Figure 2.1-1
Location of the Meteorological Stations on the North Slope
Source: NCDC (2005)

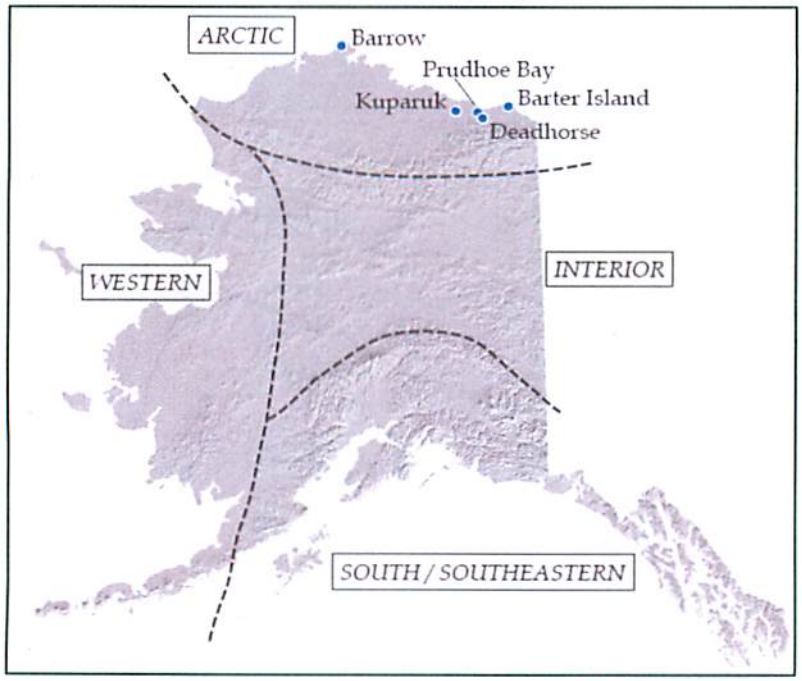


Figure 2.1-2
Annual Course of Temperature for Barrow (Mean High and Low, and Record Maximum and Record Minimum Based on the 30-Year Time Period 1975-2004)
Source: NCDC (2005)

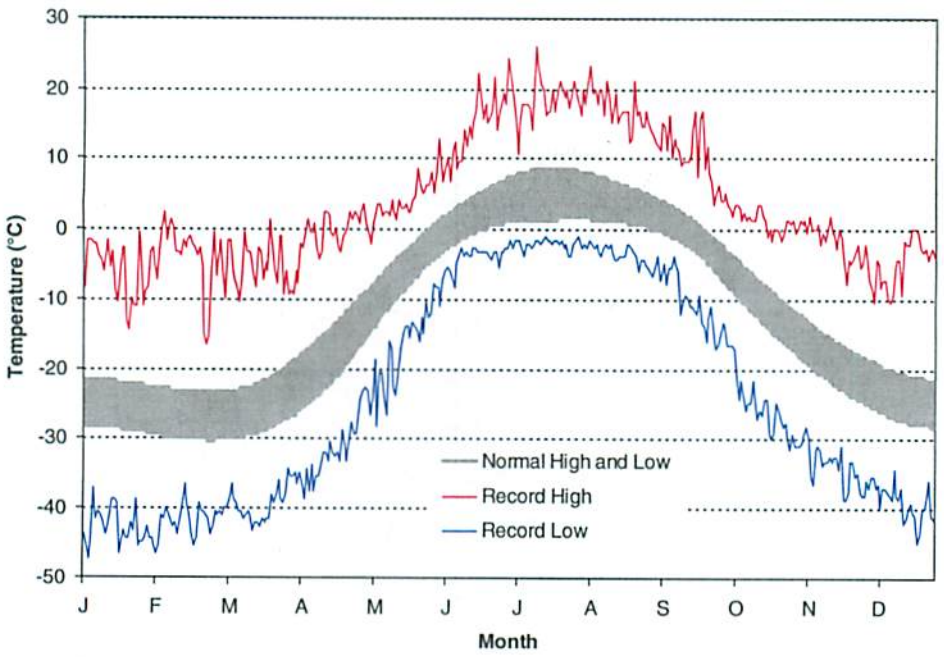


Figure 2.1-3
Mean Daily Snow Depth at Barrow and Barter Island
Source: NCDC (2005)

