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# Survey of Recreational Fishing in Canada *2005*



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# Table of Contents

<b>Preface</b> .....	iii
<b>Acknowledgements</b> .....	iii
<b>Symbols and Abbreviations</b> .....	iv
<b>1.0 Introduction</b> .....	1
1.1 Managing Canada's Recreational Fisheries .....	1
1.2 Survey Highlights .....	1
<b>2.0 Survey Overview</b> .....	3
<b>3.0 Concepts, Terms and Definitions</b> .....	3
<b>4.0 Survey Results</b> .....	5
4.1 Angler Profile .....	5
4.1.1 Resident Anglers .....	5
4.1.2 Canadian Non-resident and Foreign Anglers .....	5
4.1.3 Gender Profile .....	6
4.1.4 Age Profile .....	6
4.2 Fishing Effort .....	7
4.2.1 Days Fished .....	7
4.2.2 Non-resident Trip Characteristics .....	7
4.3 Harvest .....	7
4.3.1 Fish Caught and Retained .....	7
4.3.2 Species Profile .....	8
4.4 Direct Recreational Fishing Expenditures .....	9
4.4.1 Total Direct Expenditures .....	9
4.4.1.1 Transportation .....	10
4.4.1.2 Food and Lodging .....	10
4.4.1.3 Package Deals .....	10
4.4.1.4 Fishing Services, Fishing Supplies and Other Direct Recreational Fishing Expenditures ...	11
4.5 Major Purchases and Investments .....	11
<b>5.0 Survey Methodology and Data Quality</b> .....	12
5.1 Sampling Procedures .....	12
5.1.1 General .....	12
5.1.2 Resident Anglers in Quebec and in Newfoundland and Labrador .....	12
5.1.3 Non-resident Anglers in Quebec .....	12
5.1.4 Special Sampling: Atlantic Salmon Licence Holders .....	13
5.2 Data Collection, Processing, Coding and Estimation .....	13
5.3 Weighting Procedures .....	13
5.4 Post-Survey Adjustment Procedures .....	14

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5.5 Data Quality .....	14
5.5.1 Sampling Error .....	14
5.5.2 Non-sampling Error .....	14
5.5.3 Data Limitations .....	14
5.6 Data Comparability .....	15
<b>6.0 References</b> .....	15
<b>Annex A: Summary Tables</b> .....	17
Annex A.1 Origin of Licensed Anglers, by Angler Category and Jurisdiction, 2005 .....	19
Annex A.2 Origin of All Licensed Non-resident Anglers in Canada, 2005 .....	20
Annex A.3 Number of Active Adult Anglers, by Angler Category and Jurisdiction, 2005 .....	21
Annex A.4 Number and Average Age of All Active Adult Anglers, by Gender and Jurisdiction, 2005 .....	22
Annex A.5 Number of Days Fished in Freshwater and Saltwater, by Angler Category and Jurisdiction, 2005 .....	23
Annex A.6 Trip Information Summary for All Non-resident Anglers, 2005 .....	25
Annex A.7 Summary of Fish Harvested by All Anglers, 2005 .....	26
Annex A.8 Summary of Fish Harvested, by Angler Category, 2005 .....	27
Annex A.9 Direct Recreational Fishing Expenditures Made by All Active Anglers, 2005 .....	28
Annex A.10 Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing) Made by All Active Anglers, 2005 .....	29
Annex A.11 Major Purchases and Investments (Wholly Attributable to Recreational Fishing) Made by All Active Anglers, 2005 .....	30
Annex A.12 Major Purchases and Investments (Wholly Attributable to Recreational Fishing) by Angler Category, Canada, 2005 .....	31
Annex A.13 Statistical Reliability of Selected Variables, All Active Anglers, 2005 .....	32
<b>Annex B: 2005 Survey Contacts</b> .....	33
<b>Annex C: CD-ROM Detailed Tables</b> .....	37

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## Preface

The 2005 Survey of Recreational Fishing in Canada collected information about recreational fishing activities to assess the economic and social importance of recreational fisheries to Canada's provinces and territories. This nationally-coordinated study provides the most comprehensive information on recreational fisheries activities and harvests in all regions of the country. It is also the most up-to-date source of detailed statistics on the economic contribution made by anglers at both provincial/territorial and national levels.

## Acknowledgements

The cooperation of survey respondents was critical to the successful completion of this project and is gratefully acknowledged.

This report was prepared by Rowena Orok and Neville Johnson, Statistical Services, under the supervision of Robert Elliott, Director, Economic Analysis and Statistics, Policy Sector.

The survey was a coordinated initiative between Fisheries and Oceans Canada (DFO) and the provincial and territorial fisheries licensing agencies. Key operational activities including survey sampling, data collection, editing and estimation were managed by Kieth Brickley, consulting statistician, under the direction of Sue Rocque, Resource Management-National, Fisheries and Aquaculture Management Sector.

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## Symbols

The following symbols are used in this report:

- nil or zero
- .. figures not available
- ... figures not applicable

## Abbreviations

- ft feet
- kg kilogram
- MT metric tons
- n/a not surveyed
- DFO Fisheries and Oceans Canada

## 1.0 Introduction

With over two million lakes and rivers that flow into five major ocean drainage basins, Canada is well-known for its recreational fisheries. Fishing has historically been one of the country's popular leisure activities for both Canadians and visitors alike.

Every year, anglers from all around the world come to visit and participate in sport fishing activities across Canada. The important socio-economic contributions of recreational fishing are felt in all of Canada's provinces and territories, particularly in some of the more remote areas of the country.

### 1.1 Managing Canada's recreational fisheries

The policy framework for recreational fisheries takes into account their important socio-economic contribution not only to the fishing communities and tourism industries but to Canadians in general. In addition, this framework also focuses in emphasizing partnership, citizen-engagement and community stewardship and in promoting public awareness about conservation and the sustainable use of fishery resources.

The governance structure for managing Canada's recreational fisheries is one that has evolved over time. It is a complex combination of federal, provincial and territorial legislative and management responsibilities. Text Box 1.1 provides a summary of the different management responsibilities for recreational fisheries in Canada.

The implementation of recreational fishery management programs at the provincial and territorial level are as equally complex. These programs and strategies do reflect, however, the diversity of requirements across various jurisdictions, the need to engage all stakeholders and the importance of achieving a balance between promotion of recreational fishing as a leisure activity and conservation of the resource.

Statistical monitoring of recreational fishing activities is an important input to fishery management. Information collected through the Survey of Recreational Fishing in Canada has been used to support policy analysis and the development of fishery management plans for the past thirty years.

## 1.2 Survey Highlights

In 2005, Canadians spent an average of one hour per day pursuing various sports and active leisure.<sup>1</sup> Recreational fishing was certainly one of these activities, particularly among the older generation. However, recreational fishing participation rates have been on a downward trend in most provinces and territories.

Resident anglers continued to make up the majority of the active angler population in Canada, particularly in Ontario and Quebec. Most Canadian non-resident and foreign anglers travelled to either Ontario or British Columbia (tidal waters) for their recreational fishing activities.

The population of active adult anglers continued to age. More than half of Canadian anglers, for example, were in the 45-64 age group whereas only 26% of the general Canadian population fell within the same age range.

The average number of days fished per angler remained relatively unchanged at 13 days since 1995. Canadian non-resident and foreign anglers made over 2 million trips within Canada in 2005.

Overall, walleye was the most predominant species caught in 2005, surpassing trout for the first time since the conduct of the first survey. Brook trout, however, continued to be a dominant species caught by resident anglers, particularly in the eastern provinces and Quebec. The Territories had significant catches of lake trout, arctic grayling and northern pike.

Anglers contributed a total of \$7.5 billion to various local economies in Canadian provinces and territories in 2005. Of this amount, \$5 billion were in the form of investments and major purchases of durable goods related to recreational fishing activities. The remaining \$2.5 billion covered direct recreational fishing expenditures during fishing trips, such as transportation, food, lodging, fishing services, and fishing supplies.

<sup>1</sup> Statistics Canada, *Overview of the Time Use of Canadians*, Catalogue no. 12-0080 XIE, Ottawa.

**Text Box 1.1**  
**Summary of Federal, Provincial and Territorial Responsibilities, Management of Recreational Fisheries, Canada**

Province/Territory	Recreational Fisheries Management Responsibilities		
	Federal (DFO)	Provincial / Territorial	Co-Management Boards
Newfoundland and Labrador	marine species		
Prince Edward Island, New Brunswick, Nova Scotia	freshwater species	freshwater species (licensing)	
	anadromous, catadromous, other marine species	freshwater species (licensing)	
		anadromous species fished in inland waters (licensing)	
Quebec	all other marine species	freshwater, anadromous and catadromous species	
Ontario, Manitoba	marine species	freshwater species	
Saskatchewan	Aboriginal fisheries and fish habitat protection	day-to-day legislative fishery amendments	
Alberta		freshwater species	
British Columbia	salmon in marine and freshwater	freshwater species	
	salmon - tidal waters (licensing)	inland salmon sport fishing (licensing)	
	other tidal water species		
Northwest Territories, Nunavut		sport fish licensing (Order-in-Council)	fishery allocations; provide advice on conservation, fishery management and science activities
Yukon	marine species	freshwater species	

**Source:**  
DFO, Fisheries and Aquaculture Management, *Recreational Fisheries in Canada: An Operational Policy Framework*.



## 2.0 Survey Overview

The 2005 Survey of Recreational Fishing in Canada was the 7<sup>th</sup> cycle of the survey which began in 1975 and is conducted every five years. The survey's target population covered all individuals identified in the 2005 provincial and territorial recreational fishing licence databases.<sup>2</sup> In 2005, the questionnaires were mailed out to over 80,000 households within Canada and in other countries to obtain information on recreational fishing activities (Table 2.1).

The sample design was based on the licensing databases in each province and territory. Samples were selected using stratified, systematic random sampling with stratification based on licence category. Sample sizes were determined from the reliability estimates for days fished for each stratum, as calculated from the results of the 2000 Survey of Recreational Fishing in Canada.

**Table 2.1 Final Sample Size, Resident and Non-Resident Anglers, by Jurisdiction, 2005<sup>1</sup>**

Jurisdiction	Resident	Non-resident	Total
Newfoundland and Labrador	1,696	1,151	2,847
Prince Edward Island	1,118	287	1,405
Nova Scotia	1,214	651	1,865
New Brunswick	3,470	1,028	4,498
Quebec	13,279	0	13,279
Ontario	8,000	8,000	16,000
Manitoba	2,800	1,600	4,400
Saskatchewan	3,570	2,430	6,000
Alberta	5,001	899	5,900
British Columbia			
Freshwater	8,089	1,966	5,800
British Columbia Tidal Waters	12,000	3,410	15,410
Yukon	1,002	898	1,900
Northwest Territories	902	898	1,800
Nunavut	698	996	1,694
<b>Canada</b>	<b>62,839</b>	<b>24,214</b>	<b>82,798</b>

**Notes:**

1. The number of non-resident anglers in this table includes both Canadian non-residents and foreign anglers. Refer to Section 3 for a list of concepts, terms and definitions used in the report.

2. Due to limitations in the licensing database, non-resident anglers in Quebec were not covered in the 2005 Survey of Recreational Fishing in Canada. Refer to Section 5.1.3 for details.

Source:

DFO, Economic Analysis and Statistics.

The 2005 survey collected information on:

- angler profile (age, sex, residence, etc.)
- recreational fishing activity
  - fishing effort by regions;<sup>3</sup>
  - number of fish caught and retained;

<sup>2</sup> In Newfoundland and Labrador and in Quebec, a pre-screening process was conducted in order to identify the active angler population of the province in 2005.

<sup>3</sup> Recreational fishing regions were based on the definitions used by each province or territory.

- harvest by species and by fisheries management and/or economic region;
  - trip information; and
  - catch and release activities
- expenditures
    - major purchases or investments attributable to fishing activities;
    - package deals purchased; and
    - direct expenditures related to recreational fishing trip activities.

Each province/territory also asked other region-specific questions on recreational fishing activities. All publishable results pertaining to these questions, along with copies of the survey questionnaires are found in the CD-ROM that accompanies this report.

Section 5 provides a more detailed description of the survey methodology as well as indicators of data quality and statistical reliability of key variables.

## 3.0 Concepts, Terms and Definitions

Following is a glossary of terms and definitions used in the survey and throughout this report:

**Recreational Fishing:** refers to non-commercial fishing; recreational angling, and sport fishing are covered in the definition used by the survey. Note that ceremonial fishing and subsistence fishing are not covered by the survey and are, therefore, not included in any of the estimates presented in this report.

**Active Angler:** an angler who fished in 2005; the identification of active anglers was based on the information from provincial and territorial licensing databases, the results of the survey pre-screening<sup>4</sup> and from survey responses of individual respondents.

**Adult Anglers:** the total adult angler population in 2005; do not include individuals under 16 years of age (18 years of age in some jurisdictions). The survey results presented in this report relate to recreational fishing activities of **active adult anglers** covered in the survey.<sup>5</sup>

**Household:** made up of one or more adult anglers who reside in the same dwelling.

<sup>4</sup> Conducted in two provinces: Newfoundland and Labrador and Quebec.

<sup>5</sup> With the exception of survey results from some of the additional questions by jurisdiction (see Annex C.2).

Jurisdiction: province or territory having the recreational fishing management responsibility. The province of British Columbia (BC) is divided into two jurisdictions, namely, BC Tidal which represents salt water or marine recreational fishing and BC Freshwater which represents recreational fishing in BC's freshwater regions.

Angler categories: each jurisdiction surveyed two general categories of active anglers: resident anglers and non-resident anglers (Canadian and Other/Foreign). The only exception was in Quebec where non-resident anglers were not covered in the survey.

Resident Angler: an angler who lived in the jurisdiction and who fished within that jurisdiction in 2005.

Canadian Non-resident Angler: a Canadian angler who fished in a jurisdiction other than his/her home jurisdiction.

Other Non-resident Angler: a non-Canadian angler who fished in a Canadian jurisdiction. The terms *foreign angler*, *other non-resident angler* and *non-Canadian angler* are used interchangeably throughout the report.

Fish Harvested: number of fish caught (the term *fish harvest* is also used in the tables).

Fish Retained: number of fish kept.

Day Fished: a day or part of a day on which an angler fished for recreation.

Direct Expenditures: expenditures on goods and services (food, camping, accommodation, transportation, supplies, etc.) incurred during fishing trips or excursions.

Major Purchases and Investments: the purchase of durable goods in support of recreational fishing activities. These include boats, motors, special vehicles, camping gear and other durable goods. Land and building purchases are also included. Major purchases and investments are broken down into two categories: (1) *major purchases and investments attributable in whole or in part to recreational fishing*, defined as the total purchase price of the durable goods mentioned above; and (2) *major purchases and investments wholly attributable to recreational fishing*, calculated based on the percentage of the purchase price which the angler feels was directly attributable to recreational fishing activities.

