

**The Economic Benefits of Hunting and
Fishing Activities in Alberta in 2008**

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Introduction

In 2008, considerable economic benefits were derived on nature-related activities in Alberta. These significant benefits remain even when only consumptive activities are considered; of course they are much larger when non-consumptive uses are also included.

Hunting and Fishing related expenditures by Alberta residents and non-residents in Alberta exceeded \$264.2 million in 2008 (Table 1). These expenditures consist of \$113.4 million spent on direct hunting related activities and \$150.8 million spent on direct fishing relating activities (this value was calculated using the 2005 figure of \$133.9 million inflated by 1.125926, which is the CPI rate of increase in Alberta between 2005 and 2008). Once we include the expenditures of Conservation Organizations and Outfitters, the value of these expenditures and their impacts would rise by over \$35 million. Direct expenditures on hunting and fishing inclusive of outfitters and organizations would add up to almost \$300 million in Alberta in 2008.

Resident Alberta hunters each spent on average \$1,147 in Alberta in 2008. The corresponding average expenditures per non-resident hunter were \$1,364, while average expenditures per non-resident hunter were \$945 in the same year. Average per angler expenditures in Alberta in 2008 dollars were \$781 for resident anglers, \$486 for non-resident anglers and \$1,228 for non-resident alien anglers.

Total expenditures on hunting and fishing related activities, including both direct and capital expenditures (and excluding outfitters and organizations), exceeded \$765 million (Table 1). If outfitters and organizations' expenditures are included, this total would rise to \$801 million. Fishing alone accounts for about \$469 million of this total; the remaining \$296 million are associated with hunting, and another \$36 million with outfitters and conservation organizations. The smallest share of the total expenditures is spent on accommodations to the tune of over \$26 million or about 3.4% of the total; the largest share of expenditures was spent on equipments, and it accounts for more than \$501 million or 65.5%; food and beverage show a total of \$60.3 million or 7.9%; and transportation \$90.5 million or 11.8% of the total shares.

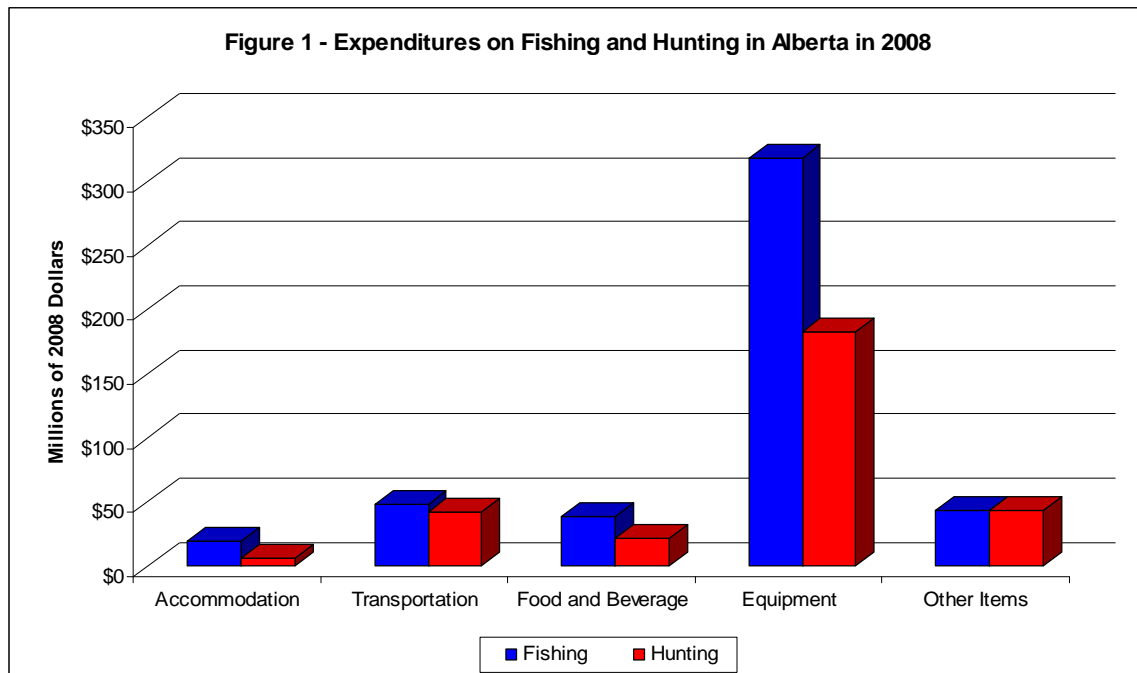
Table 1
Expenditures on Fishing and Hunting in Alberta in 2008
by Type of Activity

