# Angling in Manitoba (2000)





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# MANITOBA ANGLING SURVEY 2000 HIGHLIGHTS

- Contrary to the national trend of declining licence sales, and decreasing angling and economic activity, Manitoba showed increases in most areas.
- There were 185, 971 licensed adult anglers in Manitoba in 2000 (up +7% from 1995, not including resident anglers over 65). Of these, 77% were residents, 4% were from other Canadian provinces/territories, and 19% were from outside of Canada. Non-Canadian licence sales in particular increased by 19%.
- Over 60% of non-Canadian anglers are from the West North Central area of the U.S. (North and South Dakota, Minnesota, Iowa, Nebraska, Kansas and Missouri).
- Overall angling effort remained stable in Manitoba. Anglers fished for approximately 2.71 million days, of which 412,200 days were spent fishing through the ice. Total nonresident (other Canadian and non-Canadian) angler days actually increased +21% in 2000 to 324,443. There was also a significant increase in overnight trips (+23%).
- Almost 14 million fish were caught (up +51% from 1995). The primary species caught were walleye (5.7 million fish), northern pike (4.2 million), and perch (2.2 million fish).
- The overall release rate increased slightly to 77% in Manitoba in 2000.
- Anglers spent \$120.1 million in Manitoba on activities and supplies directly related to fishing - a significant increase from 1995 (+51%). The biggest increase was in package sales (\$42 million). An additional \$91.7 million was spent on major purchases or investments related to angling, also a significant increase from 1995 (+64%).
- The quality of the angling experience in Manitoba in 2000 was rated highly by all anglers; 73% of residents under 65, 78% of other Canadians, and 88% of non-Canadians rated their experience from "excellent" to "good".
- Almost 66% of nonresident anglers (other Canadian and non-Canadian) indicated that the primary reason they chose Manitoba as a fishing destination was the superior quality of angling.
- For the first time, Manitoba residents over 65 were surveyed, following introduction of a Resident Senior Licence in 1997. The Senior Licence allows the same limits as a Conservation Licence. Residents over 65 wishing to harvest a regular limit must buy a Regular Licence. In 2000, 3,919 Regular Licences and 8,534 Senior Licences were sold to resident anglers over 65.

## **INTRODUCTION**

The sixth national survey of recreational angling in Canada was conducted in 2000. As with previous surveys, the federal Department of Fisheries and Oceans conducted the survey in cooperation with provincial and territorial agencies. Questions used in the survey were selected to provide continuity within jurisdictions and allow comparisons with other survey years. The results of the survey provide the only national information on activity and harvest in our recreational fisheries and also provides a detailed source on the economic dimensions of this activity.

Nationally, there was a 16% decline in the number of active adult anglers since 1995, the majority of loss being with resident anglers. The number of days fished dropped by 16% and total catch declined 9%. The number of fish kept dropped by 25%. The release rate increased from 55% in 1995 to 64% in 2000, showing the continuing trend of anglers becoming less consumptive. Economically, there was a 5% decrease in expenditures directly related to angling.

In 1997, Manitoba introduced a Resident Senior Licence for anglers over 65 years of age. The Senior Licence allows the same limits as a Conservation Licence. Residents over 65 wishing to harvest a regular limit must buy a Regular Licence, which was not the case in 1995. Therefore, when comparing results from the 1995 and 2000 surveys, data on Manitoba residents over 65 will not be included.

Manitoba did not follow the national trend of declining licence sales. In Manitoba, the total number of licensed adult anglers increased by 7% from 162,311 in 1995 to 173,518 in 2000 (not including another 12,453 licences sold to resident anglers over 65). While Resident and Nonresident Canadian licence sales increased by 4% and 6%, respectively, Nonresident Non-Canadian licence sales increased by 19%. Angling effort remained stable in Manitoba between 1995 and 2000, while total catch increased 51%. The overall release rate for fish caught in Manitoba in 2000 (77%) was also up slightly from 1995. There was a significant increase in direct expenditures (+51%) by anglers in 2000, with the biggest increase in the area of package sales. There was also a significant increase of package sales.

As with previous surveys, questionnaires were sent to anglers randomly selected from licence sales. Approximately 2,600 questionnaires were mailed to resident anglers, 500 to anglers from other provinces and territories ("other Canadians") and about 1,200 to nonresident, non-Canadian anglers ("non-Canadians"). The data in this report gives a general overview of the results for Manitoba.

#### ANGLER PROFILE

There were 185,971 licensed adult anglers in Manitoba in 2000. Of these, 77% were residents (including individuals over 65), 4% were from other Canadian provinces/territories and 19% were from outside of Canada (Table 1a). Of Manitoba residents, 37% opted for a Regular Licence, 57% purchased a Conservation Licence, and 6% purchased the new Senior Licence. Of nonresidents, 60% of Canadians and 83% of non-Canadians purchased a Conservation Licence.

Not all licence holders are active anglers. In 2000, 5% of all residents, 4% of nonresident Canadians and 1% of nonresident non-Canadian licence holders did not fish. Of active adult anglers, 24% of residents and nonresident Canadians, and 8% of non-Canadians were female. Children under 16 living with licensed anglers comprised 27%, 20% and 11%, respectively of active resident, other Canadian, and non-Canadian anglers.

In 2000, there were 8,534 Senior Licences sold, while 3,919 (30%) of Manitoba resident licensees over the age of 65 opted for a Regular Licence with the higher limits (Table 1b). Of the latter, 15% bought licences but did not fish, compared to 8% of Senior Licence holders. Of all active resident anglers over 65, 17% of those with Regular Licences and 19% of those with Senior Licences were female.

Excluding licensees over 65, there were 174,765 licensed adult anglers in Manitoba in 2000, up 8% from 162,311 in 1995. The number of active, resident female anglers dropped slightly from 25% of active resident anglers in 1995 to 22% in 2000. The number of nonresident females remained relatively stable with 11% of active anglers being female in 2000, compared to 12% in 1995.

The number of active anglers among children under 16 living with licensed anglers remained relatively stable (26% of all active anglers in 1995 and 25% in 2000).

