## Hunting in Alberta in 2008: Performance, Value and Socioeconomic Impacts Volume II

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**Hunting For Tomorrow Foundation** 

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**Econometric Research Limited** 

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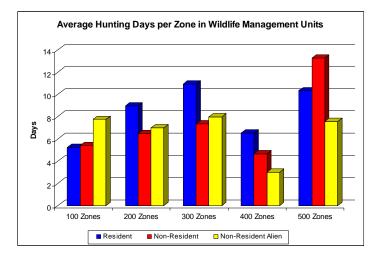
### **Executive Summary**

Hunting in Alberta has not been recognized as a substantial economic resource that makes a major contribution to the provincial economy and to many rural areas of the province. Its natural and environmental consequences are varied and serious but these have been better recognized than the economic contributions.

The Hunting For Tomorrow Foundation and its partners has retained Econometric Research Limited (ERL) to undertake an evidence-based assessment of Sport Fishing and Hunting. This is the second volume of the study.

This study involved the designing and conducting of a number of surveys of industry stakeholders including Conservation Organizations, Outfitters, resident hunters, non-resident alien hunters. Both a stratified random sample driven telephone survey and an online survey were also undertaken. The stratified random sample survey conducted by ERL in the province and abroad in 2008 and with the help of APOS and Hunting For Tomorrow Foundation administered the other two surveys. The results of the surveys were used to estimate the socioeconomic value and impacts of hunting in Alberta. Below is a summary of the salient results. They include the following:

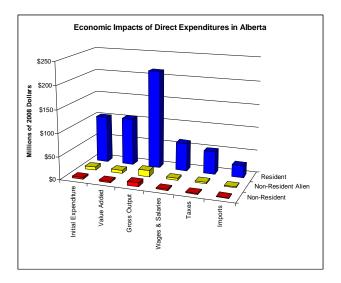
- A total of 99,001 adult hunters were identified to have held hunting licenses in Alberta in 2008. Of these, 89.7% were Alberta residents, 3.2% were from other parts of Canada and 7.1% from outside Canada. Alberta hunters are typically younger (the largest age cohort is that of those 40-49 years) than hunters from other parts of Canada or from outside Canada where the age cohort 50-59 is the largest. There were also 6,056 youth licensed hunters in the same year, for a total of 105,057.
- Hunters in Alberta have bought primarily Big Game licenses (57%); Bird Game licenses are bought by only 6% and licenses for both games account for 37%.



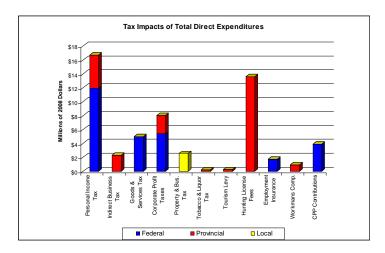
- Over 96.6% of the licensed hunters actively hunted in 2008 in Alberta.
  - On average, hunters in Alberta in 2008 hunted for 5.5 days in 100 Zones, 8.2 days in 200 Zones, 10.1 days in 300 Zones, 6.1 days in 400 Zones, and 10 days in 500 Zones.

- Family, friends and other hunters are the most often used source for information on hunting opportunities in Alberta
- Non-resident hunters and non-resident alien hunters were very satisfied with their hunting experience in Alberta in 2008. Actually 80% of non-resident hunters said they were very satisfied and another 11% said they were somewhat satisfied. Only 3% of non-resident hunters declared that they were not satisfied with their hunting experience in Alberta in 2008.
- About 93% of non-resident aliens' hunters were satisfied with their hunting experience in Alberta, with 72% declaring that they were very satisfied and another 21% said they were somewhat satisfied. Only 1% among the non-resident aliens said they were not satisfied.
- Over 81% of resident hunters said they were satisfied with their hunting experience in Alberta in 2008.
- An overwhelming majority of hunters (81%) have hunted in Alberta between 2002 and 2007, whereas 19% did not.
- About 39% of resident hunters felt that the quality of hunting was worsening while 26% felt it was improving and 32% said that there was no change.
- Non-resident hunters in Alberta in 2008 felt differently. About 49% of the nonresident hunters in Alberta felt that there was no change, 30% felt that it was improving and only 16% of then felt that it was worsening.
- Non-resident alien hunters felt that there was no change, 36% felt that it was improving and 24% felt it was worsening.
- An overwhelming majority of hunters said they will hunt in Alberta in the future (95%), whereas a small proportion of less than 5% said no.
- Hunters in Alberta participate in this activity for many reasons. Among the most important reasons mentioned are times outdoors in nature (92%) and quality time with friends and relatives (94%). Other prominent reasons include: Good hunting experience in the past (87%), good access (79%), enjoyment and thrill (76%), and participation in sport (73%). Force of habit scored relatively low (23%) and so did food (66%).
- Only 14% said they contributed to groups involved in conservation activities in 2008.
- Only 8% said they participated as volunteers in the area of conservation and hunting.

- When asked about whether they have hunted outside Alberta in the past five years 55% said no and 45% said yes.
- About 90% of non-resident hunters from other provinces and 99% of the nonresident alien hunters from outside Canada said they hunted outside Alberta in the past five years.
- Resident hunters spent more than \$102.5 million in direct hunting expenditures. This is far higher than the \$4.2 million spent by non-resident hunters from the rest of Canada and the almost \$7 million spent by non-resident hunters from outside Canada.

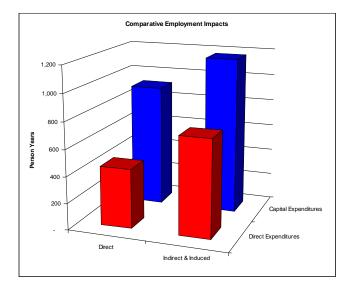


- The direct hunting expenditures of Alberta resident hunters supported a increase permanent of Alberta Gross Provincial Income of \$104.3 million and an increase in wages of and salaries \$61.4 million. Total direct hunting expenditures increase permanently the GPI of Alberta by almost \$115 million and wages and salaries by \$67.7 million.
- Over 1,054 Albertans owe their jobs to the direct hunting expenditures by residents in 2008. Total direct hunting expenditures supported 1,175 FTEs in Alberta.



The three levels of government collected over \$55 million in 2008, with the federal government deriving the largest share of about \$27.8 million, followed by the provincial government with over \$24.8 million and the local governments collectively collecting \$2.5 million.

- The total hunting related expenditures (inclusive of direct spending, packages and Conservation Organizations) supported a provincial income impact of \$156.9 million, \$94.9 million in wages and salaries, 1,801 full-time equivalent permanent jobs for Albertans and the three levels of governments collectively collected a total of \$73.7 million in taxes and fees.
- The large volume of vehicles, boats, camping equipment and other hunting equipment sustained an income (value added) impact of \$185.6 million and over \$115 million in wages and salaries in Alberta in 2008.



- A total of 2,090 person year of employment was attributed to these capital expenditures in Alberta in 2008.
- Total taxes generated by these capital expenditures to all three levels of government exceeded \$67.9 million in 2008.
- The federal government was the major beneficiary with about \$46.5 million of this total.
- The provincial government claimed over \$17.4 million and the local governments in Alberta made up with about \$4 million.

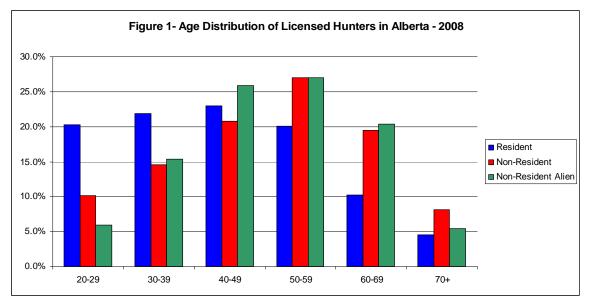
### Introduction

Alberta is blessed with exceptional big game and bird game hunting opportunities; several mild winters in a row in the past five years, have greatly improved the potential of big game hunting guides for finding the trophy moose, whitetail deer, mule deer or bear of hunters' choice. Alberta also boasts of large expanse of pristine environment for hunting and for escaping into the wild and from the drudgery of sedentary urban life.

Econometric Research Limited (ERL) was retained by Hunting for Tomorrow Foundation and its partners to undertake a comprehensive socioeconomic impact study of Hunting and Fishing in Alberta. This assessment requires a large set of data on anglers' and hunters profiles, expenditures, preferences, intensity, background, origins and destinations. Fortunately Alberta Sustainable Resource Development (ASRD) had conducted in 2005 a comprehensive survey of Anglers' in Alberta. This information is not available on hunting. ERL designed and conducted a number of surveys of hunting in Alberta in 2008. An online web-based survey attracted 5,076 respondents. The questionnaire and the results are in the Appendix. The survey had one serious drawback, however, in the sense that it is not a random survey (the respondents did not represent a randomly chosen group where each had an equal chance of being selected). Those choosing to respond were typically hunters reached through different websites and Conservation Organizations and had some familiarity with using the Internet. This self selection bias introduced a complication that precluded the use of the survey results to represent the entire population of hunters in Alberta in 2008. This bias was avoided by designing a stratified random sample survey that ERL conducted in Alberta and abroad over the telephone during a three months period starting in Mid December 2008 and ending in Mid March 2009. The sample was drawn by Alberta Sustainable Resource Development from the Win Card holders' information for 2008. The sample of 2,023 hunting license holders were randomly selected to include 1,215 Alberta residents who bought a hunting license in 2008, 404 non-resident hunters from other parts of Canada and 404 of Alberta hunting license holders from outside Canada but primarily from the United States. A total of 830 hunters responded, of these 506 were Alberta residents, 182 non-resident hunters and 142 non-resident aliens (See Table A1 in the Appendix). These were spread proportionately over the different age groups.

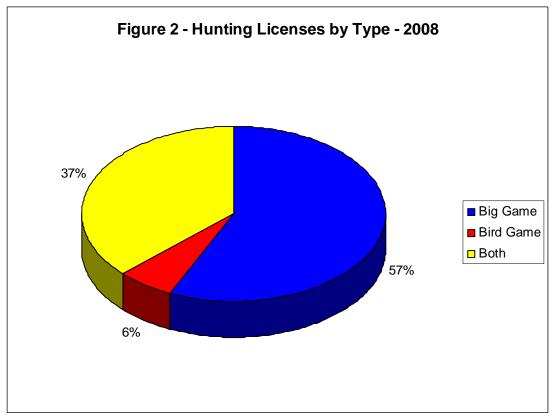
In what follows a detailed analysis of the Telephone survey results is presented. Sample proportions were corrected to reflect the population and sample norms were blown to reflect the population of hunters in Alberta in 2008. The margin of error is estimated to be plus or minus 3.1%, 19 out of 20 times.

A total of 99,001 adult hunters were identified to have held hunting licenses in Alberta in 2008. Of these, 89.7% were Alberta residents, 3.2% were from other parts of Canada and 7.1% from outside Canada. Alberta hunters are typically younger (the largest age cohort is that of those 40-49 years) than hunters from other parts of Canada or from outside Canada where the age cohort 50-59 is the largest (27%) (Figure1). There were also 6,056 youth licensed hunters in the same year, for a total of 105,057.

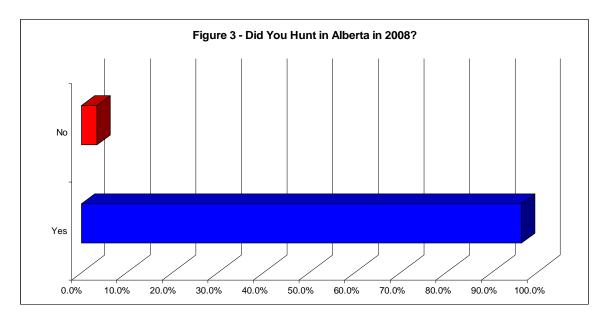


Source: Alberta Sustainable Resource Development

Hunters in Alberta have bought primarily Big Game licenses (57%); Bird Game licenses are bought by only 6% and licenses for both games account for 37% (Figure 2).



Source: Alberta Sustainable Resource Development



Over 96.6% of the licensed hunters actively hunted in 2008 in Alberta (Figure 3).

Family, friends and other hunters are the most often used source for information on hunting opportunities in Alberta. Over 56% of those who responded to the question about sources of information used to plan hunting activities in Alberta in 2008 said they most often used word of mouth from other hunters, friends and relatives the most. The least used sources are those from TV or radio announcements (95.3%), license issuers (90%) and clubs or associations (89.5) (See Table 1).