	Sport Fishing*		Hunting		Total	
	\$ Million	%	\$ Million	%	\$ Million	%
Accommodation	\$19.7	4.2%	\$6.4	2.2%	\$26.1	3.4%
Transportation	\$48.6	10.4%	\$41.9	14.1%	\$90.5	11.8%
Food and Beverage	\$38.4	8.2%	\$21.9	7.4%	\$60.3	7.9%
Equipment	\$318.0	67.8%	\$183.0	61.7%	\$501.0	65.5%
Other Items	\$44.1	9.4%	\$43.2	14.6%	\$87.3	11.4%
Total	\$468.8	100.0%	\$296.4	100.0%	\$765.2	100.0%

Source: Econometric Research Limited

* Data was available for 2005. We inflated the values to 2008 using the CPI for Alberta.

Figure 1 displays the relative shares of these expenditures, classified by type of expenditure and segregated by hunting and fishing.



The Economic Impacts of Hunting and Fishing

The economic impacts of this large volume of expenditures on the provincial economy and the various local regions where these activities take place are significant and substantial. The standard indicators of the economic impact results are displayed in two separate tables. Table 2 displays the economic impact results of direct expenditures on hunting and fishing in Alberta in 2008, whereas Table 3 displays the economic impact results of capital expenditures in Alberta in the same year.

Economic Impacts of Direct Hunting and Fishing Related Expenditures

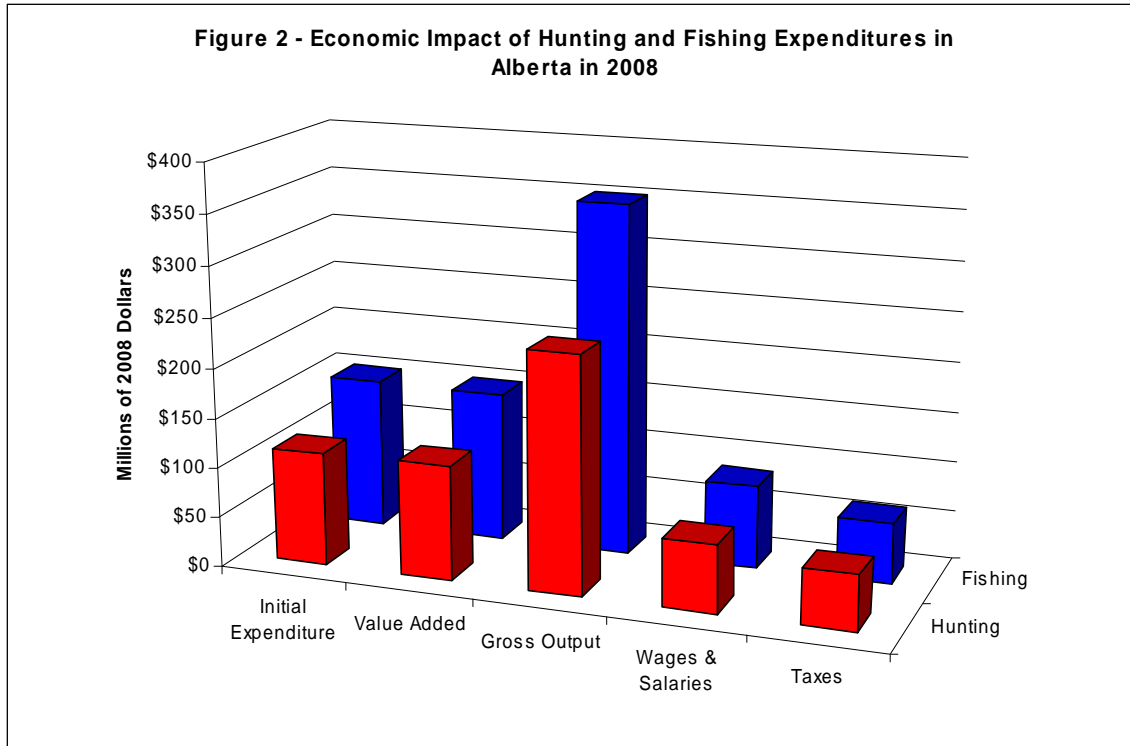
Direct expenditures on hunting and fishing generate significant economic impacts including the following (Table 2 and Figure 2):