Fishing Equipment and Fishing Supplies: *fishing equipment* includes expenditures on goods as fishing rods, reels, depth finders, etc. while

*fishing supplies* are items purchased in the course of fishing activity such as bait, line, etc.

Package Deal: monies paid to a lodge or outfitter for a complete range of services such as lodging, food, transportation, use of fishing equipment, etc. (for self-organized trips, this includes all expenditures). Types of package deals include: fly-in camps, lodge, charter boats, outfitters, etc.

Fishing Services: include boat rental, guide services, license fees, permits, tags, etc.

Fishing Supplies: include bait, line, tackle, etc.

Average Annual Growth Rate(decline): calculated using the formula  $r = \exp(\ln(p_n/p_0)/n) - 1$  where  $r$  = average annual growth rate,  $p_n$  and  $p_0$  are the last and first observations in the period,  $n$  is the number of years in the period and  $\ln$  is the natural logarithm operator.<sup>6</sup>

Current Dollars: also referred to as nominal dollars; actual dollars received or paid, unadjusted for price changes (inflation).

Constant Dollars: dollars that have been adjusted for inflation.

<sup>6</sup> World Bank, World Development Indicators, Statistical Methods, <http://devdata.worldbank.org/wdi2006/contents/statisticalmethods.htm>, accessed May 2, 2007.

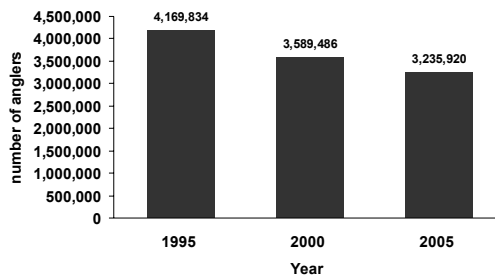
## 4.0 Survey Results

### 4.1 Angler Profile

In 2005, over 3.2 million adult anglers participated in a variety of recreational fishing activities in Canada (Annex A.3).<sup>7</sup> This was 10% lower than the estimate of 3.6 million in 2000 (Figure 4.1). Historical data show that the number of active adult anglers has decreased at an average annual rate of 2% during the past ten years.

The majority of active anglers in 2005 were residents fishing within their home province or territory (almost 2.5 million). The remaining active adult angler population consisted of just over 150,000 Canadian non-residents (Canadians fishing outside their home province or territory) and visitors to Canada (approximately 628,000).

**Figure 4.1 Total Active Adult Anglers, All Angler Categories, Canada, 1995, 2000, 2005<sup>1</sup>**



Note:

1. The 1995 and 2000 estimates have been adjusted to exclude the total number of active non-resident anglers in Quebec. The adjustment was done in order to allow comparison with the 2005 estimate.

Source:

DFO, Economic Analysis and Statistics.

#### 4.1.1 Resident Anglers

Resident anglers were mainly concentrated in Ontario and Quebec (Annex A.3). Given their large population base, this was not surprising and it has been a consistent trend since 1995. In 2005, resident anglers from these two provinces accounted for close to three-fifths of all active resident anglers in Canada. In terms of actual numbers, however, 2005 saw less active resident anglers in both provinces compared to 2000 (Table 4.1).

<sup>7</sup> This estimate reflects the total number of active anglers in the jurisdictions and angler categories covered in the survey only. In 2005, there are no available survey data for non-resident anglers in Quebec.

In general, resident angler participation rates showed a downward trend in most provinces and territories over the past ten years (Table 4.2). Resident angler participation rates have consistently been the highest in Newfoundland and Labrador and Yukon.

**Table 4.1 Number of Active Resident Anglers by Jurisdiction, Canada, 1995, 2000, 2005**

Jurisdiction	1995	2000	2005
Newfoundland and Labrador	122,677	101,945	131,578
Prince Edward Island	11,380	8,617	6,929
Nova Scotia	57,941	56,110	43,775
New Brunswick	64,694	53,132	43,382
Quebec	1,026,743	813,590	656,543
Ontario	1,039,581	814,887	764,374
Manitoba	120,599	136,334	121,788
Saskatchewan	132,955	130,076	119,824
Alberta	219,807	182,044	179,461
British Columbia Freshwater	294,439	235,691	211,403
British Columbia Tidal	181,209	145,495	169,863
Yukon	6,292	4,835	5,048
Northwest Territories	7,523	4,720	2,138
Nunavut	...	662	769
<b>Canada</b>	<b>3,285,840</b>	<b>2,688,139</b>	<b>2,456,876</b>

Source:

DFO, Economic Analysis and Statistics.

#### 4.1.2 Canadian Non-resident and Foreign Anglers

The non-resident angler category is made up of (1) Canadian non-residents who fished in jurisdictions outside their home province or territory; and (2) foreign anglers visiting Canada. In total, there were almost 780,000 anglers in these two non-resident angler categories in 2005 (Table 4.3).

Two out of ten were Canadians who fished outside their own province/territory. The remainder were foreign anglers, part of the 36 million travellers who entered Canada in 2005.<sup>8</sup> The overall trend shows an average annual decrease of 3% in the total non-resident angler population during last five years and 1% average annual decline since 1995.<sup>9</sup>

<sup>8</sup> Statistics Canada, *Non-resident travellers entering Canada*, <http://www40.statcan.ca/l01/cst01/arts34.htm?sdi=travellers%20canada>, accessed May 3, 2007.

<sup>9</sup> The calculation excludes the 1995 and 2000 non-resident estimates for Quebec.

**Table 4.2 Resident Angler Participation Rate, by Jurisdiction, Canada, 1995, 2000, 2005<sup>1</sup>**

Jurisdiction	1995	2000	2005
	(%)		
Newfoundland and Labrador	21.6	19.0	25.5
Prince Edward Island	8.4	6.2	5.0
Nova Scotia	6.2	6.0	4.7
New Brunswick	8.6	7.0	5.8
Quebec	14.2	11.0	8.6
Ontario	9.5	7.0	6.1
Manitoba	10.7	11.9	10.3
Saskatchewan	13.1	12.7	12.1
Alberta	8.0	6.0	5.5
British Columbia Freshwater	7.8	5.8	5.0
British Columbia Tidal	4.8	3.6	4.0
Yukon Territory	20.4	15.8	16.3
North West Territories	11.3	11.5	5.0
Nunavut	...	2.4	2.6
<b>Canada</b>	<b>10.8</b>	<b>8.8</b>	<b>7.6</b>

**Note:**

1. Participation rate is defined as the resident anglers' share of total population in the province or territory.

Source:

DFO, Economic Analysis and Statistics.

**Table 4.3 Combined Number of Canadian Non-resident and Foreign Anglers, by Jurisdiction, Canada 1995, 2000, 2005<sup>1</sup>**

Jurisdiction	1995	2000	2005
	('000)		
Newfoundland and Labrador	4.6	3.5	3.8
Prince Edward Island	1.0	0.8	0.6
Nova Scotia	2.5	2.5	2.1
New Brunswick	9.2	8.0	7.2
Quebec	50.8	46.6	..
Ontario	571.5	606.9	501.6
Manitoba	36.4	42.7	36.8
Saskatchewan	44.0	41.9	37.3
Alberta	12.5	13.9	12.4
British Columbia Freshwater	71.4	68.0	59.4
British Columbia Tidal	116.0	97.7	106.3
Yukon Territory	7.5	6.4	5.8
North West Territories	7.5	8.1	4.5
Nunavut	...	0.9	1.1
<b>Canada</b>	<b>934.8</b>	<b>947.9</b>	<b>779.0</b>

**Note:**

1. The 2005 Canada total does include the number of non-resident anglers in Quebec.

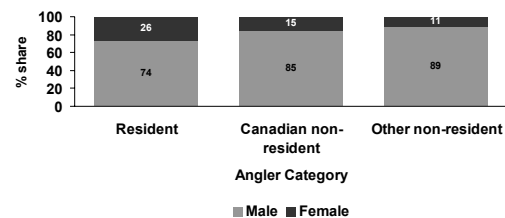
Source:

DFO, Economic Analysis and Statistics.

### 4.1.3 Gender Profile

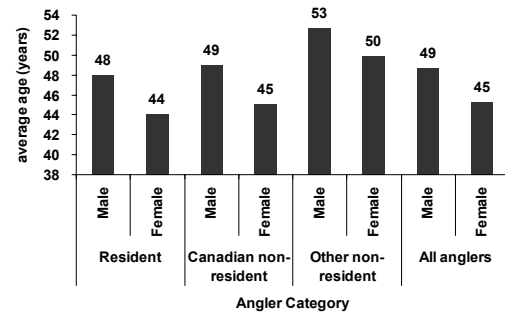
Male anglers made up 74% of resident adult anglers, 85% of Canadian non-resident anglers and 89% of all other non-resident anglers. These distributions have shown very little fluctuations throughout the years (Figure 4.2).

Figure 4.3 illustrates the average age of male and female active anglers. In 2005, the average male angler was 49 years old whereas female anglers were generally 45 years old, compared with 44 and 41 years, respectively, ten years ago.<sup>10</sup> These were considerably higher than the overall 2005 average age for Canadian males (38 years) and females (40 years).<sup>11</sup>

**Figure 4.2 Distribution of Active Anglers by Angler Category and Gender, Canada, 2005**

Source:

DFO, Economic Analysis and Statistics.

**Figure 4.3 Average Age of Active Anglers, by Angler Category and Gender, Canada, 2005**

Source:

DFO, Economic Analysis and Statistics.

### 4.1.4 Age Profile

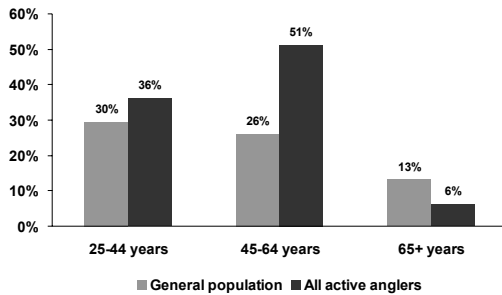
Analysis of the age distribution reveals the aging population of active anglers in Canada. This is confirmed further by comparing the 2005 Canadian angler age profile with that of the general population (Figure 4.4). In 2005, for example, more than half of Canadian anglers

<sup>10</sup> Fisheries and Oceans Canada, *1995 Survey of Recreational Fishing in Canada*, [http://www.dfo-mpo.gc.ca/communic/statistics/recreational/canada/1995/index\\_e.htm](http://www.dfo-mpo.gc.ca/communic/statistics/recreational/canada/1995/index_e.htm), accessed June 6, 2007.

<sup>11</sup> Statistics Canada, *Annual Demographic Statistics 2005*, Catalogue no. 91-213-XIB, Ottawa.

were in the 45-64 age group, whereas only 26% of Canadians, in general, fell within the same age range.

**Figure 4.4 Age Group Distribution, Canadian Active Anglers and General Population, Selected Age Groups (share of total), 2005<sup>1</sup>**



**Note:**

1. The age-group distribution of Canadian active anglers in this chart is based on the combined totals for resident anglers and Canadian non-resident anglers.

Source:  
DFO, Economic Analysis and Statistics.

## 4.2 Fishing Effort

### 4.2.1 Days Fished

Given its direct correlation with the number of active anglers, the total number of days spent fishing has also seen a decline over the past 10 years. In 2005, anglers fished a total of 43 million days in Canada, 88% of which were days fished by resident anglers (Annex A.5).

The average number of days fished per angler remained relatively unchanged since 1995 (13 days).<sup>12</sup> This suggests that although the number of people actively involved in a recreational fishing activity has been significantly lower, the people who remain active in recreational fishing appear to be applying the same amount of effort.

Canadian anglers fishing within their home jurisdictions accounted for about 38 million days fished in 2005. Only 2% of total fishing effort (992,628 days) could be attributed to Canadians fishing in other jurisdictions, while foreign anglers accounted for the remaining 10% (4.2 million days) in 2005. In terms of the average days fished for each angler category, resident anglers fished an average of 15 days, while the non-resident Canadian and foreign anglers groups averaged about 7 days each.

<sup>12</sup> Average of 13 days for all active adult angler categories.

### 4.2.2 Non-resident Trip Characteristics

The survey also gathered general information on the overall tourism activities of non-resident anglers. It asked visiting Canadian anglers about their number of trips to other Canadian provinces/territories and it also asked foreign anglers on their total number of trips to Canada in 2005 (for any reason). The follow-up question obtained further information on how many of these trips were specifically for recreational fishing. As a whole, non-resident anglers made over 2 million trips within Canada in 2005 and more than half of their trips (58%) were spent fishing (Annex A.6).<sup>13</sup>

Canadian non-resident anglers fished on 34% of their trips to jurisdictions other than their own province/territory.<sup>14</sup> British Columbia's tidal waters continued to be a strong attraction for Canadian non-resident anglers partly because of popular species like chinook salmon and halibut.

Ontario had the highest share of foreign anglers in 2005 (75%), maintaining its status as the most popular fishing destination for non-Canadians. British Columbia finished second<sup>15</sup> followed by Manitoba and Saskatchewan, with 26,981 and 16,825 active foreign anglers, respectively.

## 4.3 Harvest

### 4.3.1 Fish Caught and Retained

In 2005, anglers caught 215 million fish of all species and retained nearly 72 million (Annex A.7). Resident anglers in all provinces and territories caught 157 million of this total harvest. Foreign anglers caught 54 million (25%) while Canadian non-resident anglers caught a relatively small proportion of the total fish harvest (4 million) during the year (Figure 4.5 and Annex A.8).

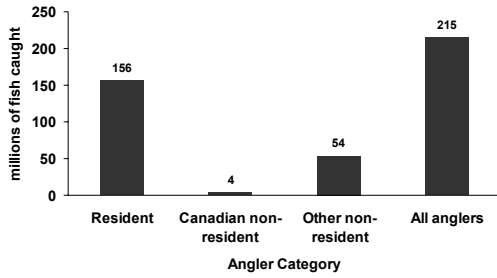
Resident anglers kept 39% of the fish they caught compared with 22% and 18% share of fish kept by Canadian non-resident and foreign anglers. On average, each resident angler kept 24 fish in 2005. Every Canadian non-resident angler kept an average of seven fish, while foreign anglers retained an average of 16 fish of various species.

<sup>13</sup> This estimate includes all trips to other provinces/territories taken by Canadian non-resident anglers as well as trips to Canada by foreign anglers in 2005.

<sup>14</sup> Canadian non-resident anglers spent a total of 992,628 days fishing out of 2,895,182 trip days (refer to CD-ROM Table 13 for details).

<sup>15</sup> In 2005, there were 31,230 foreign anglers who fished in BC Freshwater and 62,884 foreign anglers who fished in BC Tidal Waters.

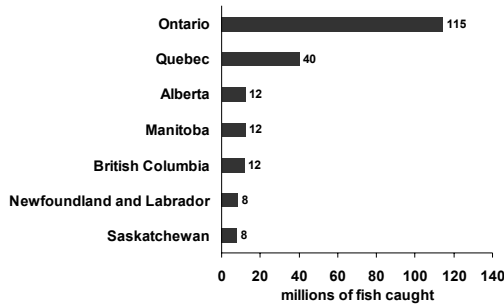
**Figure 4.5 Total Fish Harvest, All Species, by Angler Category, Canada, 2005**



Source: DFO, Economic Analysis and Statistics.

