

Investing in Conservation with Revenue from British Columbia's Special Wildlife Permits 2000 – 2010



British Columbia Special Permits Committee

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This report was made possible with the financial support of the Surcharge Revenue Account of the Habitat Conservation Trust Foundation.

Changed from a government trust to a charitable foundation in 2007, the primary purpose of the Foundation is to act as Trustee of the Habitat Conservation Trust that was created by an amendment to the British Columbia *Wildlife Act*. Hunters, anglers, trappers and guide-outfitters contribute to the Foundation's habitat and species enhancement projects through surcharges on a variety of licences. Voluntary contributions, revenue from special permits, sustainable uses of conservation lands, proceeds from the sale of education materials, and creative sentencing (court awards) provide secondary sources of revenue.

Arguably, none of the revenue sources is of more interest to the hunting contributors to the Habitat Conservation Trust Foundation than the special wildlife permits initiative.

As member of the BC Special Permits Committee, the Foundation continues to have certain responsibilities including the reporting of revenue and conservation project investments associated with the ongoing administration of special wildlife permits.

Partners, stakeholders and the public have already been privy to much of the information presented here through a number of the Foundation's routine and annual reporting mechanisms:

- Summaries of revenue and project investments were routinely provided the members of the BC Special Permits Committee;
- Revenue, expenditure and project information were described in the Foundation's Annual Reports, Project Reviews, news releases and for any materials produced to promote the special permits policy; and
- The financial performance of the Special Permits Enhancement Fund was included in the Foundation's audited Financial Statements on an annual basis.

This report is the first comprehensive multi-year summary of the performance of its Special Permits Enhancement Fund and covers the 2000-2010 period.

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Rocky Mountain Bighorn Sheep, Bill Holder

Executive Summary

Many governments issue special wildlife permits to produce revenue for conservation activities.

These special wildlife permits are usually very limited in number and allow the permit holder to hunt in a larger area or for a longer season or a combination of both.

British Columbia implemented a policy of special permits starting with mountain sheep in 2000 and Roosevelt elk in 2003. For both, two permits per species were made available on an annual basis:

- One by auction (no residency requirements); and
- One by lottery (Limited Entry Hunt draw, residency in British Columbia required).

During the 10 year period from 1999-2000 to 2009-2010, the Government of British Columbia issued a total of 34 special wildlife permits: 19 for mountain sheep and 15 for Roosevelt elk.

By agreement, the Habitat Conservation Trust Foundation was responsible for administering the revenue received from special permits and for investing it in appropriate conservation projects to benefit populations of mountain sheep and Roosevelt elk in the province.

To create a transparent mechanism and ensure accountability, the Foundation created a Special Permits Enhancement Fund with two restricted accounts-the Mountain Sheep Account and the Roosevelt Elk Account.

This report is the first comprehensive multi-year summary of the performance of its Special Permits Enhancement Fund and covers the 2000-2010 period.



California Bighorn Sheep, Bill Holder

Mountain Sheep Account

Permits

For mountain sheep, 19 special permits were issued:

- 9 special permits were issued to hunters who were successful bidders at auctions; and
- 10 special permits (authorizations) were issued to resident hunters who were successful in Special Mountain Sheep Resident draws (Limited Entry Hunts).

Revenue

Total revenue received from auctions, lotteries, interest and donations was nearly \$1.6 million. Almost 88% resulted from 9 auctions administered by the Wild Sheep Foundation.

Project and Operational Investments

Over \$1.34 million, or 84% of total revenue received between 2000 and 2010, was invested in 46 unique conservation projects. All regions of British Columbia with wild sheep populations received project funding. For every \$1 of cash provided from special sheep permits revenue, other project partners were able to leverage approx 2 ½ times that amount in matching cash funds, as well as significant “in kind” contributions.

Operational expenses were \$85,000 (5% of revenue) and included expenses for the Special Permits Committee, a workshop, and administration, communications and marketing costs.

Performance Against Policy Targets

Project investments of revenues from the **Sheep** Sub Account were 83% of total expenditures and slightly higher than the policy target of 75%.

Project investments of revenues from the **Other Wildlife** Sub Account were 17% of total expenditures and lower than the policy target of 25%.

Account Balance

As of March 31, 2010, the account balance was \$221,892.

Roosevelt Elk Account

Permits

For Roosevelt elk, 15 special permits were issued:

- 7 auction special permits were issued to hunters who were successful bidders at auctions; and
- 8 special permits (authorizations) were issued to resident hunters who were successful in Limited Entry Hunt lottery draws.

Revenue

Total revenue from auctions, lotteries and interest for special permits for elk totalled \$369,000. Over 68% of the revenue came from auctions administered by the Wild Sheep Foundation.

Project Investments

A total of \$217,618 or 59% of revenue received between the 2004-2009 period, was invested in 8 unique conservation projects for Roosevelt elk. For every \$1 of cash provided from special Roosevelt elk permits revenue, other project partners were able to leverage approx 1 ½ times that amount in matching cash funds, as well as significant “in kind” contributions.

Both regions of British Columbia with populations of Roosevelt elk received project funding.

Performance Against Policy Targets

Project investments of revenues from the **Elk** Sub Account were 89% of total expenditures and very close to the policy target of 85%.

Project investments of revenues from the **Other Wildlife** Sub Account were 11% of total expenditures and slightly lower than the policy target of 15%.

Account Balance

As of March 31, 2010, the account balance was \$145,095.

1. Introduction

Government and tribal wildlife agencies in several jurisdictions in North America now issue special species-specific hunting permits or so called “special permits” or “enhancement licences” with the goal of producing additional revenues that are invested in conservation activities.

In British Columbia, the government approved a special permits policy in 2000. It created a 6 member stakeholder Special Permits Committee to help implement and monitor the new policy. These groups were:

- Government of British Columbia as represented by the Ministry of Environment;
- Wild Sheep Foundation;
- BC Wildlife Federation;
- Guide-Outfitters Association of BC;
- Wild Sheep Society of BC; and
- Habitat Conservation Trust Foundation.



2. Scope of this Report

The goal of this report is to provide complete and accurate summary information about BC's special wildlife permits to inform, educate and demonstrate accountability to stakeholders, contributors, project proponents and the public.

As well, the information may be used to promote permits to non resident bidders at future auctions of special permits and to encourage resident hunters to participate in future lotteries (Limited Entry Hunts).

This report provides a summary of British Columbia's special wildlife permits initiative for the 10 year period, January 1, 2000 to March 31, 2010, including:

- General information about the uses of special permits by other jurisdictions;
- A brief history about the policies and partnership agreements used to administer special wildlife permits in the Province of British Columbia;
- Summaries of revenue received from auctions, lotteries, donations and interest;
- The intake and selection process for investments of revenue in conservation projects;
- Summaries of project investments; and
- Descriptions of sheep and elk project investments by region.



3. Special Permits as a Mechanism to Fund Conservation Work

Fish and wildlife conservation programs in North America have been funded primarily by allocations from government general revenues that are often related to the values of user fees collected. There is a persistent gap between the needs of conservation programs and funding allocations.

The costs of wildlife conservation have increased and diversified but new or modified sources of funding have been slow to emerge. The value of traditional sources of funding has not kept pace with the needs of wildlife managers.

To help address this situation, government and tribal wildlife agencies in several jurisdictions in North America now issue special species-specific hunting permits or so called “special permits” or “enhancement licences” with the goal of producing additional revenues that are dedicated to conservation activities associated with the protection, maintenance and enhancement of those species and the ecosystems on which they depend.

“Special permit refers to hunting permits sold through an auction (the number of permits is fixed but their price is not known until the auction) or through a raffle/lottery/draw (the total number and unit price of tickets are set). The explicit goal of special permits is to raise large amounts of funds.

Special permits are distinct from the ‘normal’ game licenses that are sold at a fixed price as part of regular management programs. Special permits are usually made available in addition to hunting opportunities provided through regular seasons, draws etc., and can include special privileges, such as extended seasons or a wide choice of hunting areas. Some recent special permits for bighorn sheep have fetched over \$200,000 US.....”

(IUCN/SSC, 1996)

Mountain sheep and elk are among the most popular species of big game in North America and special hunting permits and the wise investment of the substantial revenues that they generate continue to be of particular interest to resident and non resident hunters alike.

The creation and marketing of special permits also served to illustrate the economic value of wildlife, and therefore encouraged the protection, restoration and enhancement of their populations and habitat.



Stone's Sheep Ram, Bill Holder

3.1 Auctioned Permits

Beginning with bighorn sheep in Utah and Wyoming in 1980, many jurisdictions with huntable populations of mountain sheep have annually provided one or more special hunting permits for auction. These permits, often referred to as “Governor’s Permits”, were well publicized and sold to the highest bidder.

For those first permits, Utah administered its own sealed bid process whereas the Wyoming permit was sold to the highest bidder during a live auction at the annual convention of the Wild Sheep Foundation (formerly the Foundation for North American Wild Sheep).

Over time, 13 other American state government wildlife agencies followed Wyoming to partner with the Wild Sheep Foundation to auction special sheep permits. These were:

- Utah(1983);
- Arizona (1984);
- Nevada (1984);
- Montana(1986),
- North Dakota(1986);
- Texas(1987);
- California (1988);
- Colorado(1989);
- New Mexico(1990);
- Oregon(1992);
- Washington(1994);
- Alaska(1997);and
- Idaho (1998).

As well, the Foundation has auctioned sheep permits from 3 tribal agencies: - the Navajo Nation (1995), Taos Nation (2006) and the Blackfeet Nation (2009).

The practice was also extended internationally to Mexico in 1984, Mongolia in 1996 and to the Canadian jurisdictions of Alberta (Minister’s Permit) in 1995, British Columbia (Special Permit) in 2000, the Kluane Nation (Yukon) in 2006.

The highest amount paid at auction for special sheep permit was \$405,000 US in 1999 for the Alberta Minister’s Licence. The highest amount paid for at auction for a special sheep permit for British Columbia was \$250,000 US in 2012.

Special Sheep Permits - The Early Years

Erickson (1988) compared the results of the auction of special permits for bighorn sheep by 9 US states for the 1980 to 1988 period-the initial years of state government policies to provide such permits.

Bids for permits ranged from \$15,000 to \$109,000 US and the total revenue from all states for the 8 year period was nearly \$1.8 million (US).

Opportunities to hunt bighorn sheep were highly coveted and bidders “cited their strong support for sheep management programs as a reason for the high sums of money generated at the auctions”.

He also noted that:

“The extreme difficulty for a sportsman to obtain a permit to hunt sheep creates a strong emotional feeling amongst some to strongly object to the auctioning process”.

Most of the limited number of negative comments about the auction of special permits was “related to complaints about selling a public resource”.

He found that state governments were not consistent in their approach to permit conditions “which usually granted the auction licence holder privileges beyond that which other licence holders received”. Permits in some states allowed the permit holder a larger hunting area, other states allowed hunting in a longer season, and permits in some states offered a combination of both.

“The main benefit of the auctions is the revenue generated provides a good funding source with which to support needed sheep management. All of the states indicated they used the revenue from the auctions primarily for transplants of bighorn into new areas and for the purchase of equipment utilized in that process. Most states also utilized some of the revenue to fund annual census surveys by helicopter and or fixed wing aircraft. Habitat improvement projects such as controlled burning of winter ranges and construction of water developments were also cited as important projects. All states indicated that these programs could not have been conducted without a source of revenue like the auction.”

Most auctions of wild sheep permits were organized by the Wild Sheep Foundation, a non-government group that either:

- Administered the proceeds and directly made project investments of the funds through its Grant in Aid program; or
- Took a small percentage of auction proceeds to cover expenses and provided the remainder to state, provincial, territorial or tribal government wildlife management agencies for them to make project investments.

Over the years, auctions organized by the Wild Sheep Foundations and by other not-for-profit conservation organizations have expanded to include special permits for elk, mountain goats, deer, bear, bison, antelope and moose.

In 2007 alone, the Foundation auctioned 36 different special wildlife permits. On average, it auctions about 30 special wildlife permits per year (Layne, 2011).

Washington State made 8 different auction “tags” available in 2011 and had agreements with 6 different conservation organizations to administer the auctions. (Washington State, 2011)

This auction revenue has not only supported and continues to support conservation investments by governments, it also supported and continues to support a large Grant in Aid program managed by the Wild Sheep Foundation. “Paired with its chapters and affiliates, the Wild Sheep Foundation has raised more than \$88 million for wildlife and wild sheep” (Thornton, 2012).

In 2009/10, the Foundation’s Grant in Aid program provided over \$2.8 million in mission funding to 43 projects in 5 categories (State, Provincial and Tribal Agencies, Industry Support, Education, International Conservation and Habitat and Disease Research).

Wyoming used over \$350,000 from its permit auctions during the 2003-2010 period to fund 86 sheep conservation projects. (Wyoming, 2010)

Auctioned permits are available to any bidder- non resident and resident hunters alike.

3.2 Lottery Permits

A second type of special wildlife permit is obtained by resident hunters in a raffle, draw or lottery, where interested individuals purchase one or more tickets or Limited Entry Hunting applications sold at a fixed price. A single ticket is then drawn in a lottery. The owner of the winning ticket obtains the special permit or authorization.

The use of the lottery mechanism to determine the recipient of a special permit is used by jurisdictions to provide opportunities for resident hunters to receive special permits.

4. Special Wildlife Permits in British Columbia

4.1 Policy Development

Mountain Sheep

For a number of years prior to 1998, local, provincial and international hunting organizations had lobbied the Government of BC to implement a policy of issuing one or more special permits to hunt mountain sheep as a means of creating new and additional revenue for investment in “on the ground” conservation projects to benefit wild sheep.

They argued that there was public support for special permit programs in other jurisdictions because there were no conservation concerns - permits were only applicable to huntable populations of big game animals, annual harvests were very conservative and closely regulated, and the net proceeds from auctions and raffles would be entirely dedicated to conservation projects.

Proponents described four main objectives of a special wildlife permits policy:

- To raise money for species conservation projects and applied research;
- To engage hunters to provide money for unique and prestigious hunting opportunities;
- To allow the hunting community to make direct contributions to conservation projects that contribute to sustaining or enhancing hunting opportunities; and
- To publicly profile the hunting community’s financial support for wildlife conservation.

They noted that special permits policies in several western States had been well received and had been very successful in raising significant amounts of monies for investment in much needed conservation projects.

They also argued that there were no conservation concerns because the province had an estimated population of about 16,000 mountain sheep and a conservative annual harvest of about 500 sheep. And, any special permits for mountain sheep offered in British Columbia would be unique in North America because permit holders would have a choice of two subspecies of bighorn sheep and two subspecies of thimhorn sheep.

In 1998, the Minister of Environment of the Government of British Columbia endorsed the general concept of government issuing special permits for mountain sheep but the proposal did not proceed because hunting stakeholders were unable to provide the required support.

By June 1999, hunting stakeholders were able to agree on the concept of special permits and the then Minister of Environment, the Honourable Cathy MacGregor, approved, subject to further consultations with selected stakeholders, a special permits policy for 2000 as follows:

- The Government of British Columbia would, subject to agreement by stakeholders, annually provide two special permits for the hunting of wild sheep;
- One special permit for mountain sheep would be provided for auction by the Wild Sheep Foundation and be available to the highest bidder- both residents of BC and non residents would be encouraged to bid;

- One special permit authorization for mountain sheep would be made available for a resident hunter only lottery/draw run by the Ministry of Environment using the existing Limited Entry Hunt application process;
- The Wild Sheep Foundation would provide the net proceeds of auctions to the Habitat Conservation Trust Foundation (HTCF) - 75% of the net proceeds from the auctioned permits was to be used for mountain sheep projects in the province and 25% of the net proceeds was to be used for conservation projects in the province that were not directly related to mountain sheep (*Other Wildlife*)

Net proceeds were defined as 85% of the auction price as, by agreement, the Wild Sheep Foundation was to retain up to 15% of the gross revenue to help with costs to promote and otherwise administer the auctions;

- Ten dollars from each special sheep permit Limited Entry Hunt application (lottery) would be provided to the Habitat Conservation Trust Foundation by the Ministry of Environment and be used only for mountain sheep projects in the province;
- The Habitat Conservation Trust Foundation would manage the net revenue generated from the auction and lottery of special permits in a separate interest-bearing fund and use its existing proposal screening process to help allocate funding to worthy conservation projects. The new fund was to be managed according to the same principles as other special monies managed by the Foundation.