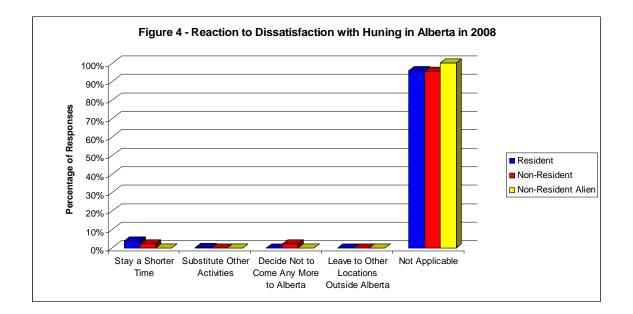
	Somet	Sometimes		Often		Did Not Use	
Internet/Web sites	18.9%	144	6.8%	52	74.3%	566	762
Magazines/Newspapers	19.3%	146	1.9%	14	78.8%	596	756
Sporting Goods Stores	16.9%	128	2.6%	20	80.5%	610	758
Outdoor/Sposrtsmen Shows Travel Agent/Tourist							
Operator	9.5%	72	3.9%	30	86.6%	658	760
Clubs/Associations	8.9%	68	1.6%	12	89.5%	680	760
Friends/family/other hunters	24.7%	188	56.6%	430	18.4%	140	760
Television/radio announcements	3.9%	30	0.8%	6	95.3%	724	760
Television Hunting shows	11.6%	88	1.3%	10	87.1%	662	760
Licence issuer	7.9%	60	2.1%	16	90.0%	684	760
Alberta Sustainable Resoure Development	15.3%	116	1.6%	12	83.1%	630	758
Brochures/pamphlets/regulations	5.8%	44	9.7%	74	84.5%	642	760
Other	0.0%	0	93.5%	144	6.5%	10	154

Table 1 - Sources of Information Used by Hunters to Plan Their Activities in Alberta in 2008

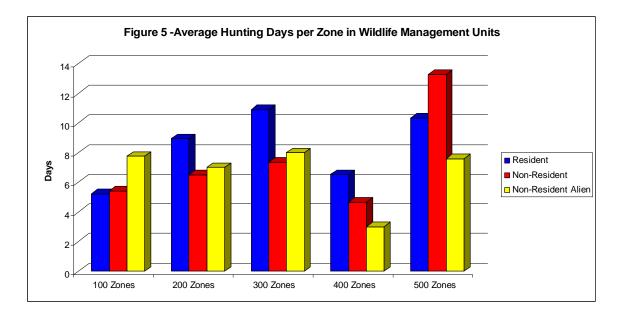
Source: Econometric Research Limited

A majority (96%) of hunters in Alberta in 2008 declared that dissatisfaction with hunting in Alberta did not apply to them. All of the non-resident alien hunters declared that dissatisfaction

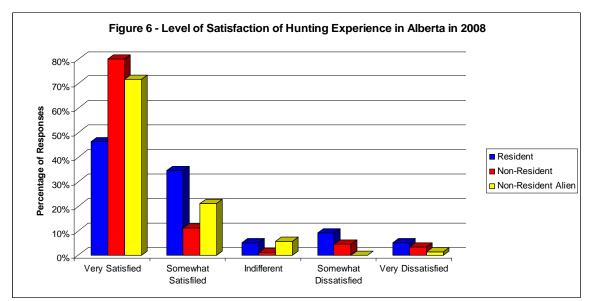
does not apply to their experience of hunting in Alberta in 2008. On the other hand, 96% of Resident hunters and non-resident hunters were satisfied with their experience. The 4% of resident hunters that were not satisfied with their hunting experience in Alberta in 2008, stayed a shorter period hunting, whereas of the 4% of non-resident hunters who declared that they were not satisfied half stayed a shorter period and the other half declared that they would not return again to Alberta to hunt (Figure 4).



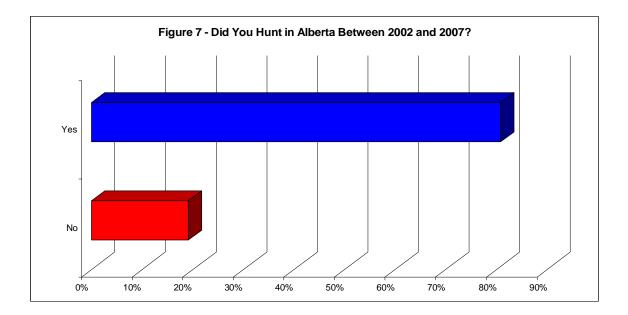
Hunters in Alberta in 2008 spent long average periods in all zones. In the 100 Zones, resident hunters spent on average 5.2 days, non-resident hunters spent an average 5.4 days and non-resident aliens spent the longest average period of 7.8 days in these zones (Figure 5). In the 200 Zones, resident hunters spent the longest average period with 8.9 days. Resident hunters spent only 6.5 days on average, whereas non-resident alien hunters spent 7 days (Figure 5). The same pattern is observed in the 300 and 400 Zones. Resident hunters spent 10.9 days on average in the 300 Zones, this being the longest average period spent by resident hunters, whereas they spent on average 6.5 days in the 400 Zones. Non-resident hunters spent 7.4 days in the 300 Zones and 4.7 days in the 400 Zones, respectively (Figure 5). Non-resident aliens spent their longest average period of 8 days in the 300 Zones and only (the shortest) 3 days in the 400 Zones. All hunters regardless of origin seem to have spent long average period) for non-resident hunters and 7.6 days for non-resident aliens (Figure 5). On average, hunters in Alberta in 2008 have hunted 5.5 days in 100 Zones, 8.2 days in 200 Zones, 10.1 days in 300 Zones, 6.1 days in 400 Zones, and 10 days in 500 Zones.



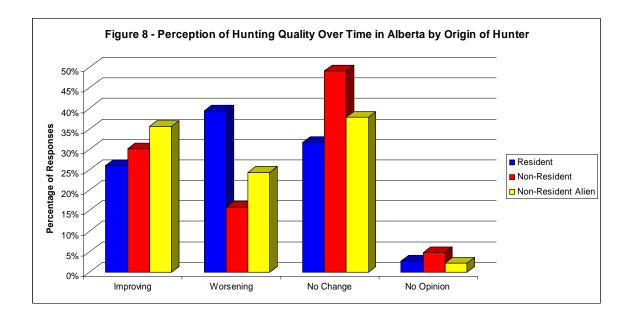
Non-resident hunters and non-resident alien hunters were very satisfied with their hunting experience in Alberta in 2008. Actually 80% of non-resident hunters said they were very satisfied and another 11% said they were somewhat satisfied. Only 3% of non-resident hunters declared that they were not satisfied with their hunting experience in Alberta in 2008. This compares to about 93% of non-resident aliens' hunters that were satisfied, with 72% declaring that they were very satisfied and another 21% said they were somewhat satisfied. Only 1% among the non-resident aliens said they were not satisfied (Figure 6). Over 81% of resident hunters said they were satisfied with their hunting experience in Alberta in 2008; 46% of the resident hunters were very satisfied and 35% said they were somewhat satisfied. Only 5% declared they were dissatisfied and 9% somewhat dissatisfied (Figure 6)



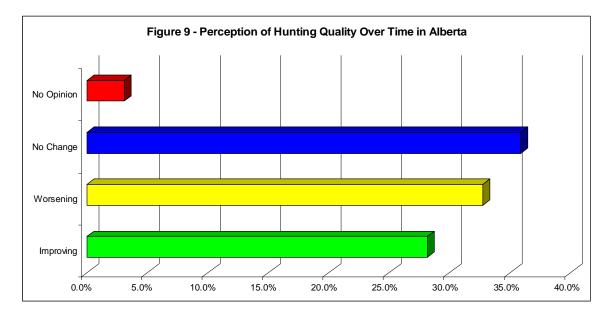
When asked whether they have hunted in Alberta between 2002 and 2007, an overwhelming majority of 81% said yes, whereas 19% said no (Figure 7).



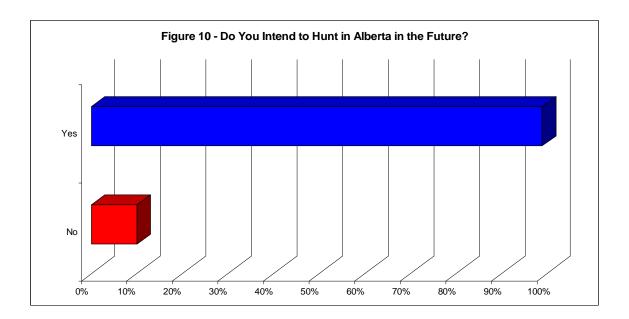
About 39% of resident hunters felt that the quality of hunting was worsening while 26% felt it was improving and 32% said that there was no change (Figure 9). Non-resident hunters in Alberta in 2008 felt differently. About 49% of the non-resident hunters in Alberta in 2008 felt that there was no change, 30% felt that it was improving and only 16% of then felt that it was worsening. Non-resident alien hunters felt that there was no change, 36% felt that it was improving and 24% felt it was worsening (Figure 8).



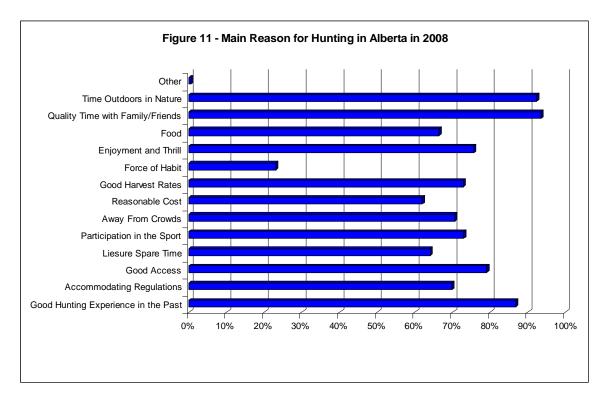
When all hunters were grouped together a large proportion of them felt that hunting quality over time in Alberta showed no change (35.9%), but a large proportion felt that it was worsening (32.8%). A further 28.2% felt that it was improving while only 3.1% had no opinion (Figure 9).



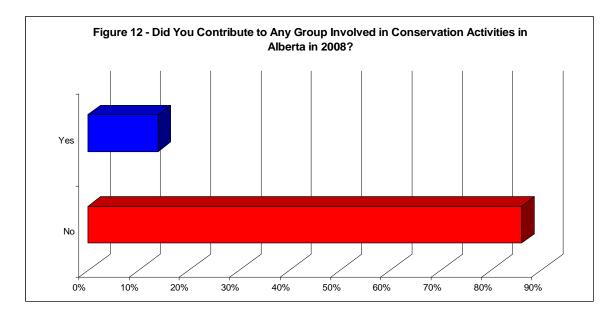
When asked about their future plans, an overwhelming majority said they will hunt in Alberta in the future (95%), whereas a small proportion of less than 5% said no (Figure 10). This is a good indicator that even when some hunters have felt that the hunting quality is worsening they still intended to hunt in Alberta in the future.



Hunters in Alberta participate in this activity for many reasons. Among the most important reasons mentioned are times outdoors in nature (92%) and quality time with friends and relatives (94%). Other prominent reasons include: Good hunting experience in the past (87%), good access (79%), enjoyment and thrill (76%), and participation in sport (73%). Force of habit scored low (23%) and so did food (66%) (Figure 11).

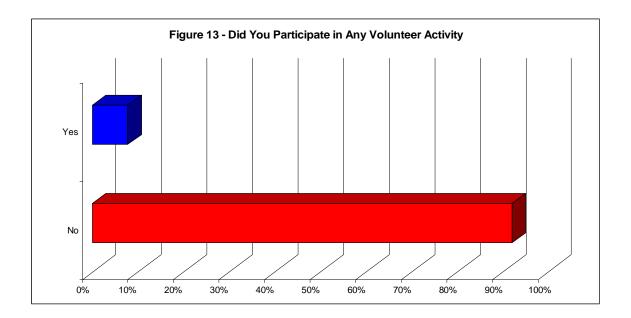


While it is generally believed within the hunting community that hunters contribute generously to groups associated with conservation activities associated with hunting, the survey shows that only 14% had contributed to groups involved in conservation activities in 2008.

