent by wildlife participants within single- and multiple-activity participation types in 1987



7 Fishing and trapping

For the first time, the 1987 survey included questions about participation in recreational fishing and in the trapping of small mammals. This chapter provides information on national and provincial participation rates as well as the profiles of participants in these activities.

The inclusion of questions on participation in these activities in the 1987 survey, in addition to participation in hunting, permitted an estimate of the number of Canadians who engage in three major consumptive activities—hunting, fishing, and trapping. Over 6 million Canadians (30.8 percent) took part in one or more of these activities during 1987.

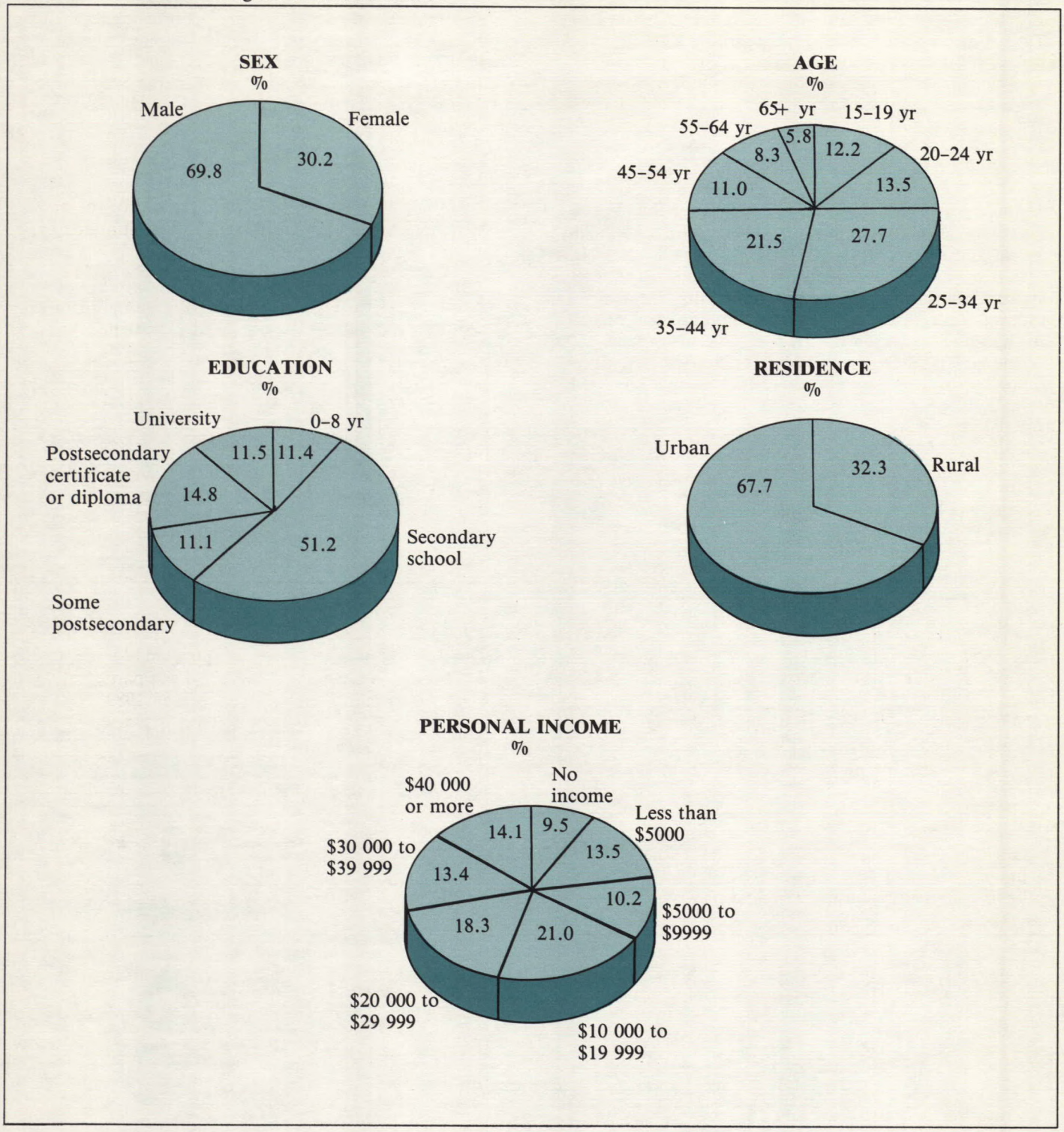
7.1 Fishing for recreation

In 1987, an estimated 5.6 million Canadians (28.1 percent of the Canadian population) participated in recreational fishing. Fishing was more popular among males (69.8 percent) than females (30.2 percent) and among younger age groups (Figure 7.1). Participants in recreational fishing between 15 and 34 years of age comprised 53.4 percent of those who fished in 1987. Like hunting, fishing was less popular among those over 45 years of age, who accounted for only 25.1 percent of those who fished in 1987. Education and personal income of participants were higher than for the Canadian population as a whole.