More than half of all reported 2005 fish harvests were caught in Ontario (115 million), followed by Quebec and three Western provinces (Figure 4.6). Ontario was the only province that saw an increase in total amount of fish caught between 2000 and 2005.

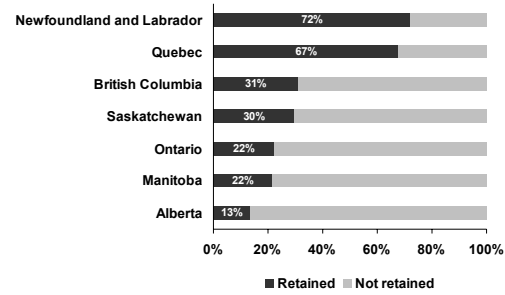
**Figure 4.6 Total Fish Harvest by All Anglers, All Species, Selected Provinces, 2005<sup>1</sup>**



Note: 1. The estimate for British Columbia includes total fish harvests in both fresh water and tidal waters. The Quebec estimate pertains to total fish harvested by resident anglers only.  
Source: DFO, Economic Analysis and Statistics.

In terms of fish retained, however, the overall proportion of fish retained by anglers in Ontario was only 22%, compared to 67% for anglers in Quebec (Figure 4.7). Anglers who fished in Newfoundland and Labrador waters retained almost three-quarters of their catch that year.

**Figure 4.7 Fish Retained, Share of Total Harvest, All Species, Selected Provinces, 2005<sup>1</sup>**

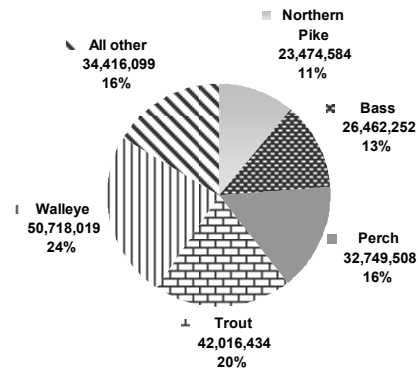


Note: 1. The estimate for British Columbia includes total fish harvests in both fresh water and tidal waters. The Quebec estimate pertains to total fish harvested by resident anglers only.  
Source: DFO, Economic Analysis and Statistics.

### 4.3.2 Species Profile

The top five species caught in each of the three angler categories covered 82% of total fish harvest in 2005 (Figure 4.8). The latest survey was also the first year in which trout was not the most predominant species caught nationally. In 2005, walleye ranked first and represented nearly a quarter of the total catch, followed by trout, perch and bass.

**Figure 4.8 Total Fish Harvest, Selected Species, Canada, 2005**



Source: DFO, Economic Analysis and Statistics.

Walleye was the number one species caught in Ontario, Manitoba, Saskatchewan and Alberta (Table 4.4). Walleye caught in Ontario accounted for the majority of the species caught nationwide by all anglers.

Trout continued to be the most predominant species harvested by resident anglers (Figure 4.9). Brook trout, in particular, was the main species in all the eastern provinces as well as Quebec. Lake trout, Arctic grayling and northern pike dominated the species caught in

the Northwest Territories, Nunavut and Yukon in 2005. It is interesting, and yet quite reasonable, to note that although foreign anglers had the largest catch totals in all three territories, it was the residents that kept the greater proportion of fish accounting for at least two-thirds of the total fish kept in each territory.

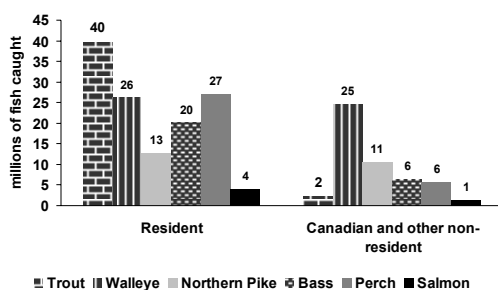
**Table 4.4 Main Species Caught By All Anglers, by Jurisdiction, Canada, 2005**

Jurisdiction	Species 1	Species 2	Species 3
Newfoundland and Labrador	brook trout	smelt	mackerel
Prince Edward Island	freshwater brook trout	sea-run brook trout	mackerel
Nova Scotia	brook trout	smallmouth bass	smelt
New Brunswick	freshwater brook trout	smallmouth bass	smelt
Quebec	brook trout	walleye	perch
Ontario	walleye	perch	sunfish
Manitoba	walleye	pike	perch
Saskatchewan	walleye	pike	perch rainbow trout
Alberta	walleye	pike	perch rainbow trout
British Columbia Freshwater	rainbow trout	freshwater salmon	cutthroat trout
British Columbia Tidal	chinook salmon	coho salmon	pink salmon
Yukon	arctic grayling	northern pike	lake trout
North West Territories	lake trout	northern pike	walleye Arctic grayling
Nunavut	lake trout	Arctic char	grayling
<b>Canada</b>	<b>walleye</b>	<b>trout</b>	<b>perch</b>

Source:

DFO, Economic Analysis and Statistics.

**Figure 4.9 Total Fish Harvested by Resident and Non-resident Anglers, Top Species Caught, Canada, 2005**



Source:

DFO, Economic Analysis and Statistics.

Despite the popularity of certain freshwater species in 2005, all anglers generally kept higher proportions of saltwater fish such as smelt and mackerel than freshwater species such as trout, perch and salmon. The species least favoured for retention were northern pike, bass and Arctic grayling.

It is also worth noting that cod retention rate in

Newfoundland and Labrador, which was 40% in 2005, has declined dramatically since 2000 when it reached a high of 95%. This could mostly be attributed to the fact that the southern coast of Newfoundland, the region with the highest catch rates of the species (93%), was the only zone open to any sort of fish capture and retention; all other sections of the province were on a strict catch and release mandate only.

## 4.4 Direct Recreational Fishing Expenditures

### 4.4.1 Total Direct Expenditures

All anglers spent a total of \$2.5 billion in direct recreational fishing expenditures in 2005 (Annex A.9). In current dollar terms, this total has remained relatively stable throughout the years (Table 4.5). However, the inflation-adjusted estimates show that total direct recreational fishing expenditures decreased at an average annual rate of 1% in the past five years, and 2% since 1995.

**Table 4.5 Total Direct Recreational Fishing Expenditures, All Active Anglers, Canada, 1995, 2000, 2005**

Year	Current \$ (million \$)	CPI <sup>1</sup> 1992=100	Constant 1992 \$ (million \$)
1995	2,492	104	2,396
2000	2,349	114	2,060
2005	2,466	127	1,942

Notes:

1. The 1995 and 2000 estimates have been adjusted to exclude the total number of active non-resident anglers in Quebec. The adjustment was done in order to allow comparison with the 2005 estimate.

2. Consumer Price Index.

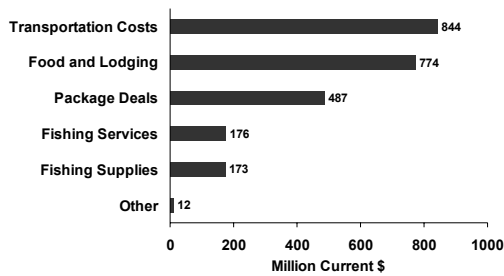
Source:

DFO, Economic Analysis and Statistics.

Transportation and food and lodging were the principal expenditure items of all anglers in 2005 (Figure 4.10). For every dollar spent on goods and services directly related to angling activities, sixty six cents went to cover transportation costs and food and lodging expenses during the year.

Not surprisingly, these two categories have consistently been the top trip expense items. Each active angler spent, on average, \$260 to cover transportation and travel costs and another \$238 on food and lodging expenses during fishing trips throughout 2005.

**Figure 4.10 Total Direct Recreational Fishing Expenditures, All Active Anglers, by Expense Category, Canada, 2005**



Source: DFO, Economic Analysis and Statistics.

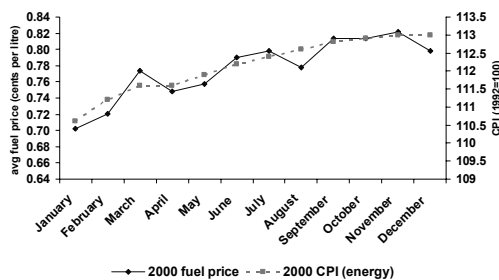
#### 4.4.1.1 Transportation

Transportation expenditures covered all travel-related costs including air and bus fares, ferry costs, vehicle costs and aircraft rentals. In 2005, the total current dollar transportation expenditures of all active anglers reached \$844 million. Transportation expenditures increased at an average annual rate of 3% between 2000 and 2005.<sup>16</sup>

Evidently, transportation costs were directly influenced by rising fuel prices during this period. Figures 4.11a and 4.11b compare the 2000 and 2005 monthly average retail prices for gasoline and how closely fuel prices followed the patterns in the energy index.<sup>17</sup>

The average transportation cost per angler varied widely across the provinces and territories and were the highest for Canadian resident anglers who fished in B.C.'s tidal waters and for foreign anglers who fished in Newfoundland and Labrador (\$538 and \$467, respectively).

**Figure 4.11a Average Retail Prices for Gasoline (cents per litre) and Energy Consumer Price Index (CPI), by Month, Canada, 2000**

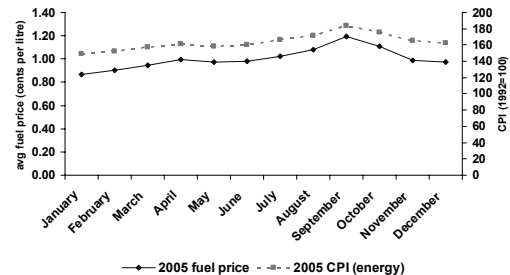


Source: DFO, Economic Analysis and Statistics.

<sup>16</sup> In the calculation of the average annual growth, the 2000 estimate has been adjusted in order allow comparison with 2005.

<sup>17</sup> Statistics Canada, *The Consumer Price Index*, Catalogue no. 62-001-XPB, Ottawa.

**Figure 4.11b Average Retail Prices for Gasoline (cents per litre) and Energy Consumer Price Index (CPI), by Month, Canada, 2005**



Source: DFO, Economic Analysis and Statistics.

#### 4.4.1.2 Food and Lodging

Total food and lodging expenditures (\$774 million) represented one-third of Canada's total direct recreational fishing expenditures. On average, an active angler paid \$239 to cover food, lodging and accommodation expenses. However, the average per angler cost could more than double these overall averages, depending on the category and fishing jurisdiction. For example, a foreign angler in Prince Edward Island spent over \$700 (on average) to pay for food, lodging and accommodations in 2005.

As expected, lodging costs took up a higher proportion of the total food and lodging expenses of non-Canadian anglers who were more likely to stay at least overnight on fishing trips. This was in contrast to their Canadian resident and non-resident counterparts whose recreational fishing activities were usually in the form of day trips.

#### 4.4.1.3 Package Deals

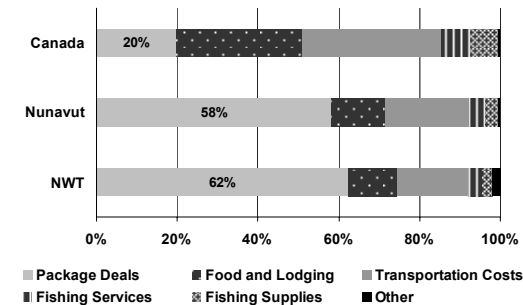
Total expenses on package deals reached \$487 million in 2005. Package deals often include a wide range of goods and services such as food, lodging, transportation, fishing supplies, equipment, etc., with the objective of making it easier for anglers to plan their fishing trips, in exchange for a certain price.

Package deals have become increasingly popular throughout the years, as more and more anglers started taking advantage of the deals offered by fishing lodges, guide services, outfitters and travel agencies. Twenty years ago, package deals accounted for 11% of total direct recreational fishing expenditures; in 2005, its share has almost doubled (20%). Anglers in the



Northwest Territories and in Nunavut, primarily non-Canadian anglers, spent a relatively higher proportion of their trip expenses on packages purchased in 2005 (Figure 4.12).

**Figure 4.12 Share of Total Direct Recreational Fishing Expenditures, by Expense Category, Northwest Territories, Nunavut and Canada, 2005**



Source:  
DFO, Economic Analysis and Statistics.

#### 4.4.1.4 Fishing Services, Fishing Supplies and Other Direct Recreational Fishing Expenditures

Expenditures on fishing services, covering boat rentals and guide services as well as licence and access fees, summed up to \$176 million in 2005. Their share of total direct recreational fishing expenditures remained relatively unchanged from 2000 (7%).

Much like in other expenditure categories, there was a wide range in the average fishing services expenditure per angler in 2005. It could be as low as \$3 per angler as in the case of resident anglers in Nunavut where there were no licence fees and only minimal access fees. It could also be as high as \$170 to over \$200, the range of per angler amounts paid by non-resident anglers in New Brunswick and Newfoundland and Labrador (mainly to pay for guide services and licence fees).

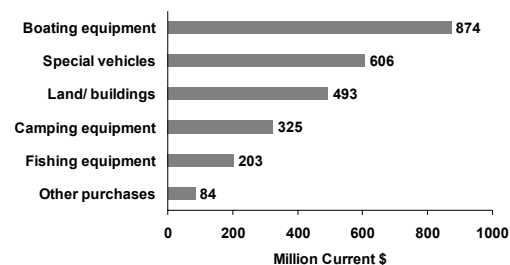
Expenses related to purchases of lures, lines, tackle, bait, and other fishing supplies were \$173 million in 2005 (or 7% of total direct expenditures). Resident anglers across Canada spent a relatively higher proportion of their fishing expenditures on fishing supplies (as high as 20% for resident anglers in Prince Edward Island), in comparison with non-resident anglers. In general, non-resident Canadian and other anglers spent approximately 3% of their total fishing expenditures on these supplies.

## 4.5 Major Purchases and Investments

In 2005, anglers invested \$5 billion in boats, motors, camping gear, special vehicles, real estate and other durable goods related to their recreational fishing activities (Annex A.10). Of this total, an estimated \$2.6 billion was directly or wholly attributable to recreational fishing (Annex A.11). Similar to the trend in direct recreational fishing expenditures, total recreational fishing investments have also remained stable since 1995.<sup>18</sup>

Boating equipment and special vehicles accounted for nearly 60% of the \$2.6 billion investments wholly attributable to recreational fishing. This was followed by investments on land and buildings (\$493 million) and camping equipment (\$325 million). The remaining 11% was dedicated to major purchases of fishing equipment and other miscellaneous investments (Figure 4.13).

**Figure 4.13 Major Purchases and Investments Wholly Attributable to Recreational Fishing, by Investment Category, Canada, 2005**



Source:  
DFO, Economic Analysis and Statistics.