- The Gross Provincial Product (Income) is permanently increased by about \$265 million.
- A total of 3,500 full-time equivalent jobs are permanently created.
- Wages and salaries in Alberta are increased by more than \$151 million.
- All levels of government receive revenues due to the hunting and fishing impacts. Total government recovery on these direct expenditures exceeds \$116 million. The Federal government share is more than \$63 million while the provincial government share is about \$41 million.
- Local governments in Alberta appear to have benefited by about \$6.2 million in 2008.

Table 2
The Economic Impact of Hunting and Fishing Expenditures
in Alberta in 2008
(2008 Dollars)

	Total Fishing Expenditures	Total Hunting Expenditures	Total Hunting & Fishing Expenditures
Initial Expenditure	\$150,805,491	\$113,424,735	\$264,230,226
Value Added			
Direct	\$51,432,811	\$42,921,983	\$94,354,794
Indirect & Induced	\$98,576,934	\$72,029,953	\$170,606,887
Total	\$150,009,745	\$114,951,936	\$264,961,681
Multiplier	0.99	1.01	1.00
Gross Output			
Direct	\$144,930,637	\$99,817,137	\$244,747,774
Indirect & Induced	\$207,031,347	\$136,466,698	\$343,498,045
Total	\$351,961,983	\$236,283,835	\$588,245,818
Multiplier	2.33	2.08	2.23
Wages & Salaries			
Direct	\$31,598,438	\$27,370,763	\$58,969,201
Indirect & Induced	\$51,850,947	\$40,289,557	\$92,140,504
Total	\$83,449,385	\$67,660,320	\$151,109,705
Employment			
Direct	926	445	1,371
Indirect & Induced	1,399	730	2,129
Total	2,325	1,175	3,500
Multiplier	2.51	2.64	2.55
Taxes			
Federal	\$35,170,050	\$27,832,482	\$63,002,532
Provincial	\$22,102,991	\$24,772,541	\$46,875,532
Local	\$3,673,688	\$2,545,759	\$6,219,447
Total	\$60,946,730	\$55,150,782	\$116,097,512
Imports			
From Other Provinces	\$17,821,654	\$11,859,574	\$29,681,228
From Other Countries	\$24,219,771	\$16,658,620	\$40,878,391
Total	\$42,041,426	\$28,518,194	\$70,559,620

Source: Econometric Research Limited and Alberta Sustainable Resource Development



The graphical display of the impact results is in Figure 2 above. Not surprisingly, fishing impacts dominate the economic impacts of direct hunting expenditures for every economic impact indicator for two reasons. First, the total expenditures on fishing related activities are larger than those on hunting. Second, the local contents in fishing related activities on per million dollars of expenditures are larger than those associated with hunting.