Newfoundland and the provinces west of Manitoba recorded participation rates in recreational fishing that were higher than the national average by as much as 5 percent (Figure 7.2). The lowest participation rates were recorded in Prince Edward Island (24.0 percent) and Nova Scotia (24.5 percent).

Canadians spent an estimated 88.7 million days fishing for recreation, with each participant averaging 15.8 days (Figure 7.3). Participants in Ontario and the Atlantic provinces averaged more days fishing than did participants in other provinces. Residents of Newfoundland recorded the highest average (20 days), while Saskatchewan residents recorded the lowest (11.7 days).

Figure 7.1
Profile of Canadians fishing for recreation in 1987



Canadians in the 15- to 19-year age group and those over 45 years of age tended to spend more days fishing on average than did other Canadians (Figure 7.4). The average number of days spent fishing in 1987 peaked at 19.1 days for those in the 55- to 64-year age group and reached a low of 14.1 days for those in the 35- to 44-year age group.

7.2 Trapping small mammals

About 400 000 Canadians (2 percent of the population) trapped small mammals in 1987. In order to facilitate analysis, participants were asked to single out their main reason for trapping from a list of possible reasons. Approximately 29.2 percent of participants recorded trapping for the main purpose of obtaining food or fur for their own use (Figure 7.5); 12.1 percent trapped for the income they received from pelts; 26.8 percent trapped to protect their property; 15.4 percent recorded recreation as their main reason for trapping; and 16.5 percent recorded other reasons.

Figure 7.2
Percentage of Canadians fishing for recreation in 1987, by province of residence

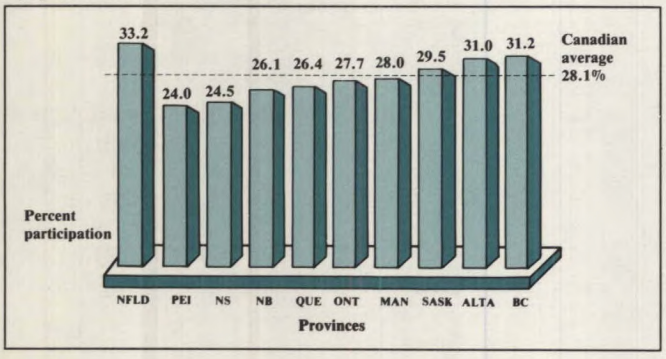
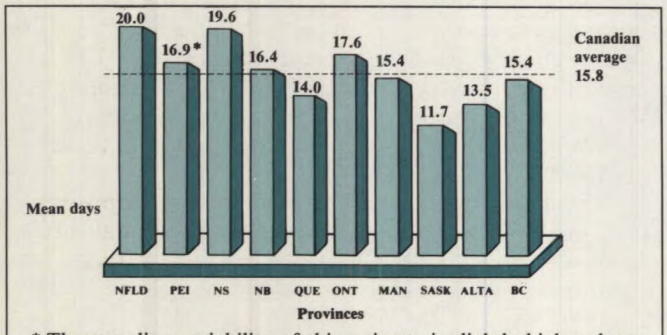


Figure 7.3
Average number of days on which participants engaged in fishing for recreation in 1987, by province of residence



* The sampling variability of this estimate is slightly higher than that for other provinces for such reasons as small sample size or low participation.

Those who trapped small mammals in 1987 were primarily males (75.7 percent) and were about equally urban and rural residents. Participation varied across the age groups: rates were highest among Canadians aged 15–19 and lowest among those aged 55–64. Education and personal income of participants were lower than for the Canadian population as a whole.