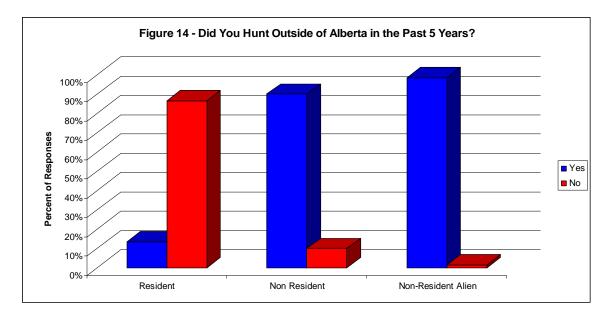


Econometric Research Limited

A Habitat study found that hunters participate widely and intensively in volunteer activities associated with hunting and conservation. Our survey, however, shows that only 8% had participated as volunteers in the area of conservation and hunting (Figure 13).



When asked about whether they have hunted outside Alberta in the past five years 55% said no and 45% said yes. Alberta residents showed the lowest rates of hunting outside Alberta with only 14% who said they hunted outside Alberta between 2002 and 2007. These ratios are totally different for non-resident hunters. About 90% of non-resident hunters from other provinces and 99% of the non-resident alien hunters from outside Canada said they hunted outside Alberta in the past five years.



The results summary of the online survey in the Appendix gives a different perspective on the activity and industry, particularly in regards to volunteer participation and contributions to conservation groups. It is to be expected that this difference would exist given that the online survey was promoted by conservation organizations and by active groups involved in hunting. Nonetheless it is instructive to recognize that over 42.9% of the respondents to the online survey said they contributed to groups involved in the conservation activity and environment protection associated with hunting in Alberta (question 20). Furthermore it is clear that of the 35% that made contributions and participated in volunteer activities, 73.2% of them sent money, 33.1% volunteered and 23.6% made in-kind contributions (question 21). The largest percentage of hunters (47.5% donated up to \$100, and there were 7.7% who donated over a \$1000. Indeed, 24.2% gave \$175, 14% gave \$375 and 6.7% gave \$750 question 22).

The survey results above reveal some very interesting and valuable information on the perceptions of hunters, their expectations, reasons for hunting in Alberta, their preferences and their intentions. The results also reveal their background and their likelihood to continue to hunt in Alberta. It is quite clear and striking that a pristine nature and accommodating environment are crucial determinants of hunters' decisions to stay and come to Alberta. It is alarming that some believe that the quality of hunting in Alberta is worsening. This should be taken quite seriously by industry stakeholders and policy makers if Alberta is to remain an attractive place to hunt. There is also invaluable information on where hunters usually get their information on hunting opportunities in Alberta and about their perceptions of the quality of their experience and its historical trends that can be used in marketing campaigns domestically, nationally and internationally.

## Hunters' Expenditures in Alberta

Hunting involves substantial expenditures on hunting supplies, hunting services, transport, food, campsites, accommodation, hunting dogs, magazines, membership fees, etc. It also involves

large investments in equipment, boats and even special vehicles. Hunters in Alberta in 2008 were estimated to have spent \$183 million on major hunting equipment, property and other related hunting related major expenditures (see Table 8). Another \$113.4 million is spent directly on hunting in Alberta in 2008, exclusive of expenditures on hunting packages in the same year. Alberta resident hunters spent per person (\$1,147), which is lower than the per person expenditures of non-resident hunters (\$1,364) but higher than non-resident aliens (\$945) (Table 2).

Resident hunters spent more than \$102.5 million in direct hunting expenditures. This is far higher than the \$4.2 million spent by non-resident hunters from the rest of Canada and the almost \$7 million spent by non-resident hunters from outside Canada (Table 2).

		Average			Total		Grand
	Resident	Non-Resident	Non-Resident	Resident	Non-Resident	Non-Resident	Total
			Alien			Alien	
Accommodation (Hotels, Motels, etc.)	\$422.32	\$478.87	\$298.32	\$4,624,404	\$507,123	\$1,085,586	\$6,217,114
Campsite Fees (private, provincial, etc.)	\$58.33	\$128.00	\$0.00	\$123,601	\$21,888	\$0	\$145,489
Food (groceries, restaurant meals, alcoholic beverages, etc.)	\$293.87	\$360.00	\$273.94	\$19,410,701	\$1,057,320	\$1,455,169	\$21,923,191
Heating and Cooking Fuels	\$59.55	\$67.47	\$0.00	\$1,577,539	\$39,200	\$0	\$1,616,739
Travel Costs Within Alberta for Hunting	\$493.36	\$522.35	\$435.86	\$38,686,331	\$1,480,862	\$1,586,095	\$41,753,288
Household Own Boats (gas, repairs, moorage, etc.)	\$320.00	\$117.50	\$0.00	\$452,160	\$7,990	\$0	\$460,150
Rentals for Hunting (boats, gear, snowmobiles, etc.)	\$0.00	\$200.00	\$0.00	\$0	\$6,800	\$0	\$6,800
Hunting Supplies (ammunition, etc.)	\$106.73	\$145.21	\$168.50	\$6,258,007	\$233,062	\$99,415	\$6,590,484
Hunting Guide Services	\$0.00	\$72.50	\$0.00	\$0	\$4,930	\$0	\$4,930
Hunting Dogs Associated Costs (training equipment, collars, etc.)	\$450.00	\$300.00	\$0.00	\$635,850	\$10,200	\$0	\$646,050
Processing, Taxidermy and Shipping Costs	\$795.10	\$499.17	\$542.61	\$14,042,261	\$204,660	\$1,494,348	\$15,741,269
Hunting License Fees	\$145.07	\$178.47	\$272.83	\$12,092,890	\$548,617	\$966,091	\$13,607,598
Access Fees (park fees, etc.)	\$450.00	\$126.67	\$0.00	\$158,850	\$12,920	\$0	\$171,770
Books, Magazines, DVD's and Other	\$82.57	\$123.18	\$0.00	\$2,770,719	\$46,316	\$0	\$2,817,035
Dues, Membership Fees, Donations, etc.	\$66.09	\$64.00	\$0.00	\$1,353,986	\$10,944	\$0	\$1,364,930
Other	\$1,000.00	\$0.00	\$50.00	\$353,000	\$0	\$4,900	\$357,900
Average/Total	\$1,147.45	\$1,363.97	\$944.87	\$102,540,299	\$4,192,832	\$6,691,604	\$113,424,736

Table 2 - Average and Total Active Direct Expenditures on Hunting in Alberta in 2008

Source: Econometric Research Limited

The largest category of hunting expenditures is that of travel costs within Alberta which exceeds \$41.7 million or about 37% of total direct expenditures. Food, groceries, meals and beverages is the second largest with \$21.9 million or 19.3% of the total direct expenditures on hunting in Alberta in 2008. Expenditures on hunting supplies is over \$6.5 million or 5.8% and license fees top 13.6 million or almost 12% of total direct expenditures in 2008.

The shares of these expenditures items change with the origin of the hunter. For example, the share of accommodation expenditures in total resident hunters' expenditures is 4.5%. The same share is 12.1% of total non-resident hunters and 16.2% of non-resident alien hunters. There are several major differences but invariably travel and food constitute the largest shares of hunters' expenditures regardless of origin.

## **Economic Impact Analysis and Methodology**

A dollar spent on ammunition, hunting gear and other hunting supplies circulates and recirculates within the economy, multiplying the effects of the original expenditures on overall economic activity. This process is referred to as the economic *multiplier effect*. It operates at several levels:

- The initial expenditures of the hunters on hunting supplies and equipment are generally referred to as the direct costs of hunting and their effects are referred to as the *initial (direct) effects*.
- Subsequent purchases by suppliers of materials and services to sustain the original and derivative expenditures are called the *indirect effects*.
- The *induced effects* emerge when workers in the sectors stimulated by direct and indirect expenditures spend their additional incomes on consumer goods and services.

Some of the key terms and definitions are presented below to assist the reader in interpreting the results of the economic impact analysis:

**Initial expenditures** – This figure indicates the amount of expenditures directly made by the hunters. It is these expenditures that drive the results.

**Value Added (Gross Provincial Income)** – This figure represents net output generated by the direct (initial) expenditures in the province. It is typically the sum of wages, rent, interest and profits in addition to indirect business taxes and depreciation minus subsidies.

**Employment** – This refers to the total person years (full-time equivalent jobs) generated by the hunting expenditures and investments and their sustaining activities.

**Taxes** – The impact system generates a large number of taxes (income taxes, GST, liquor and tobacco taxes, room tax, etc.) each of which is linked with the level of government receiving it. For example, the Federal government receives the proceeds from the GST tax, the Provincial government receives its share of personal income taxes and corporate and the Local government receives both property and business taxes.

**Imports** – These represent the goods and services acquired from outside the province to sustain the activities of the hunting activity. They essentially represent leakages from the province.

**Multipliers** – These are summary measures that represent the division of the total impacts (direct, indirect and induced) by the initial expenditures. For example, the income multiplier associated with direct hunting expenditures is calculated by dividing the total income (value added) impact by the direct expenditures. The only exception is that of the employment multiplier where total employment is divided by direct employment in order to preserve the common units.

If the economy is operating at full employment, additional expenditures will most likely reflect themselves in higher prices and wages as additional workers attracted to the site are drawn from other employment. Only if the economy is operating with excess capacity, with some unemployment and slack in critical sectors and there exists no apparent bottlenecks anywhere in the economy, is it possible to claim that the person-years associated with the activity expenditures represent additional or incremental employment. These are precisely the conditions that have prevailed in the study areas which allow us to claim that the economic impacts in this study are incremental impacts.

There is a general but unacceptable tendency on the part of economists generating impact measures to suspend any concern about alternative uses of funds or about the negative (substitution) effects associated with crowding out other expenditures. The input data were derived from the survey of hunters carried out by ERL and was deemed to be net expenditures that would otherwise be made in the economy.

Economic impact analysis is a useful mathematical tool capable of quantifying the patterns and magnitudes of interdependence among sectors and activities. It is predicated on two fundamental propositions.

- First, regardless of the inherent value of primary activities such as recreation or tourism, to the extent that the activities involve the use of scarce resources they generate economic consequences that can be measured and compared.
- Second, economic impacts are only partially captured by assessing direct expenditures. In as much as the economy is a complex whole of interdependent and interacting activities, there are some significant indirect and induced impacts associated with these direct expenditures. Invariably most of the indirect and induced impacts are larger than the direct impacts.

## The Economic Impact Model

The impact model used here is a special application of the most recent (DEIM: Alberta) model developed by Econometric Research Limited. DEIM is a unique model that captures the economic impact of tourism or related expenditures at the local level (counties or economic regions), the provincial level (Alberta) and the national level. The model is based on a novel technology that integrates input-output analysis and location theory. The system has already been applied to the study of The Economic Impact of Tourism in Banff, The Economic Impact of West Edmonton Mall and several tourism projects identified by Alberta Economic Development.

The model utilizes a large set of economic and technical databases that are regularly published by Statistics Canada. A short list includes the inter-provincial input-output tables, employment by sector, taxes by type of tax and the level of government collecting it, prices of products, energy used in physical and energy units, etc.

## Impact of Direct Hunting Expenditures

Direct Hunters' expenditures in Alberta exceeded \$113 million in 2008 on hunting related activities. Investment expenditures exceeded \$183 million in Alberta in the same year. It is true that investment expenditures related to hunting exceed those directly made in 2008 but they do not represent recurrent expenditures. They tend to be made infrequently and in lumpy amounts.

It is difficult to believe that the investment figures in 2008 are representative of expenditures in different years. In this respect their impacts are not sustainable impacts. By way of contrast, regular expenditures on lodging, travel and hunting supplies are made each year and, while they vary from year to year, the magnitudes of variation are small. These expenditures are truly recurrent and their impacts are considered for, all practical purposes, sustainable impacts.

Resident Alberta hunters spent directly over \$102.5 million on hunting supplies and recurrent items. This volume of expenditures is credited with supporting a permanent increase of Alberta Gross Provincial Income of \$104.4 million, an increase in wages and salaries of \$61.4 million and over 1,054 Albertans owe their jobs to these expenditures. All levels of government derive revenues on these impacts. Together the three levels of government collected about \$50 million in 2008, with the federal government deriving the largest share of about \$25 million, followed by the provincial government with over \$22 million and the local governments collectively collecting \$2.3 million (Table 3). New money was certainly spent by other Canadians and foreigners hunters in Alberta. Other Canadians spent \$4.2 million in wages and salaries. More than 46 Albertans owe their permanent fill-time equivalent jobs to these expenditures and the three levels of government collectively collected about \$1.2 million on these impacts. Non-resident hunters from outside Canada spent \$6.7 million which raised the GPI of Alberta by \$6.5 million. Total wages and salaries are increased by about \$3.9 million. All levels of government collected \$3.3 million (Table 3).