Investment activities by resident anglers essentially determined the general profile of investments related to recreational fishing, as their investments represented \$2.4 billion or 93% the overall total in 2005 (Annex A.12).

Non-resident Canadians and foreign anglers invested \$68 million and \$107 million, respectively, in 2005. Investment spending by both of these angler categories was mostly on land and/or buildings purchases.

<sup>18</sup> Based on current dollar investment estimates.

## 5.0 Survey Methodology and Data Quality

The diversity of recreational fishing licensing procedures across Canada required the use of several approaches in order to conduct a national survey across the various jurisdictions.

This section aims to illustrate the procedures used in the 2005 survey as well as the strengths and limitations of the data in order that they could be effectively used and analysed. Information on the methodology used and the data quality of survey results would of particular importance when making comparisons with data from other surveys and sources of information or when drawing conclusions regarding changes over time.

### 5.1 Sampling Procedures

#### 5.1.1 General

In each jurisdiction, two types of survey questionnaires were mailed: one covering residents and another covering non-residents.<sup>19</sup> Resident and non-resident samples were selected using stratified, systematic random sampling of licence databases with stratification based on licence category. The only exceptions were in the case of sampling the resident anglers in two jurisdictions: Quebec and Newfoundland and Labrador (Sections 6.1.2 and 6.1.3).

In British Columbia (freshwater) and in the Northwest Territories, the licence strata were further defined by the area in which the licences were sold. In Nova Scotia and Ontario, resident samples were further stratified by area of residence.

The sample sizes were determined from the reliability estimates for days fished for each stratum as calculated from the results of the 2000 Survey of Recreational Fishing in Canada.

#### 5.1.2 Resident Anglers in Quebec and Newfoundland and in Labrador

Due to limitations in the licence databases available for residents of Quebec and Newfoundland and Labrador, sampling for the populations of resident anglers was conducted by using household samples of the general population. The households in each province were geographically stratified. The required sample of angling households was determined in consultation with representatives of each province based on the distribution of angling households in the 2001 census.

The overall sample size was determined using the proportion of angling households to all households in each geographic area as estimated for 2000 combined with reliability of days fished for each area in 2000.

Households were pre-screened by telephone to establish the eligibility for inclusion in the survey. Profiles were obtained by determining for each selected household the age (under/over base age for *adult* anglers in the province) and sex of all individuals residing in the household. It was then further requested for those individuals identified as *adults*, how many in the household fished for recreation in 2005. In households where anglers were identified, one was selected at random to respond to the questionnaire. For verification purposes, the selected respondent was asked for the number of days fished in 2005.

The actual pre-screening operations were handled by private research firms under joint contract with DFO and the respective provincial governments. The results of the pre-screening were provided to the responsible agency and, subsequently to DFO for weighting procedures. Mailing labels for selected respondents to the survey were also provided for the fieldwork phase.

#### 5.1.3 Non-resident Anglers in Quebec

Historically, the Quebec licence database has been used to sample the non-resident anglers in the province. However, with the implementation of the province's *Act Respecting Access to Documents Held by Public Bodies and the Protection of Personal Information*, non-resident anglers are no longer required to provide complete personal and contact information when obtaining their recreational fishing licence.<sup>20</sup>

<sup>19</sup> Section 3 provides a glossary of terms and definitions used in the survey and throughout this report.

<sup>20</sup> Commission d'accès à l'information du Québec, <http://www.cai.gouv.qc.ca>, accessed June 26, 2007.

Therefore, in 2005, it was not possible to survey the non-resident angling population in Quebec due to the absence of a survey frame (i.e., a list containing all necessary information from which the survey sample can be drawn).

The number of active non-resident anglers in Quebec was estimated at 50,806 in 1995 and 46,579 in 2000. Based on the observed trend in most provinces and territories throughout the years, it would be reasonable to expect that the number of active non-resident anglers in Quebec would also have been on a downward trend in 2005. There was no attempt, however, to impute the non-surveyed portion of the Quebec angling population in this report due to methodological constraints.

#### 5.1.4 Special Sampling: Atlantic Salmon Licence Holders

In Newfoundland and Labrador, a special sample of resident Atlantic salmon licence holders was selected to ensure adequate sampling for special analyses of these important sub-populations required for an Atlantic-wide analysis of Atlantic salmon angling. A similar effort was made in Quebec, but with special resident samples of both Atlantic salmon licence holders and general licence-holders to augment the results found in the household pre-screening phase of the survey. These licences were subsequently allocated for weighting based on the administrative region of residence.

The decision to select special resident samples to augment the pre-screening phase was made because results of earlier surveys had shown that there was inadequate information for certain licence types based solely on the pre-screening results. Augmenting the samples allowed for the detailed analyses required by both provinces.

### 5.2 Data Collection, Processing, Coding and Estimation

The survey was launched in January 2006 through a coordinated press release led by DFO Headquarters (Ottawa). Each jurisdiction was responsible for survey mailout and coding of survey responses.

Due to variations across questionnaires, and specialized identification requirements, all coding were provided on the documents by each participating jurisdiction before being sent to Ottawa for processing. In some cases, all that

was required after assessing completeness of the questionnaire was identification coding on each document. In others, far more involved coding was required ranging from special codes for sub-components of questions to geographic codes in order to allow for sub-provincial/territorial data analysis.

A major requirement in the editing and coding phase was verification that the information provided by anglers was both reasonable and sound for the jurisdiction involved. This included assessing species caught by area as well as the availability of the specific species, determining whether or not the catch levels indicated were within acceptable limits, cross-checking administrative lists to eliminate substitutions (someone responding other than the designated respondent), etc. Once questionnaires had been completely assessed and coded, they were shipped to Ottawa for analysis.

DFO Headquarters coordinated the questionnaire imaging, data capture and validation of survey responses in cooperation with the coordinators for each jurisdiction. This was done on a staggered basis, depending on the province or territory. All documents were verified prior to data capture, and those with significant levels of incomplete coding, missing information, etc. were set aside. Data capture procedures were written in-house for each jurisdiction. All data collection, coding, and data capture were completed in Fall 2006.

The required programming to produce survey estimates consisted of:

- systematic editing procedures;
- substitution algorithms for missing data;
- data output programs covering all data collected; and
- special output programs for publication purposes.

### 5.3 Weighting Procedures

Weighted estimates were produced to ensure that the raw survey data reflect the estimates for the population. This procedure for most jurisdictions where licence sales were known was a simple application of inverse weighting by stratum (population of licence-holders divided by resultant sample). In all jurisdictions where additional stratification was done based on geographic information, adjustments were made on the basis of both licence-holding and geographic stratification. In jurisdictions where anglers could hold different types of licence, either by choice or due to regulations, adjustments to weighting were made to ensure

that there was no double counting of anglers across licence types.

For residents of Quebec and Newfoundland a more complex procedure was required. First, it was necessary to estimate the total population by age-group and sex in each stratum based on the pre-screening data. Household weights, determined from the estimated households in each stratum divided by the sample of households pre-screened, were used to generate estimates of population. Of primary interest were the estimated populations of *adult* anglers by sex. The definition of *adult* varied with Quebec using 15 years of age and, Newfoundland, 18. Using the pre-screening data, it was possible to determine the proportion of anglers in each geographic area of each province.

The estimates of population in each stratum of interest were then compared to official statistics on population available from Statistics Canada. Population data was based on the 2001 census with post-censal estimates as at July 1, 2005. The initial estimates of population and the respective estimates of anglers in each stratum were adjusted to reflect these statistics. Respondent weights for survey estimates were then derived using standard inverse weighting functions.

## 5.4 Post-Survey Adjustment Procedures

Preliminary survey results were distributed to various jurisdictions from late 2006 to early 2007. All jurisdictions were provided with the opportunity to review the preliminary estimates.

Adjustments were made provided that they were based on identifiable errors or changes required due to revised administrative information. The area of primary concern to most jurisdictions was catch and retention of specific species by geographic area.

Most errors were as a result of incorrect identification of species and the changes were relatively straightforward. Another area where significant adjustments were required was refinement of population estimates. Changes were made based on updated information on licence sales; however, in the two provinces where population samples had been used, a considerable number of refinements were requested to ensure that the estimated number of anglers was accurately reflected.

Revisions were completed by Spring 2007 and survey results were finalized.

## 5.5 Data Quality

### 5.5.1 Sampling Error

Information on reliability is presented in terms of the coefficient of variation of the mean, at one standard deviation. Because exact estimates of variance cannot be calculated, the coefficient of variation of the mean is used as a proxy for the assessing the variability of the data. Annex A.13 presents the statistical reliability of key variables for all anglers.

The ranges of coefficient of variation (c.v.) below provide guidelines as to the use of the data:

Coefficient of variation	Guideline
less than 16.5%	Data can be used without condition
16.5% to 33.5%	Data should be used with caution
greater than 33.5%	Data should be used with extreme caution

Source:  
Statistics Canada.

### 5.5.2 Non-Sampling Error

Many factors that are not related to sampling also affect the reliability of the data produced in the survey. For example, respondents may have made errors in interpreting questions, the answers may have been incorrectly entered on the questionnaires or errors may have been introduced during the data capture or tabulation process.

During the data collection phase, efforts were made to reduce the occurrence of non-sampling errors in the survey.<sup>21</sup> These efforts included a complete verification of the reported data, validity and consistency edits and ongoing consultations with the coordinators in each jurisdiction.

### 5.5.3 Data Limitations

Despite all efforts to improve data accuracy, the survey results have limitations. Understanding these limitations will help the reader make informed decisions before conducting further research and analysis using the estimates in this report:

1. Estimates of recreational saltwater fisheries in Quebec: Quebec residents were not required to purchase a saltwater fishing licence in 2005. Therefore, the survey results

<sup>21</sup> Non-sampling errors can arise during the course of virtually all survey activities such as a result of errors in the frame (the list used in sampling) or difficulties in establishing precise operational definitions. For more details, refer to Statistics Canada, 1993, Survey Sampling: A Non-Mathematical Guide-Second Edition, Catalogue No. 12-602E, Ottawa.

(harvests, days fished, etc.) pertaining to recreational saltwater fisheries in Quebec covered only the recreational fishing activities of Quebec residents who also fished in saltwater during the 2005 fishing season.

2. Quebec non-resident estimates: there are no survey estimates on recreational fishing activities of anglers who fished in Quebec but lived outside the province in 2005 (see Section 6.8 for details).
3. The survey did not attempt to measure the illegal, unreported activities related to recreational fisheries in Canada, for example, the days fished and harvests of individuals who conducted recreational fishing activities without a licence where/when a licence or permit is required.

## 5.6 Data comparability

The 2005 detailed provincial and territorial results are directly comparable with the 1995 and 2000 surveys. The core survey questions remained unchanged throughout these survey cycles.

The only exception would be the absence of survey data for Quebec non-residents. This ultimately has an impact on the Canadian estimates. However, since the majority of active anglers in Quebec has always been the province's resident anglers, the undercoverage in 2005 is expected to have minimal impact in overall comparability of survey results.

The issue of potentially obtaining information on the non-resident anglers in Quebec through alternate sources will be addressed in future surveys.

## 6.0 References

Fisheries and Oceans Canada, Economic and Commercial Analysis, 2000 Survey of Recreational Fishing in Canada, Report no. 165, 2003 Ottawa.

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## **Annex A: Summary Tables**





### Annex A.1 Origin of Licensed Anglers, by Angler Category and Jurisdiction, 2005

<b>Jurisdiction</b>	<b>Resident</b>	<b>Canadian Non-resident</b>	<b>Other Non- resident</b>	<b>Total</b>
Newfoundland and Labrador <sup>1</sup>	132,266	2,439	1,432	136,137
Prince Edward Island	7,221	436	195	7,853
Nova Scotia	48,674	1,227	906	50,807
New Brunswick	53,128	3,452	3,944	60,524
Quebec <sup>2</sup>	712,906	..	..	712,906
Ontario	919,455	31,475	475,454	1,426,385
Manitoba	128,905	10,175	27,353	166,433
Saskatchewan	125,087	20,762	17,011	162,860
Alberta	198,685	6,748	6,234	211,667
British Columbia Freshwater	241,346	30,799	32,509	304,654
British Columbia Tidal Waters	190,736	44,128	64,080	298,945
Yukon	6,899	2,933	3,428	13,260
Northwest Territories	2,403	2,630	2,348	7,380
Nunavut	845	698	492	2,035
<b>Canada</b>	<b>2,768,556</b>	<b>157,902</b>	<b>635,386</b>	<b>3,561,846</b>

Notes:

Figures may not add up to total due to rounding.

1. Due to licensing limitations, the number of resident anglers reflects the number of active anglers only.

2. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

## Annex A.2 Origin of All Licensed Non-resident Anglers in Canada, 2005<sup>1</sup>

Province/State/Country of Origin	Total Number	Percent of Total
<b>Canadian Provinces/Territories:</b>		
Maritimes	5,421	0.7%
Quebec	11,580	1.5%
Ontario	16,787	2.1%
Prairies	114,984	14.5%
British Columbia	7,521	0.9%
Territories	1,610	0.2%
Sub-total: Canadian Provinces/Territories	157,903	19.9%
<b>United States and Other Countries:</b>		
United States:		
New England	7,052	0.9%
Mid Atlantic	54,246	6.8%
East North Central	247,975	31.3%
West North Central	168,695	21.3%
Mountain	31,458	4.0%
Pacific	71,134	9.0%
South Atlantic	25,151	3.2%
East South Central	7,923	1.0%
West South Central	14,165	1.8%
Alaska	1,273	0.2%
Hawaii	210	0.0%
Unspecified U.S.A.	46	0.0%
Other Countries:		
United Kingdom	1,923	0.2%
Other Europe	3,468	0.4%
Mex., C.A., S.A., Caribbean <sup>2</sup>	14	0.0%
Africa	0	0.0%
Asia	40	0.0%
Australia/Pacific Region	615	0.1%
Sub-total: United States and Other Countries	635,388	80.1%
<b>Grand Total</b>	<b>793,291</b>	<b>100.0%</b>

Notes:

Figures may not add up to total due to rounding.

