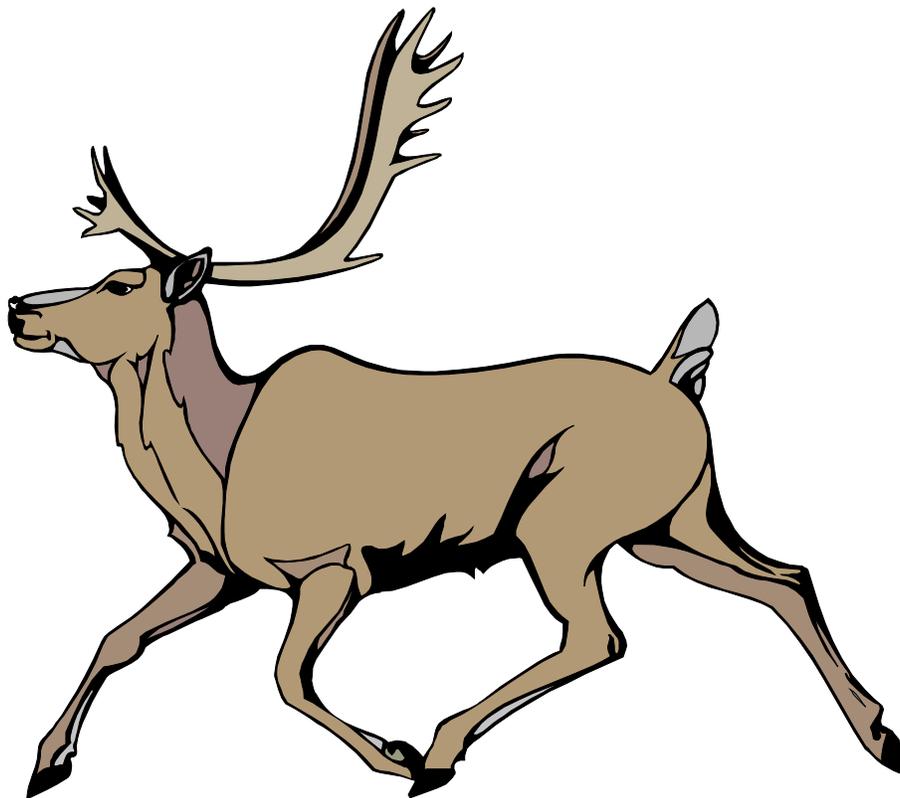


Southampton Island Caribou Harvest
1998 Summary Report & Business Plan



Prepared By:

December, 1998

Part A: 1998 Summary Report

A1.0 Introduction

The purpose of this report is two-fold:

1. To summarize the results of the 1998 harvest operation (Part A); and,
2. To present the business plan, including financial projections, financing requirements and operational characteristics, for the 1999 harvest operation (Part B).

A2.0 Summary Data

In many respects the 1997 harvest operations were the most successful to date. The number of animals harvested (3,568) was significantly higher than in previous years and the level of Government non-repayable financial assistance provided prior to August, 1997, to support operations (\$65,400 was received) was substantially lower than in previous years (additional non-repayable assistance committed in August, 1997, totaled \$33,000). However, Tunnuq was not able to achieve the harvest volume required to break even and is thus confronted with the task of planning for a 1998 harvest from a deficit position.

A2.1 Harvest Data

In 1997, 4,500 commercial caribou tags were made available by the Aiviit HTO. Commercial harvest operations occurred from late January through early April. During the initial period of harvest operations (i.e. late January) 203 animals were harvested for delivery to Keewatin Meat & Fish in Rankin Inlet, NT. These animals were designated for territorial consumption and were thus not subject to inspection by Agriculture Canada. The export grade harvest (i.e. subject to Agriculture Canada inspection) began on February 19th and continued through April 8th (a 7 week duration). During that time 3,365 animals were harvested -- see *Appendix A: Project Managers Report* for daily harvest statistics. Of the total number of animals harvested 200 animals were condemned by Agriculture Canada inspectors:

- 50 animals were condemned because of being gut shot, a condemnation rate consistent with that experienced in previous years;
- 9 animals were condemned for various health related causes; and,
- 141 animals were condemned because of internal parasites, a condemnation rate significantly higher (1.7 animals/1,000 in 1995 and 42.6 animals/1,000 in 1997) than that experienced in previous years at the same harvest location.

The failure to achieve the allowable harvest volume of 4,500 animals can be attributed to the camp location and in particular the fact that only one location was utilized -- sustained hunting pressure from one location resulted in a decrease in hunting success as a function of time. Toward the end of harvest operations, hunters were forced to travel farther afield, in excess of 20 miles, in search of caribou and this was the primary factor in deciding to suspend harvest operations on the 8th of April.

In planning for the 1997 harvest, discussion about prosecuting the 1997 harvest from two locations did occur. However, a firm conclusion to adopt this approach was not achieved and as well, Aiviit HTO and community support for the approach was not obtained. Thus, the 1997 business plan was not premised on a two location operation. Further, planning for the 1997 harvest was delayed by several weeks at a critical period in the planning phase to accommodate the herd population concerns of the Aiviit HTO which did not allocate tags for commercial purposes until January, 1997 -- this placed Tunnuq and the 1997 harvest operation, including consideration of a two location operation, in a time sensitive situation.

A2.2 Financial Data

In *Table A2.2* below summary financial data for the 1997 harvest operations are presented as a function of projected revenues and expenses versus actual revenues and expenses including variance on same as at August 20, 1997. As indicated in *Table A2.2*, 1997 harvest operations resulted in a net deficit position of \$61,877 as opposed to a projected net cash gain on operations of \$76,408. However, this does not accurately reflect the loss incurred on 1997 operations nor the projected net cash gain. The actual net cash gain projected for 1997 is calculated as follows:

Projected cash gain	=	\$76,408
<u>Less opening cash</u>	=	<u>\$34,062</u>
Net actual projected	=	\$42,346

The actual net loss on operations as at August 20, 1997 is calculated as follows:

Opening cash	=	\$34,062
GIC's contributed	=	\$52,471
<u>Cash deficit</u>	=	<u>\$61,877</u>
Loss on 97' operations	=	\$148,410

Additionally, minimal operating costs to January, 1998, not accounted for as at August 20, 1997, that Tunnuq will incur prior to, and in preparation for, a 1998 harvest are estimated as follows:

Interest charges	=	\$6,000
Phone & misc.	=	\$1,500
1998 business planning	=	\$4,500
Legal	=	\$6,000
Accounting	=	\$5,000
<u>Management</u>	=	<u>\$12,000</u>
Costs to January, 1998	=	\$35,000

Note: Estimated legal costs include a review and restructuring of Tunnuq's incorporating and organizational documents and filing an appeal on a Revenue Canada ruling on insurability for workers.

In the accompanying notes to *Table A2.2* (see below), revenue, cost and variance specific detail is presented on a category by category basis. Of particular import to the situation Tunnuq finds itself in is the \$209,909 variance is projected revenues from meat sales which is directly attributable to the failure to attain the 1997 projected harvest volume and the relatively high variance in the supply, fuel & oil, cat rental and management cost categories.

Insert Table A2.2 here

Notes to Table A2.2

General: Actual revenues and costs are as at August 20, 1997, and include administration costs and the costs of 1997 business plan preparation incurred from September, 1996.

Expense items are presented inclusive of GST where charged. GST is reconciled by attributing GST refunded and refundable as a revenue item.

Carryover accounts receivable & payable accruing from the 1996 harvest are netted out.

% Proj. and % Var. calculations express costs as a % of total revenues.

% Var/Proj is an expression of the value variance/projected value expressed as a %.

Opening Cash: As per August 31, 1996, unaudited financial statements prepared by Bulat & Poustie Chartered Accountants.

Contributions: Variance is accounted for as follows:

February 1997 GNWT additional contributions	=	\$8,400
August 1997	=	\$8,000
August 1997 Coral Harbour small business grant	=	\$25,000
		<hr/>
	Variance	= \$41,400

Grandview: Variance on meat sales based on actual weight of meat delivered by Tunnuq where 3,165 animals were delivered at an average carcass weight of 55.4 lbs. and a price as per contractual arrangements of \$3.20 per lb. (175,341 lbs. x \$3.20 = \$561,091.20)

Equipment Reserve GIC's: Value of GIC's in May, 1997, when cashed to reduce debt load.

Other Revenue: Other revenue includes the following:

April, 1997 KBDC loan	=	\$50,000
April, 1997	=	\$50,000
Sale of rifles & misc. equipment	=	\$4,504
		<hr/>
	Total	= \$104,504

Territorial Harvest: Revenue variance accounted for by additional animals and higher projected carcass weight of product delivered to Rankin Inlet, NT. Costs related to the territorial harvest include \$17,771 in payments to hunters plus local cartage and handling fees incurred in delivery of product to the Coral Harbour, NT airport.

GST Refund: Includes reconciliation of GST accounts from April, 1996, through June, 1997.

Backhauls: Reduced backhaul sales resulted from a combination of bulked out aircraft and initial use of 737 aircraft by NWT Air. A significant quantity of backhaul freight was left in Thompson, MB as a result.