All of the relevant multipliers compare favourably to average economy wide multipliers. The income multipliers of resident hunters' expenditures are relatively the highest. The provincial economy, much as the national economy, has become increasingly more open and the leakages have increased under globalization trends and free trade agreements. This explains why multipliers have continuously decreased and even a slightly larger than one multiplier is considered relatively high.

The total direct expenditures of hunters in Alberta in 2008 add up to \$113.4 million and sustained an income (GPI) impact of about \$115 million and an increase in wages and salaries of about \$67.7 million. A total of 1,175 FTE jobs are sustained by these expenditures.

The highest income multiplier as well as the highest employment multipliers are associated with resident hunters expenditures. There is a good reason why this is so. Resident hunters tend to spend larger proportions of their expenditures on domestically produced goods and services. The latter have lower leakages as most of them are produced locally.

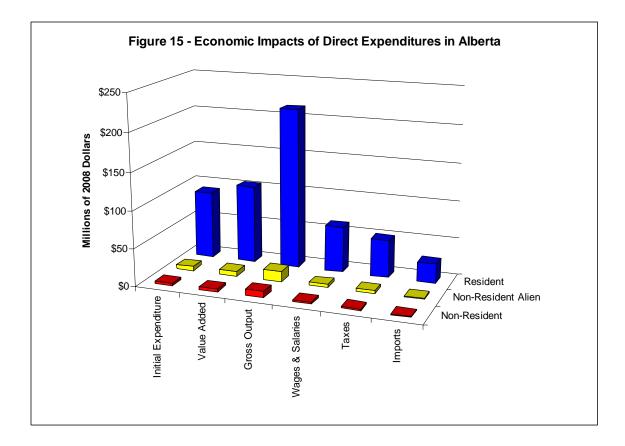
Average direct and total wages associated with direct hunting expenditures are expected to be low, but they are not. Actually, the average direct wage associated with resident hunters' expenditures is over \$63 thousand; even the total wage is relatively high at \$58,230. All other wages are high too. Direct wages associated with total hunting expenditures in Alberta in 2008 is \$61,535 and the total wage is over \$57,607.

	Resident	Non-Resident	Non-Resident	Total	Capital
			Alien		
Initial Expenditure	\$102,540,299	\$4,192,832	\$6,691,604	\$113,424,735	\$183,003,274
Value Added					
Direct	\$39,096,509	\$1,484,027	\$2,341,447	\$42,921,983	\$57,074,717
Indirect & Induced	\$65,258,430	\$2,619,194	\$4,152,329	\$72,029,953	\$128,556,666
Total	\$104,354,939	\$4,103,221	\$6,493,776	\$114,951,936	\$185,631,383
Multiplier	1.02	0.98	0.97	1.01	1.01
Gross Output					
Direct	\$90,447,409	\$3,644,215	\$5,725,513	\$99,817,137	\$183,003,274
Indirect & Induced	\$123,344,494	\$5,086,788	\$8,035,416	\$136,466,698	\$239,798,387
Total	\$213,791,903	\$8,731,003	\$13,760,929	\$236,283,835	\$422,801,661
Multiplier	2.08	2.08	2.06	2.08	2.31
Wages & Salaries					
Direct	\$24,900,618	\$942,665	\$1,527,480	\$27,370,763	\$46,251,922
Indirect & Induced	\$36,479,392	\$1,460,492	\$2,349,673	\$40,289,557	\$69,010,015
Total	\$61,380,010	\$2,403,157	\$3,877,153	\$67,660,320	\$115,261,937
Employment					
Direct	395	19	31	445	918
Indirect & Induced	659	27	44	730	1,172
Total	1,054	46	75	1,175	2,090
Multiplier	2.67	2.42	2.43	2.64	2.28
Taxes					
Federal	\$25,270,271	\$987,334	\$1,574,877	\$27,832,482	\$46,504,177
Provincial	\$22,198,034	\$951,339	\$1,623,168	\$24,772,541	\$17,433,050
Local	\$2,304,110	\$91,826	\$149,823	\$2,545,759	\$3,974,972
Total	\$49,772,415	\$2,030,499	\$3,347,868	\$55,150,782	\$67,912,199
Imports					
From Other Provinces	\$10,729,738	\$433,542	\$696,294	\$11,859,574	\$26,378,128
From Other Countries	\$15,009,220	\$638,604	\$1,010,796	\$16,658,620	\$28,899,080
Total	\$25,738,958	\$1,072,146	\$1,707,090	\$28,518,194	\$55,277,208

## Table 3 - Economic Imapcts of Direct and Capital Expenditures in Alberta (2008 Dollars)

Source: Econometric Research Limited

Figure 15 displays the comparative economic impacts of direct hunting expenditures. Surely the dominance of resident hunters' expenditures is evident; the relatively high impacts of non-resident alien hunters' expenditures are unexpected.

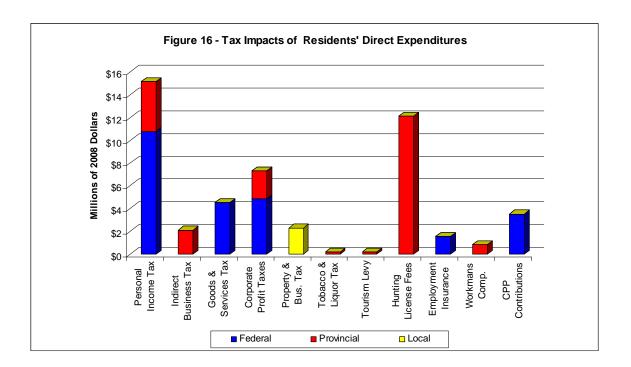


All levels of government benefit from the expenditures of hunters in Alberta. The total revenues of the three levels of government on the impacts of resident hunters' expenditures add up to \$25.3 million for the federal government, about \$22.2 million for the provincial government and \$2.3 million for local governments (Table 4). The largest share of federal government revenues on resident hunting expenditures derives from the personal income taxes of \$10.8 million. Revenues from GST and corporate profit taxes contribute the largest share of the remaining revenues. Revenues of the provincial, government vary. The largest contribution is made by license fees which contribute over 55% of the total provincial revenues from the impacts. Personal income taxes, corporate profit taxes and indirect business taxes make up the remaining revenues. Local taxation is simply derived from property and business taxes. The results in Table 4 are displayed in Figure 16 that provides a graphical representation of the relative revenues for each government level.

	Federal	Provincial	Local	Total
Personal Income Tax	\$10,788,217	\$4,364,844	\$0	\$15,153,061
Indirect Business Tax	\$0	\$2,105,128	\$0	\$2,105,128
Goods & Services Tax	\$4,520,168	\$0	\$0	\$4,520,168
Corporate Profit Taxes	\$4,879,675	\$2,427,539	\$0	\$7,307,214
Property & Bus. Tax	\$0	\$0	\$2,304,110	\$2,304,110
Tobacco & Liquor Tax	\$0	\$190,928	\$0	\$190,928
Tourism Levy	\$0	\$184,976	\$0	\$184,976
Hunting License Fees	\$0	\$12,092,890	\$0	\$12,092,890
Employment Insurance	\$1,549,962	\$0	\$0	\$1,549,962
Workmans Comp.	\$0	\$831,729	\$0	\$831,729
CPP Contributions	\$3,532,249	\$0	\$0	\$3,532,249
Total	\$25,270,271	\$22,198,034	\$2,304,110	\$49,772,415

# Table 4 - Tax Impacts of Residents' Direct Expenditures(2008 Dollars)

Source: Econometric Research Limited

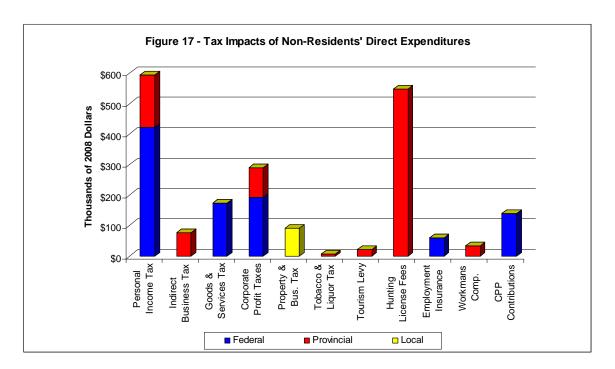


A similar pattern is displayed by the revenues of the three levels of government on the economic impacts that result from non-residents' direct expenditure in Alberta in 2008. Again the dominant effect of license fees is evident; it surpasses all other revenues for the provincial government. The differences in revenues between the federal and provincial governments are minimal despite the fact that the provincial government collects way below the federal government on the common tax base (Table 5 and Figure 17).

	Federal	Provincial	Local	Total
Personal Income Tax	\$422,381	\$170,893	\$0	\$593,274
Indirect Business Tax	\$0	\$76,050	\$0	\$76,050
Goods & Services Tax	\$172,937	\$0	\$0	\$172,937
Corporate Profit Taxes	\$193,037	\$96,032	\$0	\$289,069
Property & Bus. Tax	\$0	\$0	\$91,826	\$91,826
Tobacco & Liquor Tax	\$0	\$6,898	\$0	\$6,898
Tourism Levy	\$0	\$20,285	\$0	\$20,285
Hunting License Fees	\$0	\$548,617	\$0	\$548,617
Employment Insurance	\$60,684	\$0	\$0	\$60,684
Workmans Comp.	\$0	\$32,564	\$0	\$32,564
CPP Contributions	\$138,295	\$0	\$0	\$138,295
Total	\$987,334	\$951,339	\$91,826	\$2,030,499

# Table 5 - Tax Impacts of Non-Residents' Direct Expenditures (2008 Dollars)

Source: Econometric Research Limited



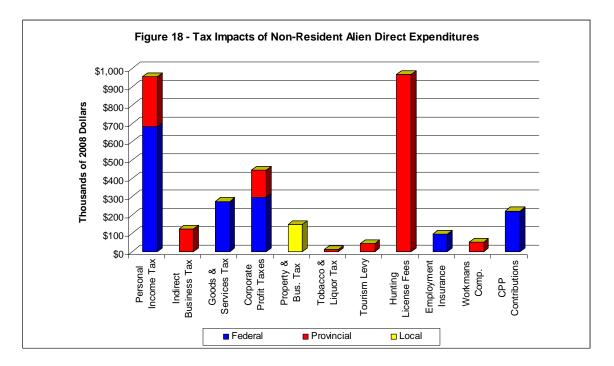
The impacts generated by non-resident expenditures are incremental to Alberta in the sense that they are new money that other Canadians bring into Alberta from other provinces. Furthermore, the expenditures of non-resident aliens in Alberta are not only incremental to Alberta but also to Canada. The magnitudes of these expenditures may be relatively small but their impacts are quite meaningful being "new" and incremental to the province and some to the nation. The tax impacts on these expenditures are quite meaningful to the extent that they give rise to no parallel expenditure commitments, but if these flows are to continue there is room to suggest that part of these revenues should be earmarked for sustaining the hunting activity in the province so as to continue to attract visitors from outside the province. The incremental tax impacts derived on non-resident alien hunting expenditures in Alberta in 2008 are displayed in Table 6 and Figure 18. The distribution and structure is not different from other tax impacts generated by corresponding expenditures of hunters from different origins. The major difference has to do with their being incremental to the provincial and national economies.

	Federal	Provincial	Local	Total
Personal Income Tax	\$681,453	\$275,711	\$0	\$957,164
Indirect Business Tax	\$0	\$126,158	\$0	\$126,158
Goods & Services Tax	\$275,290	\$0	\$0	\$275,290
Corporate Profit Taxes	\$297,110	\$147,806	\$0	\$444,916
Property & Bus. Tax	\$0	\$0	\$149,823	\$149,823
Tobacco & Liquor Tax	\$0	\$11,442	\$0	\$11,442
Tourism Levy	\$0	\$43,423	\$0	\$43,423
Hunting License Fees	\$0	\$966,091	\$0	\$966,091
Employment Insurance	\$97,905	\$0	\$0	\$97,905
Workmans Comp.	\$0	\$52,537	\$0	\$52,537
CPP Contributions	\$223,119	\$0	\$0	\$223,119
Total	\$1,574,877	\$1,623,168	\$149,823	\$3,347,868

 Table 6 - Tax Impacts of Non-Resident Alien Direct Expenditures

 (2008 Dollars)

Source: Econometric Research Limited



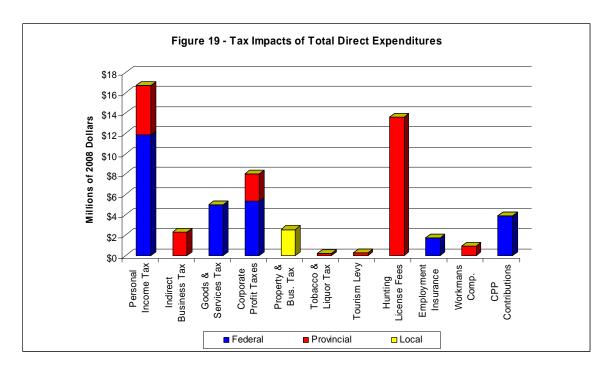
The total impacts that add together the three impacts (residents, non-residents and non-resident aliens) are significantly large to warrant careful assessment and protection of this source of

revenues. The total impacts on all levels of government add up to \$55 million, of which personal income taxes contribute \$16.7 million, followed by license fees with \$13.6 million, corporate profit taxes with \$8 million, GST with almost \$5 million and so on.(Table 7 and Figure 18).