The average age of licensed anglers (excluding residents over 65) increased slightly, with nonresidents being older than residents. Resident male anglers averaged 43 years in 2000, compared to 40 in 1995. Male nonresident Canadians averaged 47 and non-Canadian males averaged 51 years, compared to 47 for all nonresident males in 1995. Resident female anglers averaged 41 years compared to 39 in 1995. Female nonresident Canadians averaged 44 years, and nonresident non-Canadian female anglers averaged 49 years, compared to 45 years for all nonresident females in 1995. The average age of male resident licensed anglers over 65, regardless of licence type, was 72 years. Female anglers averaged 71 years.

Excluding licensees over 65, resident purchases of Conservation Licences remained stable (57% in 2000 compared to 59% in 1995). About 60% of nonresident Canadians and 83% of non-Canadians purchased a Conservation Licence (compared to 68% for all nonresidents in 1995).

On average, residents under 65 who purchased Regular Licences had more angling experience that Conservation Licence holders (23 years versus 17 years). Residents over 65 with Regular Licences and Senior Licences averaged 26 and 28 years of experience, respectively. Nonresident Canadians averaged 12 years, while non-Canadians averaged 9 years.

About 52% of resident anglers regarded themselves as average anglers, regardless of licence type. About 39% of Regular Licence holders under 65 considered themselves experienced or better while only 23% of Conservation Licence holders considered themselves to be experienced anglers. About 70% of anglers over 65 with Regular Licences considered themselves average anglers, while 19% thought themselves experienced or better. Of those anglers with a Senior Licence, 56% considered themselves to be average anglers, while 20% considered themselves to be experienced or better.

In total, 43,185 nonresidents purchased angling licences in 2000, up 17% from 36,889 nonresidents in 1995. Approximately 16% were other Canadians with the majority being from Saskatchewan and Alberta (Table 2). The 84% of other nonresidents primarily come from the United States. The majority of these anglers came from the West North Central area (Figure 1). Data concerning nonresident trip characteristics, where they obtain trip information and why they selected Manitoba can be found on page 18.

	Resident			Nonresident	Nonresident Canadian (d)		Nonresident Other	
	Regular (c)	Conserv.	Senior	Regular	Conserv.	Regular	Conserv.	Total
Total Licensed Angling population (a) - Adults	53,275	80,974	8,534	2,817	4,282	6,130	29,959	185,971
Active Adults Anglers								
- Males	41,952	54,669	6,334	2,102	3,087	5,595	27,354	141,093
- Females	8,419	22,185	1,533	671	929	535	2,154	36,426
Total	50,371	76,854	7,867	2,773	4,016	6,130	29,508	177,519
Children (b)	48,894		1,720		4,557		55,171	
Total Active Anglers - All Ages		183,986		8,5	509	40,	195	232,690

Table 1a. Numbers and characteristics of anglers in Manitoba (2000) by Licence Type - All Anglers

(a) Individuals who purchased an angling licence in Manitoba in 2000. This group provides the basis for the statistical information in this report.

(b) Individuals under 16 years of age - minimum number as reported by survey respondents.

(c) Includes individuals over 65 who purchased a Regular Licence.

(d) Canadians who live in provinces/territories other than Manitoba and who fished in Manitoba in 2000.

## Table 1b. Numbers and characteristics of anglers in Manitoba (2000) -Manitoba Residents Over 65

	Regular Licence Over 65	Senior Licence	Total
Licensed Anglers Over 65	3,919	8,534	12,453
Active Anglers Over 65			
- Males	2,758	6,334	9,092
- Females	581	1,533	2,114
Total Active Anglers Over 65	3,339	7,867	11,206

Province - State Group	Numbers
Canadian:	
Ontario	710
Saskatchewan	3,757
Alberta	1,698
British Columbia	934
Canadian Total	7,099
Non-Canadian (U.S.A.):	
Mid Atlantic	349
East North Central	8,240
West North Central	22,652
Mountain	1,298
Pacific	599
South Atlantic	1,347
East South Central	150
West South Central	1,201
New England	250
Non-Canadian Total	36,086
TOTAL	43,185

# Table 2. Origin of nonresident licensed anglers in Manitoba (2000) -All Anglers

# Regional distribution of United States residents who held Manitoba licenses in 2000



#### ANGLING EFFORT

"Angling effort" is measured in days, where all or part of a day is considered one unit of effort.

Anglers in Manitoba fished for approximately 2.71 million days in 2000 (Table 3). Resident anglers under 65 accounted for 82% of the total, residents over 65 7%, other Canadians 2% and non-Canadians 9% of the total days fished. Average number of days fished per active adult angler was 18 for residents under 65, 17 for those over 65, 9 for other Canadians and 7 for non-Canadians.

Excluding resident anglers over 65, angling activity in Manitoba remained stable (2.21 million days in 2000 versus 2.19 million days in 1995). Residents holding Regular Licences in 2000 still averaged more days fished (19) than resident Conservation Licence holders (17), although the difference is less than in 1995 (20 versus 13 days).

Anglers spent about 412,200 days fishing through the ice (Table 3). This represents 15% of the total effort, with residents under 65 accounting for 90% of days ice fished and those over 65 accounting for 6%. Of those who ice fished, Regular Licence holders under 65 averaged 8 days and Conservation Licence holders under 65 ice fished an average of 10 days. Regular Licence holders over 65 averaged the least number of days (5), while Senior Licence holders averaged the most days ice fished (13).

Excluding resident anglers over 65, ice fishing angling activity increased 46% from 266,000 days in 1995 to 387,947 days in 2000, with residents still accounting for 96% of the angling effort.

While the number of anglers under 16 remained stable, total days fished increased 17% from 281,000 in 1995 to 328,750 in 2000. As in previous years, resident youth are the most active, accounting for 92% of this effort.

For the purposes of this survey, the province is divided into seven areas and these areas have not significantly changed since 1985 (Figure 2). This allows for comparisons of effort and catch rates by area and survey year. In 2000, almost 53% of all angling effort took place in areas four and seven. These areas supported 54% of effort by residents under 65, almost 67% of effort by residents over 65, and 32% of nonresident effort. However, it is important to note that a large majority of nonresident effort continues to take place on the Red River and Buffalo Bay. The majority of nonresident effort (47%) occurred in northern Manitoba in areas one and two.