Economic Impacts of Hunting and Fishing Capital Related Expenditures

Over \$500 million is spent by hunters and anglers on capital equipment and other big purchases in Alberta in 2008. The impacts of these expenditures may not be recurrent each year and therefore it is not easy to add them to direct expenditures. But these massive expenditures on their own generate large temporary impacts that include the following (Table 3 and Figure 3):

- Income in Alberta increased temporarily by \$457 million in 2008.
- About 8,368 person years of employment are generated by these massive purchases.
- Wages and salaries paid to this large complement of employment exceeded \$276 million in Alberta in 2008.

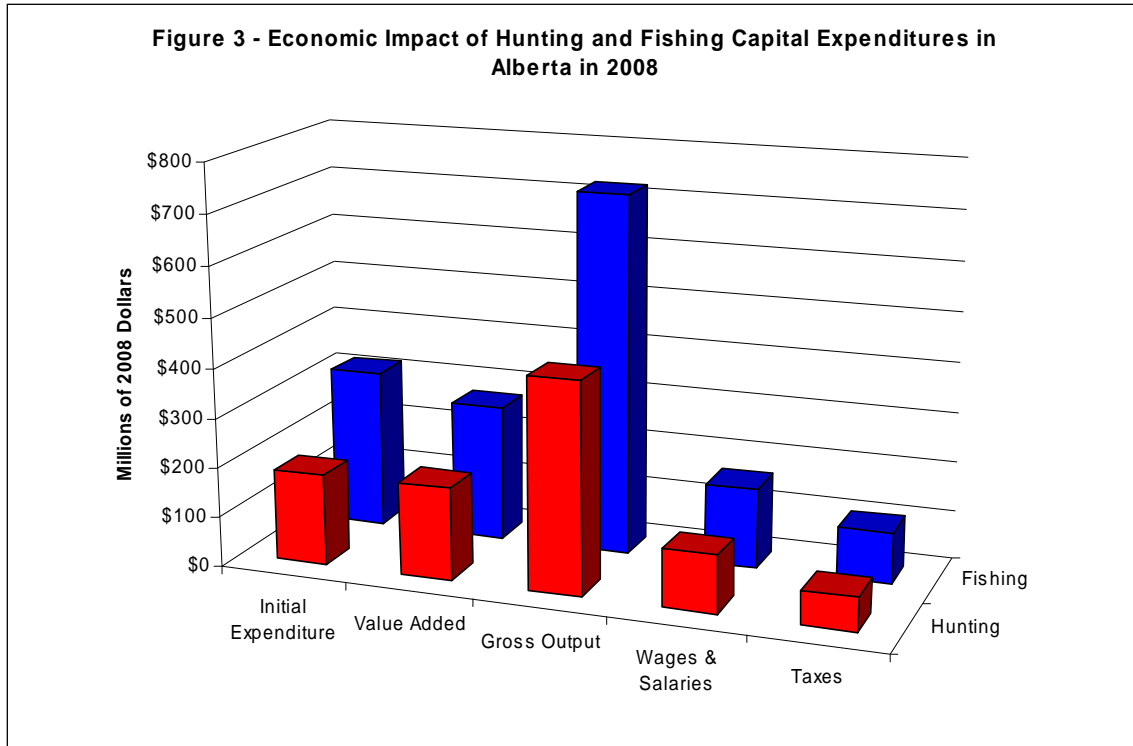
- Large revenues were recouped on these impacts by all levels of government to the tune of about \$172 million. The largest share of these total revenues belongs to the federal government with \$113.5 million; the provincial government received \$47.4 million and local governments \$10.8 million.