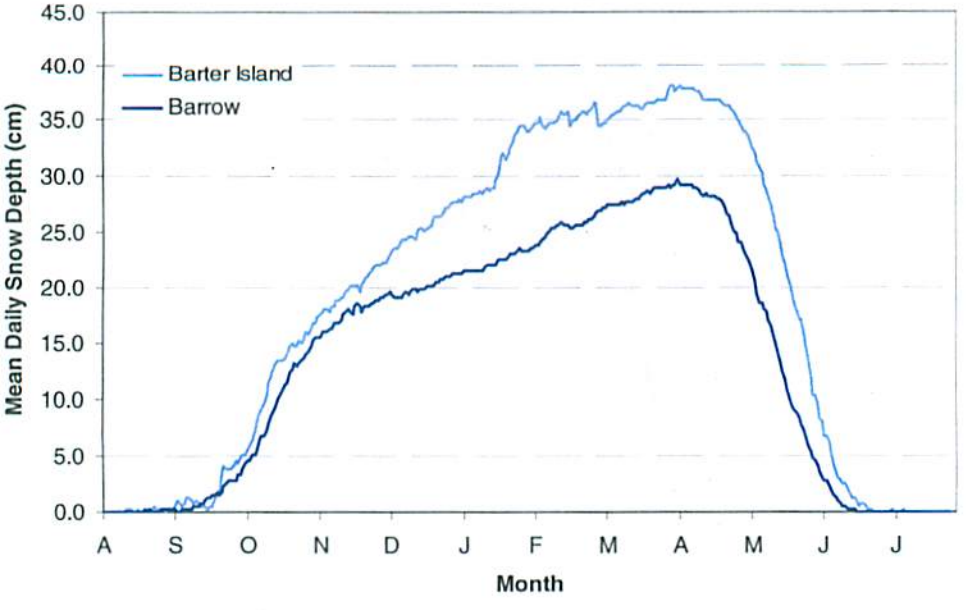


Figure 2.1-4
Wind Rose for Barrow
Source: NCDC (2005)

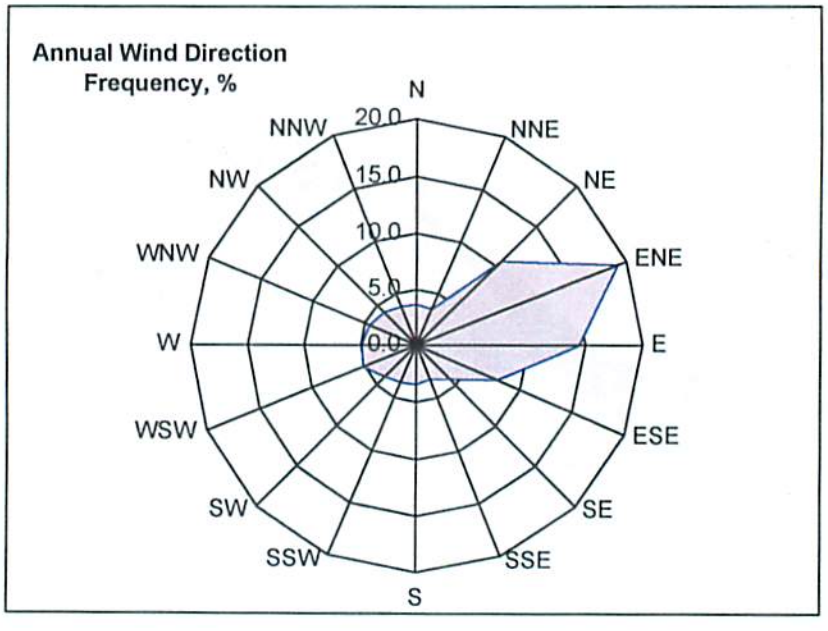


Figure 2.1-5
Number of Days per Year with Wind Speed in Excess of 30 kt at Barrow (1987-2003)
Source: NCDC (2005)