Figure 7.4
Average number of days on which participants engaged in fishing for recreation in 1987, by age group

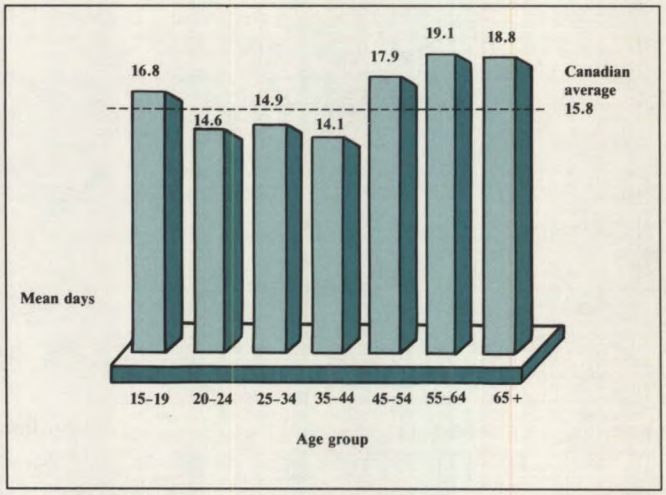
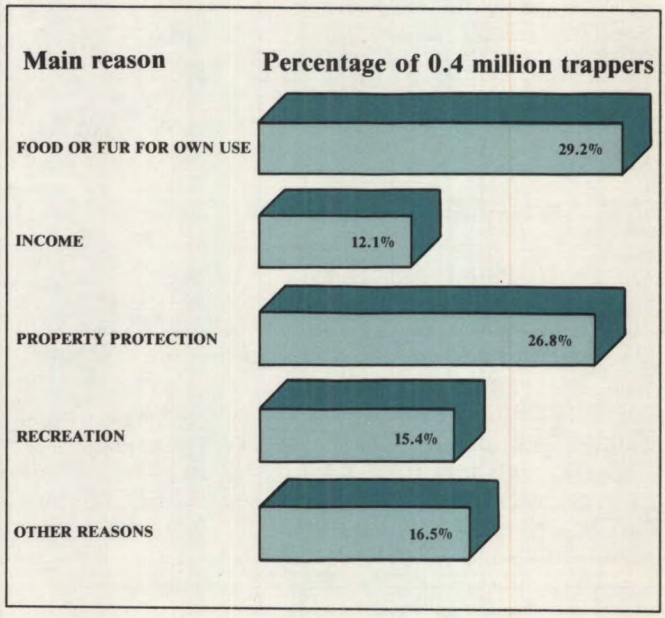
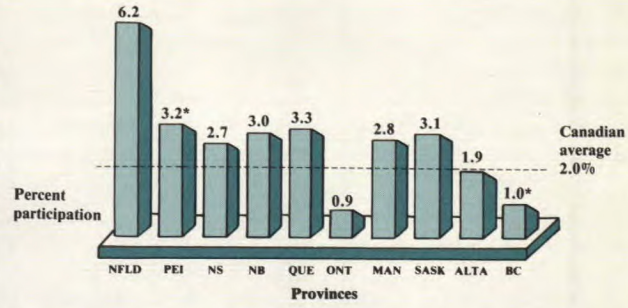


Figure 7.5
Distribution of reasons for trapping small mammals in 1987



Participation in trapping small mammals for food or fur for personal use, income, property protection, recreation, or other reasons varied across the provinces (Figure 7.6). Residents of the Atlantic region, Quebec, Manitoba, and Saskatchewan recorded participation rates above the average of 2 percent, with Newfoundland well above the average, at 6.2 percent. Ontario and British Columbia residents recorded the lowest participation rates: about 1 percent of their populations trapped small mammals for one of the main reasons specified above.

Figure 7.6
Percentage of Canadians trapping small mammals in 1987, by province of residence



* The sampling variability of this estimate is slightly higher than that for other provinces for such reasons as small sample size or low participation.

8 Implications for conservation policies and programs

The results of the 1987 National Survey on the Importance of Wildlife to Canadians show that the vast majority of Canadians had some form of contact with wildlife during 1987. Participants consisted of a number of distinct groups in terms of their demographic profiles and their commitment of time and money to wildlife activities. Significant provincial and regional differences were observed.

In this chapter, 1981 and 1987 national survey results are compared to highlight key trends that have occurred in wildlife-related activities. The implications of survey results for sustaining the benefits of wildlife are advanced, and further initiatives planned for the national survey are described.

8.1 Trends in participation in wildlife-related activities since 1981

A comparison of the 1981 and 1987 survey results confirms the popularity of wildlife-related activities among Canadians: in 1987, 91.3 percent of Canadians (18.3 million) participated in these activities, compared with 90.1 percent (16.7 million) in 1981. Interest in and commitment to these activities remain high and, in a number of instances, have grown. Demographic profiles of participants in wildlife-related activities have shifted in directions similar to changes in the Canadian population as a whole. The average participant is a little older than in 1981 and is better educated.

Participation in indirect wildlife-related activities (85.5 percent of the Canadian population), nonconsumptive residential wildlife-related activities (70.3 percent), primary nonconsumptive wildlife-related trips or outings (22.0 percent) and encounters with wildlife while on trips or outings taken for some other purpose (45.5 percent) has increased between 1.4 and 3.4 percentage points. Levels of participation in these activities have been sustained or increased in all provinces, with the greatest gains made in the Atlantic region.