1. Includes active and non-active licensed anglers.

2. Mexico, Central America, South America, Caribbean.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.3 Number of Active Anglers, by Angler Category and Jurisdiction, 2005

<b>Jurisdiction</b>	<b>Resident</b>	<b>Canadian Non-resident</b>	<b>Other Non- resident</b>	<b>Total Number of Anglers</b>
Newfoundland and Labrador	131,578	2,340	1,429	135,347
Prince Edward Island	6,929	420	195	7,544
Nova Scotia	43,775	1,198	875	45,848
New Brunswick	43,382	3,375	3,846	50,603
Quebec <sup>1</sup>	656,543	..	..	656,543
Ontario	764,374	29,074	472,505	1,265,953
Manitoba	121,788	9,851	26,981	158,620
Saskatchewan	119,824	20,519	16,825	157,168
Alberta	179,461	6,324	6,075	191,860
British Columbia Freshwater	211,403	28,205	31,230	270,838
British Columbia Tidal Waters	169,863	43,447	62,884	276,194
Yukon	5,048	2,678	3,162	10,888
Northwest Territories	2,138	2,497	2,034	6,669
Nunavut	769	648	428	1,845
<b>Canada</b>	<b>2,456,876</b>	<b>150,576</b>	<b>628,469</b>	<b>3,235,920</b>

Notes:

Figures may not add up to total due to rounding.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.4 Number and Average Age of All Active Anglers, by Gender and Jurisdiction, 2005

Jurisdiction	Total Number of Anglers	Males	Females	Average Age of Males	Average Age of Females
Newfoundland and Labrador	135,347	89,311	46,036	50	47
Prince Edward Island	7,544	7,120	424	49	43
Nova Scotia	45,848	40,924	4,924	50	49
New Brunswick	50,603	43,891	6,712	50	49
Quebec <sup>1</sup>	656,543	445,603	210,940	50	46
Ontario	1,265,953	1,009,364	256,589	49	44
Manitoba	158,620	128,099	30,521	49	47
Saskatchewan	157,168	118,391	38,777	48	45
Alberta	191,860	153,350	38,510	44	42
British Columbia Freshwater	270,838	224,099	46,739	51	50
British Columbia Tidal Waters	276,194	218,514	57,680	48	40
Yukon	10,888	8,937	1,951	51	46
Northwest Territories	6,669	5,713	956	48	40
Nunavut	1,845	1,572	273	47	38
<b>Canada</b>	<b>3,235,920</b>	<b>2,494,888</b>	<b>741,032</b>	<b>49</b>	<b>45</b>

Notes:

Figures may not add up to total due to rounding.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

**Annex A.5 Number of Days Fished in Freshwater and Saltwater, by Angler Category and Jurisdiction, 2005**

Jurisdiction	Freshwater		Saltwater		Total	
	Number of Days	Average per Angler	Number of Days	Average per Angler	Number of Days	Average per Angler
<b>Newfoundland and Labrador</b>						
Resident	1,763,331	14.0	450,447	11.4	2,213,778	16.8
Canadian Non-resident	13,410	5.8	1,210	4.2	14,620	6.3
Other Non-resident	10,276	7.3	467	4.4	10,743	7.5
Total	1,787,018	13.7	452,124	11.3	2,239,142	16.5
<b>Prince Edward Island</b>						
Resident	105,518	17.3	60,653	15.4	166,170	24.0
Canadian Non-resident	2,642	6.8	783	6.3	3,425	8.2
Other Non-resident	1,303	6.7	80	1.6	1,383	7.1
Total	109,463	16.4	61,515	15.0	170,978	22.7
<b>Nova Scotia</b>						
Resident	763,335	17.7	198,006	10.1	961,341	22.0
Canadian Non-resident	7,215	6.1	602	3.6	7,816	6.5
Other Non-resident	6,282	7.3	194	2.4	6,476	7.4
Total	776,832	17.2	198,802	10.0	975,634	21.3
<b>New Brunswick</b>						
Resident	521,502	12.2	40,617	6.5	562,120	13.0
Canadian Non-resident	13,805	4.1	196	1.6	14,001	4.1
Other Non-resident	26,576	6.9	25	2.0	26,601	6.9
Total	561,884	11.2	40,838	6.4	602,722	11.9
<b>Quebec<sup>1</sup></b>						
Resident	8,825,816	13.6	197,444	6.5	9,023,260	13.7
Canadian Non-resident	..	..	..	..	..	..
Other Non-resident	..	..	..	..	..	..
Total	8,825,816	13.6	197,444	6.5	9,023,260	13.7
<b>Ontario</b>						
Resident	13,142,893	17.2	0	0	13,142,893	17.2
Canadian Non-resident	271,155	9.3	0	0	271,155	9.3
Other Non-resident	3,405,361	7.2	0	0	3,405,361	7.2
Total	16,819,409	13.3	0	0	16,819,409	13.3
<b>Manitoba</b>						
Resident	1,954,183	16.0	0	0	1,954,183	16.0
Canadian Non-resident	77,326	7.8	0	0	77,326	7.8
Other Non-resident	171,197	6.3	0	0	171,197	6.3
Total	2,202,707	13.9	0	0	2,202,707	13.9
<b>Saskatchewan</b>						
Resident	1,611,865	13.5	0	0	1,611,865	13.5
Canadian Non-resident	166,003	8.1	0	0	166,003	8.1
Other Non-resident	94,999	5.6	0	0	94,999	5.6
Total	1,872,868	11.9	0	0	1,872,868	11.9
<b>Alberta</b>						
Resident	2,612,654	14.6	0	0	2,612,654	14.6
Canadian Non-resident	33,193	5.3	0	0	33,193	5.3
Other Non-resident	22,987	3.8	0	0	22,987	3.8
Total	2,668,834	13.9	0	0	2,668,834	13.9
<b>British Columbia Freshwater</b>						
Resident	3,582,261	16.9	0	0	3,582,261	16.9
Canadian Non-resident	208,026	7.4	0	0	208,026	7.4
Other Non-resident	194,082	6.2	0	0	194,082	6.2
Total	3,984,368	14.7	0	0	3,984,368	14.7

Jurisdiction	Freshwater		Saltwater		Total	
	Number of Days	Average per Angler	Number of Days	Average per Angler	Number of Days	Average per Angler
<b>British Columbia Tidal Waters</b>						
Resident	0	0	1,776,322	10.5	1,776,322	10.5
Canadian Non-resident	0	0	167,999	3.9	167,999	3.9
Other Non-resident	0	0	272,650	4.3	272,650	4.3
Total	0	0	2,216,970	8.0	2,216,970	8.0
<b>Yukon</b>						
Resident	66,899	13.3	0	0	66,899	13.3
Canadian Non-resident	13,187	4.9	0	0	13,187	4.9
Other Non-resident	19,286	6.1	0	0	19,286	6.1
Total	99,372	9.1	0	0	99,372	9.1
<b>Northwest Territories</b>						
Resident	32,856	15.4	0	0	32,856	15.4
Canadian Non-resident	12,748	5.1	0	0	12,748	5.1
Other Non-resident	9,195	4.5	0	0	9,195	4.5
Total	54,799	8.2	0	0	54,799	8.2
<b>Nunavut</b>						
Resident	8,436	12.3	3,041	8.8	11,477	14.9
Canadian Non-resident	2,394	4.2	734	4.4	3,128	4.8
Other Non-resident	2,071	5.0	134	2.7	2,205	5.2
Total	12,901	7.7	3,909	6.9	16,810	9.1
<b>Canada</b>						
Resident	34,991,550	15.4	2,726,529	10.1	37,718,078	15.4
Canadian Non-resident	821,104	7.7	171,524	3.9	992,628	6.6
Other Non-resident	3,963,617	7.0	273,549	4.3	4,237,166	6.7
Total	39,776,271	13.5	3,171,602	8.4	42,947,873	13.3

Notes:

Figures may not add up to total due to rounding and the methodology used to produce the estimates.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.6 Trip Information Summary for All Non-resident Anglers, 2005<sup>1</sup>

<b>Jurisdiction</b>	<b>Total Trips</b>	<b>Trip Days</b>	<b>Fishing Trips</b>	<b>Days Fished</b>	<b>Day Trips</b>	<b>Nights</b>
Newfoundland and Labrador	5,127	67,964	3,981	25,364	17	49,682
Prince Edward Island	1,771	13,296	948	4,808	110	8,652
Nova Scotia	10,103	37,519	4,289	14,292	2,125	22,594
New Brunswick	26,707	91,141	13,427	40,602	3,398	49,196
Quebec <sup>2</sup>	..	..	..	..	..	..
Ontario	1,439,939	5,578,794	954,825	3,676,517	278,609	3,638,835
Manitoba	152,809	449,486	92,236	248,523	31,905	256,799
Saskatchewan	293,119	714,672	85,993	261,002	19,908	315,295
Alberta	82,451	328,277	20,094	56,180	3,291	134,789
British Columbia Freshwater	134,328	762,820	93,480	402,108	10,358	542,272
British Columbia Tidal Waters	207,598	929,580	93,836	440,649	8,415	510,714
Yukon	9,497	97,708	6,854	32,473	197	74,162
Northwest Territories	5,984	57,515	5,017	21,943	107	40,241
Nunavut	1,716	23,651	1,231	5,333	38	15,017
<b>Canada</b>	<b>2,371,151</b>	<b>9,152,423</b>	<b>1,376,209</b>	<b>5,229,794</b>	<b>358,476</b>	<b>5,658,248</b>

Notes:

Figures may not add up to total due to rounding.

1. Estimates include Canadian non-resident anglers and foreign anglers.

2. There are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.7 Summary of Fish Harvested by All Anglers, 2005

Jurisdiction	Fish Caught		Fish Kept	
	Total	Average per Angler	Total	Average per Angler
Newfoundland and Labrador	8,351,604	61.7	6,009,711	44.4
Prince Edward Island	647,288	85.8	377,781	50.1
Nova Scotia	3,863,362	84.3	1,539,129	33.6
New Brunswick	2,425,654	47.9	899,283	17.8
Quebec <sup>1</sup>	40,269,991	61.4	27,091,753	41.3
Ontario	114,606,751	90.5	25,394,781	20.1
Manitoba	12,068,682	76.1	2,611,832	16.5
Saskatchewan	7,999,717	50.9	2,361,452	15.0
Alberta	12,334,452	64.3	1,652,336	8.6
British Columbia Freshwater	8,192,510	30.2	2,139,469	7.9
British Columbia Tidal Waters	3,621,516	13.1	1,506,666	5.5
Yukon	275,046	25.3	51,315	4.7
Northwest Territories	322,122	48.3	36,858	5.5
Nunavut	48,648	26.4	9,067	4.9
<b>Canada</b>	<b>215,027,343</b>	<b>66.5</b>	<b>71,681,432</b>	<b>22.2</b>

Notes:

Figures may not add up to total due to rounding and the methodology used to produce the estimates.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.



### Annex A.8 Summary of Fish Harvested by Angler Category, 2005

Jurisdiction	Fish Caught (number of fish, all species)				Fish Kept (number of fish, all species)			
	Residents	Canadian Non-residents	Other Non-residents	Total Fish Caught by All Anglers	Residents	Canadian Non-residents	Other Non-residents	Total Fish Kept by All Anglers
Newfoundland and Labrador	8,251,058	55,728	44,823	8,351,604	5,984,396	22,625	2,688	6,009,711
Prince Edward Island	621,030	16,919	9,339	647,288	367,413	8,104	2,264	377,781
Nova Scotia	3,835,273	18,184	9,904	3,863,362	1,531,304	5,538	2,288	1,539,129
New Brunswick	2,301,615	46,464	77,575	2,425,654	877,286	8,375	13,621	899,283
Quebec <sup>1</sup>	40,269,991	..	..	40,269,991	27,091,753	..	..	27,091,753
Ontario	65,093,908	1,659,376	47,853,466	114,606,751	16,068,801	265,755	9,060,225	25,394,781
Manitoba	8,705,471	397,820	2,965,391	12,068,682	2,278,159	85,851	247,822	2,611,832
Saskatchewan	5,826,569	802,508	1,370,640	7,999,717	2,025,357	215,533	120,562	2,361,452
Alberta	11,991,445	152,590	190,416	12,334,452	1,629,324	16,657	6,354	1,652,336
British Columbia Freshwater	6,808,617	573,775	810,118	8,192,510	1,913,066	121,680	104,722	2,139,469
British Columbia Tidal Waters	2,368,819	550,674	702,022	3,621,516	979,736	206,449	320,481	1,506,666
Yukon	103,526	45,023	126,496	275,046	32,476	7,834	11,006	51,315
Northwest Territories	89,614	92,833	139,675	322,122	25,256	8,722	2,880	36,858
Nunavut	13,598	11,479	23,571	48,648	6,209	2,047	810	9,067
<b>Canada</b>	<b>156,280,534</b>	<b>4,423,374</b>	<b>54,323,436</b>	<b>215,027,343</b>	<b>60,810,537</b>	<b>975,171</b>	<b>9,895,722</b>	<b>71,681,432</b>

Notes:

Figures may not add up to total due to rounding and the methodology used to produce the estimates.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.9 Direct Recreational Fishing Expenditures Made by All Active Anglers, 2005

Jurisdiction	Package Deals	Food and Lodging	Transportation Costs	Fishing Services	Fishing Supplies	Other	Total
(\$'000)							
Newfoundland and Labrador	5,942	17,464	21,240	1,579	4,820	225	51,271
Prince Edward Island	9	654	1,056	262	401	26	2,409
Nova Scotia	162	7,332	10,069	1,328	2,886	176	21,953
New Brunswick	4,716	7,516	7,583	2,616	2,212	395	25,038
Quebec <sup>1</sup>	47,622	118,551	142,147	33,249	35,710	1,614	378,894
Ontario	205,347	354,058	318,234	81,105	69,863	2,920	1,031,527
Manitoba	25,761	28,848	38,551	5,193	6,844	1,074	106,271
Saskatchewan	25,279	37,145	41,447	9,639	6,301	222	120,033
Alberta	5,349	50,364	56,256	8,751	12,602	618	133,939
British Columbia							
Freshwater	14,818	74,907	79,323	15,009	16,753	3,897	204,708
British Columbia Tidal Waters	139,493	72,397	122,758	15,981	13,769	515	364,915
Yukon	4,388	3,066	3,278	521	426	390	12,070
Northwest Territories	6,778	1,322	1,924	355	283	214	10,875
Nunavut	1,316	303	473	88	75	9	2,264
<b>Canada</b>	<b>486,982</b>	<b>773,927</b>	<b>844,340</b>	<b>175,676</b>	<b>172,944</b>	<b>12,297</b>	<b>2,466,167</b>
(\$)							
<b>Average per Active Angler</b>	<b>\$150</b>	<b>\$239</b>	<b>\$261</b>	<b>\$54</b>	<b>\$53</b>	<b>\$4</b>	<b>\$762</b>

Notes:

Figures may not add up to total due to rounding and the methodology used to produce the estimates.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

