

Sport Fishing in Yukon 2000

Summary Report of the Sixth Survey of Recreational Fishing in Canada

2001
Fisheries Section
Fish and Wildlife Branch



Introduction

Preface

This report summarises the results of a survey of sport fishing in Yukon in 2000. The Yukon survey is part of a national survey that takes place in each province and territory across Canada: the National Survey of Recreational Fishing in Canada. The 2000 edition is the sixth in a series carried out every five years.

The survey collects information about the recreational fishery from both resident and non-resident anglers. Information on a broad array of topics is collected, including the origin of anglers, expenditures and investments related to angling, the kind and number of fish harvested, the amount of time spent fishing, and the quality of fishing in Yukon. These data are used to evaluate the importance of recreational fishing to the public, anglers, the sport fishing industry, and fisheries management agencies. Because of the long times series no available, survey data also provide information on trends in recreational fishing across Canada. These data are used by provincial and territorial fisheries management agencies to make informed management decisions.

The survey was conducted in 2001 by the Fisheries Section of the Fish and Wildlife Branch of the Yukon Department of Environment in co-operation with the Surveys Unit, Economic and Commercial Analysis Directorate, of Canada's Department of Fisheries and Oceans (DFO).

Survey background

In 1970, recreational fisheries managers from across Canada met to discuss matters of common interest and concern. Participants realised that effective management of the recreational fisheries required a national dataset of basic information on the size, value, socio-economic performance and potential of Canada's sport fisheries. At the time no comprehensive information existed, but data from the only previous survey in 1961, indicated that millions of Canadians and hundreds of millions of dollars were involved.

The idea of a national survey was soon born and fisheries agencies from across the country launched the first nationally co-ordinated set of surveys for the 1975 calendar year. These surveys are intended to provide authoritative data on the magnitude and importance of Canada's sport fisheries and consistent and comparable data from a common group of questions. The success of the 1975 survey led to a second survey in 1980 and a strong commitment to continue the surveys at five-year intervals.

Methods

Survey design

Survey questionnaires are developed based on the common national survey design so that results can be compiled and compared across the country. In addition to the nationally common questions, the Yukon questionnaire also includes questions specific Yukon fisheries and issues. The survey included questions about:

- fishing activity: time spent fishing, type of waters, species caught and kept
- stocked lakes program
- satisfaction with the fishing experience
- assessment of the status and trends of Yukon's fisheries
- opinion on fisheries management
- financial expenditure information on fishing and fishing related activities
- basic demographic information.

The survey questionnaire also included a map of Yukon. The Yukon was divided into Regions 1 through 7 which were based on the road network within the territory (Fig. 1).

Survey implementation

Resident and non-resident anglers were selected using stratified, systematic random sampling of data sets of anglers who held a fishing licence during the survey year. Surveys were mailed out to the random subset of anglers along with a cover letter that explained the purpose of the survey and encouraged respondents to participate. Seven weeks following the first mail-out a second mail-out to all non-respondents was done, which increased the response rate. Completed surveys were sorted, screened, coded, and analyzed.

Results and Discussion

Survey response

Seventeen hundred questionnaires (1000 residents and 700 nonresidents) were sent out. Of these, 513 residents and 460 non-residents returned completed surveys for response rates of 51% and 66% respectively.

Angler profile

There were 14,553 licensed anglers in the Yukon in 2000, of that 44% (6,476) were Yukon residents (Table 1).

Table 1. Numbers and characteristics of Anglers in Yukon, 2000.				
	Resident	Canadian non-resident	Other non-resident	Total
Total Licensed Angling				
Population (a)	6476	3143	4934	14,553
Adult Males	3391	1949	3060	8,400
(Average Age, Years)	44	50	52	49
Adult Females	1365	646	612	2,623
(Average Age, Years)	42	43	53	45
Total Adults	4756	2595	3672	11,023
Children (b)	626	149	135	910
Total Active Anglers - All Ages	5382	2744	3807	11,933

a) Individuals who purchased angling licence in the Yukon. This group provides the basis for the statistical information in this bulletin.

(b) Individuals under 16 years of age.

Seventy-one percent of active resident adult anglers were male and 29% were female. The average age of adult anglers was 48 years.

Approximately 37% of resident anglers rated themselves as either expert or experienced anglers, 48% rated themselves as average, and 12% as beginner. For non-resident anglers 38% rated themselves as either expert or experienced anglers, 36% as average, and 17% as beginner.