The total time spent on wildlife-related activities has increased by 157 million days. The average time Canadians spend on wildlife-related activities remains relatively stable, at 62.2 days for residential activities, 16.9 days for primary nonconsumptive trips or outings, and 19.2 days for incidental wildlife encounters on other trips or outings. The average time spent on residential activities in Prince Edward Island and Quebec and on primary nonconsumptive trips or outings in New Brunswick increased by over 4 days.

Total expenditures on wildlife-related activities increased by 21 percent from $4.2 billion in 1981 to $5.1 billion in 1987. A more detailed comparison of these important results will be the subject of a separate report on wildlife economics (see Section 8.3).

Interest in belonging or contributing to wildlife organizations remains six times higher than the actual current participation of 1.4 million. However, a portion of this growth potential has been tapped since 1981, especially in the Atlantic region. The growth potential for direct nonconsumptive activities has declined slightly, reflecting increases in participation in these activities.

Survey results for 1987 show that the proportion of Canadians who hunted large mammals remains relatively unchanged since 1981, at just over 5 percent. On the other hand, hunting in general has declined slightly, from 9.8 percent in 1981 to 8.4 percent in 1987. The greatest declines were in the four western provinces.

Nationally, participation in waterfowl hunting dropped from 3.6 to 2.5 percent, in hunting other birds from 5.3 to 4.3 percent, and in hunting small mammals from 5.0 to 3.7 percent. The average time Canadians spent hunting remained relatively stable, except in Quebec and Saskatchewan, where the average time decreased by about 3 days.

The growth potential for participation in hunting increased nationally from 1981 to 1987, reflecting declines in participation in hunting. This trend is especially evident in Newfoundland, Ontario, Saskatchewan, and British Columbia. However, in Prince Edward Island, Nova Scotia, and New Brunswick, the difference between expressed interest in participating and actual participation in hunting has narrowed, reflecting the relative stability of hunting participation rates in these provinces since 1981.

Public support for maintaining abundant wildlife (83.3 percent) and for preserving declining or endangered wildlife populations (85.2 percent) increased by about 3 percentage points since 1981 and was maintained at similar high levels in all provinces.

Canadians continue to participate in a variety of wildlife-related activities: in 1987, 73.0 percent of Canadians participated in two or more activities, compared with 69.8 percent in 1981. A growing trend toward participating in multiple wildlife-related activities was observed in all provinces. Residents of Nova Scotia, Alberta, and British Columbia continue to have the highest participation rates in multiple wildlife-related activities.

Detailed provincial and regional trends in wildlife-related recreational activities and comparisons of demographic profiles of participants will be the subject of another report (see Section 8.3).

8.2 Implications for sustaining the benefits of wildlife

The potential management implications of the national survey results are far-ranging. The following selection illustrates how this information can serve to strengthen policies and programs intended to perpetuate the beneficial use of wildlife populations and habitats:

- The most recent Statistics Canada results confirm the significance of wildlife as an important social and economic asset to Canada. The considerable benefits of this valuable resource can be perpetuated, provided that adequate conservation policies and programs are maintained or developed to protect essential ecological processes, preserve genetic diversity, and ensure the sustained utilization of species and ecosystems.

- The demand for wildlife-related activities remains high and is increasing. The immense and sustained popularity of wildlife-related recreational activities among millions of Canadians establishes that federal and provincial government and nongovernment wildlife management organizations are accountable to complex, diverse, and nationwide constituencies. This should be reflected in the development and justification of conservation policies, programs, strategies, and legislation.

- Participants in certain wildlife-related activities that are specialized and require above-average commitment have demographic characteristics that differ from those of the general population. Tracking the changing socio-economic and demographic profiles of various segments of participants and nonparticipants enables managers to communicate more skillfully with key groups and to plan for the optimal balance of their needs and those of wildlife populations and habitat.

- The attraction of Canadians to such wildlife-related activities as watching, photographing, studying, or feeding wildlife while on trips or outings is increasing. There is a need to adapt existing programs and to develop new ones to manage wildlife populations and habitat for these forms of utilization by local communities and tourists.

- High levels of commitment to wildlife-related activities are reflected in considerable expenditures of time and money, particularly among Canadians who take primary nonconsumptive trips, hunt, or provide natural areas for wildlife. Government and nongovernment wildlife managers have an important opportunity to develop creative ways to encourage these target groups to contribute toward the cost of maintaining abundant wildlife populations and preserving endangered species and vital habitats.