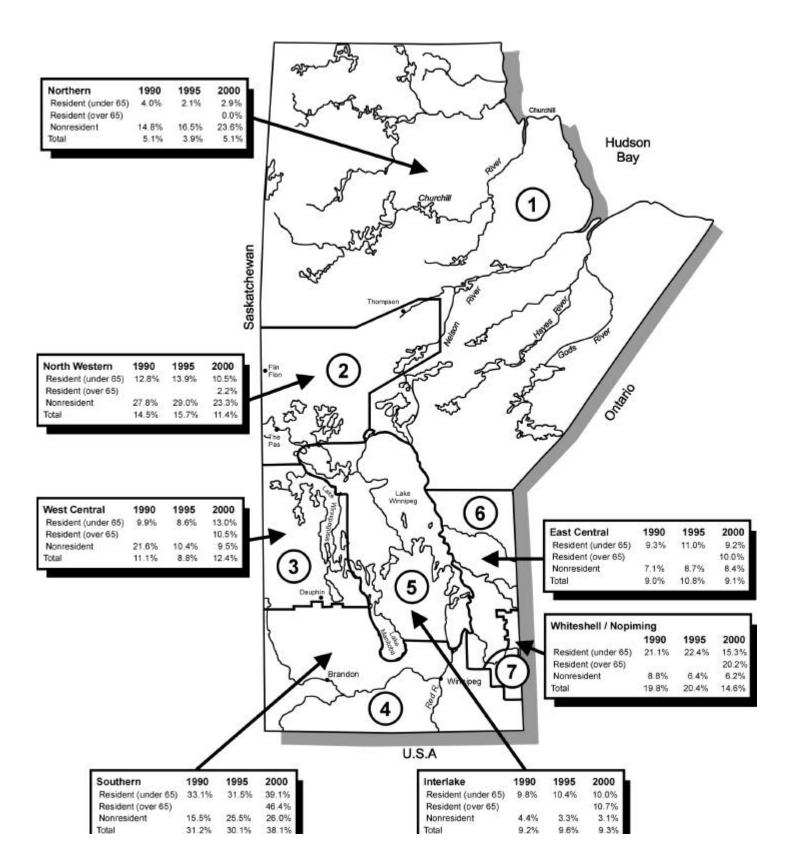
The majority of nonresident effort in area four can be attributed to activity on Buffalo Bay and the Red River channel catfish fishery. As in 1995, the drop in nonresident activity in area three may be attributed to the inability to survey Saskatchewan anglers fishing on Lake-of-the-Prairies. An agreement on licence reciprocity was reached with Saskatchewan between the 1990 and 1995 surveys. Therefore Saskatchewan residents no longer required a Manitoba licence to fish this lake and thus were not available to be surveyed.

		Residents		Nonresident	Nonresident	Total
	Under 65	Over 65*	Total	Canadian	Other	
Adult Anglers						
Days Fished - Open Water	1,843,315	161,886	2,005,201	55,454	235,207	2,295,862
Days Ice Fished	371,056	24,275	395,331	6,025	10,866	412,222
Total Days Fished	2,214,371	186,161	2,400,532	61,479	246,073	2,708,084
No. of Active Adult Anglers	123,886	11,206	135,092	6,789	35,638	177,519
Average Days/Angler - Open Water	14.9	14.4	14.8	8.2	6.6	12.9
Average Days/Angler - Ice Fishing	3.0	2.2	2.9	0.9	0.3	2.3
Average Days/Angler - Total	17.9	16.6	17.8	9.1	6.9	15.3
Anglers under 16 Years						
Total Days Fished			302,543	7,035	19,173	328,751
No. of Active Anglers			48,894	1,720	4,557	55,171
Average Days/Angler			6.2	4.1	4.2	6.0

# Table 3. Angling effort in Manitoba (2000) - All Anglers.

\*Includes anglers with Senior Licences and anglers over 65 with Regular Licences.

Percentage of angler-days expended by anglers in each fishing area of Manitoba in 2000 compared to 1995 and 1990.



#### CATCH AND HARVEST

Almost 14 million fish were caught by anglers in Manitoba in 2000 (Table 4). Excluding resident anglers over 65, 13.4 million fish were caught, up 51% from 8.9 million fish in 1995. The catch of walleye, pike and perch increased by 45% (1.7 million fish), 58% (1.5 million fish) and 102% (1 million fish), respectively. The number of smallmouth bass caught increased by 41% and the number of channel catfish caught increased by 38%. The only notable decrease was in the number of stocked trout caught (-48%).

Residents under 65 holding Regular Licences and Conservation Licences caught the majority of fish (35% and 30%, respectively). All residents over 65 (Senior and Regular licensees) only caught 4% of the fish. Nonresident Canadians caught only 3% and non-Canadians caught 29% of the fish.

In 2000, the average catch per resident angler (including those over 65) was 70 fish. The average per nonresident Canadian was 58 fish and the average per non-Canadian angler was 114 fish.

The average catch per resident angler under 65 holding Regular Licences increased 36% from 75 in 1995 to 102 in 2000 and increased 74% from 31 in 1995 to 54 in 2000 for Conservation Licence holders. Catch rates for total nonresident anglers increased 28% from 82 in 1995 to 105 fish per angler in 2000.

Anglers fishing in Manitoba in 2000 retained approximately 3.4 million fish, with an overall release rate of 76%. Nonresidents had the highest release rates (79% and 88% for other Canadians and non-Canadians, respectively) while residents over 65 had the lowest (56%).

Excluding resident anglers over 65, anglers fishing in Manitoba retained approximately 3.1 million fish in 2000 compared to 2.3 million in 1995. The over-all release rate for fish caught in Manitoba was 77%, up from 74% in 1995. The release rate for all nonresident anglers was slightly higher at 87% in 2000 in compared to 86% in 1995. For the two major species, the release rate for pike increased slightly from 86% in 1995 to 88% in 2000. The release rate for walleye increased from 66% in 1995 to 72% in 2000. The stocked trout release rate increased from 59% (1995) to 73% (2000).

