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Table 1. The abundance of wolves and caribou segregated as to the four wolf pack territories along the coast 1974 to 1987 (see Figure 6) tabulated in blocks 3 km along the shore and 5 km inland in the density dependent years.

Coastal Wolf Pack Area	Number of Aggregations		No. of km <sup>2</sup> Occupied by		Aggregations per Km <sup>2</sup>		Caribou Per Wolf	
	W	C	W	C	W	C	W	C
<b>Willow R.-</b>								
Oiseau Bay	43	67	19	27	2.3	2.5	1.1	5.2
<b>Nicols C.-</b>								
Cascade R	38	84	28	46	1.5	1.8	0.5	3.2
<b>Cascade R.-</b>								
Otter Is & Head	12	60	10	25	1.2	2.4	0.4	6.7
<b>Tagouche Cr.-</b>								
Pukaskwa River	25	14	14	11	1.8	1.5	1.2	2.1
								0.68

Table 2. Statistical tests between environmental factors compared to the percentage of calves in density dependent years.

Winter Season	Wolf Numbers		Landfast Ice		Snow Depth		Winter Temp.		Caribou No.	
	0-2P <sup>1</sup>	3-4P	No	Yes	<45cm	>45cm	>3.6C	<3.6C	<20	>20
1973	--	--	--	--	13.3	--	13.3	--	13.3	--
1974	--	13.3	--	13.3	--	13.3	--	13.3	13.3	--
1975	--	16.7	16.7	--	16.7	--	16.7	--	16.7	--
1976	31.8	--	31.8	--	31.8	--	31.8	--	31.8	--
1977	--	14.3	--	14.3	--	14.3	--	14.3	--	14.3
1978	--	12.0	--	12.0	--	12.0	--	12.0	--	12.0
1979	--	--	--	16.1	--	16.1	--	16.1	--	16.1
1980	--	15.8	--	15.8	--	15.8	15.8	--	--	15.8
1981	29.0	--	--	29.0	29.0	--	29.0	--	29.0	--
1982	--	--	--	6.3	--	--	--	6.3	--	6.3
1983	22.7	--	22.7	--	22.7	--	22.7	--	22.7	--
1984	--	--	--	19.3	--	--	--	19.3	--	19.3
1985	--	7.7	--	7.7	--	7.7	--	7.7	--	7.7
1986	--	--	--	12.5	--	--	--	12.5	--	12.5
1987	--	13.3	13.3	--	13.3	--	13.3	--	--	13.3
Means	27.8	13.3	21.1	14.6	21.1	13.2	20.4	12.7	21.1	13.0
±se	±2.69	±1.11	±4.05	±2.01	±3.27	±1.27	±2.87	±1.49	±3.27	±1.36
t-test	- 6.1018		-1.6073		-2.2634		-2.4708		-2.6017	
P>	0.0003		0.134		0.047		0.028		0.022	

<sup>1</sup>P=wolf packs

## List of figures

Figure 1. The location of Pukaskwa National Park and the adjacent caribou herds in 1985.

Figure 2. The winter snow contours of the Park (Finlay 1973) and the distribution of the caribou along the shoreline below the 330/130 cm/in. snowfall contour in an area of about 150km<sup>2</sup>.

Figure 3. The foggy shore line of Pukaskwa showing Triangle Harbour , the extensive land fast ice and “balds”—“Islands in the sky” on the tops of the rugged coastal hills. Note a mixture of closed canopies for moose and treeless hills with lichens for caribou.

Figure 4. The census lines flown for caribou and the quadrats censused for moose in 1999. At the top left is Pic Island the nearest caribou herd to the PNP herd.

Figure 5. The distribution of the caribou from 1974 to 1988. Also shown are the flights of caribou leaving Otter Island when wolves reach the island on land fast ice and the routes of wolves approaching and traveling the coast. The abundance and distribution of caribou 1974-88 (DD) is compared to that of 1989-2009 (IDD) on the left of figure.

Figure 6. The distribution of caribou, moose, wolves plotted on the annual winter census surveys in DD years within 5 km. of the shore (N=north half of Park and S=south portion).

Figure 7. The distribution and frequency of caribou, moose, and wolf sign (tracks, droppings and observations) on the coastal trail, Pic River to the North Swallow River in 44 km. in May (winter sign) and September (summer sign) in three years--1984-86. Moose show an increase in abundance to the south. Wolves tracks were



