- The magnitude of the difference between declared interest in joining or contributing to wildlife organizations and actual involvement in them confirms the significant, untapped source of support for organizations aimed at maintaining abundant wildlife or protecting endangered wildlife. There are strong opportunities for growth in this field throughout Canada, especially in Quebec and the Atlantic provinces.

- Increasingly strong attitudes favouring the maintenance of abundant wildlife and the preservation of endangered or declining species imply that Canadians are highly supportive of policies and programs designed to attain these fundamental goals. This provides an important opportunity to increase public support for a wide range of policies and programs that extend far beyond the realm of wildlife and habitat issues. For example, demonstrating the favourable impact on wildlife and habitat of enhanced agricultural, forestry, and energy practices, or of new programs on acid rain, chemical spills, and other costly environmental policies, could be an effective strategy to enhance public support for these policy and program proposals.

• When considered on a per activity basis, Canadians who engage in multiple wildlife activities spend more time and money than those who participate in a single wildlife activity. Management programs and policies that encourage participation in a variety of wildlife-related activities could provide greater benefits than those that are more narrowly focused.

• In spite of the small decline in hunting participation, the notable difference between declared interest in hunting and actual participation in this activity implies a significant growth potential. This is true across Canada, particularly in Ontario and British Columbia.

• The inclusion of fishing and trapping in the 1987 survey in addition to hunting has yielded two helpful insights, among others:

— The fact that nearly a third of Canadians engage in fishing, hunting, or trapping indicates considerable public support to maintain management programs for these activities.

— A substantially larger number of Canadians reported that they participate in fishing, hunting, or trapping than has been estimated from other sources based primarily on license sale records. Efforts to investigate the reasons for these discrepancies and to reduce them should result in substantial benefits, such as increased revenue from license sales and improved monitoring of wildlife populations.

• From the perspective of integrated resources management, this Statistics Canada survey emerges as a valuable monitoring instrument for joint initiatives among jurisdictions. This is consistent with the recommendation by the Wildlife Conservation Colloquium Task Force[14] to replicate the survey at five-year intervals. The results of 1987 confirm those of 1981 and establish the reliability of the vehicle for monitoring the demand for wildlife-related activities in Canada. The continuing survey will make important contributions to a number of federal and provincial requirements, such as the need to periodically report on the state of Canada's environment, among others.

8.3 Further initiatives

The highlights provided in this publication will be amplified in future reports to provide greater detail and significant insights to wildlife managers, other senior decision makers, and the public. Reports planned by the Federal–Provincial Task Force include:

• The economic significance of recreational wildlife-related activities for Canada and the provinces

• Trends in survey results to 1987 and a forecast of shifts in demand for wildlife

• A user's guide for the 1987 survey, prepared jointly with Statistics Canada

Further analyses of survey results are expected to examine interprovincial travel to participate in wildlife-related activities and new segmentations of wildlife users. Survey sponsors will also be encouraged by the task force to prepare analyses and reports based on results specific to a wildlife-related activity, type of wildlife, or province.

Comments and questions that readers may have on this report or survey should be directed to the Chairman of the Federal–Provincial Task Force for the 1987 National Survey on the Importance of Wildlife to Canadians, Ottawa, Ontario K1A 0H3. They will be taken into account during the completion of the report series, as well as in the planning of the 1991 National Survey on the Importance of Wildlife to Canadians.

[14]Federal–Provincial/Territorial Wildlife Conference, Wildlife Conservation Colloquium Task Force. 1987. Report to Wildlife Ministers. Canadian Wildlife Service, Ottawa, Canada.

Appendix A: Definition of terms

Consumptive activity
Consumptive activity is defined as an activity whose purpose is the harvesting of wildlife. This usually means hunting, although in some sections of this report collecting wildlife specimens, fishing, and trapping are included.

Day
A day is defined as any part of a day (24 hours) spent participating in a given activity. For example, if a hunter hunted 2 hours one day and 3 hours another day, it would be recorded as 2 days of hunting. If he hunted 2 hours in the morning and 1 hour in the evening of the same day, it would be considered 1 day of hunting.

Direct nonconsumptive activity
Direct nonconsumptive activity is defined as a nonconsumptive activity that involves an actual encounter with wildlife. **Residential activities, primary nonconsumptive trips or outings**, and **incidental wildlife encounters during trips or outings** are included in this category.

Expenditures
Expenditures is defined as expenses incurred by the participant for the purchase of goods and services to be used primarily for participation in a wildlife-related activity. Goods bought for other purposes but used in wildlife-related activities are not considered to be legitimate costs of wildlife activities. Expenditures were divided into the following categories:

- Expenditures on **natural areas**: Acceptable costs include the maintenance, improvement, or purchase of natural areas. An example of improvement or provision of a natural area for wildlife would be to maintain or add to an area certain types of plants for the purpose of feeding or sheltering wildlife. The respondent could not include, for example, his/her cottage.