Table 3
The Economic Impact of Hunting and Fishing Capital Expenditures
in Alberta in 2008
(2008 Dollars)

	Fishing Capital Expenditures	Hunting Capital Expenditures	Total Capital Expenditures
Initial Expenditure	\$317,973,676	\$183,003,274	\$500,976,950
Value Added			
Direct	\$66,680,114	\$57,074,717	\$123,754,831
Indirect & Induced	\$204,795,961	\$128,556,666	\$333,352,627
Total	\$271,476,076	\$185,631,383	\$457,107,459
Multiplier	0.85	1.01	0.91
Gross Output			
Direct	\$317,973,676	\$183,003,274	\$500,976,950
Indirect & Induced	\$404,897,691	\$239,798,387	\$644,696,078
Total	\$722,871,368	\$422,801,661	\$1,145,673,029
Multiplier	2.27	2.31	2.29
Wages & Salaries			
Direct	\$50,342,180	\$46,251,922	\$96,594,102
Indirect & Induced	\$110,716,158	\$69,010,015	\$179,726,173
Total	\$161,058,339	\$115,261,937	\$276,320,276
Employment			
Direct	3,401	918	4,319
Indirect & Induced	2,877	1,172	4,049
Total	6,278	2,090	8,368
Multiplier	1.85	2.28	1.94
Taxes			
Federal	\$67,021,966	\$46,504,177	\$113,526,143
Provincial	\$30,010,608	\$17,433,050	\$47,443,658
Local	\$6,793,730	\$3,974,972	\$10,768,702
Total	\$103,826,303	\$67,912,199	\$171,738,502
Imports			
From Other Provinces	\$47,283,030	\$26,378,128	\$73,661,158
From Other Countries	\$48,486,464	\$28,899,080	\$77,385,544
Total	\$95,769,494	\$55,277,208	\$151,046,702

Source: Econometric Research Limited and Alberta Sustainable Resource Development

In Figure 3, the different impact indicators for hunting and fishing are presented. Again fishing dominates the impacts of hunting.



Economic Impacts of Direct Hunting and Fishing Related Expenditures Inclusive of Conservation Organizations and Outfitters.

Total direct expenditures on hunting and fishing in Alberta in 2008 were \$113.4 million. When the expenditures of the organizations and outfitters are added to this total, this figure rises to \$149.4 million. The increase is comprised of two components—conservation organizations’ expenditures of \$12.7 million and the expenditures on packages of about \$23.2 million.

The total direct expenditures inclusive of organizations and outfitters are about \$300 million. This volume of expenditure results in the following impacts (Table 4 and Figure 4):

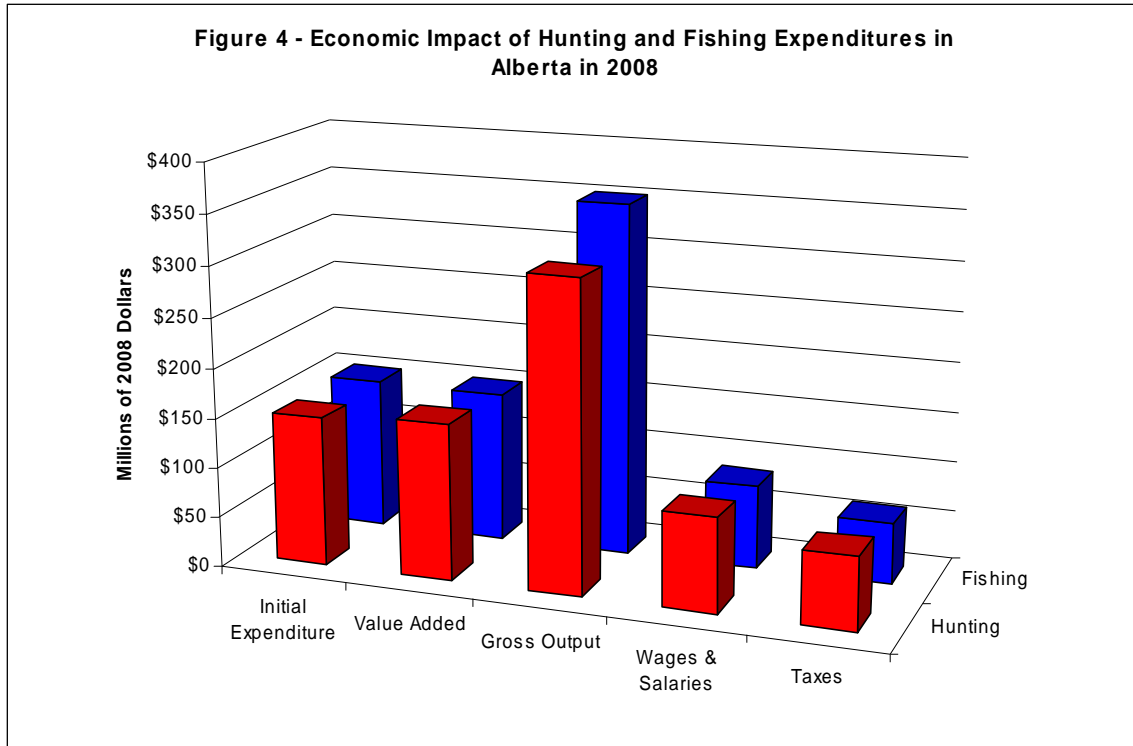
- Alberta’s GPI rises permanently by \$307 million.
- Wages and salaries increase permanently by over \$178 million.
- More than 4,126 Albertans owe their full-time equivalent jobs to hunters’ and anglers’ all inclusive expenditures.
- All levels of government collect revenues on these impacts. Total government revenues exceeded \$134.6 million. The Federal government gained \$73.4 million