Capital Purchases: Capital purchases include the following:

Cat Skids for Hauling	=	\$15,000
Insulated Shed for Camp Accom.	=	\$5,000
Power Plant Shed	=	\$4,850
Bandsaw & Chain Hoist	=	\$1,782
Flooring for Camp	=	\$4,742
		<hr/>
	Total	= \$31,374

Supplies: Variance in supply purchases is difficult to explain. The majority of the supplies were purchased by Grandview Farms on Tunnuq's behalf (see summary of purchases below) with the remainder being

comprised of purchases made during the harvest from local suppliers when shortfalls were experienced. It would appear that all purchases were necessary to the successful prosecution of the harvest and thus, the variance would appear to be attributable to an underestimation in the 1997 projections.

SUPPLY PURCHASES BY GRANDVIEW			
DATE	COMPANY	PRODUCT	AMOUNT
26/11/96	Highland Supply	saw parts	1856.38
09/1/97	CleanWear	Coverall	4099.44
19/11/96	Total Power Ltd.	V-belt/sender	82.85
24/1/97	Grey Bruce Comm.	Radios	898.80
28/1/97	Trillium Orchard	Forklift	165.00
22/1/97	L&E Paper Ltd.	Plates etc	3138.16
20/1/97	North Sylva co.	Ammo	15738.63
14/1/97	Ont.Ind.Meat Pack	Gloves etc	3643.03
22/1/97	Ideal Supply	Electrical	946.80
13/1/97	KASCO	Saw Blades	248.63
22/1/97	Rice's Home Hardware	Cables/Batter	221.49
22/1/97	Rice's Home Hardware	Bulbs/Rope et	458.82
13/1/97	Rice's Home Hardware	Microwave etc	578.87
22/1/97	BNR Equipment	Hoop ties/twis	75.44
01/2/97	Ideal Supply	Plugs/connect	53.37
31/1/97	Georgian Bay Fire&Saf	Fire Extinguish	224.38
27/1/97	Ideal Supply	Wire Set	51.55
25/1/97	Ideal Supply	Fuel/oil Filters	253.91
14/2/97	Highland Supply	Gas Pump Hose	933.80
07/2/97	Highland Supply	Gas Pump Hose	271.69
31/1/97	Thornbury Hardware	Tarps	129.34
20/2/97	Kasco	Hand saw/blades	124.43
24/2/97	Ideal Supply	Snowmobile belts	222.63
24/2/97	Ideal Supply	Snowmobile belts	74.21
24/2/97	Ideal Supply	Snowmobile Belts	32.91
28/2/97	KASCO	Band Saw Blades	248.63
26/2/97	KASCO	Filler Block-Toledo	85.28
26/2/97	Ideal Supply	Winch	833.75
04/2/97	Ideal Supply	Snowmobile Belts	296.84
25/3/97	L&E Paper Ltd.	Garbage bags etc.	271.10
25/3/97	Clarksburg Contractors	Capacitor	27.51
21/3/97	Ideal Supply	Snowmobile Belts	890.52
04/3/97	BNR Equipment	Loop Ties	51.65
21/3/97	BNR Equipment	Loop Ties	77.49
		Total	37307.33

Packaging Materials: Variance attributable to savings realized through wholesale purchases made by Grandview Farms on Tunnuq's behalf. Packaging materials include combo bins, bags, pallets & strapping.

Food: Variance attributable to savings realized through wholesale purchases made by Grandview Farms on Tunnuq's behalf.

Fuel & Oil: Fuel & Oil Costs (net of GST) were incurred as follows:

Diesel for Cat & Heat	=	\$16,477
Gas	=	\$16,476
Propane	=	\$837
Skidoo & Motor Oil	=	\$5,722

Variance attributable to gas & oil for fuel hauling while the D6 Cat was being repaired, increased gas consumption by hunters who were ranging up to 20 miles from camp to find caribou, excessive gas consumption by the Herman Nelson Heater and an underestimation of the fuel consumption rate of the D6 Cat.

Inspection Fees: As per Agriculture Canada invoice excluding travel and accommodation costs.

Contract Fees: Variance attributable to reduced payments to hunters because of a lower than projected harvest volume and unbudgeted fuel hauling because of D6 Cat breakdown. For local service contract detail see *Table A2.4*. Contract fees include \$25,000 paid to Grandview Farms for project management services.

Fuel Hauling: Fuel hauling was required because of mechanical problems with the D6 Cat.

Cat Rental/Repair: Although Cat rental charges were originally included in the rentals category the actual costs incurred were far in excess of the original budget and thus a separate category was created.

Rentals: Variance largely attributable to use of snowmobiles to haul fuel while D6 Cat was being repaired (\$2,800), rental of snowmobiles for transportation to and from camp (\$2,125) and the rental of a truck (\$750).

Repairs & Maintenance: Variance primarily attributable to excessive repairs required to maintain Herman Nelson heater (\$4,297).

Travel & Accommodation: Project manager and Agriculture Canada Inspectors travel and accommodation costs as per budget.

Freight: Variance accounted for by reduced volume of product which resulted in a >\$42,000 saving on air and truck freight and approximately \$10,500 in local cartage costs that were not budgeted for (net is \$42,000 - \$10,500 = \$31,500 variance). Freight costs incurred were as follows:

Air freight on meat	=	\$218,223.59
Truck freight on meat	=	\$26,517.41
Materials & equip freight	=	\$37,640.60
Local cartage	=	\$10,586.74
Misc.	=	\$141.68
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Total	=	\$293,110.02

Threadkell & Associates: Loan of \$50,000 plus \$6,000 fixed fee which includes recovery of a portion of fees discounted by Threadkell for services performed on Tunnuq's behalf (in excess of \$4,000) plus interest on loan.

KBDC Loan: Expensed to include interest to December, 1997.

Miscellaneous: Low activity in this category is attributable to the use of more detailed account categorizations for Tunnuq books of account.

Legal/Accounting: Legal fees incurred in preparation of service contracts and review and maintenance of incorporation documents (total = \$2,922). Accounting includes September, 1996, engagement review by and December, 1996, year end (total = \$10,771). Variance due primarily to higher than anticipated accountant costs.

Management: Management costs include the following:

Sept '96 - July '97 (fees & disburse)	=	\$18,168
-- Management Fees	=	\$31,500
Additional fees paid locally to perform various management related tasks during the '97 harvest	=	\$7,127
		<hr/>
Total	=	\$56,795

Administration: Bookkeeper/Secretary salary through May, 1997, at which time Tunnuq's financial position required that a layoff notice be issued.

Office Supplies: Misc. supplies purchased in conjunction with move to new office space.

Honoraria: Board honoraria paid from September, 1996.

Asset/Trans Insurance: Quotes obtained for Asset/Transportation insurance for product proved prohibitive (in excess of \$20,000). Thus, product was uninsured prior to acceptance by Reimer Express in Thompson, MB.

Communications: Includes installation charges of telephone & fax lines when Tunnuq moved its offices.

Revenue Canada: Remittances for bookkeeper/secretary salaries & benefits.

WCB: Cost as per invoice from WCB.

Interest & Bank Charges: Costs incurred on operating line at Royal Bank, Rankin Inlet, NT to August, 1997. Additional costs attributable to the 1997 harvest from August, 1997 through January, 1998, are estimated at \$6,000.

Liability Insurance: Cost as per invoice for liability insurance obtained in February, 1997.

A2.3 Project Financing

Tunnuq's ability to prosecute the export grade harvest is directly related to its ability to cash flow expenses. The business plan for the 1997 harvest (January 9, 1997) indicated that Tunnuq would have to cash flow \$496,000 in expenses over and above revenues received -- this cash flow requirement took into account receipt of government contributions projected at \$57,000, projected sales to Keewatin Meat & Fish of \$17,710 and an opening cash balance in Tunnuq's current account of \$34,062. Cash flow peaks were projected to occur in March when harvest operations were at their peak and June when shipping charges on the meat become payable. In February, 1997, financing in the amount of \$410,000 was arranged through the Royal Bank of Canada in Rankin Inlet, NT. This level of financing was secured through a combination of instruments including \$50,000 in GIC's held by Tunnuq, a \$160,000 irrevocable letter of credit posted by Grandview Farms (redeemable upon product delivery) and a \$200,000 unconditional guarantee provided by the GNWT.

In April, 1997, as harvest operations were coming to a close, the need for additional cash became critical. Additional financing in the amount of \$100,000 was secured -- \$50,000 was loaned to Tunnuq by the Kivalliq Business Development Corporation and \$50,000 was loaned to Tunnuq by Threadkell & Associates Ltd. This additional cash injection allowed Tunnuq to complete harvest operations.

In May, 1997, the irrevocable letter of credit posted by Grandview Farms (\$160,000) was cashed and Tunnuq's GIC's (valued at \$52,470) were cashed leaving a debt payable to the Royal Bank of Canada of \$198,561 (at May 30, 1997) secured by the \$200,000 unconditional guarantee provided by the GNWT.

During the summer of 1997, Tunnuq management applied for and was successful in obtaining commitments for additional non-repayable financial assistance in the amount of \$33,000 to be applied as follows:

- \$25,000 for D6 Cat rental and repair fees charged by the Hamlet of Coral Harbour;
- \$5,000 for year end (September 30) accounting; and,
- \$3,000 for legal fees related to tailoring Tunnuq's incorporating documents to better suit its needs and interests.