- Expenditures on **residential activities**: Such items as the cost of feeders, food for wildlife, birdhouses, magazines, films, and cameras used primarily for wildlife would be included.

- Expenditures on **transportation**: Such items as the operation of private vehicles, gas, oil, car repairs, car rentals, planes, and ferries would be included.

- Expenditures on **accommodation**: Such items as cabins, lodges, motels, and campgrounds would be included.

- Expenditures on **food**: Such items as groceries, meals, and beverages would be included.

- Expenditures on **equipment**: Such items as cameras, camping gear, binoculars, special clothing, recording equipment, boats, motors, and other vehicles such as snowmobiles and all-terrain vehicles would be included. For consumptive activity, such purchases as guns and accessories, game carriers, calls, dogs, and decoys would be included.

- Expenditures on **other items**: Such items as feed for wildlife, books, and film and film processing would be included. For consumptive wildlife activity, ammunition, guide fees, dog maintenance, and equipment rentals and repairs would be included.

Incidental wildlife encounter during trip or outing
Incidental wildlife encounter during trip or outing is defined as observing wildlife on a journey whose main purpose was other than encountering wildlife.

Indirect nonconsumptive activity
Indirect nonconsumptive activity is defined as a recreational activity that allows the participant to experience wildlife outside its natural setting through a variety of modes: reading, watching films or television, purchasing art or crafts, or visiting institutions dealing with wildlife, such as zoos, game farms, aquariums, or natural history museums.

Large mammals
Large mammals is defined as big game and nongame species, such as deer, bears, moose, mountain sheep, etc.

Multiple-activity participation
Multiple-activity participation is defined as participation in two or more wildlife-related activities during the year.

Natural area
Natural area is defined to include areas such as a woodlot, hedge, marsh, open field, or similar natural area that provides food or shelter for wildlife.

Nonconsumptive activity
Nonconsumptive activity is defined as an activity that does not involve the harvesting of wildlife, such as observing, feeding, photographing, or studying wildlife. **Direct** and **indirect nonconsumptive activities** are included in this category.

Other birds
Other birds is defined as wild birds other than waterfowl; for example, robins, sparrows, crows, pigeons, hawks, and owls, as well as upland game birds such as grouse, partridge, pheasant, etc.

Other wildlife
Other wildlife is defined as wildlife other than waterfowl, other birds, small mammals and large mammals; for example, butterflies, frogs, snakes, lizards, etc.

Primary nonconsumptive trip or outing
Primary nonconsumptive trip or outing is defined as a trip or outing taken for the primary purpose of encountering wildlife to watch, feed, photograph, or study them.

Residential activity
Residential activity is defined as wildlife-related activity that takes place around the home or cottage. Such activities as feeding, watching, studying, or photographing wildlife or maintaining shrubs or plants for wildlife are included.

Small mammals
Small mammals is defined as small game and nongame species, such as rabbits, squirrels, raccoons, foxes, groundhogs, beaver, other furbearers, etc.

Trip or outing
A trip is defined as a journey away from the place of residence for more than 1 day, and an outing is defined as a journey away from the place of residence for less than 1 day.

Waterfowl
Waterfowl is defined as ducks, geese, herons, cranes, etc.