The Habitat Conservation Trust Foundation would establish a Special Permits Committee of stakeholders who would recommend acceptable expenditures to the Chair of the Foundation. The Ministry of Environment would chair the committee; and

- Special wildlife permits initiative proposals for subsequent years would require annual reviews by both the Special Permits Committee and the Minister of Environment.

Prior to 2000, there were several sources of funding for conservation projects involving mountain sheep and their habitats in BC. These included the Ministry of Environment, Habitat Conservation Trust Foundation, Wild Sheep Society, Wild Sheep Foundation, Columbia Basin Fish and Wildlife Compensation Program and others.

These funders also supported a special permits policy to create new revenue to augment rather than replace their conservation project investments in wild sheep.

Roosevelt Elk

Building on the success of marketing special permits for mountain sheep, the special permits policy of the BC Government was expanded in 2002/03 to annually provide two special permits for Roosevelt elk and used much the same auction and lottery procedures that had been developed for sheep. The scope of the Special Permits Committee of stakeholders was expanded to include Roosevelt elk.

By policy, 85% of the net proceeds from permits auctioned by the Wild Sheep Foundation and 100% of the proceeds of the lottery permits were used for Roosevelt elk projects in the province. The remaining 15% of the net proceeds from auctioned permits was used for other wildlife projects.

4.2 Administration and Accountability

Partnership Committee Oversight

The implementation of special wildlife permits policy in British Columbia was guided by a Special Permits Committee.

As previously noted, these groups were:

- Ministry of Environment representing the Government of British Columbia;
- Wild Sheep Foundation;
- BC Wildlife Federation;
- Guide-Outfitters Association of BC;
- Wild Sheep Society of BC; and
- Habitat Conservation Trust Foundation.

The members of the committee worked together to:

- Make recommendations to government about policy issues;
- Monitor receipt of revenue;
- Review proposals for the use of revenue and recommend project investments;
- Monitor expenditures of revenue; and
- Recommend actions to promote both the special permits and the project investments from revenue generated by special permits.

Some parties on the Committee had legal and operational responsibilities that could not be delegated while others had responsibilities that were conveyed by agreement:

- By law, the policy framework and administration of all special wildlife permits were the sole responsibility of the Ministry of Environment of the Government of British Columbia;
- By agreement, the promotion and auction of permits was the responsibility of the Wild Sheep Foundation;
- By law, the Wildlife Branch of the BC Ministry of Environment handled the lottery permits authorization for resident hunters as part of hunting opportunities provided by the annual Limited Entry Hunt draw; and
- By agreement, the Habitat Conservation Trust Foundation received and accounted for revenue from permit auctions and permit lotteries to separate sheep and elk accounts of an interest-bearing fund. It also coordinated a transparent, science-based project proposal review process that assisted the committee in recommending project investments.

More detailed information about the member organizations of the Special Permits Committee in British Columbia is found in Appendix 1. This committee continues to be operational.

Samples of promotional materials prepared by the Ministry (on behalf of the Committee) for use at permit auctions are found in Appendix 2.

Financial Transparency

The Habitat Conservation Trust Fund administered a number of restricted funds. Some were one time recipients of revenue and were drawn down over time. Others received revenue over a longer term and were more permanent in nature.

Consistent with the policy direction of the Government of British Columbia, the Habitat Conservation Trust Foundation established a Special Permits Enhancement Fund in its accounting system and created two restricted accounts and four restricted sub accounts to receive revenue and to fund project investments.

The accounting structure was as follows:

- **Special Permits Enhancement Fund:**

A long term separate, restricted fund in the Foundation's financial system that administered all financial transactions associated with special mountain sheep and Roosevelt elk permits (revenue, expenditures and interest). It was comprised of 2 accounts- the Wild Sheep Account and the Roosevelt Elk Account.

- **Mountain Sheep Account:**

A separate restricted account of the Special Permits Enhancement Fund that managed all financial transactions associated with special mountain sheep permits and included two restricted sub accounts:

- **Sheep** revenue and expenditure transactions (75% of auction revenue and 100% of lottery revenue); and
- **Other Wildlife** revenue and expenditure transactions (25% of auction revenue)

- **Roosevelt Elk Account:**

A separate restricted account of the Special Permits Enhancement Fund that managed all financial transactions associated with special elk permits and included two sub accounts:

- **Elk** revenue and expenditure transactions (85% of auction revenue and 100% of lottery revenue); and
- **Other Wildlife** revenue and expenditure transactions (15% of auction revenue)

The Foundation kept meticulous records of the financial transactions associated with the Special Permits Enhancement Fund including, since 2007, annual review by its independent auditors.

4.3 Public Reaction to the Creation of a Special Permits Policy in British Columbia

The policy to create special wildlife permits in the province resulted in some negative public comment. This is consistent with experiences with special permit policy initiatives in other jurisdictions.

The Vancouver Sun reported on the results of the hunt by the hunter who won the first BC auction permit in 2000. Vicky Husband, the then Conservation Chair of the Sierra Club of BC, was quoted as saying that she “can’t really knock” the sheep permit since the proceeds are going to a good cause. (Pynn, 2000)

Similar reporting by the same paper and same reporter in 2003 and 2005 linked the Wild Sheep Foundation to wolf control in northern BC and reported comments from the Western Canada Wilderness Committee that “...we don’t need trophy hunting to help wildlife management”. (Pynn, 2003 and Pynn, 2005).

It is noteworthy that the wolf control project referenced in the article was funded by the Wild Sheep Foundation’s Grant in Aid program which is independent from the BC special permits program administered by the Special Permits Committee.

All 3 articles mentioned the conservation benefits from investing the revenue received from the auction and lottery of special permits.

4.4 Results of Policy Implementation

With unanimous agreement by the parties each year, the Special Permits Committee supported the original special permits policy until 2009.

During that period, the Ministry of Environment issued a total of 34 special wildlife permits:

- 10 lottery and 9 auction special permits authorizations were issued for mountain sheep; and
- 8 lottery and 7 auction special permits authorizations for Roosevelt elk.

The terms and conditions associated with the special permits that were issued for mountain sheep are found in Appendix 3. The terms and conditions for special permits that were issued for Roosevelt elk were similar but not as complex.

There were subtle differences between auctioned and lottery permits. Successful bidders for auctioned permits, determined January, received special permits to hunt in the autumn of the current year. Lottery/draw winners, determined in July, received Limited Entry Hunt Authorizations to hunt in the autumn of the next year.

The use of the special permits resulted in the harvest of 19 mature male bighorn mountain sheep and 15 mature male Roosevelt elk.

Mountain Sheep

There were 19 sheep taken - 16 (84%) were Rocky Mountain bighorn and 3 (16%) were California bighorn.

- Of the holders of the 9 auctioned special permits, 8 were residents of the United States of America and one was Canadian. All but one hunter took a Rocky Mountain bighorn in the same Wildlife Management Unit in the Kootenay Region;
- Holders of the 10 Limited Entry Hunt special permits authorizations were all residents of British Columbia and harvested 7 Rocky Mountain sheep and 3 California bighorns;
- Almost 74% of the sheep harvested by all holders of special permits were Rocky Mountain bighorn from herds in the Elk Valley of the Kootenay Region; and
- There were no harvests of thimhorn sheep by holders of special sheep permits in the 2000-2010 reporting period.¹

Roosevelt Elk

Of the Roosevelt elk taken, 13 (87%) were from herds on Vancouver Island and 2 (13%) were from populations in the Lower Mainland.

- All holders of the 7 auctioned special permits were residents of the United States of America and all hunted on Vancouver Island; and
- Holders of the 8 Limited Entry Hunt special permits (authorizations) were all residents of British Columbia. They took 6 elk (75%) from the Vancouver Island populations and 2 elk (25%) from herds in the Lower Mainland.

The Committee heard that guide-outfitter operations for Roosevelt elk on Vancouver Island had been adversely impacted by the special permits policy. To address the issue, the Guide-Outfitters Association of BC proposed that:-

- The scope of elk special permits be expanded to provide holders with a choice of a Roosevelt elk or Rocky Mountain elk; or
- The special permit for Roosevelt elk be discontinued.

The BC Wildlife Federation did not support either proposal.

For 2010-2011, a majority of the parties agreed to reinstate special permits but for mountain sheep only. The BC Wildlife Federation was alone in opposing this decision because it was bound by a 2010 resolution from its membership regarding changes in direction and policy.² The Ministry of Environment reinstated the special permits for mountain sheep and that policy continued for 2012.

¹ Holders of both auctioned and Limited Entry Hunt special sheep authorizations took Stone's sheep rams in 2011. These were the first thimhorn sheep harvested under BC's special sheep permit policy.

² "The BC Wildlife Federation wanted to see the continuation of the Roosevelt Elk Permit as stipulated by the original agreement because wildlife is a common public property and a guide outfitting tenure does not provide for ownership of the wildlife resource. The BCWF supported the Roosevelt Elk permit because of their limited population globally.

The BC Wildlife Federation withdrew their support for the Special Permits when the provincial government chose to change the provisions of the original Special Permits contract conditions without approval of the stakeholders. The membership of the BC Wildlife Federation was very reluctant when they originally gave consent for the Special Sheep and Special Roosevelt Elk Permits. In 2010 through the resolution process the members confirmed they would not support any changes to the original contract provisions which provided safeguards that addressed their original concerns in regards to the Permits and their concerns to the selling of wildlife" (Pfleiderer, 2012).

5. Summaries of Financial Activities (2000-2010)

5.1 Mountain Sheep Account of the Special Permits Enhancement Fund

As described earlier, prior to the special permits policy in the province, there were several sources of funding for conservation projects involving mountain sheep and their habitats.

During and after this reporting period, these funders continued their traditional and independent project investment policies to complement the new opportunities provided by the new special permits revenue. For example, the:

- Wild Sheep Foundation, through its highly successful Grant in Aid Program, provided \$163,000, or 5% of total granted, in support of 4 wildlife projects in BC for the 2010-11 period;
- Wild Sheep Society of BC contributed funding to 9 projects in addition to assisting with at least 2 projects that received support from the special permits initiative; and
- Habitat Conservation Trust Foundation allocated over \$1 million from its Licence Surcharge Revenue Fund to 3 major sheep projects in the Kootenay (Rocky Mountain bighorn), Okanagan (California bighorn) and Omineca-Peace (Stone's thimhorn) for the 2008-2010 period alone.

Revenue

The Habitat Conservation Trust Foundation established the Special Sheep Permit Account of its Special Permit Enhancement Fund in 2001 to receive revenue from three sources:

- The net proceeds of permit auctions in US dollars from the Wild Sheep Foundation;
- The proceeds of Special Mountain Sheep Resident draws (Limited Entry Hunt applications) in Canadian dollars from the Province of British Columbia; and
- Donations and miscellaneous revenue.

The Account did not receive the revenue from the auction and the lottery at the same time:

- The auction of permits by the Wild Sheep Foundation generally occurred in the first quarter of the year (last quarter of the Habitat Conservation Trust Foundation's fiscal year) and revenue was usually received by early summer; and
- The lottery occurred in mid summer and revenues were not received until the third quarter.

The timing of the receipt of revenue created the situation where revenue generated in one fiscal year was not invested in projects until the next fiscal year.

Table 1 documents the revenue generated by the auction of permits at the annual conventions of the Wild Sheep Foundation. The exchange rate of the US dollar fluctuated from year to year which annually affected net revenue to the account.

Total revenue received from auctions, lotteries and donations was \$1.5 million. Almost 88% of the revenue resulted from auctions administered by the Wild Sheep Foundation. Net revenue to BC from 9 auctions was \$ \$1.3 million.

The largest single amount received for the rights to a BC special permit for mountain sheep at auction was \$172,000 US in 2000 which netted \$215,000 Cdn. (A new auction record of \$250,000US was set in 2012)

Revenue from the 19,608 resident hunter participants in the 10 Special Mountain Sheep Resident draws (Limited Entry Hunt) was \$185,000 (Table 2).

The largest single annual amount of revenue that was received from draws for resident hunters was \$27,000 contributed by 2772 participants in 2007.

Donations received directly to the account were \$7,429 which included \$5,500 from the Wild Sheep Society of BC.

The amount for donations listed here does not include any cash and “in kind” donations made directly at the local level to project leaders in support of individual conservation projects. In many cases, these were significant.

Interest earned on the Mountain Sheep Account was \$78,359.

Project and Operational Investments

Total expenditures were \$1.34 million.

Nearly \$1.25 million, or 78% of revenue received in the 2000-2010 period was invested in 46 unique conservation projects in 7 regions of the province (Table 3). For every \$1 of cash provided from special sheep permits revenue, other project partners were able to leverage approx 2 ½ times that amount in matching cash funds, as well as significant “in kind” contributions.

This included over \$1.1 million for 39 mountain sheep projects from the Sheep Sub Account and almost \$230,000 for 11 projects from the Other Wildlife Sub Account.

Four projects received funding from both sub accounts.

Operational expenses for the same period were \$85,000 or 5% of revenue. Expenses included a workshop on California bighorn sheep, committee expenses, nominal administration charges, and communications and marketing costs (Table 4).

Performance Against Policy Targets

Project investments of revenues from the **Sheep** Sub Account were 83% of total expenditures and slightly higher than the policy target of 75%.

Project investments of revenues from the **Other Wildlife** Sub Account were 17% of total expenditures and lower than the policy target of 25%. As of March 31, 2010, large balance of almost \$80,000 remained in the restricted sub account to fund future Other Wildlife projects.

Balance

The total account balance as of March 31, 2010 was \$ 221,892.

Table 1. The History of Revenue from the Auction of BC Mountain Sheep Special Permits

Year Ending March 31	Special Permits Account Revenue (Net,\$ Cdn)	Sheep Permit Auction Revenue (Actual Gross,\$ Us)
2000	215,000	172,000
2001	153,000	110,000
2002	135,000	100,000
2003	155,000	122,500
2004	152,000	135,000
2005	158,000	150,000
2006	122,000	130,000
2007	127,000	130,000
2008	0	bidder withdrew
2009	100,000	95,000
2010	no agreement	no agreement
TOTALS	1,317,000	1,144,500

Table 2. The History of Lottery Revenue from Special BC Mountain Sheep Resident Hunter Draws

Year Ending March 31	Number of Resident Hunter Draw Applicants (Limited Entry Hunt)	Draw Revenue (\$ Cdn)
2001	2,681	26,810
2002	1,535	15,350
2003	2,152	21,510
2004	991	9,850
2005	2,641	17,750
2006	1,466	13,990
2007	2,772	27,513
2008	2,009	20,090
2009	1,589	14,555
2010	1,772	17,700
TOTALS	19,608	185,318

Table 3. Project Investments of Revenue from BC Special Permits for Mountain Sheep, 2000-2010

	PROJECT EXPENDITURES				TOTAL INVESTMENT	
Region	Sheep Account (Number and \$,000)		Other Wildlife Account (Number and \$,000)		Projects (Number and \$,000)	
BC - Wide	6	137	2	54	8	191
Thompson - Nicola	3	54	0	0	3	54
Kootenay	12	267	4*	107	14	375
Cariboo	9	148	2*	35	10	183
Skeena	3	89	1*	9	3	97
Omineca - Peace	1	25	1	4	2	29
Okanagan	5	323	1	1	6	325
Totals	39	1,043	11*	211	46	1,249

*Four projects received funding from both sub accounts

Table 4. Operational Costs Associated With the Work of the BC Special Permits Committee, 2000-2010

Activity	Sheep Sub Account \$	Other Wildlife Sub Account \$	Total \$
Committee Expenses	29,728	7,743	37,471
Communications, Marketing and Advertising	7,291	2,113	9,404
Administration*	18,735	5,515	24,250
Proposal Review Expenses	2,665	1,096	3,761
Workshop	6,248	–	6,248
Travel to Auctions	3,457	877	4,334
Totals	68,124	17,344	85,468

*Starting in 2005-06, administration charges were allocated by HCTF based on project expenses

5.2 Roosevelt Elk Account of the Special Permits Fund

Revenue

Total revenue from auctions, lotteries and interest for special permits for elk totalled \$369,000. Over 68% of the revenue came from auctions administered by the Wild Sheep Foundation. Net revenue from 7 auctions was \$251,000 Cdn. (Table 5)

The largest single annual amount received for the rights to a BC special permit for Roosevelt elk at auction was \$41,000 US in both 2004 and 2005 which netted \$46,000 (Cdn) and \$43,000 (Cdn) respectively.