A2.4 Local Employment & Benefits

Southampton Island caribou are an insular population that is experiencing a high, and quite possibly a dangerously high, rate of growth (see section A6.0). A relatively high level of commercial and domestic harvest of Southampton Island caribou is an important component of the overall herd management strategy currently being employed; a strategy directed at stabilizing the growth rate of the herd.

In addition to the management benefits accruing from commercial utilization, the 1997 Southampton Island Caribou Harvest resulted in significant financial and other benefits to residents of Coral Harbour. As well as the injection of capital into the local economy through contract employment and purchase of other services (see Table A2.4 below), residents were able to backhaul freight from the south at a significant reduction (approximately 50% less) to the rate that would have been incurred via scheduled carriers. Further, the moral boost and pulling together of the community to accomplish the harvest is of significance in an area where unemployment is high and opportunities for successful ventures that include a broad range of community interests are limited.

A3.0 Marketing Arrangements

In 1997, Tunnuq sold caribou to _____ in Rankin Inlet, NT and to Grandview Farms in Proton Station, ON. The arrangements respecting these sales are summarized in sections A3.1 and A3.2 below.

A3.1 Territorial & Other Sales

In January, 1997, Tunnuq and _____ concluded arrangements respecting the sale of 200 caribou carcasses (203 animals were actually harvested) destined for consumption in the NWT. The price paid by _____ was \$1.15 per lb., FOB Coral Harbour, for whole carcasses skinned and gutted. Net revenues on this sale were \$26,856 and a net profit of \$6,494 was realized.

Additionally, Tunnuq arranged the sale of 100 hides @ \$10/hide to the _____ in northern Manitoba.

A3.2 Export Sales

As per Tunnuq's sales agreement with Grandview Farms, all the federally inspected and provisionally certified caribou made available by Tunnuq was purchased by Grandview at a price of \$3.20 per lb. FOB Proton Station, ON. In 1977, Tunnuq delivered 175,341 lbs. of caribou in the form of streamlined carcasses to Grandview. Net revenues on this sale were \$561,091.20. However, a net loss was accrued (see section A2.2 Financial Data) on export sales. Payments by Grandview, as per contractual arrangements, include \$160,000 upon delivery and 50% of sales made and payment received by Grandview accounted for on a monthly basis with the full outstanding balance payable on or before December 31, 1997.

Because of very poor market response to remnant products obtained from the 1996 export grade harvest, no remnants were retained for sale by Grandview in 1997.

A4.0 Tunnuq Management

Tunnuq Harvest Ltd. is owned by the Aiviit HTO and is directed by a 6 member Board of Directors 3 of which are appointed by the HTO, one of which is a member of the HTO, one of which is a representative of the Kivalliq Inuit Association and one of which is a member of the Hamlet Council of Coral Harbour.

Tunnuq is managed on a day to day basis by its President. Additionally, Tunnuq employs an administrative assistant who is responsible for maintaining the books and records for the company. Tunnuq also utilizes the services of a number of outside firms to assist with various accounting, legal, planning and operational tasks --

_____ and Grandview Farms (project management, planning & operations). As well, representatives from the GNWT provide ongoing support to Tunnuq by participating in business planning exercises, assisting with project financing and performing census and other tasks critical to herd management. Agriculture Canada provides meat inspection services during the export grade harvest.

A4.1 Accounting & Administration

In September, 1996, during and in conjunction with a planning workshop where representatives of the GNWT, Grandview Farms and Tunnuq developed the 1997 business plan, the Tunnuq Board of Directors, by resolution, retained the services of

. Upon their being retained, conducted an engagement review as at August 31, 1996. The engagement review cost was \$5,757. Subsequently, prepared the fiscal year end financial statements (unaudited) for Tunnuq as at December 31, 1996 (see *Appendix B: 1996 Financial Statements*). The cost of preparing the financial statements and providing additional services to Tunnuq as necessary through August, 1997, was \$5,014. In keeping with the direction set by the Board of Directors, will be preparing 1997 year end financial statements as at September 30, 1997, a date which more closely conforms to the operational character of the business.

The cost of accounting services appears relatively high given the nature of Tunnuq's operations. This appears attributable to the manner in which the books and records are maintained by Tunnuq -- a situation which must be addressed. Related difficulties encountered during the 1997 harvest included inaccurate financial reporting and record keeping (weekly cash flow statements provided by Tunnuq's administrative assistant did not match bank records) which resulted in the issuance of NSF cheques.

A5.0 Operational Considerations

In the sections that follow, select operational aspects pertaining to the conduct of the 1997 export grade harvest are summarized and problems and deficiencies requiring attention in future are identified.

A5.1 Siting of Abattoir

In December, 1996, the Aiviit HTO conducted a ground survey of Southampton Island Caribou in an attempt to dispel concerns from community residents that the numbers of Caribou on the Island were too low to support a commercial harvest. The results of the ground survey confirmed the availability of Caribou and the HTO released 4,500 commercial tags in late December, 1996. Subsequent to that decision, Tunnuq Harvest Ltd. proceeded to organize for a January, 1997, territorial grade harvest, which was prosecuted from an operations base in the community, and a February, 1997, export grade harvest.

Based on experience obtained in previous commercial harvests respecting the availability of animals, Tunnuq decided to locate the abattoir and camp facilities at the same location that was used in 1995 -- approximately 40 miles east of the community.

Although the number of animals available to hunters from this location proved sufficient during the first part of the harvest, the number of animals available for harvest within a reasonable distance of the camp diminished over time. The hunters involved in the 1997 harvest attribute this decrease in the availability of animals to prolonged hunting pressure. Thus, it is reasonable to conclude that it is unrealistic to achieve a harvest volume in excess of 4,000 animals from a single camp location.

A5.2 Permits and Approvals

All required permits and approvals (land use, commercial harvest, etc.) for the 1997 harvest were obtained in advance of camp mobilization except for the water sample and lab test required by Agriculture Canada. The difficulties experienced in clearing the water sample arose from delays in obtaining and transporting samples to a lab for testing. Although these difficulties did not pose insurmountable obstacles to the harvest, the potential for a problem in future could be eliminated by obtaining a water sample from the intended camp location for lab analysis at least two weeks in advance of camp mobilization.

A5.3 Project Management

In 1997, project management services were provided by Grandview Farms as per contractual arrangements between Tunnuq and Grandview -- the cost of project management services is calculated at \$10,000 per month while the project manager is on site plus the cost of travel and accommodation incurred in the performance of project management related duties. of Grandview Farms was designated as project manager and in this capacity was responsible for:

- all dealings with Agriculture Canada in respect of arrangements for inspection services;
- on site supervision of the operation of the abattoir;
- staff supervision and deployment; and,
- the ordering and obtaining of supplies for the 1997 harvest.

arrived in Coral Harbour on February 1, 1997, via the chartered NWT Air 737 that transported supplies from Winnipeg. The first team of Agriculture Canada inspectors arrived in Coral Harbour on February 10th. Because of delays in completing camp mobilization, Mr. Pelling and the Agriculture Canada inspectors had to be accommodated in Coral Harbour until the harvest began on February 19th. This delay caused Tunnuq to incur significant costs and in future it is imperative that the arrival of the project manager and the Agriculture Canada inspectors be scheduled to more closely correspond to the start of harvest operations.

By all accounts the project management services provided by Grandview were exemplary. not only demonstrated a high degree of competence and knowledge in his handling of the product but was able to foster excellent relations with Agriculture Canada and local residents under his direction and tutelage.

A5.4 Staffing

In an attempt to control costs associated with abattoir, camp, hunter, mobilization and demobilization functions, Tunnuq instituted a contract services policy in 1997. As a result, all personnel except for the Administrative Assistant were contracted for specific functions at a set price and on a set payment schedule. The result of this policy decision was that projected and realized contract personnel costs were controlled and the variance experienced was attributable to contracted hunters who's payments were less than projected because less animals were harvested. The success of the contract services approach to staffing warrants the continuation of this approach in future years.

In prosecuting the export grade harvest it is significant to note that the performance of contract personnel and camp and abattoir efficiency is directly related to the performance and moral of the hunters. If a hunters snowmobile breaks down or some other unforeseen circumstance arises that negatively impacts one or more hunters, the moral and efficiency of the whole operation suffers. Thus, it is imperative that Tunnuq find ways to ensure and maintain hunter success and satisfaction so that the rest of the operation can sustain a high degree of operational efficiency -- e.g. consideration should be given to keeping a supply of backup equipment for use by the hunters when circumstances warrant.

A5.5 Use of D6 Cat

In 1997, a D6 Cat, owned by the Hamlet of Coral Harbour, was utilized by Tunnuq for mobilizing and demobilizing the camp, for transporting fuel and supplies and for transporting full combo bins of meat from the camp to the Coral Harbour airport. As well, the D6 proved invaluable in clearing snow from key areas at the camp which reduced downtime and greatly

increased the efficiency of demobilization. By comparison to the use of snowmobiles and komatiks, the D6 Cat by all accounts proved itself as a key operational asset. Further, the use of the D6 resulted in significant cost savings to the harvest operation (i.e. snowmobile rentals and hauling personnel costs). The project manager and camp personnel involved with the 1997 harvest all confirm the utility of the D6 and do not foresee a future harvest proceeding without the D6 or some suitable alternate piece of equipment.

