

Table 1. Summary of moose sightings during the Taiga Plain moose survey, North Slave Region, Northwest Territories, March 2004. Surveyed grid cells totaled 60 from 479 possible. Incidental sightings occurred over an additional 17 grid cells.

	bulls		lone cow	cow with 1 calf <sup>a</sup>	cow with 2 calves <sup>b</sup>	unclassified	total non-calf moose	total moose
	small	large						
surveyed grid cells	2	9	12	2	0	3	24	30
incidental	0	7	8	2	0	0	26	19
total sightings	2	16	20	4	0	3	50	49

<sup>a</sup> number indicates each occurrence of a cow with 1 calf; for number of moose, double the count to include the calf

<sup>b</sup> number indicates each occurrence of a cow with 2 calves; for number of moose, triple the count to include the calves

Table 2. Moose population estimates including calves for the Taiga Plain survey area March 2004 based on the Geospatial estimate. Area of interest for the survey was 7,669 km<sup>2</sup> from which 479 grid cells (approx. 4 km x 4 km) were established. Of these cells, 314 were stratified as high moose density and the remaining 165 were considered low density.

(a) Pre-Selected Grid Cells Only (no incidental sightings); Strata Count: High = 33 cells, Low = 27 cells; Total Area = 962.5 km<sup>2</sup>

Moose Counted		Population Estimate	SE	Confidence Interval			Estimation Method
High	Low			80%	90%	95%	
11	19	241	60.6	163 – 318	141 – 340	122 – 359	Geospatial
11	19	221	64.4	137 – 304	113 – 329	92 – 350	Gasaway

(b) Pre-Selected & Incidental Grid Cells; Strata Count: High = 48 cells, Low = 31 cells; Total Area = 1235.6 km<sup>2</sup>

Moose Counted		Population Estimate	SE	Confidence Interval			Estimation Method
High	Low			80%	90%	95%	
26	43	306	56.1	234 – 377	213 – 398	196 – 416	Geospatial
26	23	300	57.6	226 – 375	204 – 396	185 – 415	Gasaway

Table 3. (a) Ratio of calves to cows and (b) bulls to cows estimated for the entire Taiga Shield survey area March 2004 calculated by the Geospatial method from surveyed grid cells. Area of interest for the survey was 7,669 km<sup>2</sup> from which 479 grid cells (approx. 4 km x 4 km) were established. Of these cells, 314 were stratified as high moose density and the remaining 165 were considered low density.

(a)

Moose Counted <sup>1</sup>		Ratio Estimate (calves/cow)	SE	Confidence Interval			Grid Cells <sup>2</sup>
calves	cows			80%	90%	95%	
0+2	2+12	0.132	0.060	0.053 – 0.212	0.029 – 0.235	0.008 – 0.257	NI
1+3	10+14	0.159	0.056	0.087 – 0.231	0.067 – 0.251	0.049 – 0.268	P+I

(b)

Moose Counted <sup>1</sup>		Ratio Estimate (bulls/cow)	SE	Confidence Interval			Grid Cells <sup>2</sup>
bulls	cows			80%	90%	95%	
8+3	2+12	1.051	0.435	0.494 – 1.609	0.336 – 1.767	0.199 – 1.904	NI
14+4	10+14	0.801	0.263	0.464 – 1.138	0.369 – 1.233	0.286 – 1.316	P+I

<sup>1</sup> Count is separated as numbers of moose counted in High and Low grid cells respectively.

<sup>2</sup> NI = not incidental; P+I = Selected & Incidental

## Appendices:

### Appendix 1. Aircraft Use

For the spatial survey method, at least 10 % of the area should be surveyed and a minimum of 60 grids cells must be sampled. The identified Taiga Plain survey area encompassed 7,669 km<sup>2</sup> (479 grid cells), therefore a survey of about 60 grid cell is desired to attain the minimum sampling size. About 10-12 cells can be sampled/plane/day, on average.

Table A1. Summary of aircraft use for the Taiga Plain moose survey 18-19 March 2004, based out of Yellowknife, NT

Taiga Plain Moose Survey 2004 Aircraft Use							
date	Plane #	C-185	time charge	fuel charge	air time	flight time	mileage
18-Mar	1	ZIX	\$2,794.50	\$441.61	7.9	8.1	1027
	2	PHO	\$3,070.50	\$429.14	8.1	8.9	998
19-Mar	1	ZIX	\$2,518.50	\$396.89	6.9	7.3	1024
	2	PHO	\$3,036.00	\$440.32	8.0	8.8	1024
			\$11,419.50	\$1,707.96	30.9	33.1	4073

Appendix 2 - Expenditures and Source of Funds

Funding for this survey was provided by Northwest Territories Cumulative Impact Monitoring Project (25,000). A summary of budget expenditures follows but still needs to be confirmed.

Table A2. Taiga Plain moose survey expenses.

<i>Item</i>	<i>Cost</i>
Aircraft: 2 Cessna 185 (\$362.56/hr x 33.1 hrs)	\$11,419.50
Fuel: bulk AvGas	\$ 1,707.97
Drums	\$ 2,550.00
Wages: various community reps @ \$200/day	
Treaty 11:	\$ 400.00
Yellowknives Dene:	\$ 200.00
Yellowknife residents:	\$ 200.00
GPS equipment: 2 GPSmap 76S plus accessories	\$ 621.59
Field Equipment (batteries, film, food)	\$ 240.88
Software	\$ 598.00
Community-based monitoring gas certificates	\$ 1,000.00
Accrual to fiscal 2004 for late invoices	\$ 6,062.06
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	\$25,000.00
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