Revenue from the 9,124 resident hunter participants in the 8 Limited Entry Hunt lotteries was \$84,726 (Table 6).

The largest single annual amount of revenue that was received from resident hunter elk lotteries was \$16,810 in 2002/03. This was the first year of the special permit for elk.

There were no donations made to this account but individual projects directly received substantial cash and “in kind” partnership contributions.

Interest earned on the Roosevelt Elk Account was \$33,008.

Project Investments

A total of \$217,618 of the revenue from special permits was invested in 8 conservation projects for Roosevelt elk (Table 7).

Seven of the 8 projects were on Vancouver Island and 4 of the 8 projects involved transplanting elk to augment existing populations or create new ones.

Performance Against Policy Targets

Project investments of revenues from the **Elk** Sub Account were 89% of total expenditures and slightly more than the policy target of 85%.

Project investments of revenues from the **Other Wildlife** Sub Account were 11% of total expenditures and slightly lower than the policy target of 15%.

Balance

The account balance as of March 31, 2010 was \$145,095.

Table 5. The History of Revenue from the Auction of the BC Roosevelt Elk Special Permits

Year Ending March 31	Special Permits Account Revenue (\$ Cdn)	Elk Permit Auction Revenue (\$ US)
2003	50,000	40,000
2004	46,000	41,000
2005	43,000	41,000
2006	24,000	25,000
2007	33,000	34,000
2008	31,000	36,000
2009	24,000	23,000
2010	0	no agreement
TOTALS	251,000	240,000

**Table 6. The History of Lottery Revenue from the BC
Roosevelt Elk Special Permit Hunter Draw**

Year Ending March 31	Number of Resident Hunters Lottery Applicants (Limited Entry Hunt)	Draw Revenue (\$ Cdn)
2002	1680	16,810
2003	777	7,720
2004	1451	9,110
2005	814	7,600
2006	1077	10,221
2007	1184	11,840
2008	1176	11,775
2009	965	9,650
2010	0	no agreement
TOTALS	9,124	84,726

Table 7. Project Investments of Revenue from BC Special Permits for Roosevelt Elk, 2004-2010

	PROJECT EXPENDITURES				TOTAL INVESTMENT	
Region	Elk Account (Number and \$,000)		Other Wildlife Account (Number and \$,000)		Projects (Number and \$,000)	
Vancouver Island	5	65	2	24	7	89
Lower Mainland	1	129	0	0	1	129
Totals	6	194	2	24	8	218

6. Summaries of Conservation Project Activities

The Habitat Conservation Trust Foundation administers a well established process for evaluating conservation project proposals that dates back to 1981. With minor modifications, the process described below for the 2000-2010 period reflects the current policies of the Foundation.

6.1 Selection of Projects

Proposal Intake

By the first week of November, the Habitat Conservation Trust Foundation annually received 200-350 project proposals for funding from its regular and special funds. About 10 of those proposals were to the Special Permits Enhancement Fund.

Any person, group or organization was eligible to apply for financial support for a project. Partnerships were encouraged - both monetarily and in-kind contributions were considered invaluable. Primary beneficiaries of project funding support from the Foundation were government agencies, non-profit organizations, community conservation groups and researchers. Like other monies managed by the Foundation, the Special Permits Enhancement Fund supported project investments on the basis of merit, effectiveness and ability to produce meaningful results.

Consistent with the Province's special permits policy and the strategic objectives of the Habitat Conservation Trust Foundation, revenue from the Special Permits Enhancement Fund was eligible for project investments that:

- Focused on mountain sheep, Roosevelt elk and "other wildlife" and their habitats;
- Had the potential to achieve significant conservation outcomes;
- Best represented the interests of the Foundation's contributors; and
- Maintained or enhanced opportunities for hunting, wildlife viewing and associated outdoor recreational activities.

Applicants for project funding were asked to provide detailed information in the following general areas:

- Project Effectiveness (efficacy);
- Feasibility;
- Site Value (for Site-specific Projects); and
- Benefit/Cost

Transparent Review and Approval Process

Each proposal was subjected to a thorough evaluation process consisting of independent technical peer review, scrutiny by Foundation staff, consideration by the Special Permits Committee and a final sign off of the Committee's recommendations by the Chair of the Board of the Habitat Conservation Trust Foundation.

Foundation staff routinely routed all mountain sheep and Roosevelt elk project proposals to the Special Permits Committee for consideration. Any proposals that were not recommended for support from the Special Permits Enhancement Fund were redirected to the Board of Directors of the Foundation for consideration of support from the Foundation's larger Licence Surcharge Account.

In many years, individual sheep and elk projects received money from both the Special Permits Enhancement Fund and the Licence Surcharge Account. In some cases, individual projects received money from both Funds but in different years.

Approved projects were announced in early April of each year.

Once implemented, projects were routinely subjected to various levels of financial and technical monitoring and evaluation that is part of the Foundation's accountability policies. An open, solutions-based approach directed the overall process for evaluations of project work. Findings were shared with the proponents and help inform future decision-making relating to the project by the Foundation's Technical Review Committees and Board of Directors. Project leaders were required to submit annual progress reports and final reports.

Successful Projects Required Leaders with Knowledge and Skills

Good science-based project proposals required a significant investment of time to identify problems and/ or opportunities and to develop cost effective plans to clearly meet realistic objectives.

As described in some of the project summaries that follow, some opportunities to invest monies from special permits were extremely complex. The expertise and dedication of project leaders to develop proposals and deliver projects, that often involved any number of funders, stakeholders and volunteers, should not go unrecognized.

6.2 Reporting of Project Investments

Project Tracking

The HCTF allocated project proposals and any subsequently approved projects with unique tracking numbers to reflect the location of the work. The first number indicated the regional location within the province and was consistent with the numbering of government administrative regions as described in the Hunting Regulation Synopsis.

Sources of Information

Information provided in the following pages briefly describes financial support for sheep and elk conservation projects and, for contextual purposes, the sheep and elk resources of the region.

The descriptions of project work, associated investment figures and project partners were derived from annual and final reports that were authored by project leaders and housed in unique electronic and paper project files of the Habitat Conservation Trust Foundation in Victoria.

The expenditure figures listed for each project only represent cash investments from the accounts of the Special Permits Enhancement Fund and do not include direct "in kind" or cash contributions to projects from project leaders or local and regional partners. Expenditure figures found in project reports were checked against entries in the annual Statement of Operations of the Special Permits Enhancement Fund. Some projects received financial support for a one year term. In others, work spanned several years. Approval of future or continued funding was based on demonstrated performance in meeting project objectives in the previous year or years.

Descriptions of mountain sheep populations in the province and regions are from Demarchi et al 2000a, Demarchi et al 2000b, and Demarchi and Hartiwig, 2004.

Descriptions of the distribution and historic population levels of Roosevelt elk are from Quayle and Brunt, 2003.

Estimates of populations of sheep and elk for 2008 were provided by the Ministry of Environment.

6.3 Investment of Revenue From Special Permits for Mountain Sheep

Opportunities for Project Investments May Vary Among and Within Regions

Mountain sheep may be an icon of the wilderness but, in BC, some wilderness areas are more accessible than others. Work on the more remote herds of thimblehorn sheep in the Skeena and Omineca-Peace regions in the north may be more logistically complex and expensive than work on the more accessible bighorn populations in other regions.

As well, work on low elevation winter ranges is probably more cost effective than work on the wind swept wintering areas at higher elevations of the same region.

Some areas of habitat the province are more easily modified or treated than others. For example, application of prescribed fire to the fire dependent boreal forest ecosystems in the Peace River is possible on a large scale but similar treatments of habitat for sheep in the Okanagan Region are only possible on a small scale due, in part, to human settlement patterns, land tenures, forest types and timber values.

Expertise and interest varies among potential project leaders. Some government proponents in regions have smaller staffs than others and some regions are larger than others. Complex projects may not be a priority in a large region with few staff, technical information may be lacking or solid partnerships not fully developed. Areas may lack qualified consultants to design and/ or implement project proposals.

The Habitat Conservation Trust Foundation has created a seed funding category to help address these issues. Seed Funding proposals are geared towards those projects that are still at the design or visioning stage. These projects require small amounts of funding to develop a full proposal for submission to HCTF in the next funding year.

There are 5 seed funding projects described in the project descriptions that follow.

Project Investments: Summary

About \$1.33 million, or 84% of total revenue received was invested in 46 unique conservation projects.

- *Sheep Sub Account*

- Over \$1.1 million was invested in 39 mountain sheep projects.
- The Kootenay Region had the most projects (12) and received the most funding (\$365,000).
- The Restoration of California Bighorn Sheep Metapopulation in the South Okanagan (8-207) was the project that received the largest amount of financial support - \$215,000 over 5 years.

- *Other Wildlife Sub Account*

- Almost \$211,000 was invested in 11 projects for wildlife other than mountain sheep.
- The Kootenay Region had the most projects (4) and received the most funding (\$107,000).
- Noxious Weed Control on Bighorn Sheep Ranges (4-403) was the project that received the largest amount of financial support - \$38,128 over 7 years.

- Four projects received financial support from both sub accounts.

Project Details by Region

6.3.1 BC-Wide (Region 0)

Expenditures on 8 projects were \$191,249

Projects that were administered in Victoria were province-wide in scope, had application to one or more regions of the province, had broad policy implications or were led by species or ecosystem specialists who are associated with province-wide aspects of provincial government sheep management programs.

Bighorn Sheep in British Columbia

There are two ecotypes of bighorn sheep.

The Rocky Mountain bighorn sheep population is distributed in herds in the Rocky Mountains of the eastern portion of Kootenay region of southeastern British Columbia. Transplants have created two small herds in the western portion of the Kootenay Region and two herds in the Thompson-Nicola Region. There is a small herd of about 100 in the Kakwa area of the Omineca-Peace Region at the northern limits of distribution. The provincial population was estimated at 2,500 in 1996 and, in 2008, was estimated at 2,750 to 3,250.

California bighorn sheep population, estimated at 3,600 in 1998, is distributed in five watersheds (Okanagan-Similkameen, Thompson, Fraser, and Kettle-Granby) that are situated in three regions. These populations are not continuously connected as they are fragmented into herds that have limited interchange and are considered separate metapopulations. The 2008 population was estimated at 3,100 to 3,900.



Thinhorn Sheep in British Columbia

Thinhorn Sheep in British Columbia can be thought of as being part of one large metapopulation inhabiting B.C., the Yukon, the Northwest Territories and southern Alaska. Six subpopulations are recognized in British Columbia, based on subspecies designation, pelage colour and geographical isolation. The actual number of herds present in these subpopulations is unknown. In 2003, Dall's sheep numbered about 500 and Stone's sheep numbered about 10,000. For 2008, population estimates were 400 to 600 for Dall's Sheep and 9,500 to 14,400 for Stone's Sheep.

A distribution map for mountain sheep in British Columbia is found in Appendix 4.



Project Descriptions

Status Report For Thinhorn Sheep (0-253)

Investment Period: 2001/02 to 2002/03

Results: A 97 page status report that summarized existing biological information on Stone's and Dall's Sheep in British Columbia was produced. Conservation status was determined and conservation measures for protection and enhancement were recommended.

Investment: \$7,100 of a total project investment of \$25,000 (28%)

Sub Account: Sheep

Project Partners: Habitat Conservation Trust Foundation (Licence Surcharge Account), Ministry of Water, Land and Air Protection and Ecodomain Consulting



Brian Hay



Dry Forests and Grassland Bird Habitat Assessment (0-251)

Investment Period: 2001/02 to 2002/03

Results: Twenty-five provincially important bird species that rely on steppe, shrub/steppe and dry forests were evaluated and rated using the Broad Ecosystem Inventory Mapping System and the Provincial Wildlife Habitat Ratings Standards. Experts were used to rate each habitat for each species and for each life requisite of those species.

Investment: \$19,505 of a total project investment of \$19,505 (100%)

Sub Account: Other Wildlife

Project Partners: Ministry of Sustainable Resource Management and the Ministry of Water, Land and Air Protection



Ralph Hocken

Rocky Mountain Bighorn Sheep Critical Range Mapping and Herd Registry (0-70)

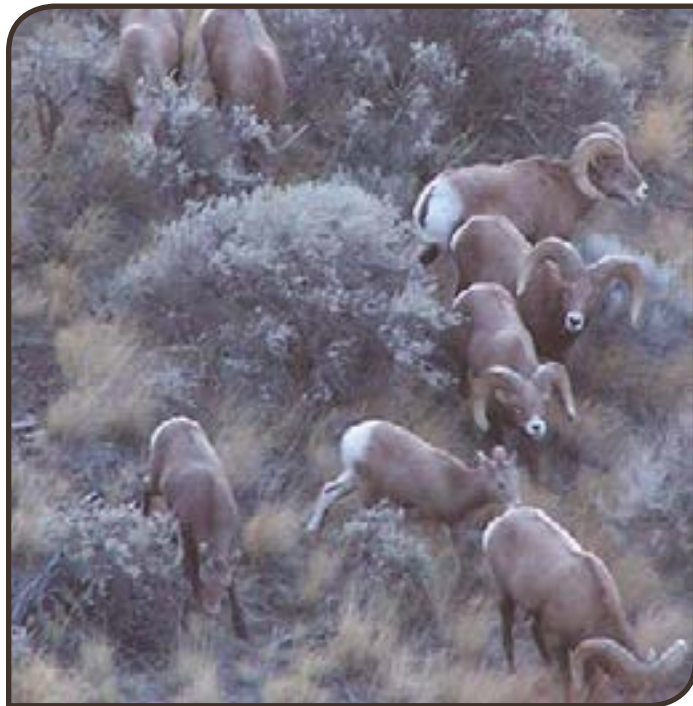
Investment Period: 2000/01 and 2002/03

Results: Meta-data on the current use of habitat units by bighorn sheep were used to produce 15 digitized 1:250,000 bighorn sheep occupancy maps for 6 regions the province. Twenty-eight herds were identified and ranges mapped for Rocky Mountain bighorn sheep and 20 for California bighorn sheep.

Investment: \$19,000 of a project investment of \$33,500 (54%)

Sub Account: Sheep

Project Partners: Ecodomain Consulting, Ministry of Water, Land and Air Protection, Ministry of Sustainable Resource Management, and wildlife biologists in BC, Alberta and Washington State



Kevin Church

Bighorn Sheep Trace Mineral Data Completion (0-93)

Investment Period: 2004/05

Results: Existing trace mineral level data for 1132 tissue and serum samples from British Columbia bighorn sheep were assembled to provide an up- to- date comprehensive and concise database for use by managers and researchers to help interpret findings as they relate to bighorn health and population dynamics.