A5.6 Product Transport

In 1997, with the exception of the use of the D6 Cat for moving product from the camp to the Coral Harbour airport, product transport was handled as in the past -- i.e. aircraft to Thompson. MB, refrigerated truck to Proton Station, ON.

Although all the product was eventually transported to Proton Station in a satisfactory condition this aspect of the overall operation was not without its difficulties. The most significant difficulty that arose was that NWT Air's C130 Hercules aircraft was pulled from the project for maintenance and replaced with a 737 which, after delivering one load (approximately 20,000 lbs.) to Thompson was also pulled to perform other duties. Once NWT was able to re-deploy the C130 Hercules the bulk of the product was moved to Thompson. However, the delay in delivery caused some concern as the weather warmed up and the potential for product spoilage increased. In future, it is imperative that schedules for product transport be set and adhered to.

A second difficulty associated with the air transport leg of the operation was attributable to backhaul freight arrangements. Specifically, certain backhaul loads bulked out the aircraft and as a result a substantial quantity of backhaul freight was left in Thompson. Not only did this cause hardship for local residents and businesses that were expecting to receive their freight but it amounted to a significant loss of revenue to Tunnuq (on the order of \$20,000 to \$25,000). To correct this situation in future it is imperative that backhaul freight be assembled and charged as a function of a loaded aircraft rather than as a function only of weight. In other words, sell the plane not the weight it is able to carry.

A5.7 Damage to Weatherhaven from Fire

Early on in the 1997 harvest an unfortunate incident occurred. A fire, started by a candle that was left unattended, resulted in damage to one of the Weatherhaven tents and a person being medivaced to Winnipeg because of severe burns to his hand.

Although the Weatherhaven tent can be repaired, a hole in the roof was the extent of damage incurred, the incident points to the need for extra precautions and the institution of camp policies to ensure the safety of all persons involved.

A5.8 Camp Operation Problems and Deficiencies

Although the operation of the abattoir and camp proved fairly efficient in 1997 there were some problems and deficiencies that require attention so that operational efficiency can be improved in future. Problems of note include:

- ***Herman Nelson:*** Repeated break down of the Herman Nelson heater that is used to keep down abattoir condensation levels proved to be an ongoing source of frustration and cost. It would appear that the utility of a Herman Nelson for the function it is intended to perform is very limited and other sources of heat for the abattoir should be explored.

- **Generator:** The generator that supplies electricity to the camp suffered from repeated overheating due to a plugged radiator. The radiator needs to be serviced prior to mobilization for the 1998 harvest.
- **Abattoir Tent:** Several holes exist in the skin of the abattoir tent. These holes need to be repaired prior to commencement of the 1998 harvest.
- **Rollers:** Rust is appearing on the rollers that are used to hang carcasses on the rail. The rollers need to be cleaned and oiled prior to commencement of the 1998 harvest.
- **Hunters Snowmobiles and Komatiks:** The snowmobiles and komatiks used by the hunters suffered from excessive break downs which adversely impacted the efficiency of the entire harvest operation. To correct or mitigate the potential problems associated with hunter equipment breakdowns, hunter equipment standards should be instituted and consideration should be given to maintaining backup equipment for use by hunters at such times as their equipment requires repair..
- **Tent Stoves:** The stoves used to heat the tents used for sleeping and dining tended to plug more often than is to be expected. Tent stoves should be checked and serviced prior to commencement of the 1998 harvest.

Although it is recognized that an operation such as the Southampton Island Caribou Harvest is such that minor equipment failures are to be expected, the potential for major and ongoing problems can be minimized by ensuring that all camp equipment is inspected and serviced as necessary prior to the commencement of harvest operations.

A6.0 June 1997 Aerial Survey Results

In June, 1997, the GNWT Department of Resources Wildlife and Economic Development conducted an aerial census of caribou on Southampton Island. Preliminary analysis (July 17, 1997 report) of census results indicates a herd size of 29,148 animals which suggests that although patterns of caribou distribution may be changing, herd size continues to increase despite commercial and domestic harvesting activity. The preliminary report concluded that:

Management of this insular population will undoubtedly require that, amongst other possible options, a strategy of high domestic and commercial utilization be continued until the growth of this herd can be stabilized.

Based on the results of the 1997 census, but subject to the concurrence of the Aiviit HTO, it is highly probable that tag allocations for commercial purposes may be increased for 1998.

A7.0 Recommendations for Improvement

- To maximize the probability of achieving the allowable harvest volume set for 1998, employ a two camp location strategy.
- To facilitate implementation of a two location strategy, increase the mobility of the camp and abattoir by building additional skids, that can be pulled behind the D6 Cat, for camp facilities wherever practical (i.e. put tent floors on skids).
- Obtain a confirmed tag allocation well in advance (i.e. fall, 1997) of commencement of harvest operations.
- Base 1998 financial projections on a realistic and achievable target harvest volume.

- Develop an approach to project financing that addresses the reality of Tunnuq’s cash flow and secure project financing that is consistent with cash flow requirements so that suppliers are not forced to wait many months to be paid for their services.
- Contract out accounting functions to ensure that records and books of account are maintained in an orderly fashion.
- Subject to the success of Tunnuq’s appeal of Revenue Canada’s ruling on insurability of workers, maintain the contract services approach to project staffing.
- Confirm all transport costs (air, truck, local cartage) and equipment rentals (D6 Cat) in advance and obtain written commitments on price and terms. Approach rental of the D6 Cat on a fixed fee basis.
- Adopt the recommendations put forward in section A5.8 above respecting camp and abattoir operation.

Part B: 1998 Business Plan

B1.0 Introduction

The local employment benefits and interest in pursuing a commercial caribou harvest are such that every effort must be made to pursue a commercial harvest in 1998. However, current financial circumstances, including Tunnuq’s deficit from 1997 operations and the reduced availability of Government contributions, necessitate the implementation of “belt tightening”, administrative and cost control measures that would maximize the probability of a profit on 1998 operations and/or minimize the level of Government assistance required.

B2.0 Tunnuq Management

From a Tunnuq organizational perspective no changes are anticipated to current ownership or the structure of the Tunnuq Board of Directors. However, in an effort to effect better administrative and accounting procedures and to control expenditures, accounting and cost control measures as outlined in section B2.1 below will be implemented. As well, Tunnuq’s corporate structure (Articles of Incorporation & By-laws) and shareholder arrangements will be reviewed and adjusted to fit current circumstance and a communication strategy, as outlined in section B2.3 below, will be implemented.

B2.1 Accounting & Cost Control Measures

Effective October 1st, 1997, Grandview Farms will assume responsibility for maintaining all books and records respecting Tunnuq Harvest Ltd. The particulars of the arrangement contemplated are as follows:

Responsibilities: Grandview Farms would assume responsibility for:

- maintaining accurate books of account in keeping with standard accounting practice;
- making any and all remittances required by agencies of Government (i.e. WCB, GST, etc.);
- monthly bank reconciliations and financial reports (e.g. balance sheet, income statement, accounts receivable and accounts payable summaries, cash flow variance reports, etc.);
- controlling expenditures, to the extent practicable, so that 1998 budget, cost and cash flow projections are adhered to;
- making payments due to suppliers of goods and services in support of 1998 operations; and,
- providing any and all information in their possession to Tunnuq's accountants at such time as that information is requested or at a minimum once per year when Tunnuq's year end financial statements are being prepared.

In performing these functions on behalf of Tunnuq, Grandview Farms liability would be limited to that of any prudent manager who exercises control and is responsible for managing other peoples' money. Grandview, in performing these functions, would not assume any liability for or on behalf of Tunnuq.

Banking: Two bank accounts would be maintained in the Tunnuq name. Account A would be established as an operating account for local purchases and payments -- i.e. payment of contract fees for abattoir workers, hunters, etc. Signing authorities on Account A would be two members of the Board of Directors. An account balance of \$5,000 would be maintained via reimbursement from Account B on receipt by Grandview of acceptable documentation for any payment made from Account A.

Account B would be controlled by Grandview Farms and would hold the balance of funds available to Tunnuq. _____, the controller for Grandview Farms, and _____, its president, would be joint signatories on Account B.

Payments to major suppliers would be made by Grandview from Account B on behalf of Tunnuq.

Cheque Requisition Procedures: In circumstances where payments from Account A are anticipated to exceed the \$5,000 available to the account (e.g. a scheduled payday for contract services -- abattoir workers, hunters, etc.), the following cheque requisition procedures will apply:

- Tunnuq management will prepare and submit to Grandview Farms a cheque requisition detailing the particulars of any and all cheques that need to be issued at least 24 hours in advance of their issuance;
- Grandview Farms will confirm the legitimacy of the cheques being requisitioned in terms of budget and cash flow projections;
- Grandview Farms having satisfied itself as to the legitimacy of the cheques being requisitioned will endorse the cheque requisition provided by Tunnuq and transfer funds, in the amount of the cheque requisition, from Account B to Account A; and,
- Grandview will notify Tunnuq management upon completion of the above tasks.