Resident anglers have fished for an average of 15 years, while non-resident anglers have fished for an average of 2 years in the Yukon.

Attitudes of anglers towards live release fishing are summarised in Table 2. Approximately 64% of anglers voluntarily practised live release fishing in the Yukon in 2000, down from 74% in 1995.

	Practised			Did not Practice %	Did Practice %
	Mandatory %	Voluntary %	Both %		
Resident	6.3	60.1	29.8	32.4	67.2
Canadian non-resident	5.9	69.6	23.7	23.8	59.2
Other non-resident	11.6	64.9	22.2	26.5	65.6
Average	8	63.7	25.9	28.4	64.8

Anglers were asked if they use barbless hooks while angling. 87% of resident anglers use barbless hooks and over 75% of non-residents use barbless hooks while angling (Table 3).

	Resident %	Canadian non-resident %	Other non-resident %
Yes	87.5	77.4	75.1
No	10.4	17.1	21.7

Angling effort

Anglers fished in the open water season, approximately from April to October, a total of 93,906 days in Yukon in 2000. On average, each angler spent eight days fishing with Yukon anglers averaging approximately 2 times as many days (12) as non-resident anglers' (5). Resident anglers fished a total of 6,604 days through the ice, while non-residents spent only 208 days fishing through the ice.

For the purpose of analysis, the Yukon's sport fishery was divided into seven regions. Resident anglers showed a decided preference for the South Central region (which is the area that contains most of the resident population), where they spent over thirty-one percent of their fishing time. Another 28% of resident's time was spent in the Southern Lakes area that includes Marsh and Tagish Lakes, two popular lakes fished by Yukon residents. Another 27% were spent in the Southwest and Southeast regions. For their part non-resident anglers favoured the Southeast, south central and the Southern Lakes area.

Harvest

In 2000, anglers in the Yukon caught an estimated 263,436 fish of all species and retained 50,910 of them (Table 4).

Table 4. Harvest of Fish Species by Anglers in Yukon, 2000.								
Fish Species	Resident		Canadian non-resident		Other non-resident		Total	
	Caught	Kept	Caught	Kept	Caught	Kept	Caught	Kept
Arctic Grayling	41,773	8,993	14,336	3,333	49,977	4,637	106,085	16,963
Lake Trout	28,450	11,572	8,156	1,425	30,431	3,397	67,037	16,394
Rainbow Trout	8,930	2,544	469	116	1,333	45	10,731	2,705
Northern Pike	26,658	5,939	10,806	950	22,099	1,885	59,563	8,774
Whitefish	1,784	842	847	39	1,756	256	4,387	1,137
Dolly Varden	1,665	596	795	58	4,143	141	6,603	796
Bull Trout	224	36	88	21	19	0	330	57
Arctic Char	2,222	680	277	267	19	0	2,517	947
Chinook	741	158	351	98	104	0	1,196	256
Sockeye	36	12	54	0	94	0	183	12
Coho	413	219	47	21	56	56	516	295
Other	2,758	2,401	499	82	1,030	92	4,287	2,576
Total	115,653	33,992	36,724	6,409	111,059	10,509	263,436	50,910

Resident anglers caught 44% of the total number of fish caught and kept 67%. Non-resident non-Canadian anglers caught 42% of the total number of fish caught, but kept very few at only 21%, while non-resident Canadians kept only 13% of the fish caught.

Arctic grayling and lake trout were the most widely caught species, with Arctic grayling accounting for highest number kept.

All anglers combined, caught on average 30 fish, but kept only 8, with resident anglers keeping the most fish at 10, while non-residents kept less at 6 (Table 5).

Yukon residents were surveyed for the retention and use of fish caught in 2000. Anglers kept 87,500 pounds of all species caught and ate approximately 93% of their catch.

Anglers spent 93,906 days fishing in the Yukon with just over 11%, or 9,962 days, spent fishing on the Marsh-Tagish Lakes system, 77% being from resident anglers. Ten percent of lake trout caught and 16% of lake trout kept in Yukon came from within this system (Table 6).