Investment: \$4,250 of a total project investment of \$4,750 (89%)

Sub Account: Sheep

Project Partners: Susan Lemke, Ministry of Water, Land and Air Protection and the Ministry of Agriculture and Lands Animal Health Centre

Recovery of Fraser River Bighorn Sheep (0-289)

Investment Period: 2003/04 and 2005/06

Results: Initial consultation with and information gathering by multi stakeholders was completed to develop a recovery/management plan for the California bighorn sheep metapopulation within the Fraser River drainage (60% of the entire population in the province). Other products produced at the request of participants in the March 2003 workshop included a map of priority sites for habitat enhancements, a report on monitoring protocols and a progress report on trials for improving lamb survival.

Investment: \$21,948 of a total project investment of \$21,948 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection



Kevin Church

Fraser River/Cariboo Grasslands Restoration Plan (0-317)

Investment Period: 2006/07

Results: A high level restoration plan was developed to help recover California bighorn sheep, Sharp-tailed Grouse, Blue Grouse and mule deer populations. Potential treatment sites were prioritized based on forage production/grazing, public safety, biodiversity values and cost of treatment (prescribed fire and/or mechanical treatment).

Investment: \$34,950 of a total project investment of \$59,000 (59%)

Sub Account: Other Wildlife

Project Partners: Ministry of Water, Land and Air Protection and BC Blackwell and Associates Ltd.



Bruce Blackwell

Wild/Domestic Sheep and Goat Separation (0-318)

Investment Period: 2006/07 to 2009/10

Results: Disease transmission between domestic sheep and bighorn sheep is a significant issue in 4 regions of British Columbia. Infectious organisms common to domestic sheep have been identified in mountain sheep die-offs in the Kootenay and Okanagan regions. This project had 3 main goals: - to mitigate the risk of disease transmission, to monitor and evaluate risk of contact, and to manage a proactive and communicative provincial program. Mitigation strategies for domestic sheep producers were prepared, 2 producers worked to assist in implementing strategies; herd status reports were reviewed with wildlife managers, a domestic sheep producers data base was compiled using 26 attributes of each of 120 producers, a unique regional district level bylaw was being considered at the provincial level; contacts with First Nations were made, information was presented to over 20 interest groups, 12 funding partners provided financial assistance and a new tool was developed to complement existing mitigation options.

Investment: \$79,510 of a total project investment of \$123,718 (64%)

Sub Account: Sheep

Project Partners: Ministry of Environment, Okanagan Region Wildlife Heritage Fund Society, Wild Sheep Foundation, Wild Sheep Society of BC, East Kootenay Wildlife Association, East Kootenay Conservation Program, Columbia Basin Trust, Friends of Kootenay Park, Environmental Farm Plan Program, Parks Canada, BC Conservation Foundation, Grand Slam/Ovis, Ministry of Agriculture and Lands, the BC Sheep Federation (domestic sheep producers) and Dave Zehnder



Analysis of California Bighorn Sheep Data

Investment Period: 2001/02

Results: Emergency funding was provided to complete an analysis of existing California bighorn sheep in the province.

Investment: \$4,986 of a total project investment of \$4,986 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection



Kevin Church

6.3.2 Thompson-Nicola (Region 3)

Regional expenditures on 3 projects were \$54,238

Mountain Sheep in the Thompson-Nicola

The population of California Bighorn Sheep in British Columbia includes five metapopulations, two of which are in this region- the Thompson River valley metapopulation (introduced) and portions of the Fraser River metapopulation.

There are two introduced populations of Rocky Mountain bighorn sheep in the region at Spence's Bridge and Squilax.

The 2008 population of bighorn sheep in the region was estimated at 2,000 to 2,500.

Project Descriptions

Fraser River California Bighorn Sheep Habitat Assessment (3-229)

Investment Period: 2002/03

Results: Seed funding was used to identify bighorn winter ranges in the Fraser River drainage, determine range conditions and create a project proposal to obtain funding for future habitat restoration activities.

Investment: \$4,068 of a total project investment of \$4,068 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection



Kevin Church

Marble Range California Bighorn Sheep Lambing Habitats (3-238)

Investment Period: 2003/04

Results: Lambing habitats for California bighorn sheep in the Marble Range were identified. As well, work included documenting new offspring on high elevation sites, investigating mineral licks, and developing guidelines for protection of the habitat areas.

Investment: \$8,975 of a total project investment of \$13,145 (68%)

Sub Account: Sheep

Project Partners: Ursus Ecological Consulting, Ministry of Water Land and Air Protection, Wild Sheep Society of BC, Clinton and District Outdoor Sportsmen Association, Wild Sheep Foundation and BC Parks



Kevin Church

South Thompson Bighorn Sheep Herd Health (3-249)

Investment Period: 2009/10

Results: Habitat use of the South Thompson bighorn sheep herd was determined by 582 observations of sheep using inventoried habitats over a 7600ha area. Factors effecting use of habitats by sheep, herd demographics, parasite presence, and stress levels were also defined. The results were used to support the development of tools and guidelines for the proactive management and protection of habitat to support a sustainable herd. Four areas, with a combined area of 40ha, were treated with prescribed fire.

Investment: \$41,195 of a total project investment of \$143,014 (29%)

Sub Account: Sheep

Project Partners: Thompson Rivers University, Ministry of Environment, Natural Sciences and Engineering Research Council of Canada (NSERC), Kamloops Indian Band, and the South Thompson Stewardship Committee



6.3.3 Kootenay (Region 4)

Expenditures on 14 projects were \$365,047

Mountain Sheep in the Kootenays

The Kootenay Region has over 75% the province's population of Rocky Mountain bighorn sheep.

This population is part of a core-satellite metapopulation of approximately 18,000 Rocky Mountain bighorn sheep in British Columbia, Alberta, and part of Montana, with the core situated in Alberta. It is connected at both extremes and along its range with sheep herds in Alberta and exists as one large more or less continuous population in the Canadian Rocky Mountains, south of 54° 40'.

As of 2005, there were an estimated 2,020 animals within 24 recognized herds in the Rocky Mountains and Rocky Mountain Trench from Golden southward to the border with the United States of America. Populations have varied dramatically over time, partly in response to epizootic die-offs that have occurred with a roughly 20-year period. Factors contributing to these rapid population declines are not completely understood and likely vary geographically, but poor nutrition and high densities have been implicated in at least some cases. While die-offs and recovery have been occurring since at least the 1800s, it appears that overall numbers for herds wintering along the Trench are lower now than historically. Concern has been expressed that ongoing loss of open range habitat to conifer ingrowth may be leading to a lower carrying capacity, increased crowding on the remaining range, less ability to detect and avoid predators, a greater susceptibility to die-offs, and a reduced ability to withstand periodic deep-snow winters.

The regional population in 2008 was estimated at 2,300 to 2,500.

Project Descriptions

Stoddart Creek Bighorn Sheep Habitat Enhancement (4-264)

Investment Period: 2001/02

Results: Over 150 hectares of forested habitat were slashed and treated with prescribed fire to remove young Douglas fir and lodgepole pine stem "ingrowth" to increase light for forage species and rejuvenate shrubs.

Investment: \$19,998 of a total project investment of \$19,998 (100%)

Sub Account: Sheep

Project Partners: Ministry of Environment and Ministry of Forests

East Kootenay Domestic Sheep/Rocky Mountain Bighorn Sheep Conflict Analysis (4-262)

Investment Period: 2001/02

Results: To help address the problem of domestic sheep contact with wild sheep, a report was prepared to inventory the extent of domestic sheep occurrence in the project area, identify areas of domestic/wild sheep contact, inform a developing regional policy to resolve conflicts and to develop site-specific operational plans to avoid or reduce contact.

Investment: \$10,000 of a total project investment of \$10,000 (100%)

Sub Account: Sheep

Project Partners: Ministry of Environment and the Elk Valley Rocky Mountain Bighorn Sheep Management Committee

Long-Billed Curlew Inventory and Grassland Habitat Restoration in the East Kootenay (4-244)

Investment Period: 2001/02 to 2002/03

Results: Inventory of grassland habitats in the Skookumchuck to Wasa Lake area of the Rocky Mountain Trench found breeding territories for 18 Long-billed Curlews. Four major threats to curlews were identified and 8 recommendations made. A trial habitat enhancement was also conducted at Skookumchuck with the cutting of 300 young ponderosa pine stems that were encroaching on a grassland area used for breeding. Treatment of areas to reverse forest encroachment on grasslands, the prevention of the spread of noxious weeds and the purchase of privately held grasslands on Skookumchuck Prairie were advocated.

Investment: \$17,115 of a total project investment of \$17,115 (100%)

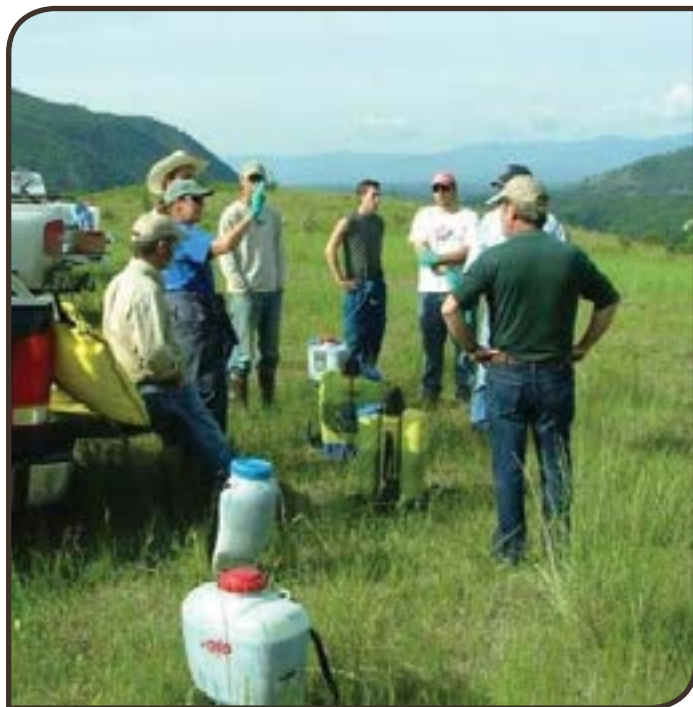
Sub Account: Other Wildlife

Project Partners: Penny Ohanjanian, Ministry of Water, Land and Air Protection, Ministry of Forests and the Ministry of Transportation

Noxious Weed Control On Bighorn Sheep Ranges (4-303)

Investment Period: 2002/03 to 2009/10

Results: The quality of bighorn sheep winter ranges was improved by conducting annual intensive and consistent noxious weed control programs on the Wigwam Flats area of the Mount Broadwood Access Management Area near Elko and one time applications at Bull River and the east side of Columbia Lake. At Wigwam Flats, five permanent 60 m transects were established at 3 sites and the pre treatment plant community documented prior to treatment of about 38ha with the herbicide "Transline". Treatments of infested sites, part of a cooperative plan for the area, significantly reduced spotted knapweed cover from between 8% and 10% in 2002 to about 1 to 3% in 2009. Infestations at Bull River were treated chemically in 2008 and the knapweed was also hand pulled. At Columbia Lake, a single chemical treatment was applied.



Investment: \$73,296 of a total project investment of \$144,001 (51%)

Sub Accounts: Sheep - \$35,168
Other Wildlife - \$38,128

Project Partners: Ministry of Water, Land and Air Protection, Nature Conservancy of Canada, Ministry of Forests, BC Parks, The Nature Trust of BC, Ministry of Transportation, Regional District of East Kootenay, Tembec Industries Inc., Columbia Basin Fish and Wildlife Compensation Program, BC Hydro, TransCanada Pipelines, CJ Holdings, and Ross Range and Reclamation Service



Rocky Mountain Bighorn Sheep Ecosystem Restoration (4-305)

Investment Period: 2002/03

Results: Preliminary assessments on the feasibility of ecosystem restoration activities at North Ewin Ridge determined that the 20ha area was marginally suitable for enhancement. Similar work at Sheep Mountain was more promising with a detailed restoration plan, using treatments of prescribed fire, commercial tree harvesting and manual slashing, recommended for 400ha. For Lakit Mountain, an ecosystem plan was prepared for treatment of 400ha. Noxious weeds were identified as a significant problem.

Investment: \$10,995 of a total project investment of \$10,995 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, Majestic Resources Consulting Ltd. and Kootenay Natural Resource Consulting

Elk Valley Rocky Mountain Bighorn Sheep Inventory (4-327)

Investment Period: 2002/03, 2004/05 and 2007/08

Results: Using the total count method following RISC Standards, aerial inventories were completed by helicopter to monitor the population health of bighorn sheep in the Elk Valley and to provide data regarding habitat use and distribution to improve management regimes. In 2002, 458 animals were observed (greatest number ever observed in an aerial survey of this area), the lamb to ewe ratio was 43.8 per 100 ewes (normally 30) and 8 class four rams were counted. Results of surveys in 2003 and 2005 (funded by MOE) and in 2008 indicate that populations on the east side of the valley appear to be stable or increasing while populations on the west side appear stable.

Investment: \$24,064 of a total project investment of \$24,064 (100%)

Sub Account: Sheep

Project Partners: Ministry of Environment and the Wild Sheep Society of BC



Brian Hay

East Kootenay Mountain Goat Habitat Project (4-339)

Investment Period: 2003-04 (Project Continued to 2005-06)

Results: Thirty mountain goats in the East Kootenay were captured, fitted with GPS radio collars and monitored to improve knowledge about habitat selection in 2 adjacent areas with differing snow depths and habitat characteristics. On the basis of 53,675 GPS locations, it was concluded that goats wintering in areas of higher snowfall made less use of open, high elevation alpine habitats compared with animals wintering in areas of lower snowfall. Goats in areas of deeper snow did not make use of old and mature timber stands. Average size of home ranges for males was 2.5 times the average size of home ranges for females.

Investment: \$15,673 of a total project investment of \$111,881 (14%)

Sub Account: Other Wildlife

Project Partners: Habitat Conservation Trust Foundation (Licence Surcharge Account), Ministry of Water, Land and Air Protection, Aurora Wildlife Research, Tembec Industries Inc., Columbia Basin Fish and Wildlife Compensation Program, Parks Canada and the East Kootenay Wildlife Association



Rocky Mountain Bighorn Sheep Transplant: Premier Ridge (4-334)

Investment Period: 2004-05 to 2009-10

Results: Transplants of bighorn sheep were implemented in 3 areas the East Kootenay to augment existing herds. To supplement the existing herd at Premier Ridge, 25 younger sheep were translocated from Radium Hot Springs in 2005. Sixteen ewes were fitted with GPS collars to help monitor movements and determine home ranges.

In 2007, 19 sheep were transplanted south from Golden to the Van Nostand Range and White Swan Lake area and all 7 of the ewes were radio collared. This transplant was not successful because of mortalities due to avalanches.

In 2009, 13 sheep were translocated from Golden to the Lazy Lake area south of Wasa and Premier Ridge with 8 ewes fitted with GPS collars. Mortalities were high from predation.

Sheep from the Golden area had been winter fed for decades in an area where avalanches are not common. Using this herd as a source population for sheep transplants was not effective in this case but could be if the receiving area had low predator populations and no risk of avalanches.

Costs to translocate sheep to the 3 areas ranged from \$436 to \$721 per sheep exclusive of volunteer assistance.

Investment: \$30,905 of a total project investment of \$150,550 (21%)

Sub Account: Sheep

Project Partners: Habitat Conservation Trust Foundation (Licence Surcharge Account), Ministry of Water, Land and Air Protection, Columbia Basin Fish and Wildlife Compensation Program, Ministry of Transportation and Infrastructure, East Kootenay Wildlife Association, Golden Rod and Gun Club, Shuswap Indian Band, Kootenay National Park, Village of Radium, Radium Chamber of Commerce, and BC Hydro



East Kootenay Domestic/Wild Sheep Fencing Program (4-362)

Investment Period: 2003/04 to 2005/06

Results: A domestic-wild sheep stewardship committee was convened to examine issues and options to reduce the risk of disease transmission between domestic and wild sheep in the East Kootenay. Five separation options including fencing were considered.