Tunnuq Billing Address: To effect Grandview's ability to make payments to authorized suppliers of goods and services, the billing address for Tunnuq will be changed to:

*Tunnuq Harvest Ltd.
c/o Grandview Farms
R.R. #2 Proton Station, ON
N0C 1L0*

Attention: Alison Burgess

Payment for Services: Grandview will be paid \$500 as a one time setup fee plus \$250 per month (12 months x \$250 = \$3,000) inclusive of GST for providing these services to Tunnuq. To requisition payment, Grandview shall submit an invoice to Tunnuq on or before the last day of each and every month from October, 1997 through September, 1998. Upon receipt of the monthly invoice Tunnuq shall endorse same and return an endorsed copy to Grandview. Upon receipt of a endorsed invoice, Grandview shall pay itself from Account B in the amount of the invoice.

By instituting the above procedures it is anticipated that costs and adherence to budget and cash flow projections will be adequately controlled. Further, during the period of peak harvest activity

these arrangements will free Tunnuq management to focus their attention on the more pressing day to day operational matters at hand.

B2.2 Corporate Structuring/Legal

The incorporating documents of Tunnuq Harvest Ltd. were developed at a time when the corporation was new and there was no clear vision as to how the corporation might operate. As a result, the Memorandum of Association and the Articles of Association are in a standard form and have not yet been tailored to suit Tunnuq's needs and interests. Because these documents are fundamental to the corporation, it is essential that they be revisited soon to ensure that the corporate structure is effective and reflects the intentions of those who are part of the company. Matters which are critical to Tunnuq which will be reviewed are:

- a) confirming the eligibility requirements for directors and for shareholders;
- b) establishing effective guidelines for the calling and conducting of directors and shareholders meetings;
- c) establishing the proper offices and appointments to office; and,
- d) confirming decision-making authority and determining if any committees need to be established.

All of these matters must be approved by the directors and shareholders to ensure that the company operates within the law and accordance with its internal by-laws.

B2.3 Communications Strategy

To maintain positive community relations, it is imperative that Tunnuq keep the community informed as to the status of the business and its prospects for the future. The composition of the Tunnuq Board of Directors ensures that key community and regional organizations (e.g. Aiviit HTO, Hamlet of Coral Harbour and Kivalliq Inuit Association appoint directors to Tunnuq Board) are informed and have input into the operation of the business. However, the community at large is not adequately dealt with unless additional steps are taken to ensure input and information exchange.

To satisfy this important local need, Tunnuq management will conduct periodic local radio call-in shows during the preparation phase for the 1998 harvest and develop and circulate newsletters prior to and after the completion of harvest operations -- both of these techniques were successfully employed in 1997.. By instituting these measures, it is hoped that positive community relations will be maintained and opportunities for misunderstandings minimized.

B3.0 Marketing Arrangements

The particulars of the arrangements for sale of territorial and export grade Southampton Island Caribou meat in 1998 are set out in sections B3.1 and B3.2 below.

B3.1 Territorial Sales/Contract Arrangements

In the past, _____ in Rankin Inlet, NT, has been the exclusive purchaser of Southampton Island Caribou destined for consumption within the Northwest Territories. In 1997, Keewatin Meat & Fish experienced a fire in their Rankin Inlet plant and it is not anticipated that the plant will be repaired before February, 1998. Thus, it is not anticipated that Tunnuq will be prosecuting a territorial harvest for sale to Keewatin Meat & Fish in 1998 and no account has been made in this business plan for territorial grade sales of Caribou in 1998.

B3.2 Export Grade Sales/Contract Arrangements

As per Tunnuq's sales agreement with Grandview Farms, all the federally inspected and provisionally certified caribou made available by Tunnuq in 1998 will be purchased by Grandview at a price of \$3.35 per lb. FOB Proton Station, ON. Payments by Grandview, as per

contractual arrangements, include \$170,000 upon delivery and 50% of sales made and payment received by Grandview accounted for on a monthly basis with the full outstanding balance payable on or before December 31, 1998.

Negotiations between Tunnuq management and Grandview during the spring and summer of 1997 indicate that some modest increase (\$0.05 to \$0.10/lb.) in the price payable to Tunnuq in 1998 may be possible although a price increase in 1998 would not necessarily result in an adjustment to the price schedule specified for 1999 (\$3.50/lb.) or beyond. At the time of preparing this business plan, Grandview was not in a position to confirm a price increase over and above the \$3.35 per lb. specified in the sales agreement between Tunnuq and Grandview. However, Grandview has committed to considering an increase subject to product sales performance during the fall of 1997 and especially sales related to shoulders and trim of which Grandview has a considerable inventory -- on the order of 20,000 lbs.

From a product marketing perspective, it is imperative that Tunnuq continue to supply product into the market place on an annual basis. Discussions _____, President of the Grandview Farms, confirmed that a disruption in supply of product annually would be devastating and that should a disruption occur it would be extremely difficult to achieve scheduled price increases which would in turn jeopardize the future viability of harvest operations.

B4.0 Harvest Volume

The results of the 1997 Aerial Survey of Southampton Island Caribou confirmed the presence of Caribou in sufficient numbers to sustain a commercial harvest. The Aiviit HTO has confirmed that a minimum of 4,500 tags will be made available to Tunnuq for a 1998 commercial harvest.

B4.1 Target Harvest Volume

In the past, Tunnuq has not been able to achieve the full harvest volume available to it. Because previous business plans were formulated on high volumes, the results of harvests where these high volumes were not achieved appear very negative -- e.g. the inability of Tunnuq to achieve the full harvest volume available to it in 1997 resulted in Tunnuq recording a deficit on operations that was not offset by Government assistance as was the case in previous years. Further, in 1998, the potential for increased rejections by Agriculture Canada inspectors because of Krabbei infestation (see B4.1 below) suggests that a conservative and realistic approach to harvest volume projections should be adopted. Thus, the target harvest volume for the 1998 export grade harvest and the basis upon which the financial projections presented in this business plan are formulated is 3,500 animals provisionally certified for delivery to Grandview Farms -- this represents a very modest increase (335 animals) over the number of animals that were provisionally certified in 1997 (3,165) and given the two camp location strategy that will be employed in 1998 it is felt that this is a realistic and achievable target harvest volume. In adopting this target volume it is recognized that significantly more animals (500+) may have to be harvested to obtain 3,500 provisionally certified carcasses.

A target harvest volume of 3,500 provisionally certified animals equates to approximately 193,900 lbs. of streamlined carcasses which in turn equates to five C130 Hercules loads. To maximize the efficiency of air transport on a higher harvest volume, an additional 700+ animals (an additional C130 Hercules load) would have to be provisionally certified and given past performance and the potential for increased condemnations in 1998 this would not appear to be a realistic nor achievable target.

B4.2 Condemnations

Out of a total of 200 animals condemned by Agriculture Canada inspectors during the 1997 harvest, 141 were because of the presence of an internal parasite called “Krabbei”. The Arctic Fox is the host of the Krabbei parasite and if it is assumed that the number of Arctic Fox pelts trapped and sold by local trappers (651 in 1995/96 and 1,365 in 1996/97) is indicative of population it would appear that the Arctic Fox population on Southampton Island is increasing.

During the 1995 harvest, which took place at the same location as the 1997 harvest, only 4 animals were condemned for Krabbei. Calculated on a per thousand basis, Krabbei condemnations in 1995 were 1.7 animals per thousand and in 1997, 42.6 animals per thousand -- this is a 25 fold increase in two years or 400% annually. If this trend were to continue at the same rate of increase the number of Krabbei condemnations in 1998 could be as high as 213 animals per thousand harvested -- if 3,500 animals were harvested, 745 could be lost to Krabbei. This possibility is of great concern and should it occur, the profitability of the 1998 operations would be seriously jeopardized -- utilizing two locations during the 1998 harvest may minimize this potential problem to some extent.

Representatives from the GNWT and Agriculture Canada were not willing to commit to a prediction of potential Krabbei infection in 1998. However, _____, a Peritologist from the Agriculture Canada lab in Saskatoon, concurs with _____, one of the vets in attendance at the 1997 harvest, that leaving the infected carcasses on the land aids in the spread of the parasite. Both suggested that carcasses condemned because of Krabbei infection be burnt in an effort to reduce the spread of the parasite and to help to slow the cycle.

B5.0 Operational Considerations

In the sections that follow, key operational characteristics proposed in respect of a 1998 export grade harvest are summarized.

B5.1 Abattoir/Camp Location

Past experience has demonstrated that it is extremely difficult to obtain a large volume of animals from a single camp location. Although hunters are comfortable ranging up to 15 miles from camp in search of animals, distances greater than 15 miles prove very inefficient and tend to bring down the overall moral and efficiency of the operation. To address this problem two camp locations are proposed for the 1998 harvest.