	Federal	Provincial	Local	Total
Personal Income Tax	\$11,892,051	\$4,811,448	\$0	\$16,703,499
Indirect Business Tax	\$0	\$2,307,336	\$0	\$2,307,336
Goods & Services Tax	\$4,968,395	\$0	\$0	\$4,968,395
Corporate Profit Taxes	\$5,369,822	\$2,671,377	\$0	\$8,041,199
Property & Bus. Tax	\$0	\$0	\$2,545,759	\$2,545,759
Tobacco & Liquor Tax	\$0	\$209,268	\$0	\$209,268
Tourism Levy	\$0	\$248,684	\$0	\$248,684
Hunting License Fees	\$0	\$13,607,598	\$0	\$13,607,598
Employment Insurance	\$1,708,551	\$0	\$0	\$1,708,551
Workmans Comp.	\$0	\$916,830	\$0	\$916,830
CPP Contributions	\$3,893,663	\$0	\$0	\$3,893,663
Total	\$27,832,482	\$24,772,541	\$2,545,759	\$55,150,782

## Table 7 - Tax Impacts of Total Direct Expenditures (2008 Dollars)

Source: Econometric Research Limited



## **Impact of Hunting Capital Expenditures**

Econometric Research Limited

Capital expenditures (investment) are lumpy but not likely to be made on a year by year basis. The impacts are consequently large but not recurrent. This raises a question about whether or not they can be added to the direct expenditures. Typically the two are not additive unless it can be shown that capital expenditures are made continuously and consistently each year. It is of course difficult to imagine that expenditures on special vehicles, boats and camping equipment that account for the largest shares of capital expenditures associated with hunting are made regularly every year.

Investment Category	Total Amount Spent on Purchases in Alberta (Sample)	% of Total Attributable to Hunting	Total Investment Expenditures (Population)
Hunting Equipment			
(Firearms Archery equipment, optics telescopic sights,	\$10,105	98.4%	
binoculars, field glasses, etc.)			<b>\$0.004.400</b>
Other Hunting Equipment	-		\$2,384,409
(GPS, re-loading equipment and components, muzzleloaders	\$5,470	85.2%	
and other primitive firearms, etc.)	<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
			\$1,117,607
Boating Equipment			
(Boats, motors, trailers, hitches, etc.)	\$2,350	45.2%	\$254,723
Camping Equipment			
(Tents, camper trailers, etc.)	\$27,600	68.7%	\$4,547,033
Special Vehicles			
(4x4's, camper truck, ATV's, snowmobiles, etc.)	\$199,390	50.7%	\$24,242,288
Land-Buildings	<b>*</b> / <b>*</b> * * * * *		<b>*</b> 440.444.000
(Cabins, Cottages, land, etc.)	\$1,202,000	50.7%	\$146,141,883
Hunting Dogs	<b>*</b> 0 <b>=</b> 00	100.00/	¢500.540
(For bird hunting).	\$2,500	100.0%	\$599,518
Clothing	¢14.150	100.0%	¢2 202 272
(Special clothing, waders, foul weather gear, etc.) Other	\$14,150	100.0%	\$3,393,272
(Knives and cases, decoys, game calls etc.)	\$1,345	100.0%	\$322,541
Total	φ1,3 <del>4</del> 0	100.0 %	. ,
וטנמו	<u> </u>		\$183,003,274

#### Table 8 - Hunting Related Capital Expenditures in Alberta in 2008

Source: Econometric Research Limited

In this Report we present each impact separately and no attempt is made to add them together. Each impact stream is large on its own and sustains significant economic benefits to the province at large and to the many remote and rural communities where hunting is practiced.

Alberta residents naturally account for most, if not exclusively, of the capital expenditures associated with hunting in Alberta in 2008. Out of the total of \$183 million that was estimated to reflect these capital expenditures on hunting equipment, special vehicles, boating equipment, camping equipment and other non-recurrent investment expenditures related to hunting in Alberta in 2008, almost \$181 million are made by Alberta resident hunters. The remaining two million are shared almost equally between non-resident Canadian and non-resident alien hunters.

A large volume of sales are supported by the investment expenditures in 2008. Actually, more than \$422 million of total gross output (sales) result from the original \$183 million (Tables 3 and 8). This large volume of sales sustains an income (value added) impact of \$185.6 million and over \$115.2 million in wages and salaries. A total of 2,090 person years of employment is attributable to these expenditures in Alberta in 2008 (Table 3 and Figure 20). Total taxes generated by the investment expenditures to all three levels of government are almost \$68 million. The federal government is again the major beneficiary with over \$46.5 million and the local governments in Alberta made up with about \$4 million. Capital (investment) expenditures involve large ticket purchases that are not typically produced in Alberta. It is not surprising to find that imports constitute a large share of the total output generated. A total of \$55.3 million is imported from other countries and other provinces. The imports from other countries were about \$29 million, whereas imports from other provinces were almost just as large with \$26.4 million (Table 3).

Given that Alberta resident hunters' capital expenditures account for almost all of the capital expenditures in Alberta associated with hunting, it is not far fetched to claim that the total economic impacts of capital expenditures can be attributed to them. The results in Table 3 and Figure 2 show clearly the dominance of Alberta hunters' capital expenditures and their share in total impacts. Although there are different income and employment multipliers associated with the different hunters' capital expenditures the multipliers of the total capital expenditures and total direct expenditures are equal for income but the employment multiplier associated with latter is higher than the one associated with capital expenditures. The fact that capital expenditures are concentrated in commodities that are capital intensive and direct expenditures are employment multiplier associated with direct expenditures are expenditures that are capital intensive and direct expenditures are concentrated in relatively labour intensive products and services explains the higher employment multiplier associated with direct expenditures (see Figure 20).

Total tax recoveries on the capital impacts are large and come from the same typical sources. Personal income taxes contribute the largest share (\$28.4 million) followed corporate profit taxes (almost \$12 million). Revenues from GST and CPP are significant and so are property and business taxes (Table 9 and Figure 21). The federal government receives the largest share of personal income taxes, all of the GST and a large share of corporate profit taxes and all of the CPP contributions. The provincial government collects a significant share of personal income taxes. It is also the recipient of indirect business taxes and fees and a workman's compensation levies.

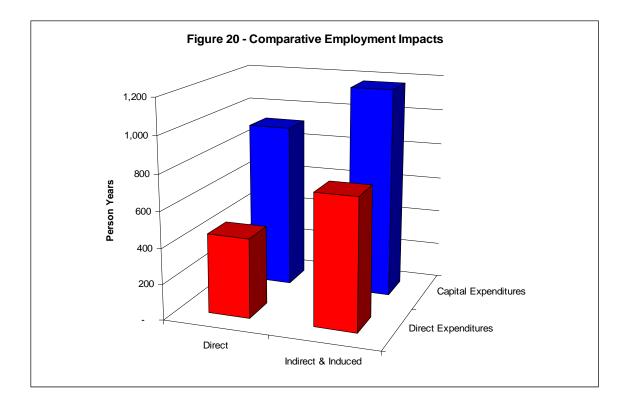
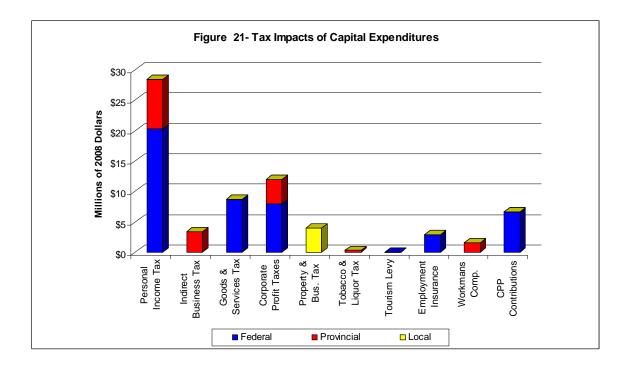


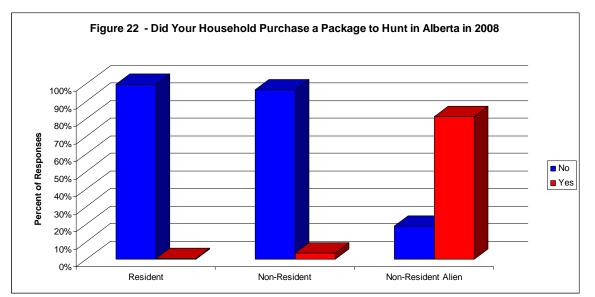
Table 9 - Tax Impacts	of Capital Expenditures
(2008	Dollars)

	Federal	Provincial	Local	Total
Personal Income Tax	\$20,258,565	\$8,196,487	\$0	\$28,455,052
Indirect Business Tax	\$0	\$3,392,076	\$0	\$3,392,076
Goods & Services Tax	\$8,711,785	\$0	\$0	\$8,711,785
Corporate Profit Taxes	\$7,990,240	\$3,974,982	\$0	\$11,965,222
Property & Bus. Tax	\$0	\$0	\$3,974,972	\$3,974,972
Tobacco & Liquor Tax	\$0	\$307,650	\$0	\$307,650
Tourism Levy	\$0	\$0	\$0	\$0
Employment Insurance	\$2,910,582	\$0	\$0	\$2,910,582
Workmans Comp.	\$0	\$1,561,855	\$0	\$1,561,855
CPP Contributions	\$6,633,004	\$0	\$0	\$6,633,004
Total	\$46,504,176	\$17,433,050	\$3,974,972	\$67,912,198



### **Hunting Packages - Impacts and Characteristics**

Some resident and a few non-resident hunters in Alberta have purchased hunting packages in 2008. The largest share of these packages was bought by non-resident aliens who spent an average \$4,988 per package for a total of \$22.8 million in 2008 (Figure 22 and Table 10).



The small size of the sample suggests that these results should be interpreted with caution, but the consistent logic of the responses is indicative of some underlying accuracy. Surely the resident purchases of these packages were so small that we have decided to eliminate them. We have concentrated instead on the responses of both non-residents and non-resident aliens. Together these purchases add up to \$23.2 million (Table 10). When Alberta residents' purchases are included the total rises to \$25.4 million but the average package price is deemed unreliable even when we eliminate outliers.

# Table 10 - Average and Total Expenditures on Hunting PackagesIn Alberta in 2008

	Residents	Non-Residents	Non-Resident	Total/
			Alien	Average
Average cost of Package	\$6,000	\$3,833	\$4,988	\$4,943
Total Expenditure on Packages	\$2,234,100	\$392,755	\$22,804,757	\$25,431,612

Source: Econometric Research Limited

The total expenditures of \$23.2 million sustain a large income (value added) impact of \$23.6 million. The income multiplier associated with these purchases is 1.02 but exceeds 1.11 for the non-residents' purchases of hunting packages (Table 11 and Figure 23).

A large employment impact results from these expenditures. A total of 268 FTEs are generated by these purchases in Alberta. The direct employment impacts are below the indirect and induced effects. Wages and salaries in Alberta are augmented by about \$14.3 million (Table 11).

Total taxes on these impacts add up to a large \$11.8 million. The federal government shows a share of \$5.8 million and almost equivalent share for the provincial government with \$5.5 million. The license fees paid by hunters are what bring the provincial revenues to an equivalent magnitude to that of the federal government. Local governments gather about \$547 thousand.

The largest sources of revenue for the federal government are personal income taxes with over \$2.5 million, GST and corporate profit taxes with \$1 million each (Table 14 and Figure 26). The provincial government shows a total of over \$3 million in hunting license fees and a \$1 million in personal income taxes and over \$0.5 million in corporate profit taxes (Table 14 and Figure 26).