Investment: \$19,911 of a total project investment of \$19,911 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, BC Wildlife Federation, Ministry of Agriculture, Food and Fisheries, Ministry of Forests, Tembec Industries Inc., Kootenay Livestock Association, Domestic sheep owners, East Kootenay Stock Dog Association, 4-H clubs, Ktunaxa Kinbasket Tribal Council, Luscar Coal, Fording Coal, Ministry of Energy, Mines and Petroleum Resources, Columbia Basin Fish and Wildlife Compensation Program and the Bighorn in Your Backyard Project

Rocky Ridge Stand Management Protection (4-337)

Investment Period: 2004-05 and 2005/06

Results: Forest stand management prescriptions on 250 ha of Crown land were developed to provide habitat managers with tools to help restore winter habitats for bighorn sheep, elk, mule deer and white-tailed deer.

Investment: \$5,600 of a total project investment of \$9,976 (56%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection and Peter Davidson

Separation of Wild and Domestic Sheep in the East Kootenay (4-347)

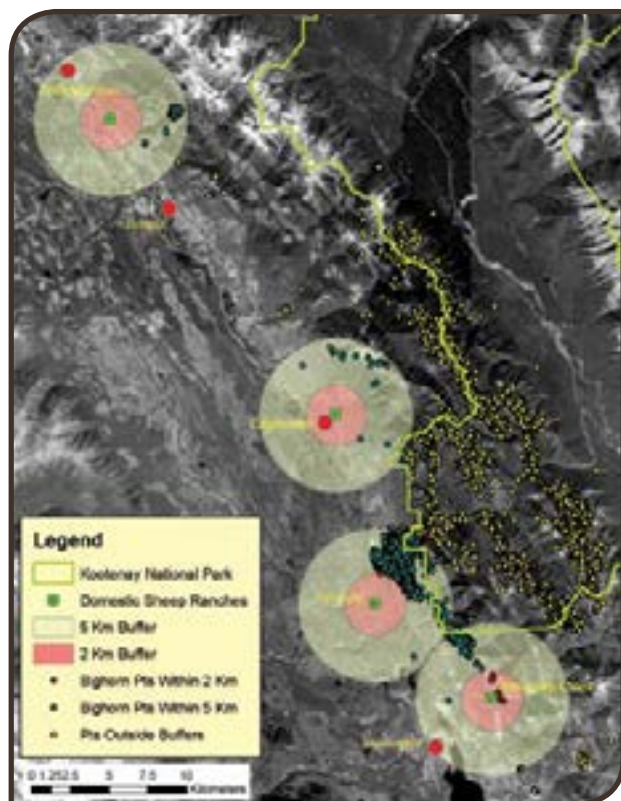
Investment Period: 2004/05 to 2006/07

Results: Eliminating contact between domestic sheep and Rocky Mountain bighorn sheep is critical to protect the health of wild sheep populations. This project designed a suite of options to mitigate the risks of disease transmission from domestic sheep and goats, developed short term solutions for landowners (domestic producers and hobbyists), and worked with governments to develop policies for longer term solutions.

Investment: \$15,624 of a total project investment of \$35,000 (45%)

Sub Account: Sheep

Project Partners: Wild Sheep Society of BC, Ministry of Water, Land and Air Protection, and Dave Zehnder



Dave Zehnder

Wigwam Flats and Columbia Lake East Bighorn Sheep Ecological Restoration (4-349)

Investment Period: 2003/04 to 2005/06

Results: Slash, pile and burn treatments of small conifers were completed on extremely important bighorn sheep winter ranges to restore 40 hectares of degraded habitat on Wigwam Flats and 100 hectares at Columbia Lake. Slash pile sites were seeded with native grass as required.

Investment: \$59,599 of a total project investment of \$71,618 (83%)

Sub Accounts: Sheep - \$23,278
Other Wildlife - \$36,321

Project Partners: Habitat Conservation Trust Foundation (Licence Surcharge Account), Ministry of Water, Land and Air Protection, Ministry of Forests, Tembec Environmental Fund, Kinbasket Development Corporation, and the Canal Flats Rod and Gun Club.



Bighorn Sheep in the Elk Valley: Evaluation of Population Dynamics, Habitat Use and Season Movements (4-412)

Investment Period: 2007/08 and 2009/10

Results: To provide information to improve the management and conservation of Rocky Mountain bighorn sheep on the east side of the Elk Valley, 39 GPS collars were fitted to sheep. Capture effort, using a helicopter and a team of workers, was spread throughout the study area. Equal numbers of rams and ewes were collared. Animals with collars were monitored twice a month using a Super Cub and the average fix success was 95%. Data indicated that seasonal movements varied among areas and documented extensive sheep use of the reclaimed mine areas during early summer through fall. To March 31, 2010, 14 rams had been harvested from this area by hunters using special mountain sheep permits. This represented 74% of the total provincial harvest by special permit holders during the 2000-2010 period.

Investment: \$57,392 of a total project investment of \$312,694 (18%)

Sub Account: Sheep

Project Partners: Habitat Conservation Trust Foundation (Licence Surcharge Account), Ministry of Environment, Teck Coal (co funder), Aurora Wildlife Research, Columbia Basin Fish and Wildlife Compensation Program, Wild Sheep Society of BC and Bighorn Helicopters



Rocky Mountain Bighorn Transplant Monitoring (4-377)

Investment Period: 2005-06

Results: The locations of transplanted sheep that had been fitted with radio collars were recorded twice a month during the May to November period using fixed wing aircraft. This work complemented similar monitoring activities of the same sheep by the staff of the Columbia Basin Fish and Wildlife Compensation Program for the December to March 2006 period. As well, the abundance of predators in the transplant area was determined by ground reconnaissance. It was concluded that transplants to the Lazy Lake and White Swan areas were successful in establishing adult sheep but were not successful in maintaining recruitment of transplanted offspring.

Investment: \$4,975 of a total project investment of \$4,975 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, Columbia Basin Fish and Wildlife Compensation Program, Kootenay National Park, East Kootenay Wildlife Association, Bighorn in our Backyard, Bear Air and Peter Davidson



Peter Davidson

6.3.4 Cariboo (Region 5)

Expenditures on 10 projects were \$182,527

Mountain Sheep in the Cariboo

The population of California bighorn sheep in British Columbia includes five metapopulations, one of which is in the Fraser River watershed.

In 1998, the Fraser metapopulation was estimated at about 1000 and the 2008 population was estimated at 500 to 600. It has played a key role in reintroducing sheep to historic ranges in the United States. Native herds in all of the states (except California) were extirpated by the late 1800s and early 1900s. By 1954, California bighorn sheep were confined mainly to British Columbia, with a small number living in California.

Since 1954, California bighorn sheep have been re-introduced from British Columbia to California, Idaho, Nevada, North Dakota, Oregon, Utah, and Washington, resulting in their re-establishment in much of their historic range. Transplant projects continued to 1999 and now California bighorn sheep are widely distributed in much of their historic range.

Most of the transplants that have resulted in successful re-establishment of sheep populations in the United States originated mainly from the Junction and Big Bar herds in this region.

Project Descriptions

Sheep Surveys In The Junction-Churn Creek Area (5-101)

Investment Period: 2001/02

Results: The writing of a final project report and preparation of GIS mapping were completed. Using funding from Forest Renewal British Columbia and the Licence Surcharge Fund of HCTF, the population of California bighorn sheep had been monitored over several years to determine winter habitat use, lamb recruitment levels and timing of migration in relation to water levels in Churn Creek.

Investment: \$6,204 of a total project investment (1996/97-2001/02) of \$59,000 (11%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection (BC Parks), Forest Renewal BC, and the Wild Sheep Foundation

Churn Creek Sheep Migration Corridor Ecosystem Restoration Plan (5-200)

Investment Period: 2005/06 and 2006/07

Results: A 71 page ecosystem restoration plan was produced for the Churn Creek California bighorn sheep migration corridor. Management recommendations focused on restoring the amount of open habitat along the migration route. Five proposed treatment areas of 1287 ha were delineated and 3 types of treatment prescriptions were recommended.

Investment: \$16,828 of a total project investment of \$75,600 (12%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, BC Blackwell and Associates Ltd., and the Wild Sheep Society of BC



BC Parks

Churn Creek Bighorn Sheep Migration Corridor Habitat Enhancement (5-208)

Investment Period: 2007/08 to 2009/10

Results: The five year habitat enhancement plan for the dense ingrown forested areas of the Churn Creek sheep migration corridor included delineation of five areas (11.5ha) for the application of thinning treatments. Trees on over 8.8 ha were thinned and piled for burning while larger trees on a further 60 ha were logged for commercial purposes. Costs for the thinning treatment ranged between \$4,224 and \$5,162 per hectare. The goal of the project was to restore suitable open habitat along the migration route to benefit mountain sheep as well as mule deer, grouse and small birds.

Investment: \$39,986 of a total project investment of 39,986 (100%)

Sub Account: Sheep

Project Partners: Ministry of Environment, Tolko Industries Ltd., Iverson and MacKenzie Biological Consulting and the Canore Creek Indian Band



Pre-treatment



Post-treatment

Photographs by Ken Mackenzie

Churn Creek Prescribed Burn Project (5-154)

Investment Period: 2002/03

Results: Habitat for California bighorn sheep in the Churn Creek area was restored and enhanced by removing conifer encroachment on grasslands through mechanical treatments and prescribed fire.

Investment: \$25,000 of a total project investment of \$25,000 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection (BC Parks), Wild Sheep Society of BC and Ministry of Forests



Fraser River Bighorn Sheep Recovery (5-153)

Investment Period: 2002/03 to 2004/05

Results: The root causes of high lamb mortality were investigated to develop prescriptions to aid in the recovery of the Fraser River California bighorn sheep population. Post lambing surveys provided trends in recruitment. Laboratory analysis of fecal samples, collected in three periods, indicated that there was no reason to suspect that the population was experiencing unusual levels of parasitism. But, the data did not exclude parasitism as a contributing factor to the observed decline in sheep numbers. Habitat areas for treatment and/or enhancement were identified.

Investment: \$29,999 of a total project investment of \$34,100 (88%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection and the BC Conservation Foundation



Brian Hay

Churn Creek Bighorn Sheep Restoration (5-188)

Investment Period: 2003/04 to 2008/09

Results: Bighorn sheep habitat in the Churn Creek area was restored and enhanced by removing conifer encroachment on grasslands through mechanical treatments and prescribed fire. A prescribed fire plan was produced in 2005 and implemented in 2006, gates were installed to restrict vehicular access, and dense conifers in 10 hectares of high fuel load were mechanically removed.

Investment: \$38,610 of a total project investment of \$38,610 (100%)

Sub Accounts: Sheep - \$8,793
Other Wildlife - \$29,817

Project Partners: Ministry of Water Land and Air Protection (BC Parks) and Ministry of Forests Protection (BC Parks), Wild Sheep Society of BC and Ministry of Forests

West Fraser Road California Bighorn Sheep Signage (5-184)

Investment Period: 2005/06 to 2006/07

Results: Ten road signs were produced and installed on a 6 km stretch of road to help reduce or prevent sheep mortality due to collisions with motor vehicles and to educate the public of the presence of the herd in the area. The small band of sheep, the northern most herd of California bighorn sheep in the province, often traverses the road to seek water and forage.

Investment: \$2,571 of a total investment of \$2,571 (100%)

Sub Account: Sheep

Project Partners: Quesnel Rod and Gun Club, Ministry of Environment, Ministry of Transportation, and HML Road Maintenance (Quesnel)



American Avocet Conservation in the Cariboo (5-132)

Investment Period: 2001/02

Results: There were two known nesting colonies of this red-listed species prior to this project and the provincial population was estimated at about 100. One colony was at Little White Lake in the Cariboo Region the other near Kelowna in the Okanagan Region. To determine the status in the Cariboo, an aerial photo review of potential sites was followed by a four hour helicopter inventory with assistance from ground-based volunteers. Four new nesting sites were found and nesting was suspected at two other sites. The physical parameters, potential risks to breeding and management recommendations were described for all six new sites.

Investment: \$5,000 of a total investment of \$9,700 (52%)

Sub Account: Other Wildlife

Project Partners: Central Okanagan Naturalist Club and the Ministry of Environment



Photographs by Les Gyug

Managing Ingrowth Douglas-Fir for Biodiveristy, Forage and Timber – The Farwell Canyon Project (5-200)

Investment Period: 2005/06

Results: A technical report was produced to document the effects of an innovative method of timber harvest combined with thinning and prescribed fire to increase wildlife and biodiversity values in Douglas-fir stands. After 7 years, evaluation of 4 treatments applied to each of 2 sites confirmed that modified logging practices were an appropriate method for managing ingrown stands of Douglas-fir.

Investment: \$14,329 of a total project investment of \$75,600 (2005/06 to 2009-10, 19%)

Sub Account: Sheep

Project Partners: BC Parks, First Nations contractors, Ministry of Forests and Range, BC Wildlife Federation, Wild Sheep Society of BC and O.A. Steen Consulting



Overview before



Overview after

Ken Mackenzie

Junction Sheep Range Provincial Park Prescribed Burn (5-203)

Investment Period: 2007/08 and 2008/09

Results: Guided by the fire management plan for the Junction Sheep Provincial Park that was produced in 2000, 5 ha of dense and in grown Douglas fir stems on the perimeter of grasslands were thinned and readied for treatment with prescribed fire.

Investment: \$4,000 of a total project investment of \$5,000 (80%)

Sub Account: Sheep

Project Partners: BC Parks, First Nations contractors, Ministry of Forests, BC Wildlife Federation and the Wild Sheep Society of BC

6.3.5 Skeena (Region 6)

Expenditures on 3 projects were \$111,400

Mountain Sheep in the Skeena

The Skeena Region has significant populations of Dall's sheep and Stone's sheep.

Dall's sheep

In British Columbia, Dall's sheep are only found in the extreme northwest corner of the province from Bennett Lake to the St. Elias Mountains. There is considerable interchange with herds in the southwestern Yukon.

Dall's sheep mainly live in the alpine. In winter they select areas with light snowfall and strong winds, where they can move easily and find forage. In the northern part of their range, Dall's sheep winter range has relatively shallow and soft snow and the climate is cold and dry. Near the southern limits of their range, their winter range has more precipitation and warmer temperatures, with occasional thaws and subsequent crusting and deeper snow.

In 2008, the estimated population of Dall's sheep was 400 to 600.

Stone's sheep

Stone's Sheep distribution in the region runs northwest to southeast, from the east side of Bennett Lake on the British Columbia–Yukon border along the eastern side of the northern Coast Mountains to the northern end of the Skeena Mountains and through the Cassiar mountains.

Stone's Sheep use alpine areas and cliffs, but also inhabit lower-elevation sub-alpine brush lands and lower forested areas. The highest concentrations of Stone's Sheep are found on lower mountain areas to the northeast of high-elevation mountains, where the high precipitation and winds result in good graminoid production, winter snow removal and summer drying.

In 2003, the estimated population of Stone's sheep in the Skeena Region was 4,750. In 2008, the estimate was 3,600 to 5,900.