The initial camp location would be located within 10 to 15 miles of Coral Harbour. By locating the camp close to town a full camp set-up would not be required as harvest personnel, with the exception of the project manager and Agriculture Canada inspections staff, would commute to and from town on a daily basis. To operate the camp in this way the following facilities would need to be erected and maintained:

- Abattoir;
- Kitchen;
- Washroom;
- 1 Weatherhaven for Agriculture Canada staff and Project Manager; and,
- Packaging tent.

It is anticipated that the set-up of the initial camp location would be accomplished in 3 or 4 days and that from this location 1,500 to 2,000 animals would be harvested over 10 to 15 harvest days.

The second camp location would be the same as that used in 1995 and 1997, a site which has proven itself as a good location for harvesting in excess of 2,000 animals -- the decline in harvest productivity at this location typically occurs after 2 or 3 weeks of sustained hunting pressure. The move to this location from the initial site would take 4 to 5 days as a full camp set-up would be required. During this relocation period, personnel, except for those involved in relocating the camp, would have time off.

Prosecuting the harvest from two locations should maximize the probability of attaining the target harvest volume upon which the financial projections associated with this business plan are premised. Downside aspects to this strategy include:

- The cost of additional camp mobilization and demobilization (hauling, personnel time, etc.) -- this cost is offset somewhat by reduced camp operating costs during phase 1 where personnel return to their own homes on a daily basis;
- During the camp relocation phase Agriculture Canada inspection staff will have to be accommodated in town -- this is a significant cost consideration. Alternately, this may be offset if Agriculture Canada would consider a crew rotation at this juncture in the harvest operation -- this possibility will need to be discussed with Agriculture Canada; and,
- If the personnel used to mobilize and demobilize the camp also perform other functions during harvest operations they would not get a break for an extended period of time -- perhaps as long as 4 or 5 weeks. This would undoubtedly impinge on productivity and thus, it would be advisable to limit personnel involved in mobilization and demobilization to these functions only.

B5.2 Harvest Timing

The anticipated scheduling of critical operational elements of the 1998 harvest is as follows:

- **Fall, 1997:** Initiate Land Use Permit & Business License application process -- completion by January 15, 1998;
- **January 21:** Supplies assembled at Winnipeg staging;
- **January 24:** Delivery of supplies via chartered 737 aircraft from Winnipeg staging;
- **January 27:** Begin mobilization for the initial camp location -- 10 to 15 miles from Coral Harbour;
- **January 30:** Arrival Project Manager -- final adjustments to camp set-up prior to Agriculture Canada pre-startup inspection;
- **February 2:** All land use and other permits and approvals in place on or before this date;
- **February 3:** Agriculture Canada pre-startup inspection;
- **February 5:** Begin Phase 1 harvest operations;
- **February 20:** Conclude Phase 1 harvest operations and relocate camp to second location;
- **February 25:** Begin Phase 2 harvest operations;
- **April 3:** Suspend harvest operations and demobilize camp;
- **April 6:** Begin airlift of caribou to Thompson staging via C130 Hercules aircraft.

The above schedule reflects an intention on the part of Tunnuq to initiate harvest operations at the earliest practical date in an effort to maximize the number of animals harvested before operations are hampered by bad weather which typically occurs with regularity by the middle of March. As well, the early start date provides for the additional time required for camp relocation while still

allowing eight weeks during which harvest operations may proceed -- 2 to 3 weeks at the initial camp location and 5 to 6 weeks at second camp location.

B5.3 Requisition of Supplies/Transport Thereof

A supply list, priced as at June, 1997, is presented in Appendix C (*Appendix C: 1998 Supply List/June 1997 Prices*). The cost of supplies required, excluding capital purchases and transport to Coral Harbour, in support of the 1998 harvest is summarized in Table B5.3 below.

Responsibility for requisitioning supplies will rest with Grandview Farms -- Grandview assumed responsibility for this function in 1997 and this arrangement worked very well. As well, Grandview will assume responsibility for arranging transport of supplies to Winnipeg where supplies will be assembled for air transport via chartered 737 aircraft to Coral Harbour. Transport costs to Coral Harbour will be approximately \$41,495. Additionally, local cartage costs to transport perishable goods from the Coral Harbour airport to town will be on the order of \$2,000.

Table B5.3: 1998 Supply Cost by Category

SUPPLY CATEGORY	COST
Abattoir Supplies	8,400
Washroom Supplies	553
Kitchen Supplies	1,970
Electrical Supplies	500
Propane	850
Snowmobile Supplies	4,100
Packaging Supplies	10,392
Ammunition	14,710
Camp Maintenance	1,575
Food	24,000
TOTAL	\$67,050

Supplies transport from Winnipeg to Coral Harbour via chartered 737 aircraft is very expensive. Ideally, Tunnuq would be in a cash flow position to requisition non-perishable supplies for delivery via the annual sealift out of Churchill, MB -- perishable supplies would be positioned via scheduled air service at a significantly lower rate on a per pound basis or purchased locally from the Co-op or Northern outlet in Coral Harbour. The cost saving attributable to utilizing the sealift would be on the order of \$20,000.

Alternately, assuming price competitiveness, the Co-op and/or Northern could be contracted to obtain and position all required supplies in Coral Harbour. To enter into an arrangement with the Co-op and/or Northern Tunnuq would need to be in a position to guarantee payment for supplies purchased and positioned in Coral Harbour on its behalf.

Although Tunnuq's cash flow position and 1997 operation deficit did not allow either the sealift nor the Co-op and/or Northern supply options to be used, it is recommended that project financing be arranged to take advantage of one or the other of these options for the 1999 harvest.

B5.4 Project Management

As per contract arrangements between Tunnuq and Grandview Farms, Project Management services will be provided by Grandview Farms. However, _____, who for the past two harvests was on site for the full duration of harvest operations, feels that the caliber of personnel available locally is now such that his presence may not be required for the full duration of harvest operations. It is _____ view that local expertise respecting abattoir operations has developed greatly over the past two years and that it is an appropriate time to begin reducing the level of outside project management services provided to the harvest in favor of increased local employment and opportunities for advancement. As well, _____, on a personal level, finds it difficult to be away from home and his responsibilities at Grandview for such an extended period of time. Thus, subject to agreement from Agriculture Canada, it is envisioned that _____ would be take a 1 to 2 week break at an appropriate point during harvest operations.

B5.5 Contract Services

As was the case in 1997, personnel involved in the 1998 harvest will be independently contracted for their services. Service contract categories include hunters, two classes of abattoir workers, mobilization/demobilization, cooks, cooks helpers, camp maintenance, haulers, etc. Contracts will be on a fixed price basis except for hunters who will be remunerated based on the number of animals delivered to the abattoir. Contract categories, excluding Project Management services supplied by Grandview Farms, and remuneration rates are summarized in Table B5.5 below.

Table B5.5: Service Contracts

CONTRACT CATEGORY	NUMBER	UNIT PRICE	TOT PRICE
Abattoir Worker Category A	9	\$6,000	\$54,000
Abattoir Worker Category B	9	\$5,000	\$45,000
Camp Maintenance	2	\$5,000	\$10,000
Asst Project Manager	1	\$8,000	\$8,000
Hunters	6	\$8,066	\$48,400
Mobilize/Demobilize Foreman	1	\$5,450	\$5,450
Mobilize/Demobilize	6	\$4,250	\$25,500
Cooks	2	\$4,945	\$9,990
Cooks Helpers	2	\$4,945	\$9,990
Mechanical Foreman	1	\$8,500	\$8,500
Cat Operator	1	\$6,000	\$6,000
TOTAL	40	\$66,156	\$230,830

B5.6 D6 Cat

The utility of the D6 Cat used in 1997 to transport equipment, supplies and meat was exceptional. Arrangements, to be confirmed, with the Hamlet of Coral Harbour to use the D6 Cat in 1998 should be pursued on the following basis:

- The D6 Cat will be available to Tunnuq on a fixed fee rental basis at \$10,000;
- Tunnuq will be responsible for personnel to operate the D6 Cat; and,
- Tunnuq will be responsible for fuel, oil and any repairs and maintenance (est. @ \$5,000) which are necessary during the period when the D6 Cat is in its possession.

B5.7 Capital Purchases and Improvements

Four capital items identified for acquisition in support of a 1998 harvest include: a replacement heat source for the abattoir tent; a 10 foot extension to the abattoir; a 10' x 16' Weatherhaven tent; and, skids for 7 Weatherhaven tents to facilitate camp mobility (see **Table B5.7: Capital Purchases**).

Abattoir Heat: In previous years, a Herman Nelson heater was used to heat the abattoir -- the primary function of the heater is to keep water vapor from inside the abattoir. In 1997, the operation of the Herman Nelson proved to be an ongoing source of frustration as the unit broke down repeatedly. As well, the Herman Nelson is excessively expensive to operate -- approximately \$4,000 was charged for parts to repair the unit and fuel consumption was approximately 110 liters per day which over 35 harvest days cost Tunnuq \$3,041 (35 days x 110 liters of fuel x \$0.79/liter).

Alternate heat sources for the abattoir have been researched and the following replacement for the Herman Nelson is recommended:

- Brock Model MBP/MBP-F oil furnace;
- 115,000 BTU\1,330 CFM;
- Fuel consumption 1 GPM;
- Price with plenum \$2,000.