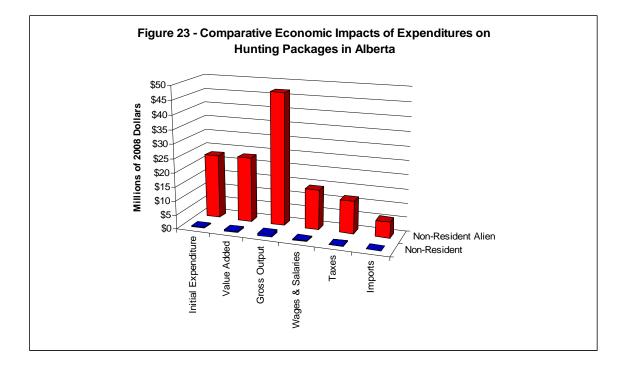
Two tables (Table 12 and Table 13) and two figures (Figure 24 and Figure 25) display the tax generation distributions associated with non-residents' package purchases and the non-resident aliens package purchases, respectively.

	Non-Resident	Alien	Total
Initial Expenditure	\$392,754	\$22,804,757	\$23,197,511
Value Added			
Direct	\$185,753	\$11,742,327	\$11,928,080
Indirect & Induced	\$252,069	\$11,404,397	\$11,656,466
Total	\$437,822	\$23,146,724	\$23,584,546
Multiplier	1.11	1.01	1.02
Gross Output			
Direct	\$392,754	\$22,804,757	\$23,197,511
Indirect & Induced	\$485,755	\$24,104,657	\$24,590,412
Total	\$878,509	\$46,909,414	\$47,787,923
Multiplier	2.24	2.06	2.06
Wages & Salaries			
Direct	\$109,613	\$5,789,972	\$5,899,585
Indirect & Induced	\$155,076	\$8,240,141	\$8,395,217
Total	\$264,689	\$14,030,113	\$14,294,802
Employment			
Direct	2	114	116
Indirect & Induced	3	150	152
Total	5	264	268
Multiplier	2.42	2.31	2.31
Taxes			
Federal	\$107,568		
Provincial	\$64,929	\$5,399,622	\$5,464,551
Local	\$10,081	\$536,467	\$546,548
Total	\$182,578	\$11,614,949	\$11,797,527
Imports			
From Other Provinces	\$45,438	\$2,415,302	\$2,460,740
From Other Countries	\$61,248	\$3,337,804	\$3,399,052
Total	\$106,686	\$5,753,106	\$5,859,792

### Table 11 - Economic Impacts of Expenditures on Hunting Packages in Alberta (2008 Dollars)

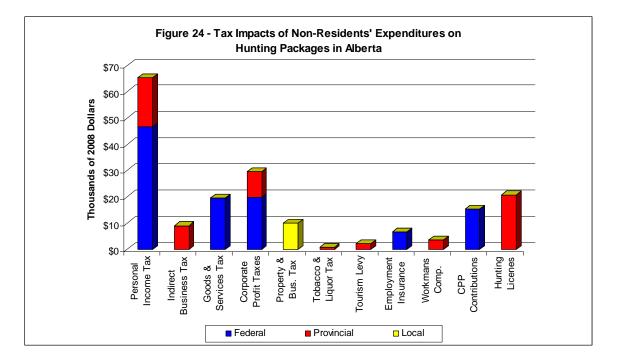
Source: Econometric Research Limited

The largest share of taxes is collected on Non-resident aliens' expenditures impacts. These contribute \$11.6 million out of the \$11.8 million collected on total impacts. The Provincial government collects almost as much as the Federal government on these impacts. The equalizer is the large license fees that the Provincial government collects from non-resident hunters.



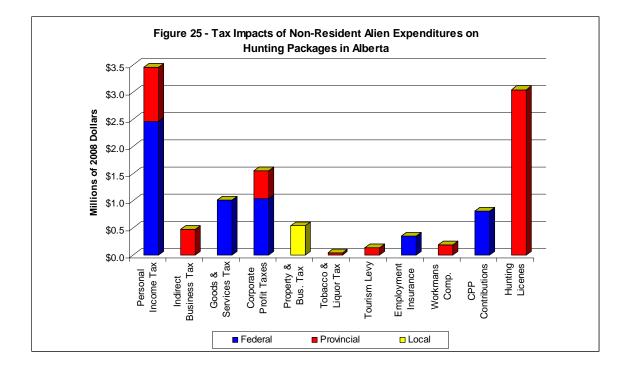
### Table 12 - Tax Impacts of Non-Residents' Expenditures on Hunting Packages in Alberta (2008 Dollars)

	Federal	Provincial	Local	Total
Personal Income Tax	\$46,522	\$18,822	\$0	\$65,344
Indirect Business Tax	\$0	\$8,984	\$0	\$8,984
Goods & Services Tax	\$19,471	\$0	\$0	\$19,471
Corporate Profit Taxes	\$19,659	\$9,780	\$0	\$29,439
Property & Bus. Tax	\$0	\$0	\$10,081	\$10,081
Tobacco & Liquor Tax	\$0	\$815	\$0	\$815
Tourism Levy	\$0	\$2,224	\$0	\$2,224
Employment Insurance	\$6,684	\$0	\$0	\$6,684
Workmans Comp.	\$0	\$3,587	\$0	\$3,587
CPP Contributions	\$15,232	\$0	\$0	\$15,232
Hunting Licenses	\$0	\$20,717	\$0	\$20,717
Total	\$107,568	\$64,929	\$10,081	\$182,578



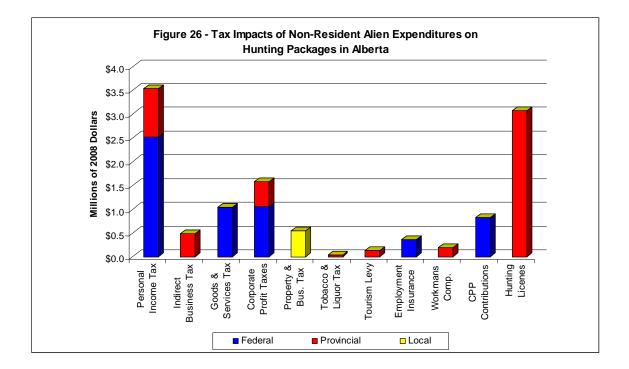
### Table 13 - Tax Impacts of Non-Resident Alien Expenditures on Hunting Packages in Alberta (2008 Dollars)

	Federal	Provincial	Local	Total
Personal Income Tax	\$2,465,948	\$997,707	\$0	\$3,463,655
Indirect Business Tax	\$0	\$473,762	\$0	\$473,762
Goods & Services Tax	\$1,016,067	\$0	\$0	\$1,016,067
Corporate Profit Taxes	\$1,035,164	\$514,973	\$0	\$1,550,137
Property & Bus. Tax	\$0	\$0	\$536,467	\$536,467
Tobacco & Liquor Tax	\$0	\$42,969	\$0	\$42,969
Tourism Levy	\$0	\$133,260	\$0	\$133,260
Employment Insurance	\$354,287	\$0	\$0	\$354,287
Workmans Comp.	\$0	\$190,115	\$0	\$190,115
CPP Contributions	\$807,394	\$0	\$0	\$807,394
Hunting Licenses	\$0	\$3,046,836	\$0	\$3,046,836
Total	\$5,678,860	\$5,399,622	\$536,467	\$11,614,949



### Table 14 - Tax Impacts of Total Expenditures on Hunting Packages in Alberta (2008 Dollars)

	Federal	Provincial	Local	Total
Personal Income Tax	\$2,512,470	\$1,016,529	\$0	\$3,528,999
Indirect Business Tax	\$0	\$482,746	\$0	\$482,746
Goods & Services Tax	\$1,035,538	\$0	\$0	\$1,035,538
Corporate Profit Taxes	\$1,054,823	\$524,753	\$0	\$1,579,576
Property & Bus. Tax	\$0	\$0	\$546,548	\$546,548
Tobacco & Liquor Tax	\$0	\$43,784	\$0	\$43,784
Tourism Levy	\$0	\$135,484	\$0	\$135,484
Employment Insurance	\$360,971	\$0	\$0	\$360,971
Workmans Comp.	\$0	\$193,702	\$0	\$193,702
CPP Contributions	\$822,626	\$0	\$0	\$807,394
Hunting Licenses	\$0	\$3,067,553	\$0	\$3,067,553
Total	\$5,786,428	\$5,464,551	\$546,548	\$11,797,527



## **Alberta Conservation Organizations**

There are a number of Organizations in Alberta that are committed to conservation and advocacy for the environment and activities that are considered environment friendly. We have attempted to reach each and every one of them but were only successful in obtaining the financial statements of 8 out of the 11 contacted. The Organizations contacted have broad mandates that extend beyond hunting issues and concerns, but they do present an agenda of promoting safe hunting and its practice in an environmentally protective way

Volunteers make large contributions in time and money to support the activities of the Organizations. These activities include training, mentoring, good governance, organizing special events, and supporting and/or conducting field research. They also contribute substantially to several other smaller or specialized organizations. It appears that universities, particularly the University of Alberta, have been a major beneficiary of these Organizations' contributions.

Less recognized perhaps is the large financial and economic contributions these Organizations make to the economy of Alberta either as direct employers of many Albertans (over 156 FTEs in 2008) or as centres of economic activity spending scarce resources on sustaining their functions.

# Table 15 - Operating Expenditures ofConservation Organizations in Alberta

(2008 Dollars)

Advertising, Public Relations and Legal Expenses	\$507,413
Consulting and Professional Fees	\$31,851
Landowner Agreements	\$97,709
Management Fees	\$12,440
Contracted Services	\$1,525,756
Insurance	\$133,821
Maintenance and Repairs	\$150,743
Office Supplies, Expenses and Equipment	\$327,520
Payroll	\$5,557,815
Hosting and Conferences	\$75,521
Payroll Taxes	\$28,560
Printing and Mailing	\$67,226
Rent or Lease Payments	\$757,487
Shipping and Deliveries	\$38,060
Licenses	\$9,325
Materials and Supplies	\$225,482
Amortization	\$499,321
Local Property Taxes	\$3,500
Local Busines Tax & Charges	\$3,000
Utilities: Gas, Electric etc.	\$40,215
Travel and Entertainment	\$360,878
Vehicle Expenses	\$239,904
Communication (Phone & Faxes)	\$121,533
Grants to Other Organizations	\$1,262,989
Miscellaneous	\$38,742
Other (1) Training	\$48,675
Other (1) Awards in programs	\$95,868
Other (1) Newsletter	\$180,079
Other (1) GST	\$15,000
Other (1) Board Expenes	\$5,000
Other (1) Fundraising Costs	\$108,979
Accounting	\$750
Bank Charges and Interest	\$172,359
Total	\$12,743,520

Source: Conservation Associations' Survey

The nine Conservation Organizations that submitted their questionnaires show a total expenditure that was over \$12.7 million in 2008 (see Table 15). This volume of spending sustained a total income impact in Alberta of \$18.4 million. The implicit income multiplier associated with these expenditures is a large 1.44. This is not surprising given the high wages and salaries component in these expenditures, which in addition to the large share of local products and resources in these expenditures explain the high magnitude of the income multiplier (Table 16 and Figure 27).

31

#### Table 16 - Economic Impacts of Organization Expenditures

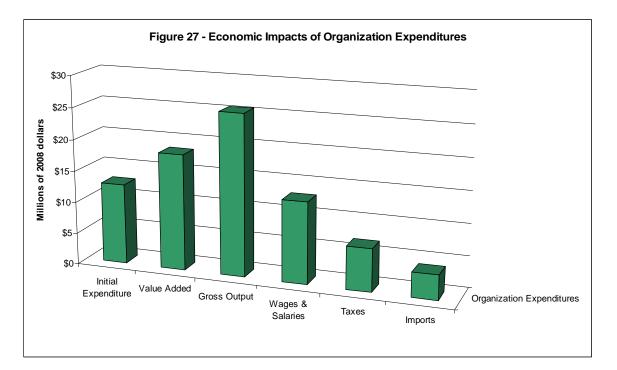
(2008 Dollars)

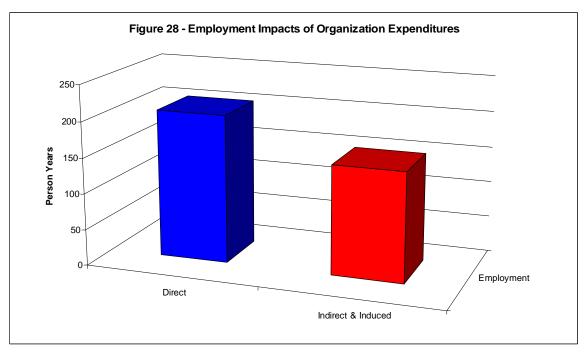
Initial Expenditure	\$12,743,520
Value Added	
Direct	\$8,682,157
Indirect & Induced	\$9,718,702
Total	\$18,400,859
Multiplier	1.44
Gross Output	
Direct	\$12,743,520
Indirect & Induced	\$12,797,434
Total	\$25,540,954
Multiplier	2.01
Wages & Salaries	
Direct	\$7,328,068
Indirect & Induced	\$5,581,598
Total	\$12,909,666
Employment	
Direct	206
Indirect & Induced	152
Total	358
Multiplier	1.74
Taxes	
Federal	\$4,633,663
Provincial	\$1,723,121
Local	\$392,895
Total	\$6,749,679
Imports	
From Other Provinces	\$1,830,786
From Other Countries	\$2,109,989
Total	\$3,940,775

Source: Econometric Research Limited

The wages and salaries impact is larger than the initial expenditures. As many as 358 Albertans owe their permanent FTE jobs to these Organizations' activities and spending. The direct jobs are larger than the 206 FTE that are on the premises of these Organizations. Indirect and induced jobs are relatively small given that most of their spending is on wages and salaries, management and professional services (Table 16 and Figure 28).