Project Descriptions

Skeena-Omineca-Peace Thinhorn Sheep Range Mapping and Herd Registry (6-149)

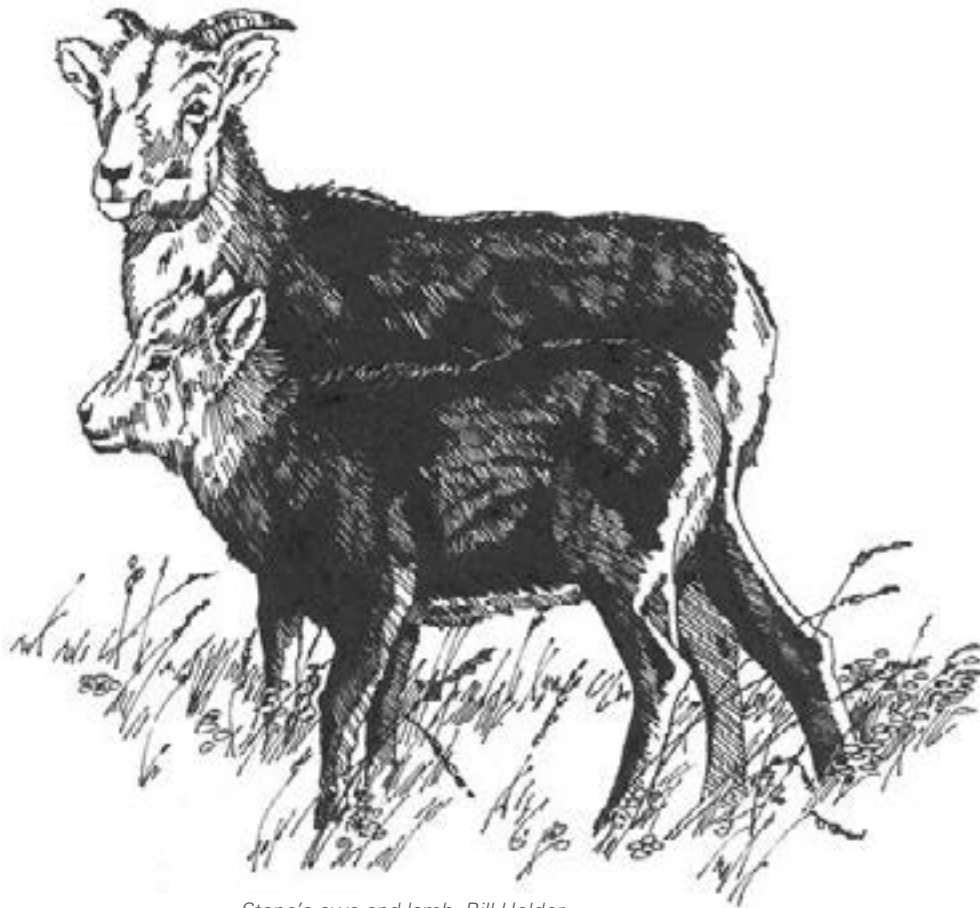
Investment Period: 2004/05 to 2005/06

Results: Meta-data of current use by thinhorn sheep was applied to produce a complete set of 1:250,000 digitized range maps and herd registries for the Skeena and Omineca-Peace regions.

Investment: \$40,001 of a total project investment of \$52,000 (77%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, Ecodomain Consulting, Northern Guides Association, Northwest Guides Association, Peace-Williston Fish and Wildlife Compensation Program, Government of the Yukon, and LGL



Stone's ewe and lamb, Bill Holder

Tatshenshini Dall's Sheep Inventory (6-151)

Investment Period: 2004/05

Results: A total count and classification of the Dall's sheep population in northwestern BC was completed using helicopter inventory techniques during a four day period in mid June 2004. A total of 294 sheep were counted with 12% classified as class IV rams. Results were comparable to those achieved in a 1996 survey. Some 482 mountain goats were also counted - a 13% drop in the number counted in 1996. Most of the area surveyed was in the Tatshenshini-Alsek Park. Observations of other wildlife species were also recorded.

Investment: \$35,552 of a total project investment of \$35,552 (100%)

Sub Accounts: Sheep - \$21,331
Other Wildlife - \$14,221

Project Partners: Ministry of Water, Land and Air Protection, BC Parks, Capital Helicopters and the Yukon Department of Highways



Brian Hay

Stone's Sheep Winter Habitat Suitability Mapping (6-184)

Investment Period: 2006/07 and 2008/09

Results: A suitability map of Stone's Sheep winter habitat in the Atlin area was produced and validated. Based on a map of ecosystems derived from Landsat 7 satellite imagery, the final product was used by resource managers as a tool for strategic planning and land use planning processes (such as heli-skiing and mineral developments) and for delineating strata for population surveys of the sheep population.

Investment: \$35,847 of a total project investment of \$57,847 (62%)

Sub Account: Sheep

Project Partners: Wildlife Conservation Society of Canada, Ministry of Environment, University of Northern British Columbia, Taku River Tlingit First Nation and WildTracks Ecological Consulting



BC Parks

6.3.6 Omineca-Peace (Region 7)

Expenditures on 2 projects were \$29,143

Mountain Sheep in the Omineca-Peace

The Omineca-Peace Region has a significant population of Stone's sheep and a small herd of Rocky Mountain bighorn sheep.

Rocky Mountain Bighorn Sheep

A small herd of 50 to 150 sheep reside in the Kakwa area in the southeast corner of the Peace-Liard sub region. This is the most northerly population of bighorn sheep in the British Columbia portion of the Canadian Rocky Mountains.

Stone's Sheep

Region 7A, Omineca: In 2008, there was an estimated minimum of 600 to 900 Stone's sheep in the sub region. Stone's Sheep in the area are characteristically found in areas of folded and faulted sedimentary rocks in the Omineca Mountains of the Finlay-Omineca Planning Unit. More southern populations inhabit the Mitchell Ranges, in the Takla-Nechako Planning Unit and on the east side of Williston Reservoir.

Region 7B, Peace-Liard: Currently there are an estimated 5,250 to 7,000 Stone's sheep in 12 Game Management Units in the Northern Rocky Mountains generally distributed from the Peace River in the south to the Yukon Border in the north. Above-average snowfalls in the 1960s through the mid 1970s may have reduced Stone's Sheep by as much as 50%. The Chadwick ram was taken here in 1936 and it is "widely regarded as the best big-game trophy this continent has produced" (Boone and Crockett Club, 1999).

Project Descriptions

Sulphur/8 Mile Stone's Sheep Collaring (7-301)

Investment Period: 2005/06

Results: The objective of the Sulphur/8 Mile Project (S8MP) was to provide scientifically-defensible management guidelines for Stone's sheep, to meet oil and gas pre-tenure plan requirements in the Muskwa-Kechika Management Area in the northern Rocky Mountains.

In 2004/05 to 2009/10, the S8MP assessed population demographics and trends, as well as habitat use and mortality rates of Stone's sheep ewes (females) to assess potential impacts of industrial development activities on sheep.

Money from special sheep permits was provided to monitor the movements of already radio-collared Stone's sheep (2005/06 only).

Investment: \$25,000 of a total project investment of \$1.4 million (2%)

Sub Account: Sheep

Project Partners: Synergy Applied Ecology, North Peace Stone's Sheep Sustainability Committee, North Peace Stone's Sheep Science Advisory Committee, BC Integrated Land Management Bureau, BC Ministry of Energy, Mines, and Petroleum Resources Environmental Policy Program, BC Ministry of Environment, BC Oil and Gas Commission Science and Community Environmental Knowledge Fund, BP Canada Energy Company, Dawson Creek Sportsman's Club, Wild Sheep Society of BC, Habitat Conservation Trust Foundation (Licence Surcharge Account), Muskwa-Kechika Trust Fund and Advisory Board, North Peace Rod and Gun Club, Northeast BC Wildlife Fund, Northern BC Guides Association, and TransCanada Pipelines Ltd.



Photographs by Pamela Hengeveld

Mountain Goat WHA Monitoring (7-310)

Investment Period: 2005/06

Results: Ten 50 hectare Mountain Goat Wildlife Habitat Areas (WHAs), established under the province's Identified Wildlife Management Strategy, were surveyed to define the presence of escape terrain, identify development impacts, assess current use by goats and develop long term management plans. WHAs were situated in 2 areas: the Sikanni Chief watershed northwest of Fort St. John and the Belcourt Creek- Mistanusk area of the Hart Foothills southeast of Chetwynd.

Investment: \$4,143 of a total project investment of \$31,950 (13%)

Sub Account: Other Wildlife

Project Partners: Ministry of Environment



BC Parks

6.3.7 Okanagan (Region 8)

Expenditures on 6 projects were \$324,788

Mountain Sheep in the Okanagan

The population of California bighorn sheep in British Columbia includes five metapopulations, two of which, the south Okanagan and Kettle-Grandby metapopulations, occur in this region and encompass small isolated populations in northern Washington.

In 1998, there were an estimated 825 animals in the south Okanagan metapopulation but a catastrophic die off in 1999-2000 reduced the population by nearly 70%. By 2006, there was in excess of 300 animals in the population.

The Kettle-Granby sheep, about 125 animals, did not experience a die off.

In 2008, the population of bighorn sheep in the region was estimated at 1,000 to 1,200 animals.

Project Descriptions

Restoration of Bighorn Sheep Metapopulation-South Okanagan (8-207)

Investment Period: 2001/02 to 2005/06

Results: After a die-off of California bighorn sheep in the main valley of the South Okanagan watershed, a 5 year recovery plan was implemented that included habitat restoration activities, a hunting moratorium, fencing projects to separate domestic and wild sheep, and research initiatives to restore the population to historic levels (400 adult animals) and help safeguard it from future die-offs.

In 2000, the population was estimated at 130-150 animals. By 2004, the estimate was 240 and by 2008 it had rebuilt to an estimated 300- 350 adults.

Investment: \$215,054 of a total project investment of \$595,610 (36%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection, Okanagan Region Wildlife Heritage Fund Society, South Okanagan- Similkameen Conservation Program, University of Sherbrooke (MSc student), The National Science and Engineering Research Council of Canada, Wild Sheep Foundation, Grand Slam Ovis, and The Nature Trust of BC



Daryl Stepaniuk

South Slope Bighorn Lamb Recruitment (8-274)

Investment Period: 2006/07

Results: Classified counts of California bighorn sheep on the South Slope winter range in the Ashnola River drainage were conducted during 3 day periods in both June and July 2006. Standardized routes were used. In the highest count, 103 sheep were observed including 13 lambs. The data indicate that the current ewe to lamb ratio is about one-half of that recorded in the 1960-72 period. Coyote predation is likely responsible for low lamb productivity.

Investment: \$4,999 of a total project investment of \$4,999 (100%)

Sub Account: Sheep

Project Partners: Ministry of Environment, Okanagan Region Wildlife Heritage Fund Society, and Bill Harper



Brian Hay



L.R. Erickson

Okanagan Mountain Park Bighorn Transplant (8-272)

Investment Period: 2005/06 and 2006/07

Results: Using drop nets and over 50 volunteers, 23 California bighorn sheep, mostly ewes and lambs, were captured from Crater Mountain in the Ashnola River watershed near Keremeos and transported by trailer to Peachland and then barged across Okanagan Lake to Okanagan Mountain Provincial Park north of Naramata. A new population of wild sheep was created.

Investment: \$20,000 of a total project investment of over \$52,500 (38%)

Sub Account: Sheep

Project Partners: Ministry of Environment (Wildlife and BC Parks), Okanagan Region Wildlife Heritage Fund Society, Wild Sheep Society of BC, BC Wildlife Federation, Wild Sheep Foundation, Guide- Outfitters Association of BC, Lower Similkameen Indian Band, Forests for Tomorrow, South Okanagan Bighorn Sheep Recovery Program and many volunteers



Brian Harris

Okanagan Region Bighorn Transplant Monitoring (8-299)

Investment Period: 2007/08 to 2009/10

Results: Monitoring of transplanted populations of California bighorn sheep at Shorts Creek and Okanagan Mountain Park was completed by tracking animals with deployed VHF collars on 7 helicopter flights. At Shorts Creek, 2 flights recorded 1 and 6 animals respectively but fading signal strengths from 5 year old collars hampered monitoring accuracy. At Okanagan Mountain Park, between 24 and 46 animals were counted on 5 flights. Of the 46 sheep observed in the July 2009 survey, 13 were lambs.

Investment: \$23,385 of a total project investment of \$30,070 (78%)

Sub Account: Sheep

Project Partners: Ministry of Environment and the Wild Sheep Society of BC



Brian Harris

Highway Wildlife Fence Construction, Vaseux Lake Area (8-206)

Investment Period: 2001/02

Results: With the goal of eliminating mountain sheep and deer mortality caused by animal/vehicle collisions, 7.3 kilometres of fencing was installed along the east side of Highway 97 near Vaseux Lake.

Investment: \$60,000 of a total project investment of \$263,000 (23%)

Sub Account: Sheep

Project Partners: First Nations of the Okanagan-Similkameen Environmental Protection Society, Insurance Corporation of British Columbia, Ministry of Transportation and Highways, South Okanagan Sportsmen Association, Okanagan Region Wildlife Heritage Fund Society, TD Canada Trust, The Nature Trust of BC, Weyerhaeuser, West Kootenay Power, Argo Road Maintenance, Maurer Crane Service, Peters Brothers Paving and Berry and Smith Trucking



Derenzy Wildlife Management Area Proposal (8-223)

Investment Period: 2002/03

Results: Existing data were collected in map form and a draft management plan for the proposed Derenzy Bighorn Sheep Wildlife Management Area east of Skaha Lake was completed to provide the information requested by the Okanagan-Shuswap LRMP. This work led to the purchase of privately held land now known as the Skaha Conservation Area that was led by The Land Conservancy in 2008. The site acquired is comprised of 307 hectares of open Ponderosa Pine forests, grasslands, riparian forest, rugged terrain and towering cliffs. The landscape, now proposed as the Ian McTaggart-Cowan Wildlife Management Area, consists of a variety of distinctive terrain features, which function together to provide habitat for many provincially or federally listed species at risk including California bighorn sheep, Western Screech Owl, White-throated Swift, Canyon Wren, Lewis' Woodpecker, five snake and four bat species as well as many other wildlife species. The area is still under active consideration for designation as a Wildlife Management Area.

Investment: \$1,350 of a total project investment of \$1,350 (100%)

Sub Account: Sheep

Project Partners: Ministry of Water, Land and Air Protection and Anthea Bryan



Daryl Stepaniuk

6.4 Investment of Revenue from Special Permits for Roosevelt Elk

Roosevelt Elk in British Columbia

In Canada, Roosevelt elk are found on Vancouver Island and some pockets of the southwest Lower Mainland in approximately 23,000 km² of occupied habitat. In 2008, the provincial population of Roosevelt elk was estimated at 5,900 to 7,100 and 69 of the 135 local populations were categorized as stable to increasing. Roosevelt elk are currently on the provincial “blue list” which indicates that the species is considered vulnerable to human activities.

The 4,600-5,600 animals in populations on Vancouver Island represent most of the elk in the province and Vancouver Island is the core of the current range.

All of the local populations in the Lower Mainland are stable to increasing where the demographic trend is known. The 2008 population was estimated at 1,300 to 1,500 animals.

A distribution map for Roosevelt Elk in British Columbia is found in Appendix 5.



In the 2002-2010 period, a total of \$217,618 or 59% of total revenue received was invested in 8 conservation projects. For every \$1 of cash provided from special Roosevelt elk permits revenue, other project partners were able to leverage approx 1 ½ times that amount in matching cash funds, as well as significant “in kind” contributions.

- *Elk Sub Account:*

- Six Roosevelt elk projects received \$193,818. The Vancouver Island Region had the most projects (5).
- The Lower Mainland Elk Recovery Project (2-127) received the largest amount of financial support-over \$129,000 over 3 years.

- *Other Wildlife Sub Account:*

- Almost \$24,000 was invested in 2 projects related to other wildlife species.
- The Roosevelt Elk Prescribed Burn Project (1-318) received the most funding-almost \$19,000 over 4 years.

Project Details by Region

6.4.1 Vancouver Island (Region 1)

Expenditures on 7 projects were \$88,418.

Roosevelt Elk on Vancouver Island

About 4,600 to 5,600 Roosevelt elk occur in two metapopulations on Vancouver Island. They are composed of 120 local population units and occupy most forested areas. They are rare or absent in large areas around urban centres at Victoria and Nanaimo and along the west coast north to the Brooks Peninsula.

There are two distinct, but not discrete, metapopulations of elk on the island separated roughly by the Alberni Inlet:

- One comprised of 26 herds or population units in the south island, centred between Cowichan Lake and the Nanaimo River watershed, and
- The northern population of 94 herds or population units in a rectangle with corners at Woss, Gold River, Campbell River, and the Tsitika River.