It is estimated that the purchase price of the unit would be recovered in fuel cost savings, as compared to using the Herman Nelson (rated at 5 GPM), over the course of one harvest. Further, the simplicity of the burner unit, its reliability and the reasonable price of parts support the purchase of this heater for the abattoir.

Abattoir Extension: A 10 foot extension to the abattoir tent has been recommended by Agriculture Canada as a measure to eliminate congestion in the trimming area of the abattoir -- congestion typically occurs when several hunters arrive at the abattoir at the same time creating a backlog in processing the carcasses which in turn causes the hunters to be delayed in their departure.

With the addition of 10 feet to the abattoir an additional 20 feet of rail would also be required. The price for the abattoir extension and 20 feet of rail is \$6,200 FOB Proton Station, ON.

Weatherhaven: An additional 10' X 16' Weatherhaven or suitable alternative is required for accommodation of camp personnel -- in 1997 the additional Weatherhaven was borrowed from GNWT Renewable Resources. The price for the Weatherhaven FOB the manufacturer located on the lower mainland of BC is \$5,080.

Weatherhaven Skids: Seven skids are required for the Weatherhaven tents to facilitate camp mobility. Skid construction would utilize aluminum I-beams and the tent floors would be permanently mounted to the skid frames. The cost per skid is estimated at \$1,500 for a total cost of \$10,500.

Table B5.7: Capital Purchases

CATEGORY	COST
Abattoir Heat	2,000
Abattoir Extension	6,200
Weatherhaven (10' x16')	5,080
Weatherhaven Skids	10,500
TOTAL	\$23,780

B5.8 Product Transport/Contract Arrangements

Arrangements for product transport from Coral Harbour to Proton Station, ON are as follows:

- **Coral Harbour, NT to Thompson, MB:** Chartered C130 Hercules. Five trips will be required to transport 3,500 provisionally certified carcasses. The quoted price per trip is \$37,095 + GST (Total = 9 legs @ \$18,547.50 + GST). Positioning charges incurred will be \$40,667 + GST. (see *Appendix D: Transport Cost Quotations*);
- **Thompson, MB to Proton Station, ON:** Refrigerated truck. Five trucks are required to transport 3,500 provisionally certified carcasses. The quote price per truck is \$3,500 + GST (see *Appendix D: Transport Cost Quotations*).

Based on the quotes obtained from NWT Air and Reimer Express , the total cost for transporting 3,500 provisionally certified carcasses in 1998 will be \$240,851 inclusive of GST.

To offset the cost of product transport freight will be backhauled on the C130 Hercules from Thompson, MB to Coral Harbour, NT. Although backhaul arrangements in the past have proved frustrating and fraught with confusion and disorganization, this revenue source can not be ignored. Backhaul revenues in 1997, even though the aircraft was bulked out repeatedly by the loads assembled in Thompson, were approximately \$49,800. In 1998, every effort must be made to sell the airplane rather than charge by weight. Based on the anticipated routing of the aircraft there is potential for 4 backhaul loads from Thompson, MB. Backhaul arrangements will be priced at \$15,000 per load which, if can be arranged, would provide \$60,000 in revenues and, if the loads are not bulked out, freight rates equal to \$0.375 per pound (basis 40,000 lbs./load).

B6.0 Financial Projections

In the sections that follow, a projected income statement, cash flow and summary of local employment and benefits related to a 1998 harvest where 3,500 animals are provisionally certified for delivery to Grandview Farms are presented in tabular form.

B6.1 Income Statement & Assumptions

Table B6.1 below presents projected revenues and costs for a 1998 harvest compared to actual revenues and costs that were incurred in 1997. Detailed explanatory notes to Table B6.1 (see below) are presented on an item by item basis. Based on the projected revenues and costs presented for 1998, Tunnuq would accrue a net loss on 1998 operations in the amount of \$155,232 (Cash Gain/Deficit - Opening Cash = Net Profit/Loss). To offset this level of loss through increased production, assuming that expenses other than freight would not increase, an additional 80,000 lbs. (2 Herc/Truck loads at a cost of approximately \$90,000) or 1,445 animals would need to be harvested. Given past performance, achieving this level of harvest volume is highly unlikely.

Insert Table B6.1 here

Notes to Table B6.1

General: Revenue projections based on 3,500 provisionally certified animals at an average dressed weight of 55.4 lbs. = 193,900 lbs. delivered to Grandview Farms.

All costs are projected inclusive of GST and include costs incurred from August 20, 1997 through August 31, 1998.

% Act & % Proj calculations express costs as a % of total revenues.

Opening Cash: Carry forward August, 20, 1997 cash deficit -- accounts receivable and payable as at August 20, 1997 are accounted for.

Contributions: At the time that this business plan was prepared the level of non-repayable financial assistance available in support of a 1998 harvest was unknown and thus, non-repayable financial assistance has not been accounted for. However, the opening cash balance does account for \$33,000 in additional non-repayable financial contributions committed in August, 1997.

Grandview: Meat sales based on 193,900 lbs. delivered to Grandview Farms and a price paid (\$3.35/lb.) by Grandview Farms as per contractual arrangements.

Equip Reserve GIC's: GIC's were cashed in 1997 and are thus not available. It is important to note that cashing the GIC's to offset operating losses incurred in 1997 leases Tunnuq with no cash reserves for replacement and repair of equipment.

Other revenue: No other sources of revenue could be confirmed at the time that this business plan was prepared.

Territorial Harvest: See section B3.1 Territorial Sales/Contract Arrangements.

GST Refund: 7% of cost items where GST is charged and recoverable.

Backhauls: Assumes four C130 Herc loads sold at \$15,000 per load (\$0.375/lb. net). Note that additional backhaul revenues may accrue from the positioning leg, Yellowknife to Coral Harbour.

Territorial Harvest: See section B3.1 Territorial Sales/Contract Arrangements.

Capital Purchases: See section B5.7 Capital Purchases & Improvements.

Supplies: See *Appendix C: 1998 Supply List/June 1997 Prices*.

Packaging Materials: See *Appendix C: 1998 Supply List/June 1997 Prices*.

Food: See *Appendix C: 1998 Supply List/June 1997 Prices*.

Fuel & Oil: Projected increase over 1997 based on additional fuel consumption accruing from two camp locations. Note that \$4,100 for snowmobile oil is accounted for in the supplies category As per *Appendix C: 1998 Supply List/June 1997 Prices*.

Inspection Fees: Projected increase to offset potential overtime payments for Agriculture Canada inspections personnel.

Contract Fees: Contract fees are projected on a cash flow basis as set out in the table below. Note that projections for hunters includes a relatively high allowance (500+) for animals that could potentially be condemned by Agriculture Canada and an allowance for a maximum of 10 storm days per hunter. Estimates for payments to hunters are projected as follows:

2,800 females x \$10	= \$28,000
1,200 males x \$12	= \$14,400
10 storm days x 6 hunters x \$100	= \$6,000
Total	= \$48,400

POSITION	Mobilize	Feb-13	Feb-20	Feb-27	Mar-06	Mar-13	Mar-20	Mar-27	Apr-03	Demob	TOTAL
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category A)			1500		1500		1500		1500		6000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Abattoir (Category B)			1250		1250		1250		1250		5000
Assist Proj Manager	1000		1500		1500		1500		1500	1000	8000
Camp Attendant			1250		1250		1250		1250		5000
Camp Attendant			1250		1250		1250		1250		5000
Cook		925	1295	1295	1295	1295	1295	1295	1295		9990
Kitchen Help		925	1295	1295	1295	1295	1295	1295	1295		9990
Mechanical Foreman	1250		1500		1500		1500		1500	1250	8500
Mob/Demob Foreman	1800				2050					1600	5450
Mob/Demob	1400				1650					1200	4250
Mob/Demob	1400				1650					1200	4250
Mob/Demob	1400				1650					1200	4250
Mob/Demob	1400				1650					1200	4250
Mob/Demob	1400				1650					1200	4250
Mob/Demob	1400				1650					1200	4250
Hunters			12100		12100		12100		12100		48400
Cat Operator	600		1200		1200		1200		1200	600	6000
Project Manager	10000									15000	25000
Total	23050	1850	46140	2590	58090	2590	46140	2590	46140	26650	255830

Fuel Hauling: Projection assumes all fuel hauling would be done using the D6 Cat and that no additional contract fuel hauling would be required..

Cat Rental/Repair: Projected cost includes a \$10,000 fixed rental fee payable to the Hamlet of Coral Harbour (to be confirmed) and a budget of \$5,000 for D6 Cat repairs & maintenance.

Rentals: Projection based on the following increases to 1997 actual:

7 additional hunting days for 6 hunters at \$100/day per rental unit = \$4,200 days
additional transportation related to 2 camp locations = \$4,000

Repairs & Maintenance: As per 1997 costs.

Travel & Accommodations: Increase projected is based on anticipated additional costs of hotels and meals for inspectors and project manager during camp relocation.