**Annex A.10 Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing),  
Made by All Active Anglers, 2005**

<b>Jurisdiction</b>	<b>Fishing Equipment</b>	<b>Boating Equipment</b>	<b>Camping Equipment</b>	<b>Special Vehicles</b>	<b>Land &amp;/or Building</b>	<b>Other</b>	<b>Total</b>
<b>(\$'000)</b>							
Newfoundland and Labrador	6,225	22,891	25,825	111,778	36,924	4,087	207,730
Prince Edward Island	356	908	211	1,782	628	183	4,069
Nova Scotia	3,628	12,431	3,501	24,359	11,474	1,645	57,038
New Brunswick	2,649	8,362	5,806	18,270	8,576	1,325	44,988
Quebec <sup>1</sup>	41,234	198,263	110,469	489,966	505,263	25,865	1,371,059
Ontario	73,065	423,674	137,314	362,406	423,470	31,781	1,451,711
Manitoba	8,615	59,377	36,790	79,464	73,107	4,234	261,587
Saskatchewan	7,920	53,227	37,496	51,092	39,549	3,507	192,790
Alberta	19,672	90,176	154,735	183,656	58,654	9,995	516,888
British Columbia Freshwater	22,258	113,948	79,075	152,423	103,503	7,037	478,245
British Columbia Tidal Waters	24,082	216,874	29,781	81,692	70,706	6,748	429,882
Yukon	678	4,158	2,226	2,752	955	258	11,028
Northwest Territories	315	2,706	1,266	2,606	96	143	7,132
Nunavut	64	64	22	770	129	37	1,085
<b>Canada</b>	<b>210,761</b>	<b>1,207,058</b>	<b>624,516</b>	<b>1,563,016</b>	<b>1,333,037</b>	<b>96,844</b>	<b>5,035,231</b>
<b>(\$)</b>							
<b>Average per Active Angler</b>	<b>\$65</b>	<b>\$373</b>	<b>\$193</b>	<b>\$483</b>	<b>\$412</b>	<b>\$30</b>	<b>\$1,556</b>

Notes:

Figures may not add up to total due to rounding.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

**Annex A.11 Major Purchases and Investments (Wholly Attributable to Recreational Fishing),  
Made by All Active Anglers, 2005**

<b>Jurisdiction</b>	<b>Fishing Equipment</b>	<b>Boating Equipment</b>	<b>Camping Equipment</b>	<b>Special Vehicles</b>	<b>Land &amp;/or Building</b>	<b>Other</b>	<b>Total</b>
	(\$'000)						
Newfoundland and Labrador	6,225	16,092	17,145	42,058	9,943	3,626	95,089
Prince Edward Island	356	514	94	1,111	206	151	2,432
Nova Scotia	3,628	8,431	2,916	9,418	5,355	1,505	31,252
New Brunswick	2,649	6,330	2,260	7,613	4,647	1,190	24,689
Quebec <sup>1</sup>	41,234	145,284	56,361	208,447	101,484	21,498	574,307
Ontario	73,065	300,749	68,111	146,966	197,471	28,686	815,049
Manitoba	8,615	44,929	15,531	23,217	13,959	3,788	110,039
Saskatchewan	7,920	38,021	15,094	18,920	13,080	3,214	96,248
Alberta	19,672	73,580	84,700	61,079	34,640	8,740	282,411
British Columbia Freshwater	18,429	77,776	47,982	55,373	69,770	5,857	275,187
British Columbia Tidal Waters	20,645	156,658	13,038	30,252	42,083	5,169	267,845
Yukon	678	3,146	1,034	853	549	219	6,480
Northwest Territories	315	1,997	555	815	68	109	3,859
Nunavut	64	52	13	275	107	28	540
<b>Canada</b>	<b>203,495</b>	<b>873,559</b>	<b>324,833</b>	<b>606,399</b>	<b>493,362</b>	<b>83,779</b>	<b>2,585,427</b>
	(\$)						
<b>Average per Active Angler</b>	<b>\$63</b>	<b>\$270</b>	<b>\$100</b>	<b>\$187</b>	<b>\$152</b>	<b>\$26</b>	<b>\$799</b>

Notes:

Figures may not add up to total due to rounding.

1. Resident anglers only; there are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

**Annex A.12 Major Purchases and Investments (Wholly Attributable to Recreational Fishing), by Angler Category, Canada 2005<sup>1</sup>**

Major Purchases and Investments	Resident	Canadian Non-resident	Other Non-resident	Total Number of Anglers
	(\$'000)			
Fishing Equipment	193,919	4,369	5,206	203,495
Boating Equipment	842,242	19,140	12,177	873,559
Camping Equipment	321,409	2,816	608	324,833
Special Vehicles	604,332	1,676	391	606,399
Land &/or Building	368,530	38,176	86,657	493,362
Other	80,420	1,486	1,873	83,779
<b>Total</b>	<b>2,410,852</b>	<b>67,664</b>	<b>106,911</b>	<b>2,585,427</b>

Notes:

Figures may not add up to total due to rounding.

1. There are no estimates for non-resident anglers in Quebec.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

### Annex A.13 Statistical Reliability of Selected Variables, All Active Anglers, 2005

Jurisdiction	Sample Size (number)	Days Fished	Fish Caught	Fish Kept	Direct Expenditures (%)	Major Purchases and Investments (W/P) <sup>2</sup>	Major Purchases and Investments (W) <sup>3</sup>
Newfoundland and Labrador	2,487	3.4	10.8	15.5	4.5	10.4	10.3
Prince Edward Island	1,865	5.5	11.1	19.2	7.8	37.2	35.2
Nova Scotia	1,405	3.5	7.1	9.8	3.9	17.3	21.2
New Brunswick	4,498	3.1	11.4	7.0	5.2	11.0	9.5
Quebec <sup>4</sup>	13,279	1.7	2.6	2.9	2.0	8.5	5.2
Ontario	16,000	1.5	2.3	4.3	1.4	15.4	15.3
Manitoba	4,400	3.0	5.1	6.0	3.5	12.5	10.7
Saskatchewan	6,000	2.4	3.1	3.5	2.9	13.0	11.8
Alberta	5,900	2.8	4.9	5.9	3.0	8.4	8.8
British Columbia Freshwater	5,800	2.4	4.0	3.8	2.8	10.9	11.8
British Columbia Tidal Waters	15,410	2.0	4.2	2.6	1.8	6.6	6.7
Yukon	1,900	5.5	7.7	7.8	6.6	17.6	19.5
Northwest Territories	1,800	5.0	6.2	14.7	5.9	23.2	24.7
Nunavut	1,694	5.5	9.2	9.7	19.0	20.8	8.0
<b>Canada</b>	<b>82,798</b>	<b>0.7</b>	<b>1.3</b>	<b>2.0</b>	<b>0.8</b>	<b>3.9</b>	<b>3.9</b>

Notes:

1. Coefficient of variation=(standard error of the mean/mean)\*100.
2. Major purchases and investments wholly or partially attributable to recreational fishing.
3. Major purchases and investments wholly attributable to recreational fishing.
4. Resident anglers only.

Source:

Fisheries and Oceans Canada, Economic Analysis and Statistics.

## **Annex B: 2005 Survey Contacts**





**Annex B: List of Survey Contacts by Jurisdiction, 2005**

<b>Jurisdiction</b>	<b>Contact Information and Mailing Address</b>	<b>Telephone/Fax/Email</b>
Newfoundland and Labrador	Jonathan Sharpe Inland Fish and Wildlife Environment and Conservation 117 Riverside Drive P. O. Box 2007 Corner Brook, NL A2H 7S1	(709) 637-2023 637-2004 jonathansharpe@gov.nl.ca
Prince Edward Island	Rosanne MacFarlane Freshwater Fisheries Biologist PEI Department of Environment and Energy Conservation & Management Division 11 Kent Street, 4 <sup>th</sup> floor Charlottetown, PE C1A 7N8	(902) 368-6082 368-5830 remacfarlane@gov.pe.ca
Nova Scotia	Al McNeill Agriculture and Fisheries 91 Beeches Road P.O. Box 700 Pictou, NS B0K 1H0	(902) 485-7029 485-4014 mcneilla@gov.ns.ca
New Brunswick	Mary Sabine Fish and Wildlife Branch Natural Resources H. J. Flemming Forestry Centre P.O. Box 6000 Fredericton, NB E3B 5H1	(506) 453-2440 453-6699 mary.sabine@gnb.ca
Quebec	Pierre Bouchard Ministère des Ressources naturelles et de la Faune Faune Québec Direction de la recherche sur la faune 930, chemin Sainte-Foy, 4ième étage Québec QC G1S 2L4	(418) 627-8692 poste 7414 (418 ) 646-6863 pbouchard@fapaq.gouv.qc.ca
Ontario	Eric Miller Senior Economist Policy and Planning Coordination Branch Ontario Ministry of Natural Resources 880 Bay St., 6 <sup>th</sup> Floor Toronto, Ontario M7A 1W8	(416) 314-1976 314-9477 eric.miller@mnr.on.goc.on.ca
Manitoba	Rob Cann Angling Program Manager Manitoba Conservation Box 20-200 Saulteaux Cres., Winnipeg, MB R3J 3W3	(204) 945-7816 948-2308 rocann@gov.mb.ca
Saskatchewan	Tanya Johnston Sport Fishery Specialist Saskatchewan Environment 436-3211 Albert Street Regina, SK S4S 5W6	(306) 787-2467 787-9544 TJohnston@serm.gov.sk.ca

<b>Jurisdiction</b>	<b>Contact Information and Mailing Address</b>	<b>Telephone/Fax/Email</b>
Alberta	David Park Fisheries Biologist Alberta Sustainable Resource Development, Fisheries Management Branch 2 <sup>nd</sup> Floor, Great West Life Building Edmonton, AB T5K 2M4	(780) 427-8347 422-9559 dave.park@gov.ab.ca
British Columbia Freshwater	Andrew Wilson Manager, Fisheries Management Section Ministry of the Environment 2975 Jutland Road, 4th floor Victoria, BC V8T 5J9	(250) 387-9788 387-0239 andrew.wilson@gov.bc.ca
British Columbia Tidal Waters	Laurie Biagini Regional Data Unit Fisheries and Oceans Canada Pacific Region Suite 200-401 Burrard Street Vancouver, BC V6C 3S4	(604) 666-7749 666-9008 biaginil@dfo-mpo.gc.ca
Yukon	Susan Thompson Department of Environment Fish and Wildlife Branch Fisheries Section P.O. Box 2703 Whitehorse, YT Y1A 2C6	(403) 667-5715 668-4363 susan.thompson@gov.yk.ca
Northwest Territories	Richard Zieba Industry, Tourism and Investment Government of the Northwest Territories PO Box 1320 Yellowknife, NT X1A 2L9	(867) 920-3185 873-0434 Richard_zieba@gov.nt.ca
Nunavut	Wayne Lynch Director Fisheries and Sealing Department of Economic Development and Transportation P.O. 1000, Station 1196 Iqaluit, NU X0A 0H0	(867) 975-7821 975-7739 wlynch@gov.nu.ca

## **Annex C: CD-ROM Detailed Tables**



### Annex C.1 List of Detailed 2005 Statistical Tables on the CD-ROM<sup>1</sup>

Table 1	Origin of Licensed Anglers by Angler Category and Jurisdiction
Table 2	Number and Average Age of Active Resident Anglers by Gender and Jurisdiction
Table 3	Number and Average Age of Active Canadian Non-resident Anglers by Gender and Jurisdiction
Table 4	Number and Average Age of Other Active Non-resident Anglers by Gender and Jurisdiction
Table 5	Number and Average Age of All Active Anglers by Gender and Jurisdiction
Table 6a	Origin of Non-resident Licensed Anglers, Newfoundland and Labrador
Table 6b	Origin of Non-resident Licensed Anglers, Prince Edward Island
Table 6c	Origin of Non-resident Licensed Anglers, Nova Scotia
Table 6d	Origin of Non-resident Licensed Anglers, New Brunswick
Table 6e	Origin of Non-resident Licensed Anglers, Ontario
Table 6f	Origin of Non-resident Licensed Anglers, Manitoba
Table 6g	Origin of Non-resident Licensed Anglers, Saskatchewan
Table 6h	Origin of Non-resident Licensed Anglers, Alberta
Table 6i	Origin of Non-resident Licensed Anglers, British Columbia Freshwater
Table 6j	Origin of Non-resident Licensed Anglers, British Columbia Tidal Waters
Table 6k	Origin of Non-resident Licensed Anglers, Yukon
Table 6l	Origin of Non-resident Licensed Anglers, Northwest Territories
Table 6m	Origin of Non-resident Licensed Anglers, Nunavut
Table 6n	Origin of Non-resident Licensed Anglers, Canada
Table 7	Number of Days Fished by Anglers in Freshwater and Saltwater
Table 8	Number of Days Fished Through the Ice
Table 9a	Harvest of Fish Species by Anglers, Newfoundland and Labrador
Table 9b	Harvest of Fish Species by Anglers, Prince Edward Island
Table 9c	Harvest of Fish Species by Anglers, Nova Scotia
Table 9d	Harvest of Fish Species by Anglers, New Brunswick
Table 9e	Harvest of Fish Species by Anglers, Quebec
Table 9f	Harvest of Fish Species by Anglers, Ontario
Table 9g	Harvest of Fish Species by Anglers, Manitoba
Table 9h	Harvest of Fish Species by Anglers, Saskatchewan
Table 9i	Harvest of Fish Species by Anglers, Alberta
Table 9j	Harvest of Fish Species by Anglers, British Columbia Freshwater
Table 9k-1	Harvest of Fish Species by Anglers, British Columbia Tidal Waters
Table 9k-2	Harvest of Shellfish Species by Anglers, British Columbia Tidal Waters
Table 9l	Harvest of Fish Species by Anglers, Yukon
Table 9m	Harvest of Fish Species by Anglers, Northwest Territories
Table 9n	Harvest of Fish Species by Anglers, Nunavut
Table 9o	Total Fish Harvest, Selected Species, Canada
Table 10a	Summary of Fish Harvested, Resident Anglers
Table 10b	Summary of Fish Harvested, Canadian Non-resident Anglers

<sup>1</sup>The statistical tables refer to the profile of recreational fishing activities of **active adult anglers** in 2005, except Tables 1 and 6a-6o which cover all licensed anglers (active and non-active adult anglers).