The finite rate of increase for elk on Vancouver Island suggests stability. Local population estimates also imply that Roosevelt elk in the region are stable to increasing throughout their distribution.

Project Descriptions

Roosevelt Elk Portable Trap Acquisition (1-374)

Investment Period: 2004/05

Results: A proper, portable Roosevelt elk trap was designed and built to help reduce the risk of mortality during the capture and handling of elk during relocation activities.

Investment: : \$12,492 of a total project investment of \$14,492 (86%)

Sub Account: Elk

Project Partners: Ministry of Water, Land and Air Protection and the Campbell River Fish and Wildlife Association

Vancouver Island Elk Relocation Project (1-380)

Investment Period: 2004/05 to 2006/07

Results: At 3 sites, 33 elk were trapped, transported and released at 3 wilderness sites. This project reduced human conflicts with Roosevelt elk (mainly agricultural damage and human safety issues) and increased the distribution and abundance of the species in historic range.

From the Duncan area, 8 elk were relocated to the Lower Nitinat River in 2005 and a further 9 were moved to the Upper Koksilah in 2006. From the Campbell River area, 16 were relocated to the Waukwass River.

Investment: \$17,326 of a total project investment of \$18,824 (92%)

Sub Account: Elk

Project Partners: Ministry of Water, Land and Air Protection, BC Conservation Foundation, Cowichan First Nations, Kwakiutl First Nation, Cowichan Fish and Game Association, Valley Fish and Game Club, Courtenay and District Fish and Game Protective Association, and the Campbell River Fish and Wildlife Association



Vancouver Island Roosevelt Elk Transplant Strategy Development (1-386)

Investment Period: 2004/05

Results: A 25 page report was produced to describe the biological and socio-economic considerations of transplanting Roosevelt elk to locations on Vancouver Island. Eight steps were described to help achieve successful transplant projects.

Investment: \$5,000 of a total project investment of \$5,000 (100%, seed funding)

Sub Account: Elk

Project Partners: Ministry of Water, Land and Air Protection and Doug Janz



Vancouver Island Broadcast Burn Strategy Development (1-387)

Investment Period: 2004/05

Results: An 18 page strategic plan was produced to identify biological priorities and help direct future use of broadcast burns (prescribed fire) to enhance habitat for elk and other wildlife. A 7 step planning process was described.

Investment: \$5000 of a total project investment of \$5,000 (100%, seed funding)

Sub Account: Other Wildlife

Project Partners: Ministry of Water, Land and Air Protection and Doug Janz

West Vancouver Island Roosevelt Elk Enhancement-Problem Analysis (1-413)

Investment Period: 2006/07

Results: To address concerns that the current population of Roosevelt elk on the west coast of Vancouver Island may be significantly depressed from historic levels, a 35 page report summarized existing information. It concluded that the relocation of elk to the area offers the most effective and feasible option to increase the population.

Investment: \$4,800 of a total project investment of \$4,800 (100%, seed funding)

Sub Account: Elk

Project Partners: Ministry of Water, Land and Air Protection and Doug Janz

Roosevelt Elk Prescribed Burns (1-318)

Investment Period: 2007/08

Results: Using ground and aerial ignition, 3 areas of spring and summer forage for elk totalling 105 hectares were treated with prescribed fire. The sites also had high value for other big and small game species. The large scale application of prescribed fire on Vancouver Island is limited by land ownership patterns and extremely high timber values.

Investment: \$18,800 of a total project investment for 2006/07 to 2009/10 of \$95,200 (20%)

Sub Account: Other Wildlife

Project Partners: Ministry of Water, Land and Air Protection and the Ministry of Forests Coastal Fire Centre

Strathcona Elk Winter Range Habitat (1-454)

Investment Period: 2009/10

Results: To evaluate the long term effects of vegetation treatments in 2002 and 2004, 12 enhancement sites on Roosevelt elk winter range were monitored for vegetation responses and elk use. Data for 10 of the 12 sites indicate that elk use of the treated areas was greater than pre-treatment use.

Investment: \$25,000 of a project total of \$25,000 (100%)

Sub Account: Elk

Project Partners: Ministry of Environment (BC Parks) and Ursus Environmental



6.4.2 Lower Mainland (Region 2)

Expenditures on a single project were \$46,944.

Roosevelt Elk in the Lower Mainland

Roosevelt elk are concentrated in local populations along the southwest Mainland. Currently, the concentration of animals located near Phillips Arm is possibly the only remaining local population native to mainland British Columbia. The delineation of the Roosevelt Elk's historic distribution on the mainland is not well described; however, reports from the first Europeans in the area describe abundant elk during the early 1800s, with very few apparently remaining by the late 1800s.

All of the local populations in the Lower Mainland are stable to increasing where the demographic trend is known. The 2008 population was estimated at 1,300 to 1,500 animals.

Project Description

Lower Mainland Roosevelt Elk Recovery (2-127)

Investment Period: 2007/08 and 2008/09

Results: The goal of this complex project was to re-establish healthy and vigorous populations of elk populations while reducing existing conflicts with humans. Elk from urban areas were relocated to 19 priority wilderness areas covering 3 Forest Districts and 8 First Nations traditional territories.

The results were dramatic. Total area occupied by elk was increased by 1500% and population size by 380% (380 to 1200 animals). The number of, and areas open to, hunting opportunities was also increased. During the 2000-2009 period, over 9600 applications were received from resident hunters for 200 Limited Entry Hunt opportunities.

This project was extremely successful at eliminating or greatly reducing nuisance elk conflicts in urban areas—a 75% decline in elk-related complaints was recorded.



Darryl Reynolds

Investment: \$129,200 of a total project investment (1997/98 to 2009/10) of \$186,664 (69%)

Sub Account: Elk

Project Partners: Ministry of Environment, Habitat Conservation Trust Foundation (Licence Surcharge Account), Sunshine Coast Rod and Gun Club, Powell River Rod and Gun Club, Pemberton Rod and Gun Club, BC Conservation Foundation, Ministry of Forests, Ministry of Transportation and Infrastructure, Conservation Corps, Guide-Outfitters Association of BC, Katzie, Klahoose, Sechelt, Sliammon, Squamish, Sto-lo and Tsleil-Waututh First Nations, Powell River ATV Club, Canadian Wild Elk Federation, Coastal Inlet Adventures, Pacific Mountain Outfitters, International Forest Products, Terminal Forest Products, Western Forest Products-Powell River, Colbow Trucking, Airspan Helicopters, Blackcoomb Helicopters, MacKenzie Sea Services, Myrtle Point Golf Club, Pender Harbour Golf Club, Sechelt Gold and Country Club, Regional Power Inc., Kiewit and many volunteers



Darryl Reynolds

7. Acknowledgements

Information and helpful suggestions were provided by Wilfred Pfleiderer, (BC Wildlife Federation), Becky Layne and Gray Thornton (Wild Sheep Foundation), Brian Harris, Ian Hatter, Darryl Reynolds, Gerry Kuzyk, Angus Carney, Lynnie Roy, Yvonne Foxall, and Mike Wolowicz (BC Ministry of Forests, Lands and Natural Resource Operations), Aaron Bremner, Brian Springinotic, Lynne Bonner, Jane Algard, Brittani Turner and Les Husband (Habitat Conservation Trust Foundation), David Beranek (Guide Outfitters Association of BC) and Chris Barker (Wild Sheep Society of BC).

Images were provided by project leaders and generously donated by other photographers. Credit is noted where possible.

Illustrations provided from the files of Wild BC, the environmental educational project of the Habitat Conservation Trust Foundation included works by Bill Holder, Cindy Vincent and Anthony Bubenik.

The line drawing of the bighorn ram is courtesy of J. Sharkey Thomas. The illustrations of Stone's sheep were provided by Dr. Valerius Geist.

Samples of posters used to promote the special permits at auction in Appendix 2 were provided by the Ministry of Forests, Lands and Natural Resource Operations.

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Appendix 1

Membership, Roles and Responsibilities of the Special Permits Committee

For the 2000-2010 reporting period, there were six (6) organizations that annually signed agreements to participate in the operation of the Special Permits Committee. Each organization provided a representative and an alternate representative and worked together to:

- Make recommendations to government about special wildlife policy issues;
- Monitor receipt of special permit revenue;
- Monitor expenditures of revenue;
- Review proposals and recommend new project investments; and
- Recommend actions to promote special wildlife permits.

The Special Permits Committee continues to operate today with the original membership though reorganizations of the Government of BC has, from time to time, resulted in changes to the names of Ministries who represent government interests.

The administration of the provincial government's *Wildlife Act* has historically been the responsibility of the Ministry of Environment. The responsibility for the act was assigned to the Ministry of Water, Land and Air Protection during the 2001-2005 period, the Ministry of Environment again for the 2005 -2011 period and to the Ministry of Forests, Lands and Natural Resource Operations in 2011.

The current organizations on the Special Permits Committee are:



The Ministry of Forests, Lands and Natural Resource Operations delivers integrated natural resource management services for British Columbians. With a long-term vision of economic prosperity and environmental sustainability, it is the main agency responsible for establishing the policy and conditions for access to and use of the province's forest, land and natural resources. The Ministry incorporates policy with operational resource management, aligning and streamlining operations in delivering services to enable effective stewardship and sustainable management of B.C.'s land base for a variety of uses.

The Ministry is the provincial government entity responsible for the administration of the *Wildlife Act* and associated regulations. The act is the fundamental instrument of public policy that creates the framework for the protection, management and wise use of native and non native wildlife species.

Special wildlife permits obtained at auction and by lottery are all issued by the Ministry pursuant to regulations based on sections of the *Wildlife Act*. They are referred to as "Special Permits" though they were originally referred to as "Director's Permits" because of the wording of the *Wildlife Act*.

On an annual basis, the ministry provides promotional information to the Wild Sheep Foundation about the success of permit holders in harvesting animals as well as brief descriptions of projects that had received funding from auction proceeds.

The Ministry also manages annual lotteries of sheep and elk permits for resident hunters using the Limited Entry Hunt authorization system.

The Government of British Columbia through Ministry staff had involvement in most, if not all, of the sheep and elk projects described in this report.



The Wild Sheep Foundation (WSF), formerly the Foundation for North American Wild Sheep, was founded in 1977 by sheep and mountain hunting enthusiasts and conservationists. With a membership of more than 10,000 worldwide and a chapter network in North America, WSF is the premier advocate for wild sheep, wild goats, other mountain wildlife, and their habitat.

Since its inception, the Wild Sheep Foundation has raised and expended more than \$88 million on conservation and education programs in North America, Europe and Asia. Included in its proven record of fund raising is the promotion and auction of a number of special wildlife permits issued by state and provincial governments that has generated over \$40 million (US). The Foundation retains 5-20% of auction proceeds to administer and promote auctions and to fund its Grant-in-Aid Program. The average administration charge is about 7% per permit.

In 2009/10 alone, the Foundation's Grant in Aid program provided over \$2.8 million in mission funding to 43 projects in 5 categories (State, Provincial and Tribal Agencies, Industry Support, Education, International Conservation and Habitat and Disease Research). Any project investments by the Foundation's Grant-in Aid Program is complementary to the on the ground project work of the BC Special Permits Committee.

By agreement with the Government of British Columbia, the Foundation manages the auction of mountain sheep and Roosevelt elk permits and annually provided net proceeds to the Habitat Conservation Trust Foundation. A standardized letter of transmittal is used to report overall net proceeds as well as proceeds for allocation of auction revenues.

It advertises the opportunities for BC mountain sheep and Roosevelt elk special hunting permits in its magazine, in its Donor Profile, in convention mailings to its members as well as in press releases and notifications to other wildlife organizations.

The Wild Sheep Foundation provided logistical and or financial support for four wild sheep projects described in this report.

The interests of resident hunters are represented by *the BC Wildlife Federation (BCWF)* - British Columbia's largest and oldest conservation organization that dates back to the 1890s. It is a province-wide voluntary conservation organization of hunters, anglers and recreational shooters, representing all British Columbians whose aims are to protect, enhance and promote the wise use of the environment for the benefit of present and future generations. Its 42,000 members are passionately committed to protecting, enhancing and promoting the wise use of the environment for the benefit of present and future generations. Volunteer members and donors give generously of their time and finances to support to a wide range of wildlife conservation programs and projects.

The BCWF represents the interests of resident sheep and elk hunters on the Special Permits Committee.

Twenty- nine local clubs and regional associations of clubs associated with The Federation provided logistical and /or financial assistance for 18 sheep and elk projects described in this report.

The Guide Outfitters Association of British Columbia (GOABC) promotes guide outfitting to government and within BC communities. It helps market the Canadian northwest as the premier hunting destination and endorses the responsible, sustainable and ethical use of the wildlife resource. It encourages members to honour a Code of Conduct and follow best practices to ensure the highest quality wilderness experiences for hunting clients. The mission is to be the leader among guide outfitting associations in the areas of governance and organizational performance while ensuring legal and ethical integrity.



GOABC has a long history of supporting the work of the Wild Sheep Foundation and works with the provincial government to help non resident holders of auctioned permits obtain suitable guide-outfitting services to help facilitate quality hunting experiences.

Guide-outfitters provided logistical and/or financial assistance for five sheep and elk projects described in this report.



The Wild Sheep Society of British Columbia (WSBC), the provincial affiliate of the Wild Sheep Foundation, promotes the cause of wild sheep conservation and preservation, protects and enhances habitat for wild sheep and associated wildlife. It strives to unite sportsmen with one purpose, the safeguarding of these natural resources for future generations, supports the rights of its members in their endeavors to preserve our environment and strives to maintain and promote the right to hunt in a safe and ethical manner and to foster good will, sportsmanship and fair chase in light of all rules and regulations.

The Wild Sheep Society of BC, now a rapidly growing, province-wide organization of over 500 members, represents the interests of resident sheep hunters on the Special Permits Committee.

The Wild Sheep Society and its members provided logistical and/or financial support for 12 wild sheep projects described in this report.



*The Habitat Conservation Trust Foundation (HCTF) is a not for profit charitable foundation established in 2007. The primary purpose of the Foundation is to act as Trustee of the Habitat Conservation Trust that was created by an amendment to the *Wildlife Act*. The Foundation succeeded the Habitat Conservation Fund (Special Purpose Fund) which operated from 1981 to 1996 and the Habitat Conservation Trust Fund (Legislated Trust Fund) that operated between 1996 and 2007.*

Hunters, anglers, trappers and guide-outfitters contribute to the Foundation's habitat and species enhancement projects through surcharges on a variety of licences issued under the authority of the *Wildlife Act*. This revenue accounts for over \$ 5.5 million annually.

Voluntary contributions, revenue from special permits, sustainable uses of conservation lands, proceeds from the sale of education materials, and creative sentencing (court awards) provide secondary sources of revenue.

The mission of the Habitat Conservation Trust Foundation is to invest in projects that maintain and enhance the health and biological diversity of British Columbia's fish, wildlife, and habitats so that people can use, enjoy, and benefit from these resources.

The uniqueness of the Habitat Conservation Trust Foundation comes from its dedicated funding obtained from angling, hunting, trapping, and guiding licence surtaxes; its ability to receive payments from creative sentencing ordered by the BC court and revenue from the issuance of special wildlife permits; its provincial scope; its engagement of common but committed citizens; its ability to fund acquisition of key habitats; and, for certain projects, its ability to fund up to 100% of the total project costs.

By agreement, the Foundation received and accounted for revenue from permit auctions and permit lotteries to separate sheep and elk accounts of a restricted, interest-bearing fund. It also coordinated a transparent project proposal review process that assisted the committee in recommending project investments, provided administrative services to the committee and highlighted revenue and project investments in its annual reports and promotional materials.

Appendix 2

Samples of Materials Used to Promote the Auction of BC Special Permits

The amount of revenue raised from the live auction of special wildlife permits by non government organizations is affected by any number of factors including credibility of the auction agency in the conservation market place, its expertise in promoting unique sport hunting opportunities and its track record of investing proceeds in meaningful conservation projects.