Freight: The projected freight costs (inclusive of GST) are estimated as follows:

Equip. & Materials Freight: 737 Wpg + Truck	= \$41,495
Air Freight on Meat: 5 C130 loads + positioning	= \$222,126
Truck Freight on Meat: 5 trucks @ \$3,745/truck	= \$18,725
Local Cartage: Misc. cartage for perishable items	= \$2,000
	<hr/>
Total	= \$284,346

: No additional loan commitments were secured at the time that this business plan was prepared. Payment of outstanding loans have been accounted for in the opening cash balance.

KBDC. Loan: No additional loan commitments were secured at the time that this business plan was prepared. Payment of outstanding loans have been accounted for in the opening cash balance.

Miscellaneous: Projection includes a one time cost of \$5,000 to move Tunnuq's warehouse from town to a location at the airport -- this will reduce the need for use of local cartage services when supplies arrive in Coral Harbour -- and \$2,500 to cover unanticipated expenses during harvest operations.

Legal/Accounting: Projection includes the following:

Sept, 1997 year end financial statements	= \$5,000
Sept, 1998 year end financial statements	= \$3,500
Review & amend corporate documents	= \$3,000
Revenue Canada appeal & contract prep.	= \$3,000
	<hr/>
Total	= \$14,500

Management: Projection includes management fees at \$36,000 and consulting fees at \$10,000 from August, 1997 through September, 1998.

Administration: Projection includes the following:

Grandview Farms accounting set-up fee	= \$500
Monthly accounting fee (\$250 x 12)	= \$3,000
Part time clerical/reception (Dec - May)	= \$5,000
	<hr/>
Total	= \$8,500

Office Supply: Consists of computer supplies, stationary, fax supplies, etc.

Honoraria: Projected at \$300/meeting with quarterly meetings + 1 special meeting to address legal issues respecting corporate documentation.

Asset/Trans Insurance: Cost of this item is prohibitive and thus will not be purchased in 1998.

Communications: Includes cost (on the order of \$600/month) for office telephone and fax lines which were previously paid for by the Aiviit HTO and the rental of a satellite phone (\$1,440 rental fee + usage fees estimated at 150 minutes/month x 3 months x \$1.40/minute = \$630) for use at the camp -- in 1997 a satellite phone was made available through Agriculture Canada at no cost to Tunnuq and it is not anticipated that this arrangement will be available in 1998.

Revenue Canada: Employee deductions for part time clerical/reception (Dec - May).

WCB: As per 1997 quarterly payments.

Interest & Bank Charges: Increase reflects carrying cost of 1997 loss on operations.

Liability Insurance: As per 1997 price.

B6.2 Cash Flow & Financing Requirements

In Table B6.2 projected revenues and costs are presented on a cash flow basis -- September, 1997 through September, 1998.

As indicated in Table B6.2, a peak cash flow requirement of \$688,111 would occur in April, 1998. The reason that this peak is higher than that experienced in past years is directly related to how previous harvest operations were financed. In 1997, financing was arranged through the Royal Bank in Rankin Inlet, NT, where credit was extended on a demand rather than a line of credit basis. This resulted in Tunnuq not having sufficient financial resources to pay suppliers such as Reimer Express and NWT Air when payments were due. These suppliers have indicated that future arrangements will be on a cash in advance basis only. Thus, in 1998, Tunnuq will need to pay for virtually all expenses in advance of obtaining any revenues from the sale of meat to Grandview Farms. Resolving this cash flow conundrum may prove to be a considerable, if not insurmountable, challenge.

Given the projected loss on operations, coupled with the projected cash flow requirements associated with prosecuting a 1998 harvest, it would appear that a significant level of Government and/or other assistance will be required. Although it is normal for a business venture to arrange financing on the basis of contract assignment where revenues accruing through contractual arrangements are used to secure a line of credit at a financial institution, this option would not appear to be available to Tunnuq. In the past, neither the Royal Bank nor the Bank of Commerce have been amenable to this type of arrangement. Rather, these financial institutions have approached financing in support of Tunnuq on a "sovereign" loan basis where an unconditional Government guarantee is required for any funds advanced over and above funds secured 100% by cash.

The type and level of assistance required for Tunnuq to prosecute a 1998 harvest on the basis of the projections presented in this business plan are as follows:

- maintenance of the unconditional guarantee, in the amount of \$200,000, provided by the GNWT in support of the 1997 harvest through January 31, 1998;
- non-repayable contributions in the amount of \$217,109 advanced on or before January 31, 1998 -- this level of financing would place 1998 operations in a neutral cash position at year end and effectively reduce the cash flow requirement to $\$688,111 - \$217,109 = \$471,002$; and,
- an operating line of credit (not a demand loan arrangement) in the amount of \$480,000 -- this will allow Tunnuq to meet its obligations to suppliers in a timely manner prior to receipt of funds from sale of meat to Grandview Farms.

Although it is recognized that Grandview Farms is required to post an irrevocable letter of credit in the amount of \$170,000 prior to commencement of 1998 harvest operations, this type of financial instrument does not alleviate the need for a line of credit in the amount specified above. The difficulty with using a letter of credit as security is, that in the past, the financial institutions approached have only accepted the value of the letter of credit as security until it becomes due and payable at which time the amount of credit available to Tunnuq is reduced by the value of the security held -- this reduction in the level of credit available to Tunnuq occurs at a time when liabilities incurred in support of harvest operations have not been completely satisfied.

Insert Table B6.2 here.

B6.3 Local Employment & Benefits

In Table B6.3 below, the benefits that would accrue to residents and business interests in Coral Harbour as a result of prosecuting a 1998 harvest on the basis outlined in this business plan are summarized.

Table B6.3: Local Benefits

EMPLOYMENT	POSITIONS	PAYMENTS
Contract Services ¹	40	230,830
Management	2	36,000
Administrator	1	5,000
Skid Construct	2	5,000
Warehouse Move	2	5,000
Total	47	281,830
PURCHASES		PAYMENTS
Cartage/Handling		2,000
Rentals		44,800
Cat Rental/Repair		15,000
Fuel		45,000
Hotels & Meals		15,000
Honoraria		1,500
Misc.		2,500
Total		\$125,800

Note 1: See Table B5.5: Service Contracts

As in past years when a commercial caribou harvest has been prosecuted by Tunnuq the level of benefits accruing to residents and business interests in Coral Harbour is significant. Additionally, reasonable freight rates on backhauls and the type and level of meaningful activity generated are important factors. Finally, it is important to recognize that the very existence of an opportunity for a commercial harvest arose from, and is consistent with, herd management initiatives recommended by GNWT resources personnel. The consequences that would accrue from a failure to effectively contain herd growth on Southampton Island could have far reaching social and economic consequences.

B7.0 A View to the Future

Given the continued growth of the Southampton Island caribou herd and the current management strategy of employing relatively high levels of domestic and commercial utilization to stabilize herd growth, it is reasonable to assume that a commercial harvest of 4,000 + animals can be sustained on an annual basis. However, based on the revenue and cost projections associated with a harvest where 3,500 animals are provisionally certified for export, it is not reasonable to assume that Tunnuq can sustain harvest activities on an annual basis without some level of ongoing financial assistance both in the form of non-repayable contributions to offset projected operational deficits and, unless financial institutions can be convinced to accept contract arrangements for sale of meat as security for an operating line of credit, in the form of guarantees to secure operating capital sufficient to satisfy cash flow requirements.

To address the issue of operational deficits, it may be worth considering implementation of a freight subsidization scheme. As indicated in the 1998 financial projections, freight costs constitute the single largest expense accruing from harvest operations. The design of such a scheme would necessarily include consideration of a number of market related factors such as scheduled increases in product price and the point at which product price and market demand stabilize (likely in the \$4/lb. range). Notionally, the per pound subsidy required to offset operational deficits and provide a modest profit (perhaps on the order of \$0.10/lb.) for the business would be expected to decrease at a rate corresponding the scheduled price increases until the product price stabilizes. In Table B7.0 below, a plausible freight subsidization rate structure is presented for purposes of illustration.

Table B7.0: Illustration Freight Subsidy

Year	Volume	Price/lb	Deficit	Deficit/lb	Subsidy/lb	Subsidy
1998	193,900	\$3.35	\$155,232	0.80	0.90	\$174,510
1999	193,900	\$3.50	\$126,147	0.65	0.75	\$145,425
2000	193,900	\$3.65	\$97,062	0.50	0.60	\$116,340
2001	193,900	\$3.80	\$67,977	0.35	0.45	\$87,255
2002	193,900	\$3.95	\$38,892	0.20	0.30	\$58,170

To address the cash flow issue, it is recommended that the level of guarantee provided as security be reduced over time and that the financial institution being dealt with be convinced to accept contract arrangements for sale of product as security for an operating line of credit -- as Tunnuq continues operations and establishes a track record, it is unreasonable for financial institutions to continue treating Tunnuq on a “sovereign” loan basis.

B8.0 Conclusions

Since assuming primary responsibility for harvest operations in 1996, Tunnuq Harvest Ltd. has demonstrated an increasing ability to control costs while effectively prosecuting a commercial caribou harvest. Although the financial results of the 1997 harvest have placed the business in a rather precarious position, the potential for continued improvement in performance and the corresponding contribution to herd management and the local economy does exist. However, continued financial assistance will be required for Tunnuq and the community of Coral Harbour to realize the economic, social and herd management benefits that accrue from a commercial caribou harvest.