As in other years, walleye, pike and perch were the most often caught and retained species in Manitoba (Table 4). Walleye alone accounted for 41% of fish caught and 50% of all fish kept.

Anglers were asked if they released any fish that they caught in Manitoba in 2000 and, if so, whether it was because it was mandatory, voluntary, or for both reasons.

Of those who responded to the question, 89% of residents, 87% of other Canadians, and 97% of non-Canadians said they had released fish. When they were asked why, over half of residents and other Canadians said it was voluntary. Resident anglers over 65 were less likely to practice catch and release (about 70% compared to 90% of those under 65). Residents under 65 with Conservation Licences were the most likely to practice it voluntarily (almost 60%). Over half of non-Canadians said they practiced catch and release both for voluntary and mandatory reasons.

Resident anglers were asked to estimate the total weight of the fish that they kept. Almost 3.7 million pounds of fish were kept, at an average of 27 pounds per respondent. Almost 90% of the fish kept were eaten by respondents or members of their household.

Fish Species		Residents		Neurosident	Nonrosidont	
	Under 65	Over 65*	Total	Nonresident Canadian	Nonresident Other	Total
No. of Fish Caught						
Walleye	3,521,492	184,117	3,705,609	136,385	1,860,526	5,702,520
Pike	2,124,182	133,428	2,257,610	188,668	1,733,847	4,180,125
Perch	1,842,656	115,082	1,957,738	43,481	191,791	2,193,010
Lake Trout	158,524	1,459	159,983	7,090	103,412	270,485
Smallmouth Bass	176,170	10,741	186,911	5,699	75,833	268,443
Catfish	241,114	7,969	249,083	2,720	54,178	305,981
Stocked Trout	105,159	4,719	109,878	1,952	9,776	121,606
Other	774,782	51,250	826,032	4,953	35,103	866,088
Total Fish Caught	8,944,079	508,765	9,452,844	390,948	4,064,466	13,908,258
No. of Active Adult Anglers	123,886	11,206	135,092	6,789	35,638	177,519
Fish Caught per Active Adult Angler	72	45	70	58	114	78
No. of Fish Retained						
Walleye	1,240,560	105,666	1,346,226	42,884	280,748	1,669,858
Pike	403,709	40,102	443,811	12,826	63,751	520,388
Perch	667,179	51,769	718,948	18,003	126,016	862,967
Lake Trout	28,113	823	28,936	2,434	10,031	41,401
Smallmouth Bass	13,610	3,432	17,042	266	1,550	18,858
Catfish	7,207	412	7,619	33	2,684	10,336
Stocked Trout	44,069	3,703	47,772	1,284	2,344	51,400
Other	165,663	15,414	181,077	2,821	3,398	187,296
Total Fish Retained	2,570,110	221,321	2,791,431	80,551	490,522	3,362,504
Fish Kept per Active Adult Angler	21	20	21	12	14	19
Percent of Fish Released	71%	56%	70%	79%	88%	76%

 Table 4. Number of fish caught and retained by species (2000) - All Anglers

#### **ANGLING EXPENDITURES**

In 2000, anglers spent \$120.1 million in Manitoba on activities and supplies directly related to fishing (Table 5). Resident expenditures comprised 49%, other Canadians 2%, and non-Canadians 49% of total direct expenditures in the province. Expenditures by resident anglers over 65 comprised only 5% of total resident expenditures and only 2.6% of total direct expenditures by all anglers in Manitoba. Residents under 65 with Regular Licences and those with Conservation Licences each contributed 23% of total expenditures.

Direct expenditures on ice fishing comprised only 3.5% of the total, with residents contributing 95% all expenditures on ice fishing (Table 5).

Excluding residents over 65, anglers spent \$117 million in 2000, a significant increase (+50%) from the \$77.9 million in direct expenditures observed in 1995. Nonresident expenditures, comprising 51% of total expenditures, increased 113% from \$28.8 million in 1995 to \$61.3 million in 2000. Expenditures by residents under 65 also increased by 13% from \$49.2 million in 1995 to \$55.6 million in 2000. The biggest increase came in the area of package sales, up 132% from \$18.1 million in 1995 to \$42 million in 2000. Food and lodging expenditures increased 37% from \$19.2 million (1995) to \$30.6 million (2000).

On average, residents under 65 spent \$449 on angling in 2000, residents over 65 spent \$282, nonresident Canadians spent \$394, and non-Canadians spent \$1,646. All show increases from average expenditures in 1995 (\$397, \$290, and \$784 for residents, other Canadians and non-Canadians, respectively). In 2000, residents under 65 with Regular Licences spent and average of \$580 on angling, while those with Conservation Licences spent an average of \$362 (compared to \$530 and \$304, respectively, in 1995).

Anglers also made purchases and investments in durable goods related to angling. The questionnaire asked what portion of these expenditures were attributable to angling. An additional \$91.7 million was spent on such things as equipment, vehicles and land and buildings (Table 6). Resident anglers accounted for 96% of these expenditures. Excluding residents over 65, an additional \$88.5 million was spent, up 64% from \$54.1 million in 1995. Resident anglers also accounted for almost the entire amount spent on major purchases for ice fishing, which comprised 11% of all major purchases.