While all member organizations of the British Columbia Special Permit Committee work to promote auctions and lotteries of special permits, the Wild Sheep Foundation has the responsibility to manage the auctions of the province's mountain sheep and Roosevelt elk permits and provide net proceeds to the Habitat Conservation Trust Foundation.

Promotion of special permits before and during the annual convention of the Wild Sheep Foundation is a key component of creating competition among potential bidders and in maximizing the auction proceeds for on the ground conservation work.

The Wild Sheep Foundation uses several means to promote the live auction of special permits. These include:

- Advertising the opportunities for BC mountain sheep and Roosevelt elk special hunting permits in its magazine;
- Describing the available permits in its Donor Profile;
- Including information to its members in its convention mailings;
- Proving exposure in press releases and notifications to other wildlife organizations; and
- At conventions, utilizing written and visual materials to demonstrate past hunting successes and investments in conservation projects.

The posters on the two pages that follow are samples of visual poster materials that were produced by the Province of British Columbia for display at conventions of the Wild Sheep Foundation to help promote the auction of its special permits.

BRITISH COLUMBIA SPECIAL SHEEP PERMIT



Year 2001
Bighorn Outfitters Ltd.
42" X 15" - 109.25



Year 2002
Bighorn Outfitters Ltd.
45" X 16" - 154.25



Year 2003
Bighorn Outfitters Ltd.
38" X 16" - 188



Year 2004
World Record with Muzzle Loader
41 1/2" X 16 3/8" - 197.75



Year 2005
Backcountry Creek Outfitters Ltd.
Boone & Grockel 187



Year 2006
Baldy Mountain Outfitters
Boone & Grockel 191



Year 2011
Backcountry BC & Beyond Ltd.
and Big N Outfitters



Ministry of
Forests, Lands and
Natural Resource Operations



BRITISH COLUMBIA SPECIAL ROOSEVELT ELK PERMITS



Ron Schauer Year 2003 with his Elk
"SCI score 373 3/8"
and Boone and Crockett net score 355 4/8"



Arthur R. Schuler Year 2004
with his Boone & Crockett



James Gegare Year 2005 with his Elk
"SCI score 340"



Roland Wheeler Year 2006 with his Elk
"SCI score 376 1/8"



Scott Jesseman Year 2007 with his Elk
"SCI score 320"



Dave Tarchanski Year 2008 with his Elk
"SCI score 319"



BRITISH COLUMBIA
GOVERNMENT
Wildlife Management
and Conservation



Appendix 3



Terms and Conditions of Special Permits for Mountain Sheep in British Columbia

Since 2000, the holders of BC special mountain sheep permits have been provided with premier opportunities to hunt for a choice of thinhorn sheep (Dall's and Stone's) or bighorn sheep (California and Rocky Mountain).

The Government of British Columbia included a number of terms and conditions when issuing special permits for mountain sheep:

- Permits were valid on any Crown land or private land (with owner's permission) that had a regular legal sheep hunting season;
- Permits were valid during the regular hunting season;
- If the species of choice was a bighorn sheep, the successful auction bidders and raffle winners had special opportunities to hunt until December 20, approximately 1 month past the end of the latest regular hunting season;
- If the species of choice was a thinhorn sheep, the permits were valid for an additional period of 21 days prior to the opening of regular hunting seasons for thinhorn sheep and through winter periods to March 31;
- In each year, there were only two persons licenced to hunt mountain sheep in the province during these extended opportunities;
- The permits were valid for any male sheep;
- Permit holders were required to purchase a sheep species licence in order to hunt under the special permit;
- A sheep harvested under the special permits was in addition to any applicable provincial bag limit for sheep, however, permit holders could only hold one uncanceled sheep species licence at one time;
- If permit holders wanted to hunt under the normal provincial hunting regulation, they were allowed to do so in the same region or a different region as special permit hunts;
- Permit holders who are non residents of British Columbia were required to use the services of licensed guide-outfitters in areas in which they chose to hunt. The Director of Wildlife approved recommended guide-outfitters. Guide fees were negotiated between permit holders and guide outfitters and were in addition to the prices for special permits; and
- Special permits were non-transferable. In the event that permit holders did not, or could not hunt, there were no refunds of bid prices of auctioned permits or application fees for raffled permits (authorizations).

Sample of Application for Resident Hunter Limited Entry Draw for Special Mountain Sheep

 BRITISH COLUMBIA Wildlife Branch		Non-refundable application SERIAL NUMBER S 19500																																
SPECIAL MOUNTAIN SHEEP LIMITED ENTRY HUNTING																																		
WARNING: An incorrect entry may mean disqualification - double-check before mailing																																		
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Sample of an Application for a Special Sheep Hunting Permit



Ministry of
Forests, Lands and
Natural Resources

APPLICATION FOR A BRITISH COLUMBIA SPECIAL SHEEP HUNTING PERMIT

Section I

(To be completed by applicant)

APPLICANT
DO NOT COMPLETE THIS FORM
UNTIL YOU HAVE CAREFULLY
READ THE "PERMIT CONDITIONS"

LAST NAME		FIRST NAME & INITIAL	
NUMBER		STREET	
TOWN/CITY		PROVINCE/STATE	
CT. IZL SHEEP STATUS		ZIP POSTAL CODE	
BIRTHDATE		AREA CODE	TELEPHONE
YEAR	MM	DD	

I certify by my signature that:

- I am aware of the "PERMIT CONDITIONS" as set out below; and
- All entries by me in this application are true and correct to the best of my knowledge.

Signed _____

Date _____ 2012

APPLICANT: Upon completing Section I, forward all copies of this application to the
Director, Fish, Wildlife and Habitat Management Branch
PO Box 9391 STN PROV GOVT, Victoria, British Columbia V8W 9M8

Section II

(This section may be completed by the Director)

PERMIT

"Applicant" is authorized, under Section 4 (c) of the *Wildlife Act Permit Regulations* (BC Reg. 253/2000), subject to the Permit Conditions specified below, to hunt a Ram Mountain Sheep during the hunt dates specified below.

PERMIT CONDITIONS

1. Permit is valid during the period August 1, 2012 to March 31, 2013.
2. Any Mountain Sheep harvested under this permit is in addition to any applicable bag limit for sheep.
3. If the Hunting Regulation (BC Reg. 190/84) or the Limited Entry Hunting Regulation (BC Reg. 134/93) specifies an open season in an area for a mountain sheep of any description, the Permit Holder may hunt and harvest a ram mountain sheep with no restriction on age or horn configuration in that area from the start of that season until December 20, 2012. In the case of thin horn sheep, the Permit Holder may hunt and harvest a ram mountain sheep with no restriction on age or horn configuration in that area from 3 weeks prior to the start of that season until March 31, 2013.
4. Permit holder must comply with all provisions of the *Wildlife Act* and regulations including, but not limited to
 - a) obtaining all required licenses before hunting;
 - b) ensuring that he or she is accompanied by a licensed guide;
 - c) submitting for inspection by an officer any mountain sheep harvested.
5. Permit holder may only hold one uncanceled Mountain Sheep species licence at one time.

Name of Issuer _____

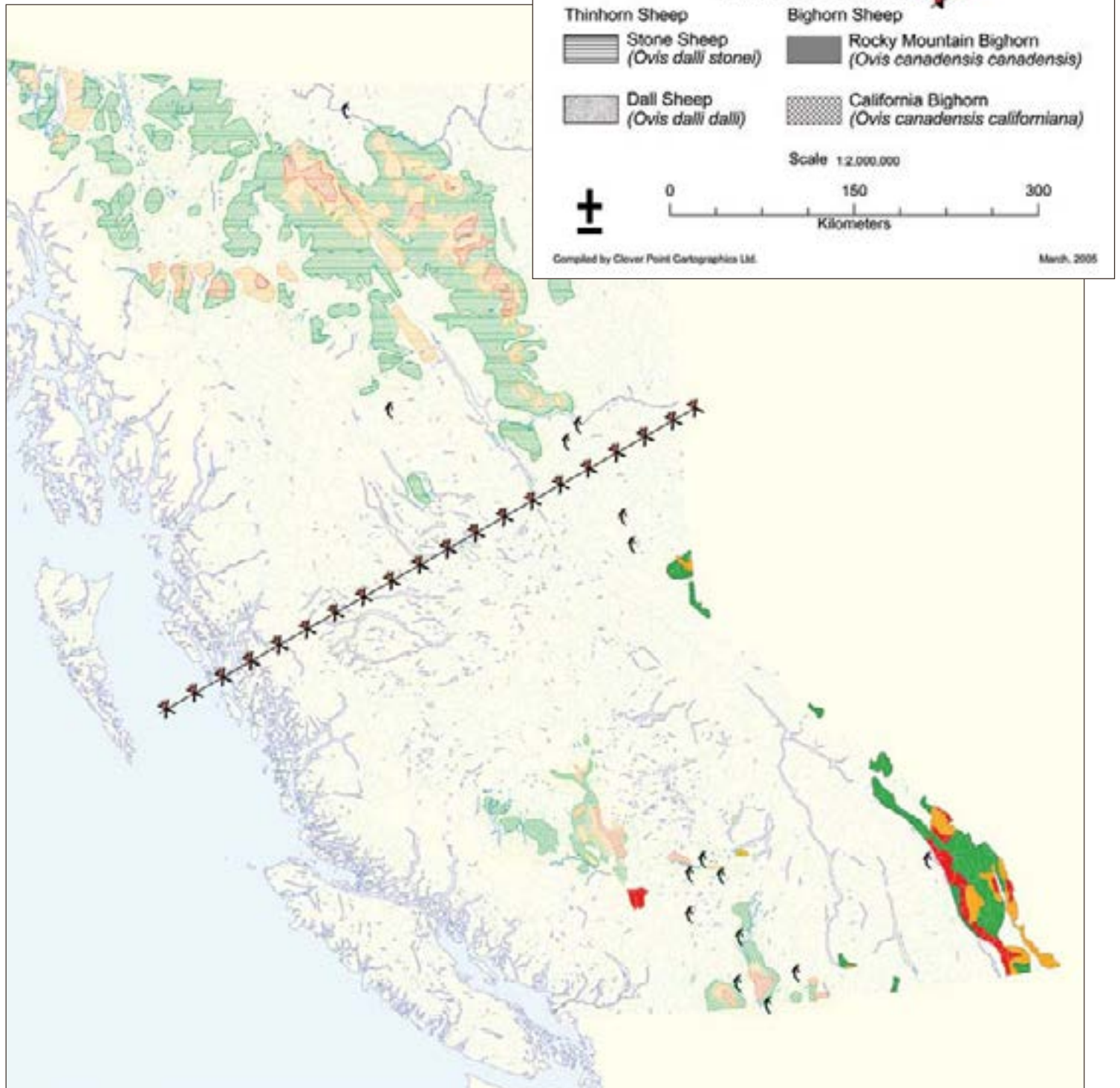
Date _____

Official Position _____

Signature _____

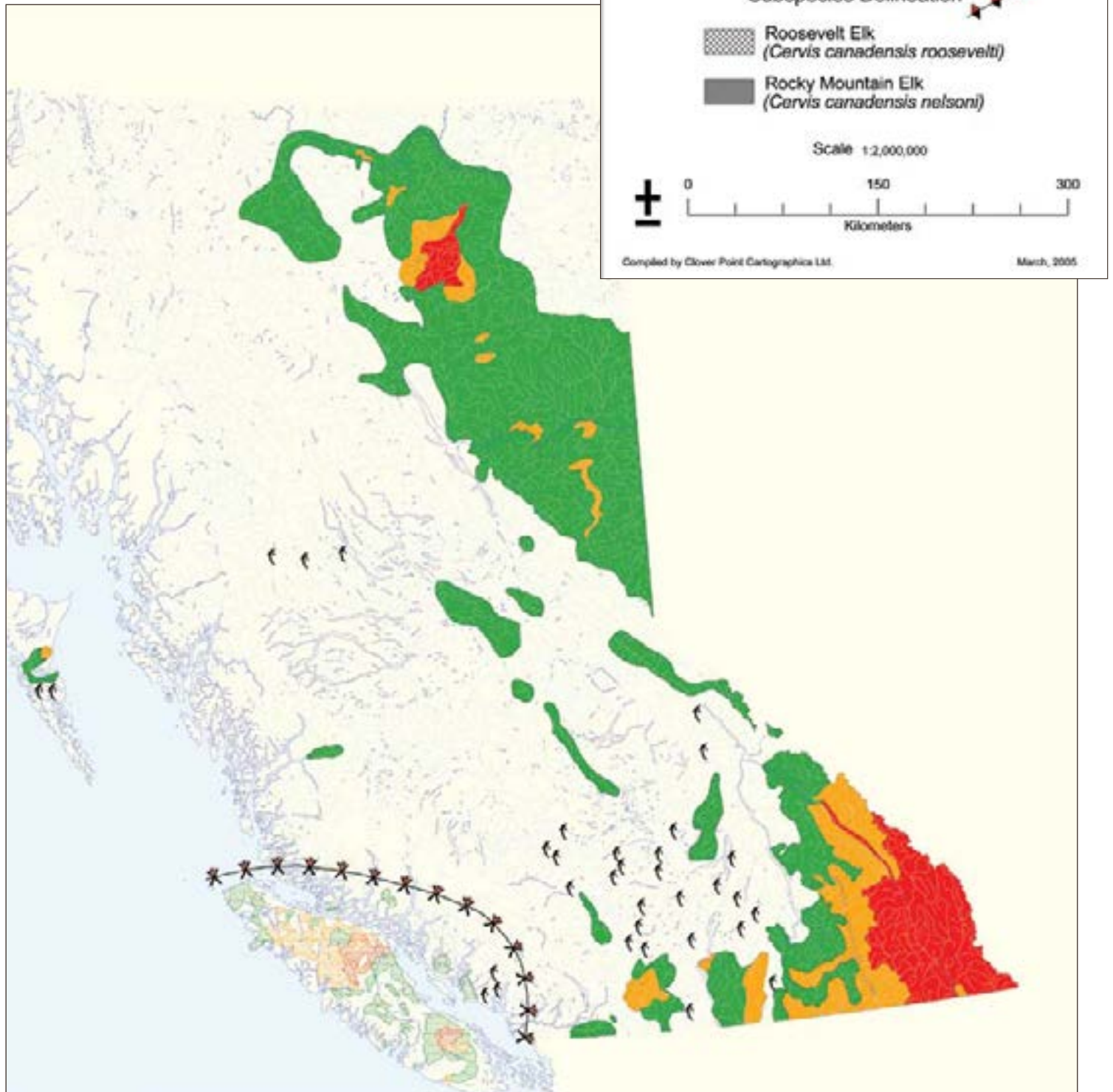
Appendix 4

Distribution of Mountain Sheep in British Columbia



Appendix 5

Distribution of Elk in British Columbia



The Coat of Arms of the Province of British Columbia

Coincidentally, mountain sheep and Roosevelt elk are the only two indigenous animals to have a place of prominence on the official Coat of Arms for the Province of British Columbia.

The shield of the Province of British Columbia was originally granted by King Edward VII in 1906; the remaining elements of the Coat of Arms were subsequently granted by Her Majesty Queen Elizabeth II on October 15, 1987. The Union Jack on the shield symbolizes the province's colonial origins. The geographic location between the Pacific Ocean and the Rocky Mountains is represented by the wavy blue and silver bars and the setting sun.

The supporters, the stag (Roosevelt elk) and the ram (mountain sheep), represent the riches of the natural environment and the union of the two colonies of Vancouver Island and British Columbia - joined together to become the Province of British Columbia in 1866. The Royal Crest (the crowned lion standing on the crown), wears a collar of dogwood flowers and sits atop the golden helmet of sovereignty. Traditional heraldic elements of a wreath and mantling in Canada's colours. The provincial flower, the dogwood, appears a second time, entwining the motto which translates as splendour without diminishment.





Stone's Sheep, Dr.Val Geist