Table 10c	Summary of Fish Harvested, Other Non-resident Anglers
Table 10d	Summary of Fish Harvested, All Anglers
Table 11	Catch and Release Activities, by Angler Category and Jurisdiction
Table 12a	Quality of Fishing: Assessment by Resident Anglers
Table 12b	Quality of Fishing: Assessment by Canadian Non-resident Anglers
Table 12c	Quality of Fishing: Assessment by Other Non-resident Anglers
Table 12d	Quality of Fishing: Assessment by All Anglers
Table 13	Trip Information, Non-resident Anglers
Table 14a	Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing) Made by Resident Anglers
Table 14b	Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing) Made by Canadian Non-resident Anglers
Table 14c	Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing) Made by Other Non-resident Anglers
Table 14d	Major Purchases and Investments (Wholly or Partly Attributable to Recreational Fishing) Made by All Anglers
Table 15a	Major Purchases and Investments (Wholly Attributable to Recreational Fishing) Made by Resident Anglers
Table 15b	Major Purchases and Investments (Wholly Attributable to Recreational Fishing) Made by Canadian Non-resident Anglers
Table 15c	Major Purchases and Investments (Wholly Attributable to Recreational Fishing) Made by Other Non-resident Anglers
Table 15d	Major Purchases and Investments (Wholly Attributable to Recreational Fishing) Made by All Anglers
Table 16a	Direct Recreational Fishing Expenditures Made by Resident Anglers
Table 16b	Direct Recreational Fishing Expenditures Made by Canadian Non-resident Anglers
Table 16c	Direct Recreational Fishing Expenditures Made by Other Non-resident Anglers
Table 16d	Direct Recreational Fishing Expenditures Made by All Anglers

## **Annex C.2 List of Additional Questions by Jurisdiction<sup>2</sup>**

### **Newfoundland and Labrador**

- What species do you prefer to fish?
- How do you feel trout stocks in the province are doing?
- Would you support size-based retention regulations to protect breeding trout species? If yes, what would be your preference for the regulations?
- Do you frequently catch the bag limits? In your opinion, do you think there should be separate daily bag limits for brook trout, brown trout and landlocked salmon? If yes, what should the bag limit be for each species?
- Did you fish for trout on any of your fishing trips in Newfoundland and Labrador in 2005?
- If you fished through the ice, what was the average number of trout you caught per day during an ice fishing trip?
- For other trips, what was the average number of trout you caught per day?
- Is the current level of enforcement for Atlantic salmon adequate?
- Is the current level of enforcement for Brook trout adequate?
- Is the current level of management (science) for Atlantic salmon adequate?
- Is the current level of management (science) for Brook trout adequate?
- Do you think sea trout (sea-run brook or speckled trout; sea-run brown trout) should be managed separately from their freshwater counterparts? If yes, should there be a season in tidal waters?
- Should there be a separate bag limit for sea trout?
- Do you agree with mandatory catch-and-release fishing as a management tool for Atlantic salmon? If yes, do you think there is a mortality rate associated with catch-and-release? What do you think is the rate of mortality?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion.
- Did you go fishing in Newfoundland and Labrador during National Fishing Week as a result of the promotion?
- Assessment of angler skill
- Which of sources of information did you use when planning your fishing activities to Newfoundland and Labrador in 2005?
- Were you a member of an organized angling group or association in 2005?
- If there had been no fishing opportunities in Newfoundland and Labrador in 2005, what would you have done?
- Did you personally hold a licence to fish for Atlantic salmon in Newfoundland and Labrador in 2005?
- How many days did you fish for Atlantic salmon in Newfoundland and Labrador in 2005?
- How many members of your household under 18 years of age fished for recreation in Newfoundland and Labrador in 2005, and how many days in total did they fish?

### **Prince Edward Island**

- Of the days you spent fishing in PEI in 2005, how many were spent fishing for the following?
  - Rainbow Trout stocked lakes January - March
  - Rainbow Trout stocked lakes April – November
  - Trout April - September
  - Salmon
  - Smelt (through the ice)
  - Shellfish
- Did you fish for trout in Prince Edward Island in 2005?
- Please provide the approximate percentage of time you spent fishing for trout in the following time periods: Spring, Summer, Fall
- How many brook trout did you catch that were greater than 35 cm (14 inches) in length? How many did you keep?
- Please provide the percentage of time you spent fishing by location and by method:
  - Dock/shore
  - Boat
  - Wading
  - Fly fishing
  - Bait only

<sup>2</sup> Annex C.2 covers a complete list of additional questions by jurisdiction. However, the statistical tables found on the CD-ROM contain only the publishable survey results relating to these additional questions by jurisdiction.

- Lures
  - Bait/lures
- How would you rate your recreational fishing experience in Prince Edward Island in 2005?
  - Trout fishing
  - Salmon fishing
  - Saltwater fishing
  - Overall rating
- How would you rate your deep-sea fishing experience in Prince Edward Island in 2005?
- Were you aware of Prince Edward Island's Family Fishing Weekend held from May 20-23, 2005? (Residents Only) Did you participate in this event in 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005?
- Please indicate your information source(s) for the National Fishing Week promotion
- Did you go fishing in Prince Edward Island during National Fishing Week as a result of the promotion?
- Which of the following sources of information did you use when planning your fishing activities to Prince Edward Island in 2005?
- Did you fish for recreation in Prince Edward Island in any of the last five years?
- How has your recreational fishing activity changed over the last five years for each of the following species: trout, cod, smelt, tuna?
- Have you ever used the services of an angling guide on Prince Edward Island? Would you be interested in using the services of a licensed angling guide? How much would you be willing to pay per day for a licensed angling guide?
- Each licensed angler, trapper and hunter on Prince Edward Island is required to purchase a Wildlife Conservation Fund license for: fish habitat enhancement, fish stocking, research and monitoring, non-game enhancement, pond management, education and public awareness, upland game enhancement, natural areas acquisition of restoration, furbearer enhancement, other projects. How do you think these funds should be allocated?
- How much personal time did you give to volunteer work in support of Prince Edward Island's recreational fishery in 2005? (Residents Only)
- Assessment of angler skill
- Do you have access to a computer with Internet capabilities? Would you consider purchasing Prince Edward Island fishing licences using the Internet?
- If there had been no fishing opportunities in Prince Edward Island in 2005, what would you have done?
- How many members of your household under 16 years of age fished for recreation in Prince Edward Island in 2005 and how many days in total did they fish?

### **Nova Scotia**

- Of the total days fished, how many were spent fishing during the winter fishery (January to March) in Nova Scotia in 2005?
- Of the days fished in freshwater, how many were spent fishing for Atlantic salmon in Nova Scotia in 2005 (winter fishery, ice fishing)?
- Please estimate the percentage of time you spent using the following gear types in Nova Scotia in 2005: lures, bait, lure and bait, flies
- Bait used in Nova Scotia in 2005: no bait used, worms, minnows caught, minnows bought, synthetics
- Please estimate the percentage of time you spent using the following fishing methods in Nova Scotia in 2005: dock/shore, wading, boat.
- If you fished from a boat in Nova Scotia in 2005, was the boat (Residents Only): moored, launched from a boat launch, launched from shore? If you launched a boat in Nova Scotia in 2005, how would you rate the boat launch facilities in Nova Scotia (excellent, very good, good, fair, poor)?
- If you fished in Nova Scotia in 2000, how would you rate the fishing in 2005 compared to 2000?
- If you feel that fishing has declined in Nova Scotia, how would you rate the following factors as reasons for this decline (overfishing, poaching, pollution, access problems, habitat degradation, introduced stocks)?
- For anglers whose fishing remained the same, improved or who did not fish in 2000, factors rated for improving fishing: shorter seasons, longer seasons, modify bag limits, improve habitat, increased enforcement, better stocking, better access, more size limits, increase facilities, special regulations.
- Why would your fishing activity have declined in Nova Scotia in 2005: poor fishing quality, no time, health reasons, family responsibilities, complex regulations, lack of information, financial reasons, other interests?
- Are you aware of the stocking programs in Nova Scotia?



- Did you know which lakes/ivers were stocked in your fishing areas in Nova Scotia in 2005?
- What percentage of your time fishing was directed to stocked lakes/ivers in Nova Scotia in 2005?
- Do you agree with holding organized fishing events (derbies and tournaments) in Nova Scotia?
- Did you participate in any organized fishing events in Nova Scotia in 2005?
- How many organized fishing events did you enter in Nova Scotia in 2005?
- Were you aware of the Nova Scotia Sportfishing Weekend (June 4 - 5, 2005)? Please indicate your information source(s) for this event. Did you participate in this event? Was your participation a factor in buying a fishing licence in 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? Please indicate your information source(s) for the National Fishing Week promotion.
- Did you go fishing in Nova Scotia during National Fishing Week as a result of the promotion?
- Assessment of angler skill
- Of the species available in Nova Scotia, rate your top three in order of preference: brook trout, rainbow trout, brown trout, smallmouth bass, atlantic salmon, landlocked salmon, yellow perch, white perch, pickerel, smelt, striped bass, mackerel, cod, shad, other freshwater and saltwater fish.
- If there had been no fishing opportunities in Nova Scotia in 2005, what would you have done?
- Were you a member of an organized angling group or association in 2005?
- How much personal time did you give to volunteer work in support of Nova Scotia's recreational fishery in 2005? (Residents Only)
- How often did you use the following sources of information when looking for fishing information in Nova Scotia: web, newspapers, tackle shops, sport shows, clubs/associations, family and friends, licence vendors, angler handbook, other sources?
- How many members of your household under 16 years of age fished for recreation, for species other than Atlantic salmon, in Nova Scotia in 2005 and how many days in total did they fish? What species did they prefer to fish for? How were they introduced to fishing (family or friends, school, recreation clubs)?

### **New Brunswick**

- Of the total days fished, how many days did you spend fishing for recreation in inland waters and/or in tidal or coastal waters of New Brunswick in 2005? Of these days, how many were spent fishing through the ice in New Brunswick in 2005?
- Did you see any fisheries enforcement officers while fishing in New Brunswick in 2005?
  - Number of times Enforcement Officers were seen in the field in New Brunswick in 2005
- Please provide the percentage of time you spent fishing by location and by method: dock, boat, wading, fly, bait, lures, bait and lures).
- Did you take a child / youth (under 16 years of age) fishing in New Brunswick in 2005? (Residents Only) Were you aware of the "Fish New Brunswick Days" event, June 4 - 5, 2005? Did you participate in this event in 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion.
- Did you go fishing in New Brunswick during National Fishing Week as a result of the promotion?
- Are you aware that regulations exist in New Brunswick that prohibit the introduction or transfer of fish of any species, including sport fish and bait fish, from one body of water to another without a permit?
- Are you aware that the use of live fish as bait is prohibited in most inland waters, with the exception of the boundary waters between New Brunswick and Maine?
- If you fished outside New Brunswick in 2005, how many days did you fish in these other areas: other provinces, United States, other countries?
- If there had been no fishing opportunities in New Brunswick in 2005, what would you have done?
- Assessment of angler skill
- Were you a member of an organized angling group in New Brunswick in 2005?
- Do you have access to computer with Internet service? Would those with access consider buying a licence on-line? Would those with access consider obtaining fishing information on-line?
- How many members of your household under 16 years of age who did not possess their own licence fished for recreation in New Brunswick in 2005 and how many days in total did they fish?

### **Quebec**

- In 2005, how many days did you fish in each of the following areas in Quebec in 2005?
- What was the total weight of the fish you kept in Quebec in 2005 and what percentage of it was eaten?
- If you release fish on a voluntary basis, what was the reason?

- Did you fish as much as you would have wanted to in Quebec in 2005?
- For which of the following reasons did you not fish as often as you would have liked to in Quebec in 2005?
- For each of the following species, would you prefer to catch a large number of small fish or a small number of big fish?
- Does the presence of stocked fish influence in a positive way, a negative way or not at all your choice of fishing locations (lakes, rivers, streams, ponds)?
- How often did you use these sources of information on recreational fishing regulations in Quebec?
- Were you a member of an organized angling group or association in 2005?
- How many members of your household under 15 fished for recreation in Quebec and how many days in total did they fish?
- What is the highest level of education you have completed?
- What category best describes your employment status in 2005?

### **Ontario**

- Do you own an ice-hut? Did you rent an ice-hut in 2005? Do you always use an ice-hut when you fish through the ice?
- Excluding any time spent ice-fishing, what percentage of time did you spend fishing from the following: from shore, from a boat?
- On average, how many hours per day did you fish for recreation in Ontario in 2005?
- Please list the top three species you fished for, in the order of angling preference. For each species please indicate the number of fish you expected to catch when fishing for that species on a single day.
- How often did you use the following bait and tackle options when fishing: live baitfish, dead baitfish, leeches, worms, lures, flies, crayfish, frogs, lead sinkers/weights, non-lead sinkers/weights, other bait?
- Are you aware of which water bodies are stocked in the province of Ontario? Did you fish in a stocked water body in Ontario in 2005?
- Please rate the importance of fish stocking when deciding where to fish in Ontario.
- Did you fish in a competitive fishing event in Ontario in 2005?
- How would you rate your fishing success in 2005 compared to previous years' experience?
- Did you fish as much as you would have liked in Ontario in 2005?
- What were the major factors that limited your fishing activity in 2005: poor quality, lack of access, distance, no one to fish with, physical problems, complexity of regulations, cost to go fishing, poor weather, not enough time to go fishing, other interests.
- Including yourself, on average how many anglers were in your fishing parties in 2005?
- Did you take a child (youth under 18) fishing in Ontario in 2005? (Residents Only)
- Were you aware of the Ontario Family Fishing Weekend (July 8 - 10, 2005)? (Residents Only). Did you participate in this event?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in Ontario during National Fishing Week as a result of the promotion?
- Did you fish for recreation outside Ontario in 2005?
- How would you rate the clarity and ease of use of the Ontario Recreational Fishing Regulations Summary 2005-2006? (Residents Only)
- Assessment of angler skill
- Did you purchase an Ontario hunting licence in 2005?
- Were you a member of an organized angling group or association in 2005?
- Do you have access to a computer with Internet capabilities? Would you consider purchasing Ontario fishing licences using the internet, if you had this option?
- Assessment of issues that affect Ontario's recreational fishery: change in lake productivity, climate change, resource user conflicts, contaminant levels in fish, fish habitat loss, lack of access to fishing opportunities, sea lamprey predation, impacts of invasive species, complexity in fishing regulations, inadequate enforcement, lack of information, loss of wetlands, over-harvest of fish, other issues.
- If there had been no fishing opportunities in Ontario in 2005, what would you have done?
- Excluding yourself, how many members of your household under 18 fished for recreation in Ontario in 2005 and how many days in total did they fish?
- Excluding yourself, how many members of your household 65 years of age and older fished for recreation in Ontario in 2005 and how many days in total did they fish?

## **Manitoba**

- Of the total days, how many were spent fishing through the ice in Manitoba in 2005?
- Did you fish in stocked trout waters in Manitoba in 2005? How many days did you fish for stocked trout?
- Did you use the services of a lodge or outfitter for fishing? Days spent at a lodge or outfitter in Manitoba in 2005.
- Do you agree with holding fishing derbies and tournaments in Manitoba?
- Do you agree with waiving angling regulations for derbies or tournaments?
- Did you participate in any fishing derbies or tournaments in Manitoba in 2005?
- Purchases of bait in Manitoba in 2005: packages of frozen/salted bait fish, dozens of worms purchased, dozens of live bait fish purchased, dozens of live leeches purchased.
- Did you use any fish that you caught yourself as bait? frozen/salted bait fish caught? live leeches caught?
- Bait/lures ranked in order of use in 2005, (1 - used most often, 2 - second most often, to 6 - used least often) and the number purchased.
- Were you aware of the Manitoba Family Fishing Weekend (June 11-12, 2005)? Did you participate in this event in 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only) Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in Manitoba during National Fishing Week as a result of the promotion?
- Methods when fishing for recreation in Manitoba in 2005.
- Comparison of fishing days in past years to 2005. Why would your fishing activity have decreased in 2005: poor fishing, lack of information, overcrowded fishing sites, fish sought not available, weather, complex regulations, financial reasons, family responsibility, health problems, conflicting interests, not enough leisure time.
- If you fished for recreation in 2000 in Manitoba, how would you rate the fishing in 2005 compared to 2000?
- If you feel that fishing has declined, please rate each of the following options on how you feel it would help to improve recreational fishing in Manitoba: reduced creel limits, maximum size limits, slot limits, increased fines, more catch and release regulations, more stocking programs, more habitat improvement, minimum size limits, increase facilities.
- If there had been no fishing opportunities in Manitoba in 2005, what would you have done?
- Assessment of angler skill
- Do you feel that organized angling groups in Manitoba represent your interests? (Residents Only)
- What do you think of the present price of a fishing licence in Manitoba? (Residents Only). Would you be willing to pay a higher licence fee? What additional amount would you be willing to pay? For those willing to pay more than \$10, how much more would they pay?
- Do you live in an urban or rural area?
- How many members of your household under 16 years of age fished for recreation in Manitoba in 2005 and how many days in total did they fish?