Expenditures		Residents		Nonresident	Nonresident	TOTAL
Expenditures	Under 65	Over 65*	Total	Canadian	Other	IUIAL
Total Package Costs	\$2,423,592	\$66,672	\$2,490,264	\$213,160	\$39,342,893	\$42,046,317
Accommodation	\$2,490,950	\$98,341	\$2,589,291	\$310,893	\$5,074,151	\$7,974,335
Campsite Fees	\$2,770,236	\$208,988	\$2,979,224	\$212,004	\$803,063	\$3,994,291
Food	\$14,233,752	\$609,897	\$14,843,649	\$701,106	\$3,978,272	\$19,523,027
Travel	\$16,111,267	\$1,039,547	\$17,150,814	\$711,053	\$4,582,502	\$22,444,369
Household-owned Boat Costs	\$7,910,109	\$613,722	\$8,523,831	\$139,459	\$783,013	\$9,446,303
Boat Rentals	\$809,103	\$10,446	\$819,549	\$28,551	\$556,135	\$1,404,235
Fishing supplies	\$5,998,327	\$340,722	\$6,339,049	\$205,858	\$1,356,351	\$7,901,258
Guide Services	\$41,142	<b>\$</b> 0	\$41,142	\$20,629	\$900,193	\$961,964
Fishing Licence Fees	\$1,792,181	\$146,200	\$1,938,381	\$98,772	\$1,037,110	\$3,074,263
Access Fees	\$728,963	\$24,506	\$753,469	\$18,936	\$89,572	\$861,977
Other	\$278,909	\$O	\$278,909	\$15,214	\$160,316	\$454,439
Total Direct Expenditures	\$55,588,531	\$3,159,041	\$58,747,572	\$2,675,635	\$58,663,571	\$120,086,778
No. of Active Anglers	123,886	11,206	135,092	6,789	35,638	177,519
Ave. per Active Angler	\$448.71	\$281.91	\$434.87	\$394.11	\$1,646.10	\$676.47
No. of Angler-Days	2,214,371	186,161	2,400,532	61,479	246,073	2,708,084
Ave. per Angler-Day	\$25.10	\$16.97	\$24.47	\$43.52	\$238.40	\$44.34

# Table 5. Expenditures directly attributable to recreational fishing in Manitoba (2000) - All Anglers

# **ICE FISHING**

		Residents		Nonresident	Nonresident	Total
Expenditures	Under 65	Over 65*	Total	Canadian	Other	Total
Total Expenditures	\$3,910,615	\$105,903	\$4,016,518	\$100,674	\$106,411	\$4,223,603
No. of Active Anglers	123,886	11,206	135,092	6,789	35,638	177,519
Ave. per Active Angler	\$31.57	\$9.45	\$29.73	\$14.83	\$2.99	\$23.79
No. of Angler-Days of Ice Fishing	371,056	24,275	395,331	6,025	10,866	412,222
Ave. Per Angler-Day	\$10.54	\$4.36	\$10.16	\$16.71	\$9.79	\$10.25

\*Includes anglers who purchased Panier Licenses and anglers over 65 who purchased Pagular Licenses

Expandituras		Residents		Nonresident	Nonresident	Total
Expenditures	Under 65	Over 65*	Total	Canadian	Other	TOLAI
Fishing Equipment	\$8,784,488	\$293,348	\$9,077,836	\$117,294	\$452,115	\$9,647,245
Boating Equipment	\$29,711,164	\$2,398,188	\$32,109,352	\$133,620	\$993,450	\$33,236,422
Camping equipment	\$8,134,417	\$103,341	\$8,237,758	\$71,531	\$26,569	\$8,335,858
Special Vehicles	\$25,175,271	\$263,294	\$25,438,565	\$419,152	\$8,391	\$25,866,108
Land/Buildings	\$10,124,422	\$60,839	\$10,185,261	\$367,372	\$629,494	\$11,182,127
Other	\$3,144,616	\$85,178	\$3,229,794	\$21,189	\$166,359	\$3,417,342
Total Major Purchases	\$85,074,378	\$3,204,188	\$88,278,566	\$1,130,158	\$2,276,378	\$91,685,102
No. of Active Anglers	123,886	11,206	136,334	6,822	35,839	178,995
Ave. per Active Angler	\$686.72	\$285.94	\$647.52	\$165.66	\$63.52	\$512.22

# Table 6. Major purchases or investments relating in whole or in part to recreational fishing in Manitoba (2000) - all anglers.

\*Includes anglers who purchased Senior Licences and anglers over 65 who purchased Regular Licences.

# **ICE FISHING**

Expenditures		Residents		Nonresident	Nonresident	Total	
Expenditures	Under 65	Over 65* Total		Canadian	Other	TOLAI	
Total Expenditures	\$9,877,789	260,435	\$10,138,224	4,437	11,844	\$10,154,505	
No. of Active Anglers	123,886	11,206	136,334	6,822	35,839	178,995	
Ave. per Active Angler	\$79.73	\$23.24	\$74.36	\$0.65	\$0.33	\$56.73	

\*Includes anglers who purchased Senior Licences and anglers over 65 who purchased Regular Licences.

#### BAIT USE

Anglers were asked about their use of and preference for various types of bait. The first part of the question asked anglers to rate bait/lures in order of use and how much processed and/or live bait they purchased. The second part of the question asked if anglers used live bait fish, processed bait fish and/or live leeches that they caught themselves for their own use.

About 60% of all resident anglers selected frozen/salted bait fish as their first or second choice while 31% of residents stated that they never used this type of bait (Table 7a). For residents, lures were the next most often selected (39%), followed by worms (36%), live bait fish (13%), live leeches (7%) and "other" bait (4%). Almost 80% of residents stated that they never used live leeches, and 73% never used live bait fish (although residents had the highest rate of use of live bait fish).

Residents under 65 were more likely to choose frozen/salted bait fish (62%) than residents over 65 (38%) (Table 7b). Residents over 65 were the least likely to choose live bait fish or leeches. Over 90% never used either type of live bait. Residents under 65 holding Regular Licences were more likely to use live bait fish than were those with Conservation Licences, while use of live leeches by both groups was about the same.

Nonresident Canadians had similar preferences to residents with frozen/salted bait fish being their most often used bait; however, they had the highest preference for leeches (14%). They were the least likely to select live bait fish (6%). Non-Canadians preferences differed from the others, with lures being their top choice (67%). Their next most selected bait was worms (29%) and frozen/salted bait fish (28%). Non-Canadians also preferred leeches more than residents (12%), and used live bait fish more than other Canadians (10%).

Almost 811,000 packages of frozen/salted bait fish were purchased by all anglers in 2000 (Table 8). Residents accounted for 91% of total sales. Worms were the next most often purchased bait (391,000 dozen) and again residents were the major buyers (81%). Approximately 183,000 dozen live bait fish were sold in the province of which residents purchased 86%. Residents also bought 68% of the 93,000 dozen live leeches sold in Manitoba.

Excluding residents over 65, about 776,400 packages of frozen/salted bait fish were sold, up 26% from 614,000 packages purchased by all anglers in 1995. The amount of worms, live bait fish, and live leeches purchased in 2000 all declined slightly by -6%, -3%, and -8%, respectively, from volumes sold in 1995.