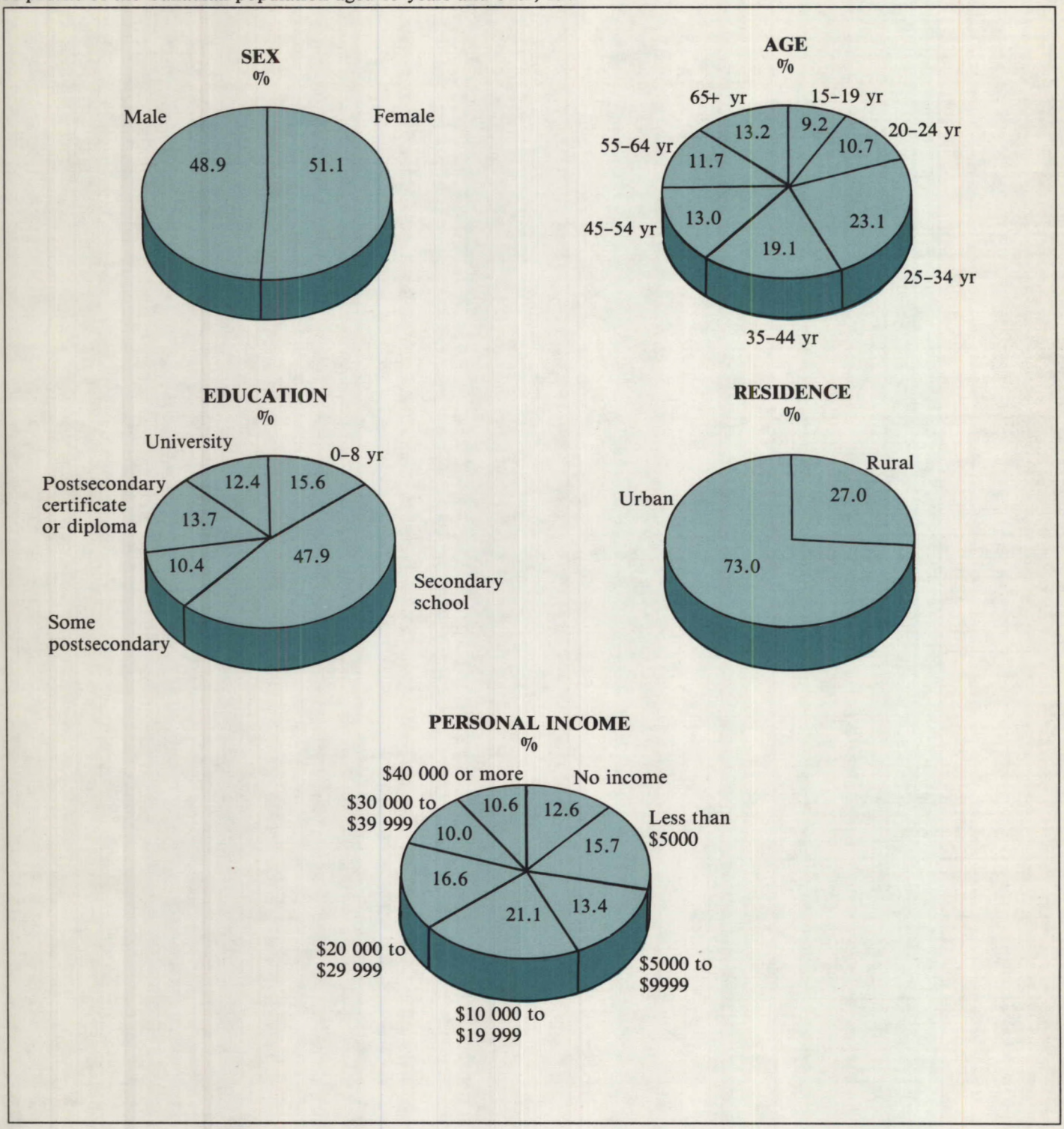
Wildlife
Wildlife is defined as wild animals, not pets or other domesticated animals. It includes **waterfowl, other birds, small** and **large mammals**, and **other wildlife** in a natural environment. Animals in zoos or game farms were not classified as wildlife in this study, with the exception of indirect nonconsumptive activities.

Wildlife-related activities
Wildlife-related activities is defined as recreational activities that include, in some form, either direct or indirect contact with wildlife. All **consumptive** and **nonconsumptive activities** are included in this category.

Wildlife-related organization
Wildlife-related organization is defined to include organizations such as naturalist and conservation organizations and sportsman's clubs.

Appendix B:
Profile of the Canadian population (fold-out)

Figure B.1
A profile of the Canadian population aged 15 years and over, 1987



Appendix B:
Profile of the Canadian population

Table B.1
A profile of the Canadian population aged 15 years and over, 1987

	Number	Percent
Sex		
Male	9 770 199	48.9
Female	10 220 906	51.1
Age group		
15–19 years	1 846 454	9.2
20–24 years	2 144 467	10.7
25–34 years	4 611 542	23.1
35–44 years	3 806 264	19.1
45–54 years	2 603 645	13.0
55–64 years	2 334 618	11.7
65 years and over	2 664 115	13.2
Residence		
Rural	5 394 491	27.0
Urban	14 596 614	73.0
Education		
0–8 years	3 118 714	15.6
Some secondary, no postsecondary	9 563 714	47.9
Some postsecondary	2 077 156	10.4
Postsecondary certificate or diploma	2 744 492	13.7
University	2 487 029	12.4
Personal income		
No income	2 512 222	12.6
Less than $5000	3 129 446	15.7
$5000–9999	2 675 069	13.4
$10 000–19 999	4 226 828	21.1
$20 000–29 999	3 326 636	16.6
$30 000–39 999	1 996 863	10.0
$40 000 or more	2 124 042	10.6
Province of residence		
Newfoundland	431 826	2.2
Prince Edward Island	97 597	0.5
Nova Scotia	681 306	3.4
New Brunswick	548 649	2.7
Quebec	5 236 651	26.2
Ontario	7 370 441	36.8
Manitoba	811 979	4.1
Saskatchewan	741 535	3.7
Alberta	1 773 730	8.9
British Columbia	2 297 391	11.5
Canada total	19 991 105	100.0