Table 5. Disposition of Fish Caught and Kept by Anglers in Yukon, 2000.				
	Resident	Canadian non-resident	Other non-resident	Total
Total Fish Caught	115,653	36,724	111,059	263,436
Ave. per Angler	29	20	37	30
Total Fish Kept	33,992	6,409	10,509	50,910
Ave. per Angler	10	6	6	8

Table 6. Lake Trout fishing on the Marsh-Tagish Lakes System in Yukon, 2000.				
	Resident	Canadian non-resident	Other non-resident	Total
Total Days Fished	7,746	615	1,601	9,962
Average	6.1	2.4	2.9	4.8
Trout Caught	4,978	552	1,494	7,024
Average	3.9	2.1	2.8	3.4
Trout Kept	2,181	108	334	2,624
Average	1.7	0.4	0.6	1.3

Stocking program

Twenty four percent of Yukon residents fished in the stocked lakes in Yukon in 2000, while only 3% of non-residents accessed these lakes (Table 7). Of those that fished stocked lakes, the majority thought the quality of fishing in stocked lakes was fair or better (Table 8).

Table 7. Percentage of Anglers who fished in Stocked Lakes in Yukon, 2000			
	Resident %	Canadian non-resident %	Other non-resident %
Yes	24	4.4	1.8
No	76	96	98.2

Table 8. Opinions of anglers on the quality of Stocked Lake Fishing in Yukon, 2000.			
Rating	Resident %	Canadian non-resident %	Other non-resident %
Excellent	7.8	0	0
Very Good	14.5	18.3	0
Good	33.2	11.3	27.1
Fair	20.2	38.3	0
Poor	22.3	32.2	45.7
No response	2.1	0	27.1

Resident anglers angling pressure was greatest on Scout Lake at 1,335 days followed by Hidden Lakes at 1,144 days, Cantlie Lake at 739 days and Fisheye Lake at 704 days, while all non-residents only fished 184 days in total with the majority fishing on Lucky Lake (56 days) and Fisheye Lake (40 days).

Motivations

Non-resident anglers made 16,631 trips to the Yukon in 2000 and spent a total of 113,350 days in the Yukon. Fifty percent of these were fishing trips (Table 9).

Table 9. Trip Characteristics of Non-resident Anglers in Yukon, 2000.	
Characteristics	Number
Trips to the Yukon (all reasons)	16,631
Fishing trips to the Yukon	8,409
Days spent for all reasons	113,350
Days fished	35,569
Total night spent on fishing trips	77,263

Sixty-four percent of all non-resident anglers said they would have substituted other activities if there had been no fishing opportunities (Table 9).

Table 9. Attitude of non-resident Anglers if there had been no Fishing opportunities in Yukon, 2000.		
Activity	Canadian non-resident %	Other non-resident %
Stayed Shorter Time	9.5	17
Substituted Other Activities	75	56
Not come at all	7.9	19

Anglers rated fishing in the Yukon as good to excellent (Table 10). Non-residents still consider the fishing in the Yukon to be excellent at 20% of those surveyed, while only 13% of Yukoners thought the fishing was excellent.

Table 10. Attitude of Active Anglers on the quality of fishing in Yukon, 2000.			
Rating	Resident %	Canadian non-resident %	Other non-resident %
Excellent	12.8	19.8	19.7
Very Good	19.8	17.5	20.4
Good	32.2	18.3	23.1
Fair	17.6	13.4	14.5
Poor	12.6	18.3	13.2

Expenditures and Investments

Anglers in the Yukon invested \$7.3 million on major durables and property in 2000 (Table 11), of which \$3.8 million, or 52% was directly attributed to sport fishing activities. Boats and fishing equipment attracted a total, from all anglers, of \$2.5 million, while special vehicles (ATV's, snowmobiles, camper trucks, etc.) were popular items for residents only, accounting for \$2.6 million.

Resident anglers alone accounted for \$6,695,084 spent in the Yukon on major fishing related purchases, or 92% of the overall total.

Table 11. Major Purchases of Durables and Property attributable in whole or in part to Recreational Fishing in Yukon, 2000.				
Expenditures \$	Resident	Canadian non-resident	Other non-resident	Total
Fishing Equipment	294,694	16,869	89,442	401,006
Boating Equipment	2,026,525	6,677	138,604	21,771,806
Camping Equipment	736,449	2,615	41,943	781,007
Special Vehicles	2,590,061	0	16,376	2,606,437
Land/Buildings	946,944	2,565	192,398	1,141,906
Other	100,411	9,491	53,558	163,460
Total	6,695,084	38,218	532,321	7,265,622
Total Attributable to Sport Fishing	3,554,600	29,512	229,606	3,813,718

Yukon residents spent \$3.5 million attributed totally to sport fishing or 93% of the total spent by all anglers. In direct expenditures' non-resident non-Canadian anglers accounted for the most money spent at \$5.6 million, \$3 million more than resident anglers. This was due to the amount that non-resident non-Canadian anglers spent on lodge packages at over \$3 million (Table 12).