Anglers were also asked if they used any bait that they caught themselves. Less than 7% of resident anglers said that they caught live bait fish for their own use while only 5% caught and used their own live leeches. Only 6% caught and processed their own frozen/salted bait fish for personal use. Nonresidents were even less active with only 3% catching and using their own live bait fish. Less than 3% caught and used their own live leeches and slightly more than 3% caught and processed bait fish for their own use.

Bait Type	Resid	dents	Nonresident	Canadians	Nonresident Other		
	1st & 2nd Choice	Never selected	1st & 2nd Choice	Never selected	1st & 2nd Choice	Never selected	
Frozen/Salted Bait Fish	60%	31%	56%	37%	28%	65%	
Worms	36%	47%	34%	57%	29%	63%	
Live Bait Fish	13%	73%	6%	85%	10%	83%	
Live Leeches	7%	79%	14%	78%	12%	80%	
Lures	39%	36%	40%	42%	67%	22%	
Other Bait	4%	82%	4%	85%	4%	91%	

Table 7a. Bait Preference (2000) - All Anglers

Table 7b. Bait Preference (2000) - Manitoba Residents

Bait Type 1	Residents	under 65	Residents	s over 65	Total		
	1st & 2nd Choice	Never selected	1st & 2nd Choice	Never selected	1st & 2nd Choice	Never selected	
Frozen/Salted Bait Fish	62%	28%	38%	57%	60%	31%	
Worms	37%	45%	22%	74%	36%	47%	
Live Bait Fish	13%	72%	4%	93%	13%	73%	
Live Leeches	7%	78%	6%	92%	7%	79%	
Lures	41%	33%	25%	66%	39%	36%	
Other Bait	4%	81%	3%	94%	4%	82%	

# Table 8. Bait purchased (2000) - All Anglers

Bait Type & Amount Purchased	Residents			Nonresident	Nonresident	Tatal
	Under 65	Over 65	Total	Canadian	Other	Total
Packages of Frozen/Salted Bait Fish	702,357	34,459	736,816	17,441	56,602	810,859
Dozens of Worms	312,022	6,103	318,125	7,169	65,965	391,259
Dozens of Live Bait Fish	156,486	333	156,819	4890	21,515	183,224
Dozens of Live Leeches	60,662	1,902	62,564	3867	26,130	92,561

# NONRESIDENT TRIP CHARACTERISTICS

Nonresidents (other Canadians and non-Canadians) were asked several questions regarding trip information. This included why they selected Manitoba as a fishing destination and what sources of information they used when planning their trip.

Nonresidents who purchased angling licences made 184,100 trips to Manitoba in 2000, of which 61% were for fishing (Table 9). Of the 113,100 fishing trips, fishing was the main reason for over 93,000 visits and angling was the secondary reason for 12,400 trips. For 2,100 trips, angling was decided upon after arriving in Manitoba.

Nonresident anglers spent 508,400 days in Manitoba (a 7% increase from 1995) and of these, 324,400 days were spent fishing, a 21% increase over 1995. Day trips for fishing declined slightly (-6%) but there was a significant increase (+23%) in the number of overnight trips when compared to 1995.

	1990	1995	2000
Trips to Manitoba - All Reasons	176,212	180,997	184,079
Fishing Trips to Manitoba	96,748	105,031	113,074
- % of All Trips	55%	58%	61%
Fishing Trips:			
- Main Reason for Visit	80,167	90,821	93,030
- Secondary Reason	12,969	10,733	12,433
- Decided Upon After Arrival	3,612	3,501	2,103
Day Trips for Fishing	57,472	55,248	52,086
Overnight Trips for Fishing	39,276	49,783	60,988
Days Spent in Manitoba for All Reasons	474,865	473,272	508,389
Days Spent Fishing	251,536	267,493	324,443
- % Fishing Days	53%	57%	64%
Total Nights Spent on Fishing Trips	224,393	250,721	292,814

# Table 9. Trip characteristics of nonresident anglers in Manitoba (1990,1995, 2000).

Nonresidents were also asked what primary factors played a role in selecting Manitoba as a fishing destination over other places in 2000. The question was structured to allow anglers to select more than one reason and anglers were not asked to rank their selections.

Almost 66% of respondents stated that they selected Manitoba for the superior quality of angling. About 49% indicated that they had previously visited Manitoba while 44% stated that they wanted to be with family and friends. Ease of travel to Manitoba had a 36% response while 26% had referrals from other anglers. Conservation oriented angling regulations and superior quality of service were both noted by 19% of respondents. Less expensive and diversity of angling opportunities were both noted by 16% of respondents, while 8% indicated availability of information about Manitoba.

Nonresidents were asked if there had been no fishing opportunities in Manitoba in 2000, what they would have done. Of those who responded, 80% of non-Canadians said they would not have come; 14% of non-Canadians would have substituted other activities, and 6% would have stayed a shorter time. Of other Canadians, 56% said they would have substituted other activities, 28% would not have come, and 16% would have stayed a shorter time.

Nonresidents were also asked to rate information sources that they used when planning fishing trips to Manitoba using a scale of 1- never used, 2 - sometimes and 3 - used most often. Data showed that friends, family and other anglers were the most often used source of information with a score of 2.42. This was followed by brochures and pamphlets (1.46), outdoor/sport shows (1.38), internet/web sites (1.28), bait and tackle shops (1.19), magazines/newspapers (1.18), Manitoba Natural Resource offices (1.13), travel agent/tour operator (1.11), video tapes (1.11), tourism ads on television or radio (1.08), and clubs and associations (1.05).

#### **ANGLING IN STOCKED WATERS**

All anglers were surveyed about angling in waters stocked with trout. For the purposes of these questions, all rainbow, brown and brook trout noted in the data are considered to be from stocked waters.

In 2000, 11% of resident anglers, 7% of other Canadians, and 2% of non-Canadian anglers fished in stocked waters. These anglers fished approximately 62,000 days for stocked trout, an average of four days per angler. This represents 2.3% of the total angling effort. Almost 95% of angling effort in stocked waters and 90% of the catch was by resident anglers. Only 5% of residents over 65 fished in stocked trout waters and they fished only 3% of total resident angler days fished in stocked waters.