Large government revenues are collected on these impacts by all levels of government. A total of \$6.7 million is collected on the impacts of the Conservation Organizations' expenditures in Alberta in 2008. The federal government alone collects about \$4.6 million. The provincial government in turn collects about \$1.7 million whereas the local governments show a share of \$393 thousand (Table 16).





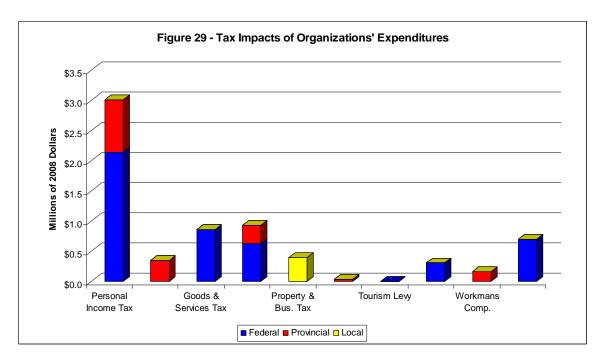
Again most of the federal government revenues on the Conservation Organizations' impacts come from personal income taxes (\$3 million) with the GST accounting alone for \$858 thousand (Table 17 and Figure 29). CPP contributions are also quite large with over \$674 thousand, followed by corporate profit taxes of \$603 thousand.

#### Table 17 - Tax Impacts of Organizations' Expenditures

(2008 Dollars)

	Federal	Provincial	Local	Total
Personal Income Tax	\$2,142,793	\$866,960	\$0	\$3,009,753
Indirect Business Tax	\$0	\$349,114	\$0	\$349,114
Goods & Services Tax	\$857,916	\$0	\$0	\$857,916
Corporate Profit Taxes	\$623,508	\$310,183	\$0	\$933,691
Property & Bus. Tax	\$0	\$0	\$392,895	\$392,895
Tobacco & Liquor Tax	\$0	\$31,663	\$0	\$31,663
Tourism Levy	\$0	\$0	\$0	\$0
Employment Insurance	\$307,859	\$0	\$0	\$307,859
Workmans Comp.	\$0	\$165,201	\$0	\$165,201
CPP Contributions	\$701,588	\$0	\$0	\$701,588
Total	\$4,633,664	\$1,723,121	\$392,895	\$6,749,680

Source: Econometric Research Limited



The provincial government collects its main revenues on these impacts from its share in the personal income taxes followed by indirect business taxes and corporate profit taxes. The local governments show a total of \$379 thousand in property and business taxes. A few more sources of taxes are shown in Table 16 but they represent small sources of revenue but together they add to a significant source of government revenues.

Conservation Organizations in Alberta carry out a number of activities that promote environmental conservation and safety programs. These Organizations draw on a very wide membership and many volunteer hours (see Table A2 in the Appendix). They also organize banquets, events and other fund-raising activities that advertise and raise awareness about their conservation programs in Alberta.

### **Total Economic Impacts of Hunting Activities in Alberta**

There are many activities that go under the umbrella of hunting. These cover direct spending on hunting supplies, capital expenditures, the activities and expenditures of Conservation Organizations involved in hunting and the outfitting industry and hunting packages.

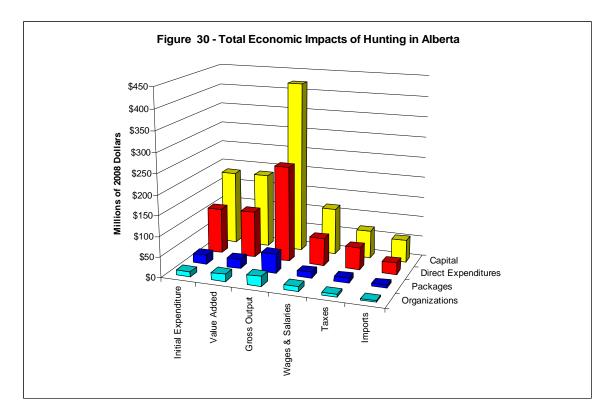
When all of the expenditures are added up with the exception of capital expenditures we arrive at a total recurrent expenditure of about \$149 million in Alberta in 2008. This comprises \$113.4 million in direct hunting expenditures, \$23.2 million in packages and \$12.3 million spent by the relevant Organizations.

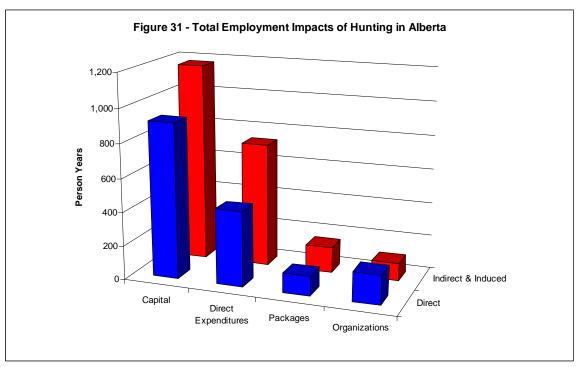
	Capital	Direct	Packages	Organizations	Total
		Expenditures	-	-	
Initial Expenditure	\$183,003,274	\$113,424,735	\$23,197,511	\$12,743,520	\$149,365,766
Value Added					
Direct	\$57,074,717	\$42,921,983	\$11,928,080	\$8,682,157	\$63,532,220
Indirect & Induced	\$128,556,666	\$72,029,953	\$11,656,466	\$9,718,702	\$93,405,121
Total	\$185,631,383	\$114,951,936	\$23,584,546	\$18,400,859	\$156,937,341
Multiplier	1.01	1.01	1.02	1.44	1.05
Gross Output					
Direct	\$183,003,274	\$99,817,137	\$23,197,511	\$12,743,520	\$135,758,168
Indirect & Induced	\$239,798,387	\$136,466,698	\$24,590,412	\$12,797,434	\$173,854,544
Total	\$422,801,661	\$236,283,835	\$47,787,923	\$25,540,954	\$309,612,712
Multiplier	2.31	2.08	2.06	2.01	2.07
Wages & Salaries					
Direct	\$46,251,922	\$27,370,763	\$5,899,585	\$7,328,068	\$40,598,416
Indirect & Induced	\$69,010,015	\$40,289,557	\$8,395,217	\$5,581,598	\$54,266,372
Total	\$115,261,937	\$67,660,320	\$14,294,802	\$12,909,666	\$94,864,788
Employment					
Direct	918	445	116	206	767
Indirect & Induced	1,172	730	152	152	1,034
Total	2,090	1,175	268	358	1,801
Multiplier	2.28	2.64	2.31	1.74	2.35
Taxes					
Federal	\$46,504,177	\$27,832,482	\$5,786,428		\$38,252,573
Provincial	\$17,433,050		\$5,464,551	\$1,723,121	\$31,960,213
Local	\$3,974,972	\$2,545,759	\$546,548	\$392,895	\$3,485,202
Total	\$67,912,199	\$55,150,782	\$11,797,527	\$6,749,679	\$73,697,988
Imports					
From Other Provinces	\$26,378,128		\$2,460,740		\$16,151,100
From Other Countries	\$28,899,080		\$3,399,052	\$2,109,989	\$22,167,661
Total	\$55,277,208	\$28,518,194	\$5,859,792	\$3,940,775	\$38,318,761

#### Table 18 - Total Economic Impacts of Hunting in Alberta (2008 Dollars)

Source: Econometric Research Limited

This large stream of expenditures is credited with sustaining a total of \$156.9 million in permanent income in Alberta, and 1,801 Albertans owe their permanent FTE jobs to these expenditures (Table 18 and Figures 30 and 31).





A relatively large income multiplier is associated with total expenditures on hunting in 2008 of 1.05. The Conservation Organizations' income multiplier is the highest with 1.45. Wages and salaries in Alberta are augmented annually by over \$94.9 million by these expenditures and a total effective wage is sustained at \$52,670. All levels of government gain from the associated

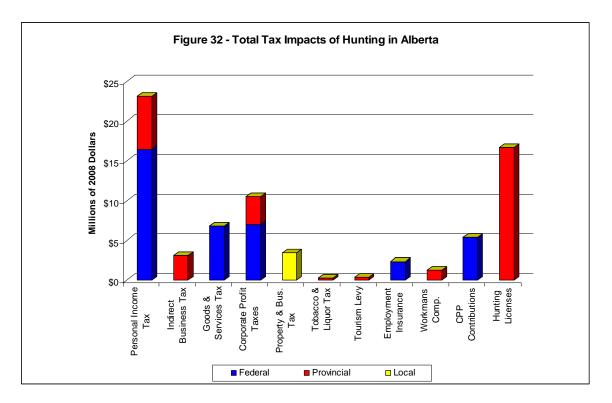
impacts of hunters. Total tax revenues for the three levels of government on the impacts of hunting expenditures exceed \$73.7 million. The Federal government collects the largest share with \$38.3 million. The Provincial government collects about \$32 million and local governments in Alberta show combined revenue on these impacts of \$3.5 million (Table 19 and Figure 32).

### Table 19 - Total Tax Impacts of

Hunting	in Alberta	
(2008	Dollars)	

	Federal	Provincial	Local	Total
Personal Income Tax	\$16,547,314	\$6,694,937	\$0	\$23,242,251
Indirect Business Tax	\$0	\$3,139,196	\$0	\$3,139,196
Goods & Services Tax	\$6,861,849	\$0	\$0	\$6,861,849
Corporate Profit Taxes	\$7,048,153	\$3,506,313	\$0	\$10,554,466
Property & Bus. Tax	\$0	\$0	\$3,485,202	\$3,485,202
Tobacco & Liquor Tax	\$0	\$284,715	\$0	\$284,715
Tourism Levy	\$0	\$384,168	\$0	\$384,168
Employment Insurance	\$2,377,381	\$0	\$0	\$2,377,381
Workmans Comp.	\$0	\$1,275,733	\$0	\$1,275,733
CPP Contributions	\$5,417,877	\$0	\$0	\$5,417,877
Hunting Licenses	\$0	\$16,675,151	\$0	\$16,675,151
Total	\$38,252,574	\$31,960,213	\$3,485,202	\$73,697,989

Source: Econometric Research Limited



#### Limitations

The following outlines salient limitations imposed on the approach and findings of this analysis:

- An effort has been made to ensure estimates in the Report are made in a conservative manner to avoid overstating the results. A few outliers were eliminated from the survey results; capital expenditures were considered non-recurrent and as such were not added to direct expenditures. Only 7 out of 11 identified Conservation Organizations responded and therefore their expenditures fall short of representing the total expenditures of Conservation Organizations.
- The survey results were estimated based a stratified random sample of Win Card holders in 2008. The sample results contain a margin of error that we have estimated to be 3.1%, 19 out of 20 times.
- Benefits are not always easily expressed in monetary terms. For example, social and cultural benefits and costs from recreational activities or the preservation of the environment, habitat, and the protection of the aquatic ecosystem are not easily measured. We have not estimated in monetary terms some of the conservation activities and environmental impacts. We simply presented social and environmental impacts in qualitative terms.
- The impact results are based on data compiled from a variety of sources including Statistics Canada, Alberta Sustainable Resource Development and other government departments. They may not be strictly statistically reliable and are therefore subject to a margin of error.
- The model used is a simulation model and, as such, it creates a theoretical picture of the future of the economy on the basis of a series of assumptions, which may or may not hold true over time. These assumptions are discussed in the Technical Manual of DEIM, housed in Alberta Tourism, Recreation and Parks.