Comparison to 1995 results

Total licensed angling population for both resident and non-residents decreased by 18% in 2000 and the total number of active anglers also decreased to 20%. The biggest decrease was in resident active anglers with numbers fished dropping by 24%.

Resident anglers fished less number of days in 2000, with a decrease of 25,000 days or a 30% change from 1995. Non-residents decreased their fishing activity by 11%, spending approximately 35,569 days fishing in 2000 as compared to 39,847 days in 1995.

The total fish caught and retained of all species combined was down by 37% from 80,258 in 1995 to 50,910 in 2000.

Total direct expenditures by all licensed anglers in the Yukon increased by +1.3% in 2000, from \$9.7 million spent in 1995 to \$9.8 million in 2000. Resident anglers spending decreased by 19% in 2000, while non-resident anglers increased by 11%.

The major purchase and investment category decreased by 14% and likewise, the amount of purchases and investments that were totally attributable to sport fishing was down by 20%. Yukon resident purchases in 2000 were

slightly less than in 1995 with a slight decrease in total amount of \$737,000 attributable to sport fishing. Non-residents made the most significant decrease in purchase, with major purchases' and total attributable to sports fishing decreasing by 42% in both categories (Table 13).

Table 12. Direct Expenditures made in Yukon, 2000.				
Expenditures \$	Resident	Canadian non-resident	Other non-resident	Total
Packages	47,499	389,029	3,103,724	3,540,253
Accommodation	32,042	128,866	4,757,772	636,680
Campsite Fees	38,429	72,846	126,692	237,967
Food Costs	680,626	339,276	566,831	1,586,732
Travel Costs	883,445	503,043	861,621	2,248,109
HHLD Boat Costs	510,153	30,030	21,692	561,875
Boat Rental	16,541	10,020	109,075	135,636
Fishing Supplies	188,895	58,402	99,906	347,203
Guide Services	4,037	5,900	118,524	128,461
Licence Fees	87,767	53,284	111,886	252,937
Access Fees	2,505	2,541	12,141	17,186
Other Costs	16,608	71,975	41,117	129,700
Total Direct Expenditures	2,508,545	1,665,212	5,648,980	9,822,738

Conclusions

The results of the 2000 survey of sport fishing in the Yukon show that angling remains a popular recreational activity and although there has been a decrease in participation from 1995, amount spent in total direct expenditures has remained stable.

In 2000 14,553 licensed adult anglers participated in fishing, 6,476 of whom were residents of the Yukon and 8,077 were non-residents. Licence sales decreased between 1995 and 2000 by 18%.

Licensed anglers spent approximately 93,906 days fishing in the Yukon in 2000, 24% less than in 1995. The total catch by licensed anglers was 50,910 fish down by 37% from 1995's catch. Sixty-five percent of anglers practised live release, similar to attitudes in 1995. Arctic grayling, lake trout and northern pike were the species most frequently retained in 2000.

In 2000, anglers spent a total of \$7.2 million on major purchase and investments and \$3.8 million totally attributable to sport fishing.

Table 13. Comparisons of Angler Characteristics, Days Fished, Species Harvested and expenditures in Yukon for 1995 and 2000.

	Resident			Non-resident			Total		
	1995	2000	Change	1995	2000	Change	1995	2000	Change
Total Licensed Angling Population	7,482	6,476	-13%	9,017	8,077	-14%	16,499	14,553	-18%
Total Active Adult Anglers	6,292	4,756	-24%	7,489	6,267	-16%	13,781	11,023	-20%
Total Days Fishing	83,565	58,337	-30%	39,847	35,569	-11%	123,412	93,906	-24%
Total Fish Caught and Retained	51,300	33,992	-34%	28,959	16,918	-41%	80,258	50,910	-37%
Total Direct Expenditures	3,110,145	2,508,545	-19%	6,579,972	7,314,192	11%	9,693,118	9,822,737	1.30%
Major Purchases and Investments	7,492,414	6,695,084	-11%	986,589	570,539	-42%	8,479,004	7,265,623	-14%
Total Attributable to Sport Fishing	4,291,817	3,554,600	-17%	446,979	259,118	-42%	4,738,797	3,813,718	-20%