Excluding anglers over 65, still 11% of resident anglers fished in stocked waters, down from 16% in 1995. Residents under 65 fished approximately 56,000 days, a significant decrease (-50%) from 112,000 days in 1995.

All resident anglers caught a total of 109,900 stocked fish in 2000 and released 57% of their catch. Excluding those over 65, resident anglers caught 105,160 fish, down 45% from 192,000 stocked fish in 1995, and released 58% compared to a 71% release rate in 1995.

The following facts were also taken from the database.

- Residents under 65 who purchased Regular Licences accounted for 49% of the total effort and 40% of the total fish caught, and had a 69% release rate.
- Residents under 65 with Conservation Licences accounted for 42% of the total effort and 46% of the fish caught, and released 49% of their fish.
- All residents over 65 accounted for only 3% of effort and 4% of the fish caught. Those
  over 65 with Regular Licences released 26% of their fish, while those with Senior
  Licences did not release any.
- Nonresident Canadians caught only 1,950 stocked fish (1.6% of the total) and released 34% of them. Non-Canadians caught about 9,800 stocked fish (8% of the total) and released 78%.
- Almost 70% of the stocked fish caught were rainbow trout; 17% were brook trout, and the remainder were brown trout.

### **ANGLER SATISFACTION**

Questions relating to angling satisfaction were asked of all anglers. In 2000, 73% of resident anglers under 65 rated their angling experience in Manitoba from "excellent" to "good", compared to 62% in 1995. About 7% rated their experience as "poor", compared to 15% in 1995. Of resident anglers over 65, 48% rated their experience as "excellent" to "good" and 21% rated their experience as "poor".

Nonresidents highly rated their angling experience in Manitoba. Other Canadian residents fishing in Manitoba in 2000 rated their experience as follows: "excellent" to "good" - 78% (compared to 71% in 1995) and "poor" - 8% (compared to 13% in 1995). Non-Canadians rated their experience even higher - 88% from "excellent" to "good" (compared to 87% in 1995) and only 3% rated their experience as "poor" (compared to 6% in 1995).

Anglers were asked questions relating to the time they spent fishing compared to the last survey year and what they felt should be done to improve angling.

The first question asked anglers if they fished more, less or the same number of days in 2000 as in previous years. Thirty-seven percent (37%) of residents under 65 responded that they fished the same number of days, 19% stated they increased their time fishing and 39% stated that they fished less time (3% did not fish in Manitoba prior to 2000). Of resident anglers over 65, 41% said their activity decreased, 39% fished the same number of days, and 9% said their activity increased. Only 1% said they did not fish in Manitoba prior to 2000.

For other Canadians, 40% fished the same number of days, 19% increased their time fishing, and 25% decreased their time. For non-Canadians, 55% spent the same amount of time fishing in Manitoba, 12% increased their time, and 12% spent less time fishing in Manitoba.

Those who responded that they fished less were asked why and were given a number of responses to choose from. They could choose any number of the reasons listed and were not asked to rate their selections. The most often selected answer by all angler groups was "not enough leisure time" (59% of residents, 48% of other Canadians, and 31% of non-Canadians). For residents anglers, this was followed by "poor fishing" (31%), "weather" (29%), family responsibilities (28%), "competing or conflicting interests" (24%), and financial reasons (13%). The least common reasons were "lack of information" (2%) and "the type of fish desired was not available" (6%). "Complex regulations" was cited by 10% of resident anglers.

While there was little difference between resident anglers under 65 and those over 65 regarding changes in the amount of time spent fishing, the most common reason for a decline in fishing activity was different. "Not enough leisure time" was cited by 62% of residents anglers under 65 followed by "poor fishing" (30%) and "family responsibilities" (29%). The most common reasons for those over 65 were "poor fishing" and "weather" (both 41%), followed by "health problems" (36%). Only 7% of those under 65 cited health as a reason.

After "not enough leisure time", other Canadians cited "family responsibilities" (30%), "weather" (28%), "poor fishing" (23%), and "competing or conflicting interests" (20%) as the most common reasons for their fishing activity declining. While lack of time was the most common reason for non-Canadians (31%), "weather" (30%), and "competing or conflicting interests" (29%) were almost as important. "Poor fishing" was the next most common reason (24%), followed by "family responsibilities" (14%). Only 7% of both other Canadians and non-Canadians cited "complex regulations" as a reason.

The second part of the question asked only resident anglers how they rated fishing in 2000 as compared to 1995 if they had fished for at least five years. Approximately 26% of the respondents had not fished for at least five years, 13% indicated that angling had improved, 33% stated that it had remained the same and 28% stated that it had declined. Responses were very similar for residents under 65 and over 65, however those over 65 were more likely to say that fishing had declined (33%).

Resident anglers who indicated that angling had declined were asked to rate, on a scale of one (not important) to five (extremely important), what options they would feel would improve angling in Manitoba. The response selected as most important was "more stocking programs" followed closely by "increase fines/penalties". Others listed in order of importance included "more habitat improvement", "minimum and maximum size limits" (same rating), "slot limits", and "more catch and release regulations". The least important options were "reduced creel limits" and "increase access facilities".

Rating of improvement options differed little between residents under 65 and those over 65. The greatest difference was that those over 65 thought "slot limits" would have the least effect, while anglers under 65 gave it a mid-range rating. Anglers over 65 also had greater interest in increasing facilities (e.g. boat ramps, handicapped access, etc.), while it ranked the lowest for those under 65.

# **OTHER FACTS OF INTEREST**

Several other questions were asked in the 2000 survey and the following data was gathered.

# Competitive Fishing Events (Derbies/Tournaments)

- 79% of residents, 77% of other Canadians, and 55% of non-Canadians agreed with holding competitive fishing events (derbies and tournaments) in Manitoba.
- 17% of residents, 5% of other Canadians, and 2% of non-Canadians actually participated in a competitive fishing event in Manitoba in 2000.
- Of residents, the highest participation was by those under 65 with Regular Licences (23%), followed by anglers under 65 with Conservation Licences (13%). Anglers over 65 were the least likely to have participated in a Competitive Fishing Event (8% of those with Regular Licences and 6% of anglers with Senior Licences).