## **Saskatchewan**

- If you release fish on a voluntary basis, what was the reason: fish was too small, fish appeared diseased, to protect the species, fish only for recreation, reached catch limit, not the species of fish sought, fish was too large, other reasons?
- Do you agree with mandatory catch and release fishing as a management tool?
- Do you support barbless hooks as a management tool on all Saskatchewan lakes?
- Do you support size-based retention regulations to protect fish species: minimum size, maximum size, slot limits, do not support size-based regulations?
- Were you aware of Saskatchewan's Free Fishing Weekend, July 9 - 10, 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? Please indicate your information source(s) for the National Fishing Week promotion.
- Did you go fishing in Saskatchewan during National Fishing Week as a result of the promotion?
- Which of the following sources of information did you use when planning your fishing activities to Saskatchewan in 2005: travel agent, newspapers/magazines, bait/tackle shops, outdoor/sports shows, internet, television/radio announcement, tourism brochures, friends/family/other anglers, Saskatchewan Environment, clubs/associations?
- What is the likelihood that you will fish in Saskatchewan in the next 5 years?
- Assessment of angler skill
- Did you launch a boat in Saskatchewan waters during 2005? How many times did you launch this year? Did you launch the same boat in other provincial or state waters during 2005?
- Where did anglers launch their boats outside of Saskatchewan.

- If there had been no fishing opportunities in Saskatchewan in 2005, what would you have done?
- How many members of your household under 16 years of age fished for recreation in Saskatchewan in 2005 and how many days in total did they fish?

### **Alberta**

- If you did not fish in Alberta in 2005, what were the main reasons for not fishing: no reason given, disappointed in 2004, not enough spare time, poor health, do not fish every year, complicated regulations, restrictive regulations, poor catch rates, too expensive, poor access, too crowded?
- Of the days fished, how many were spent fishing: in rivers and streams, in open waters, on ice?
- Of the days fished, how many were spent fishing: in public stocked sites, in private stocked sites?
- In which Watershed Unit did you fish for stocked trout in 2000?
- Were you aware of the National Fishing Week (NFW) promotion? What was the information source(s) for the National Fishing Week Promotion? Did you go fishing in Alberta during National Fishing Week as a result of this promotion?
- How satisfied were you with the quality of your recreational fishing experience in Alberta in 2005?
- Did you fish in Alberta at any time between 2000 and 2004? (Non-residents Only)
- In your opinion, what is the trend in overall quality of recreational fishing in Alberta over the past 5 years?
- Which of the following sources of information did you use when planning your fishing activities to Alberta in 2005: internet, magazines/newspapers, bait and tackle shops, outdoor/sport shows, travel agent, clubs/associations, friends/family, TV/radio, TV fishing shows, licence issuer, Alberta Environment, brochure/pamphlets regulations?
- Assessment of angler skill
- Were you a member of an organized angler group in 2005?
- Were you aware of Alberta's Free Family Fishing Weekend Promotion? What was your information source for the Free Family Fishing Weekend? Have you ever fished during the Free Family Fishing Weekend as a result of these promotions? Do you plan to fish for recreation in the future on the Free Family Fishing Weekend?
- How would you rate the importance to you of the following: trout stocking, habitat protection and conservation, science-based fisheries management, fish population monitoring, enforcement of fisheries regulations, fish harvest opportunities, public consultation in policy-setting, promoting increased angling participation, healthy aquatic ecosystems?
- If there had been no fishing opportunities in Alberta in 2005, what would you have done?
- How many members of your household under 16 years of age or 64 years of age and over fished for recreation in Alberta in 2005?

### **British Columbia Freshwater**

- How many days did you spend fishing for recreation in each month in freshwater in British Columbia in 2005: ice fishing, on lakes, on rivers? How many days were spent fishing in the following areas?
- Of the total days you fished, how many were spent using the services of a guide?
- On average, how many hours per day did you fish in freshwater in British Columbia in 2005?
- Why did you fish where you did in freshwater in British Columbia: to eat, to catch large fish, for companionship, to enjoy nature, for challenge, to catch many fish, to get away, to get family together, to relax, to improve skills?
- Did you see a conservation officer while fishing in British Columbia freshwater in 2005? Number of times Conservation Officers were seen by anglers fishing in by B.C. Freshwater.
- About what percentage of the time did you use the following methods to fish in British Columbia freshwater in 2005: lures, bait, lures and bait, fly gear, set lines, other method?
- Did you spend as much time fishing for recreation in British Columbia freshwater in 2005 as you had wanted to?
- Why did the angler not spend as much time fishing as desired: fish too small, restrictive regulations, complicated regulations, crowding, poor boat access, poor shore access, poor catch rate, not enough spare time.
- Did you stay at a fishing resort, fishing lodge or fishing camp when fishing in British Columbia freshwater in 2005?
- How important are the following factors when you are selecting a sportfishing resort, lodge or camp: travel time to lodge, lodge familiarity, cost of accommodation, first class accommodation, rustic accommodation, lodge remoteness, non-fishing activities, quality of fishing, other factors?
- How did you find out about the fishing resort, lodge or camp: internet/websites, bait and tackle shops, travel agent, friends/family, fishing/sportsman shows, TV fishing shows, magazines/newspapers?

- Were you aware of B.C.'s Family Fishing Weekend (June 17- 19, 2005)? (Residents Only) Did you participate in this event?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005?
- Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in British Columbia freshwater during National Fishing Week as a result of the promotion?
- How often did you use these information sources about recreational fishing in British Columbia freshwater in 2005?
- Assessment of angler skill
- Do you intend to fish in British Columbia freshwater in 2006?
- Did you fish in British Columbia tidal waters in 2005? If yes, how many days did you fish in British Columbia tidal waters in 2005?
- Do you intend to fish in British Columbia tidal waters in 2006?
- Does your household have access to a computer with Internet capabilities? Would you consider purchasing your fishing licence through a secure on-line website? Would you accept paying a service fee to cover the cost of an on-line transaction? What maximum amount would you expect to pay for an on-line transaction? Amount anglers would be willing to pay for a transaction fee over and above \$5
- If there had been no fishing opportunities in British Columbia freshwater in 2005, what would you have done?
- Would you donate money to independent organizations who deliver programs designed to improve recreational fishing opportunities or educate young or new anglers? If yes, how much would you be willing to donate annually? Amount anglers would be willing to pay to independent organizations over and above \$50
- How many members of your household were under 16 years of age? How many fished for recreation in British Columbia freshwater in 2005 and how many days in total did they fish?

### **British Columbia Tidal Waters**

- Of the total days fished, how many were spent fishing for the following: salmon, halibut, finfish, shellfish?
- Of the total days fished, how many were spent fishing from the following: from a boat, shore, tidal bars, piers, diving?
- Of the days fished, how many were spent using the services of a guide?
- On average, how many hours per day did you fish in BC tidal waters in 2005?
- In 2005, were you ever interviewed in any surveys seeking your daily catch and effort data (creel census) conducted by the Department of Fisheries and Oceans? In which areas were you interviewed in 2005 and how often?
- Creels in which anglers were interviewed in British Columbia Tidal Waters in 2005: Queen Charlotte Islands, Northern Coast, Central Coast, Johnstone Strait, Georgia Strait, Barkley Sound, West Coast Vancouver Island.
- Estimated number of times anglers were interviewed in creels in British Columbia Tidal Waters in 2005.
- Are you aware of the "Marked Head Recovery Program"? How many salmon did you catch with a missing adipose fin? How many salmon heads did you return as part of the program?
- How many salmon did you lose to seals or sea lions? Did you see the seals or sea lions take your catch?
- Did you fish for salmon in BC tidal waters in any year from 2000 to 2005? In which year(s) did you fish for salmon?
- Have the number of days fishing for salmon in British Columbia Tidal Waters changed over this time?
- Has your harvest success rate for salmon in British Columbia Tidal Waters changed over this time?
- Due to shifting regional salmon abundances did you choose to target another species or did you choose to fish in different regions where salmon were in higher abundance in 2005?
- To which species were your efforts directed (please check all that apply): halibut, rockfish, lingcod, other finfish, shellfish?
- What new regions were fished in British Columbia Tidal Waters in 2005 (from traditional fishing regions)?
- Did you fish for halibut in BC tidal waters in any year from 2000 to 2005?
- In which years did the angler fish for halibut in British Columbia Tidal Waters?
- Have the number of days fishing for halibut in British Columbia Tidal Waters changed over this time?
- Has your harvest success rate for halibut in British Columbia Tidal Waters changed over this time?

- Were you aware of rockfish conservation areas (RCAs) in the regions where you were fishing for rockfish in BC tidal waters in 2005?
- Are you familiar with the term “Paralytic Shellfish Poisoning” (PSP)? Were you aware of shellfish closures due to PSP in your harvest area in 2005?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only) Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in British Columbia tidal waters during National Fishing Week as a result of the promotion?
- Assessment of anglers skill
- Do you have access to a computer with Internet capabilities? Were you aware that you can purchase a recreational fishing licence through DFO’s secure on-line website? If yes, how did you first learn of this service: DFO website, DFO release, radio/newspaper, lodge, fishing association, family or friends, licence vendor, guide?
- Would you consider purchasing your recreational fishing licence through DFO’s secure on-line website? Have you ever purchased a recreational fishing licence through DFO’s secure on-line website? If yes, how would you rate your service experience? If you considered the service to be only fair or poor, what were the reasons for this rating?
- If there had been no fishing opportunities in British Columbia tidal waters in 2005, what would you have done?
- Did you fish for recreation in British Columbia freshwater in 2005? If yes, how many days did you fish in British Columbia freshwater?
- How many members of your household under 16 years of age, who did not hold their own licence, fished for recreation in British Columbia tidal waters in 2005? How many days in total did they fish?

### **Yukon**

- Did you fish with barbless hooks in the Yukon in 2005?
- Of the species available in the Yukon, rate your top three in order of preference.
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion. Did you fish in the Yukon during National Fishing Week as a result of the promotion?
- How would you rate the importance to you of the following programs for educating and assisting anglers in Yukon: school-based programs, young angler programs, tackle loaner programs, skills development programs, live release training, ice fishing clinics, fisheries enhancement programs, species ID programs, habitat protection programs?
- Did you fish for salmon in the Yukon in 2005? Days fished for salmon by river on the Tatshenshini River System in Yukon in 2005.
- Salmon caught by river on the Tatshenshini River System in Yukon in 2005; salmon kept by river on the Tatshenshini River System in Yukon in 2005.
- Did you fish in one of the stocked lakes in the Yukon in 2005? Days fished for stocked species by lake in Yukon in 2005; stocked species caught/kept by lake in Yukon in 2005.
- How would you rate stocked lake fishing in the Yukon in 2005?
- How would you rate the importance to you of the stocking program in the Yukon?
- Did you fish for lake trout in the Marsh / Tagish Lakes system (includes Tagish Bridge and Six Mile River)? If yes, how many days did you fish in this water system? Please indicate the number of lake trout caught and kept from this water system.
- How do you feel lake trout stocks in the Yukon are doing?
- Please indicate which of the following factors you feel would improve recreational fishing in the Yukon: reduce possession limits, increase fines, increase enforcement, expand stocking programs, improve facilities, more live release regulations, other factors.
- If there had been no fishing opportunities in the Yukon in 2005, what would you have done?
- Assessment of angler skill
- How many members of your household under 16 years of age fished for recreation in 2005, and how many days in total did they fish?
- How many members of your household 65 years of age and over fished for recreation in 2005, and how many days in total did they fish?

### **Northwest Territories**

- Of the total days fished, how many were spent in rivers and lakes?
- Of the species you fished for in the Northwest Territories in 2005, please rank them in your order of preference. Indicate how many days you fished for each species.
- Days fished for Northern pike by preference in the Northwest Territories in 2005.

- How often did you use the following sources of information when selecting the places you fished in the Northwest Territories in 2005: travel agent, clubs/associations, friends/family/other anglers, television/radio announcement, NWT Tourism, licence issuer, Sustainable Development office, brochures and pamphlets?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in the Northwest Territories during National Fishing Week as a result of the promotion?
- Assessment of angler skill
- Did you hunt for large game, small game or game birds in the Northwest Territories in 2005?
- Were you a member of an organized angling group or association in 2005? (Residents Only)
- What priority did your fishing trip take in the North West Territories in 2005? If fishing was the main reason for your trip, why did you choose to fish in the Northwest Territories over other destinations in 2005?
- How much personal time did you provide to volunteer work in support of the Northwest Territories' recreational fishery in 2005? (Residents Only)
- If there had been no fishing opportunities in the Northwest Territories in 2005, what would you have done?
- Did you fish for recreation outside the Northwest Territories in 2005? If yes, where did you fish?
- In what other location(s) outside the Northwest Territories did you consider a fishing trip, but did not go?
- How many members of your household, under 16 years of age or 65 years of age and over, fished for recreation in the Northwest Territories in 2005, and how many days in total did they fish?

### **Nunavut**

- For each species of fish below, please indicate if you fished for the species, the number of days you did so and the number of days you caught your daily limit in Nunavut in 2005?
- How do you feel Arctic char stocks in Nunavut are doing?
- Would you support size-based retention regulations to protect breeding Arctic char stocks? If yes, please rank your preference for the type of regulation below from 1 to 3, with 1 being your most preferred: minimum-size release, maximum-size release, slot-limit release.
- How often did you use the following sources of information when selecting the places you fished in Nunavut in 2005: travel agent, newspapers/magazines, bait/tackle shops, outdoors/sports shows, internet, TV/radio announcements, friends/family/other anglers, Sustainable Development office, Travel Arctic, clubs/associations?
- Were you aware of the National Fishing Week promotion covering July 2-10, 2005? (Residents Only). Please indicate your information source(s) for the National Fishing Week promotion. Did you go fishing in Nunavut during National Fishing Week as a result of the promotion?
- Assessment of angler skill
- Were you a member of an organized angling group or association in 2005?
- Did you hunt for sport/recreation in Nunavut in 2005?
- If there had been no fishing opportunities in Nunavut in 2005, what would you have done?
- How many members of your household under 16 years of age fished for recreation in Nunavut in 2005 and how many days in total did they fish?
- How many members of your household 65 years of age and over fished for recreation in Nunavut in 2005 and how many days in total did they fish?