## **Summary and Conclusions**

Hunting in Alberta has not been recognized as a substantial economic resource that makes a major contribution to the provincial economy and to many rural areas of the province. Its natural and environmental consequences are varied and serious but these have been better recognized than the economic contributions. This study involved the designing and conducting a number of surveys of industry stakeholders including Conservation Organizations, Outfitters, resident hunters, non-resident and non-resident alien hunters. Both a stratified random sample driven telephone survey and an online survey were also undertaken. The stratified random sample survey conducted by ERL in the province and abroad in 2008 and used the results of the survey

and its estimates to calculate the economic value and impacts of hunting in Alberta. Below is a summary of the salient results. They include the following:

- A total of 99,001 adult hunters were identified to have held hunting licenses in Alberta in 2008. Of these, 89.7% were Alberta residents, 3.2% were from other parts of Canada and 7.1% from outside Canada. Alberta hunters are typically younger (the largest age cohort is that of those 40-49 years) than hunters from other parts of Canada or from outside Canada where the age cohort 50-59 is the largest. There were also 6,056 youth licensed hunters in the same year, for a total of 105,057.
- Hunters in Alberta have bought primarily Big Game licenses (57%); Bird Game licenses are bought by only 6% and licenses for both games account for 37%.
- Over 96.6% of the licensed hunters actively hunted in 2008 in Alberta.
- Family, friends and other hunters are the most often used source for information on hunting opportunities in Alberta. Over 56% of those who responded to the question about sources of information used to plan hunting activities in Alberta in 2008 said they most often used word of mouth from other hunters, friends and relatives the most. The least used sources are those from TV or radio announcements (95.3%), license issuers (90%) and clubs or associations (89.5).
- A majority (96%) of hunters in Alberta in 2008 declared that dissatisfaction with hunting in Alberta did not apply to them. All of the non-resident alien hunters declared that dissatisfaction does not apply to their experience of hunting in Alberta in 2008.
- A total of 96% of Resident hunters and non-resident hunters were satisfied with their experience. The 4% of resident hunters that were not satisfied with their hunting experience in Alberta in 2008, stayed a shorter period hunting, whereas of the 4% of non-resident hunters who declared that they were not satisfied half stayed a shorter period and the other half declared that they would not return again to Alberta to hunt.
- Hunters in Alberta in 2008 spent long average periods in all zones. In the 100 Zones, resident hunters spent on average 5.2 days, non-resident hunters spent an average 5.4 days and non-resident aliens spent the longest average period of 7.8 days in these zones.
- In the 200 Zones, resident hunters spent the longest average period with 8.9 days. Resident hunters spent only 6.5 days on average, whereas non-resident alien hunters spent 7 days.
- The same pattern is observed in the 300 and 400 Zones. Resident hunters spent 10.9 days on average in the 300 Zones, this being the longest average period spent by resident hunters, whereas they spent on average 6.5 days in the 400 Zones. Non-resident hunters spent 7.4 days in the 300 Zones and 4.7 days in the 400 Zones, respectively.

- Non-resident aliens spent their longest average period of 8 days in the 300 Zones and only (the shortest) 3 days in the 400 Zones. All hunters regardless of origin seem to have spent long average periods in the 500 Zones with 10.3days for resident hunters, 13.3 days (the longest average period) for non-resident hunters and 7.6 days for non-resident aliens.
- On average, hunters in Alberta in 2008 have hunted 5.5 days in 100 Zones, 8.2 days in 200 Zones, 10.1 days in 300 Zones, 6.1 days in 400 Zones, and 10 days in 500 Zones.
- Non-resident hunters and non-resident alien hunters were very satisfied with their hunting experience in Alberta in 2008. Actually 80% of non-resident hunters said they were very satisfied and another 11% said they were somewhat satisfied. Only 3% of non-resident hunters declared that they were not satisfied with their hunting experience in Alberta in 2008.
- About 93% of non-resident aliens' hunters were satisfied, with 72% declaring that they were very satisfied and another 21% said they were somewhat satisfied. Only 1% among the non-resident aliens said they were not satisfied.
- Over 81% of resident hunters said they were satisfied with their hunting experience in Alberta in 2008; 46% of the resident hunters were very satisfied and 35% said they were somewhat satisfied. Only 5% declared they were dissatisfied and 9% somewhat dissatisfied.
- An overwhelming majority of hunters (81%) have hunted in Alberta between 2002 and 2007, whereas 19% did not.
- About 39% of resident hunters felt that the quality of hunting was worsening while 26% felt it was improving and 32% said that there was no change.
- Non-resident hunters in Alberta in 2008 felt differently. About 49% of the non-resident hunters in Alberta felt that there was no change, 30% felt that it was improving and only 16% of then felt that it was worsening.
- Non-resident alien hunters felt that there was no change, 36% felt that it was improving and 24% felt it was worsening.
- When all hunters were grouped together a majority of them felt that hunting quality over time in Alberta showed no change (35.9%), but a large proportion felt that it was worsening (32.8%). A further 28.2% felt that it was improving while only 3.1% had no opinion.
- An overwhelming majority of hunters said they will hunt in Alberta in the future (95%), whereas a small proportion of less than 5% said no.
- Hunters in Alberta participate in this activity for many reasons. Among the most important reasons mentioned are times outdoors in nature (92%) and quality time with

friends and relatives (94%). Other prominent reasons include: Good hunting experience in the past (87%), good access (79%), enjoyment and thrill (76%), and participation in sport (73%). Force of habit scored low (23%) and so did food (66%).

- Only 14% said they contributed to groups involved in conservation activities in 2008.
- Only 8% said they participated as volunteers in the area of conservation and hunting.
- When asked about whether they have hunted outside Alberta in the past five years 55% said no and 45% said yes.
- Alberta residents showed the lowest rates of hunting outside Alberta with only 14% who said they hunted outside Alberta between 2002 and 2007.
- About 90% of non-resident hunters from other provinces and 99% of the non-resident alien hunters from outside Canada said they hunted outside Alberta in the past five years.
- Resident hunters spent more than \$102.5 million in direct hunting expenditures. This is far higher than the \$4.2 million spent by non-resident hunters from the rest of Canada and the almost \$7 million spent by non-resident hunters from outside Canada.
- The direct hunting expenditures of Alberta resident hunters supported a permanent increase of Alberta Gross Provincial Income of \$104.3 million and an increase in wages and salaries of \$61.4 million. Total direct hunting expenditures increase permanently the GPI of Alberta by almost \$115 million and wages and salaries by \$67.7 million.
- Over 1,054 Albertans owe their jobs to the direct hunting expenditures by residents in 2008. Total direct hunting expenditures supported 1,175 FTEs in Alberta.
- All levels of government derived revenues on the impacts of direct hunting expenditures in 2008.
- The three levels of government collected over \$55 million in 2008, with the federal government deriving the largest share of about \$27.8 million, followed by the provincial government with over \$24.8 million and the local governments collectively collecting \$2.5 million.
- The total hunting related expenditures (inclusive of direct spending, packages and Conservation Organizations) supported a provincial income impact of \$156.9 million, \$94.9 million in wages and salaries, 1,801 full-time equivalent permanent jobs for Albertans and the three levels of governments collectively collected a total of \$73.7 million in taxes and fees.
- The large volume of vehicles, boats, camping equipment and other hunting equipment sustained an income (value added) impact of \$185.6 million and over \$115 million in wages and salaries in Alberta in 2008.

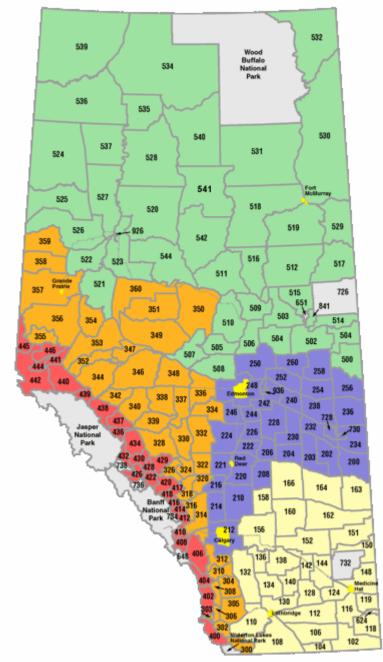
- A total of 2,090 person year of employment was attributed to these capital expenditures in Alberta in 2008.
- Total taxes generated by the capital expenditures to all three levels of government exceeded \$67.9 million in 2008.
- The federal government was the major beneficiary with about \$46.5 million of this total.
- The provincial government claimed over \$17.4 million and the local governments in Alberta made up with about \$4 million.

## Appendix

	Age	Response	%	Sample	%	Set	
Resident	20-29	22	4.3%	220	18.1%	18085	20.2%
	30-39	112	22.1%	250	20.6%	19575	21.9%
	40-49	176	34.8%	290	23.9%	20555	23.0%
	50-59	94	18.6%	250	20.6%	17951	20.1%
	60-69	92	18.2%	145	11.9%	9174	10.3%
	70+	10	2.0%	60	4.9%	4024	4.5%
		506	100.0%	1215	100.0%	89364	100.0%
Non-Resident	20.20	38	20.9%	72	17.8%	312	10.1%
Non-Resident	20-29 30-39	30	16.5%		20.8%	446	14.5%
	30-39 40-49	36	19.8%		20.8%		20.8%
	40-49 50-59	38					
		24	<u>20.9%</u> 13.2%		20.8% 11.9%		27.0%
	60-69 70+	16					19.5%
	70+	182	<u>8.8%</u> 100.0%		5.0% 100.0%		8.1% 100.0%
		102	100.0%	404	100.0%	3074	100.0%
Non-Resident							
Alien	20-29	18	12.7%	72	17.8%	418	5.9%
	30-39	26	18.3%	84	20.8%	1088	15.4%
	40-49	34	23.9%	96	23.8%	1835	25.9%
	50-59	44	31.0%	84	20.8%	1913	27.0%
	60-69	18	12.7%	48	11.9%	1443	20.4%
	70+	2	1.4%	20	5.0%	385	5.4%
		142	100.0%	404	100.0%	7082	100.0%
Total		830		2023		99520	

Table A1: Sample and Population Sizes and Distribution By Age and Origin

Source: Econometric Research Limited



Map A1 – Wildlife Management Units and Zones in Alberta

Source: http://www.albertaregulations.ca/huntingregs/

#### Table A2 - Conservation Organizations - Additional Information

Name of organization	Phone No.	Number of employees	Annual Payroll	Average Annual Manhours of Volunteer	Tota	I Membership	Mentor Programs	Special Events	Do	ollar Value
		7.5 FTE, 3 seasonal +						Wildlife Awards Banquet		
Alberta Fish & Game	780.437.2342			68,000 hours (Provincial organization and clubs)		19,000	)	& Conference	\$	200,000
ACA	780.410.1990	67 full time, 5 part time 14 seasonal	\$5 million		2000	N/A	A	Antelope Conference (Lethbridge) Bull Trout Conference (Kanaskis)	\$ \$	30,00 60,00
		20 FT, 10 PT, 15						(Kanaskis)	þ	60,000
AHEIA	403.319.2275			TOTAL VOLUNTEER HOURS (ANNUAL) = 122,3 At AHEIA premises: 55,000 Instructors across Alberta 1200 * 40 = 48,000 Service personnel: 1000 Other volunteer: 5000 Sportsman Shows: 5,500 Workshops = 3640 Banquet: 250 Other Instructor contributions: 4000	90	3400	)			
		* 6 (including			427 o	utfitters,	Provide support to existing			
APOS	780.414.0249	contractors)	\$280,000		2200 1600	guides	programs	Golf Tournament Convention Sporting Clays	\$	15,000.0 60,000.0 2,000.0
Hunting For							First time hunter programs -			
Tomorrow	780.462.2444	2	2 \$85,000		450	N/A	A 2000 hours			
Alberta Bowhunters Association	780.539.9811	N/A	A N/A		7,500	1100	)	Banquet Sanctioned Shoots (3 per	\$	35,000
Alberta Trappers Association	780.349.6626 (left message)							year)	φ	2,500
Wild Sheep										
Foundation	780.624.1208	1 contractor	\$6,000		2700	500	)	Youth Sheep Camp Banquet	\$ \$	6,000 256,000
Pheasants Forever	403.995.9960	2 FT	\$120,000		320	600	)	Fund Raising Auction & Novice Shoot Directors Invitational	\$\$\$\$	350,000 4,000 20,000
Wild Elk Federation	780.980.1600	1								
Safari Club										
nternational	780.457.6672									

Source: Hunting For Tomorrow Foundation