# Volunteer Work

- Resident anglers stated that they contributed 35,376 days of volunteer work in 2000 in support of Manitoba's recreational fishery. Almost 80% of this effort was by anglers under 65 holding Regular Licences.
- Excluding those over 65, residents contributed 33,748 days, down 39% from 55,733 days of volunteer work in 1995.
- Resident respondents under 65 were more likely to indicate that they felt that organized angling groups in Manitoba represented their interests (55% of those with Regular Licences, 43% of those with Conservation Licences). Of residents over 65, 30% of those with Regular Licences and 39% of those with Senior Licences thought their interests were represented.

# Licence Fees

- 82% of resident respondents stated that licence fees were appropriate. Respondents over 65 were slightly less likely to say fees were appropriate (80% versus 84% for those under 65). (Nonresidents were not asked this question.)
- 15% said that licence fees were too high. Again, respondents over 65 were slightly more likely to say this was the case (17% versus 14% for those under 65).
- 73% of all resident respondents said they would not be willing to pay a higher licence fee.

# Choice of Licence

- 72% of Regular Licence holders indicated that they bought the licence because they preferred the higher creel limit. 15% did not answer the question.
- 35% of Conservation Licence holders stated that they selected this licence because they supported conservation, 25% did not fish much, 15% preferred the lower fee, and 10% rarely caught their limit. 10% did not answer the question.

# RESIDENT ANGLERS OVER 65 SUMMARY

- In 1997, Manitoba introduced a Resident Senior Licence for anglers over 65 years of age. The Senior Licence allows the same limits as a Conservation Licence. Residents over 65 wishing to harvest a regular limit must buy a Regular Licence, which was not the case in 1995.
- In 2000, 3,919 Regular Licences and 8,534 Senior Licences were sold to resident anglers over 65.
- Residents over 65 who purchased licences were less likely to be active anglers than those under 65. 15% of Regular Licence holders over 65 and 8% of Senior Licence holders did not fish.
- Of active resident anglers over 65, 17% of those with Regular Licences and 19% of those with Senior Licences were female, compared to 22% of resident anglers under 65.
- The average age of male resident anglers over 65, regardless of licence type, was 72 years. Female anglers averaged 71 years.
- Resident anglers over 65 with Regular Licences and Senior Licences averaged 26 and 28 years of experience, respectively, compared to resident anglers under 65 with Regular Licences (23 years) and with Conservation Licences (17 years). Anglers under 65 were more likely to consider themselves experienced anglers than those over 65.
- Anglers over 65 accounted for 7% of the total angling effort in Manitoba in 2000; 82% of effort was by resident anglers under 65. Anglers over 65 averaged 17 days per angler (compared to 18 for anglers under 65). Anglers over 65 accounted for 6% of total ice fishing effort. Of those who ice fished, anglers over 65 with Regular Licences ice fished the least number of days (5 on average), while those over 65 with Senior Licences ice fished the most (averaging 13 days per angler).
- Anglers over 65 concentrated their effort (46% of angler days) in the Southern area of Manitoba, followed by the Whiteshell/Nopiming area (20%).
- Residents over 65 caught only 4% of all fish caught in Manitoba in 2000, and had the lowest release rate of all angler groups (56%).
- Direct expenditures by residents over 65 comprised only 5% of total resident expenditures and 2.6% of total direct expenditures by all anglers in Manitoba in 2000.
- Resident anglers over 65 were least likely to choose live bait fish or leeches for bait. Their preferred baits were frozen/salted bait fish, lures, and worms.
- Only 5% of residents over 65 fished in stocked trout waters. They fished only 3% of total resident days fished in stocked waters, and took only 4% of the total catch.

- Resident anglers over 65 rated their fishing experience lower than did residents under 65. In 2000, 48% of resident anglers over 65 rated their angling experience in Manitoba from "excellent" to "good", compared to 73% of those under 65. About 21% of residents over 65 rated their experience as "poor" compared to 7% of those under 65.
- 41% of resident anglers over 65 said their angling activity decreased in 2000 compared to previous years, 39% fished the same number of days, and 9% said their activity increased. Only 1% said they did not fish in Manitoba prior to 2000. In comparison, 37% of residents under 65 responded that they fished the same number of days, 19% stated they increased their time fishing and 39% stated that they fished less time (3% did not fish in Manitoba prior to 2000).
- The most commons reasons for a decrease in angling activity for residents over 65 were "poor fishing" and "weather" (both 41%), followed by "health problems" (36%). In comparison, the most common reasons for those under 65 were "not enough leisure time" (62%), "poor fishing" (30%), and "family responsibilities" (29%).
- When asked to rate fishing in 2000 compared to 1995, 33% of resident anglers over 65 said that fishing had declined, 29% said it had remained the same, and 5% said it had improved. 32% did not fish in 1995. In comparison, 28% of residents under 65 said fishing had declined, 33% said it was the same, and 13% said it had improved. 26% did not fish in 1995.
- Both residents over 65 and those under 65 rated "more stocking programs" and "increased fines/penalties" as the best options for improving the fishery. Anglers over 65 thought "slot limits" would have the least effect. They also had greater interest in increasing facilities (e.g. boat ramps, handicapped access, etc.), while this option ranked the lowest for those under 65.
- Resident anglers over 65 were the least likely to have participated in a competitive fishing event (8% of those with Regular Licences and 6% of those with Senior Licences).
- Residents over 65 contributed 5% of 35,376 days of volunteer work in 2000 in support of Manitoba's recreational fishery. Anglers over 65 with Regular Licences contributed more days in total (1,161) but averaged 2.7 days per angler. Those over 65 with Senior Licences contributed 467 days, averaging 7 days per angler.
- Of residents over 65, 30% of those with Regular Licences and 39% of those with Senior Licences thought that organized angling groups in Manitoba represented their interests. Residents under 65 were more likely to indicate that this was the case (55% of those with Regular Licences and 43% of those with Conservation Licences).
- 80% of residents over 65 thought that licence fees were appropriate, while 17% thought they were too high. In comparison, 84% of residents under 65 thought fees were appropriate and 14% thought they were too high.