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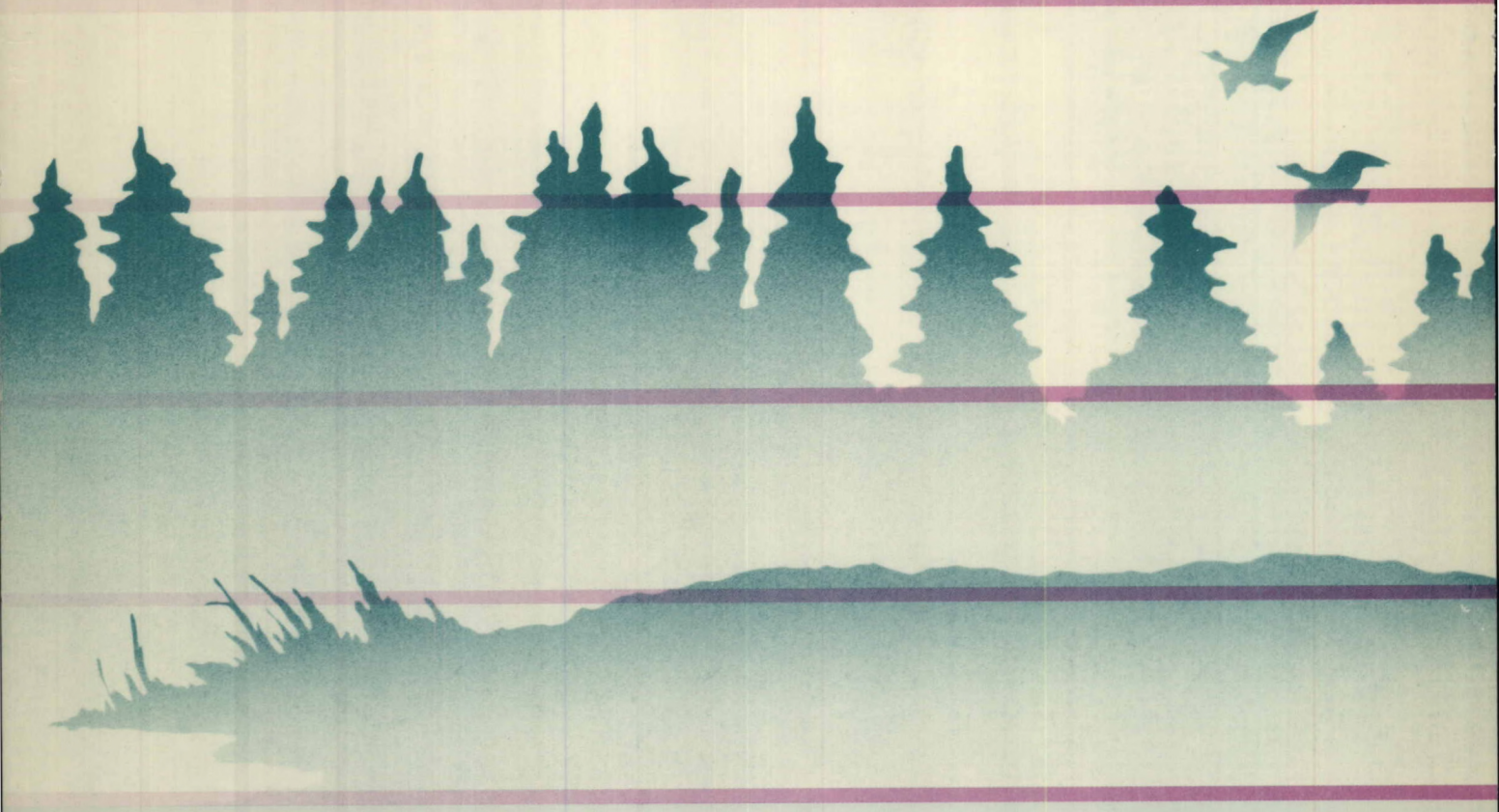

A joint federal–provincial initiative

Newfoundland
Prince Edward Island
Nova Scotia
New Brunswick
Quebec
Ontario
Manitoba
Saskatchewan
Alberta
British Columbia

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