annually, the provincial government collected \$54 million and local governments \$7.2 million.

Table 4
The Economic Impact of Hunting and Fishing Expenditures
in Alberta in 2008
(2008 Dollars)

	Total Fishing Expenditures	Total Hunting Expenditures	Total Hunting & Fishing Expenditures
Initial Expenditure	\$150,805,491	\$149,365,766	\$300,171,256
Value Added			
Direct	\$51,432,811	\$63,532,220	\$114,965,031
Indirect & Induced	\$98,576,934	\$93,405,121	\$191,982,055
Total	\$150,009,745	\$156,937,341	\$306,947,086
Multiplier	0.99	1.05	1.02
Gross Output			
Direct	\$144,930,637	\$135,758,168	\$280,688,805
Indirect & Induced	\$207,031,347	\$173,854,544	\$380,885,891
Total	\$351,961,983	\$309,612,712	\$661,574,695
Multiplier	2.33	2.07	2.20
Wages & Salaries			
Direct	\$31,598,438	\$40,598,416	\$72,196,854
Indirect & Induced	\$51,850,947	\$54,266,372	\$106,117,319
Total	\$83,449,385	\$94,864,788	\$178,314,173
Employment			
Direct	926	767	1,693
Indirect & Induced	1,399	1,034	2,433
Total	2,325	1,801	4,126
Multiplier	2.51	2.35	2.44
Taxes			
Federal	\$35,170,050	\$38,252,573	\$73,422,623
Provincial	\$22,102,991	\$31,960,213	\$54,063,204
Local	\$3,673,688	\$3,485,202	\$7,158,890
Total	\$60,946,730	\$73,697,988	\$134,644,718
Imports			
From Other Provinces	\$17,821,654	\$16,151,100	\$33,972,754
From Other Countries	\$24,219,771	\$22,167,661	\$46,387,432
Total	\$42,041,426	\$38,318,761	\$80,360,187

Source: Econometric Research Limited and Alberta Sustainable Resource Development



The quantifiable economic impacts represent only one aspect of the contributions of hunting and fishing to Alberta. Equally relevant, and perhaps more important, are the social and recreational utilities derived by Albertans from being close to nature, as well as the many conservation activities and volunteer opportunities that residents of Alberta benefit from and invest in.

The respondents to each of the fishing survey and hunting survey have voiced a strong support for better management of the natural endowments of Alberta and even a stronger desire for increased participation in protecting the environment and wildlife resources.