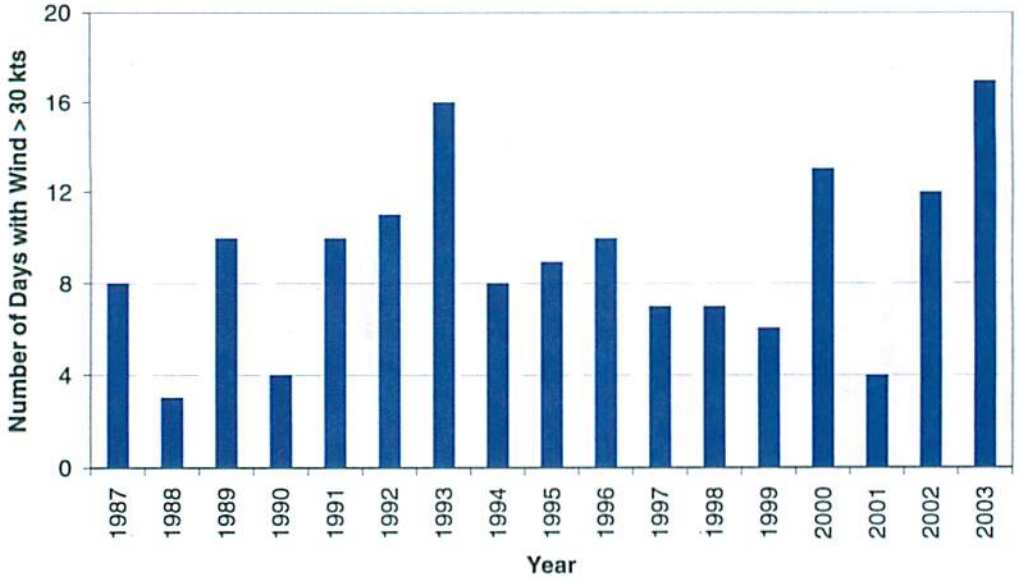


Figure 2.1-6
Mean Annual Temperatures for North Slope Climatological Stations
Source: NCDC (2005)

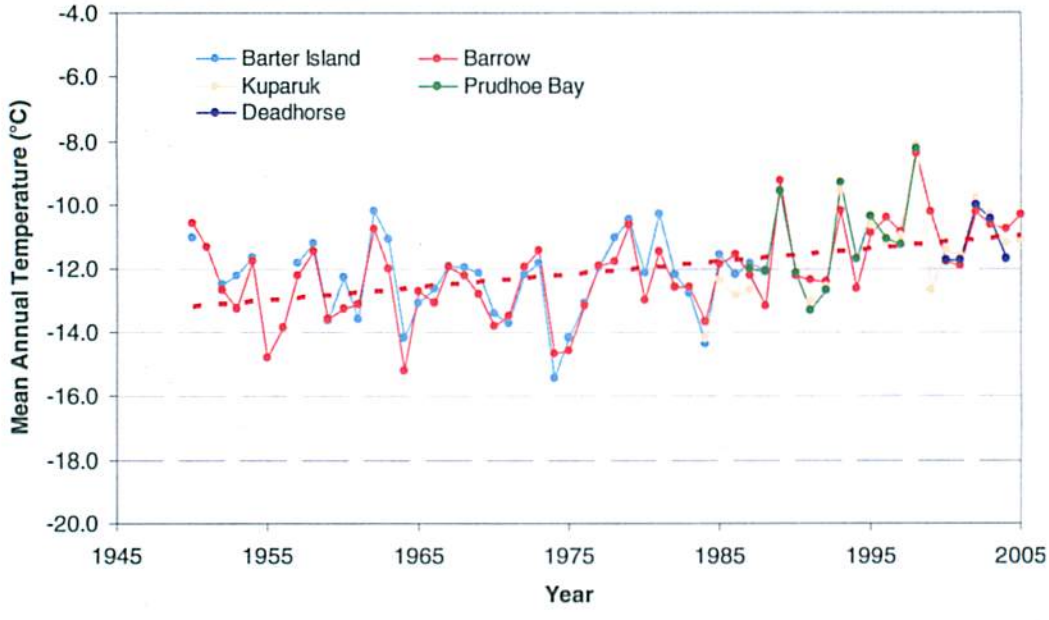


Figure 2.1-7
Mean Annual Ice Concentration in the Beaufort Sea for a 50-Km-Wide Strip off the Coast of Northern Alaska

Source: Wendler et al. (2003)

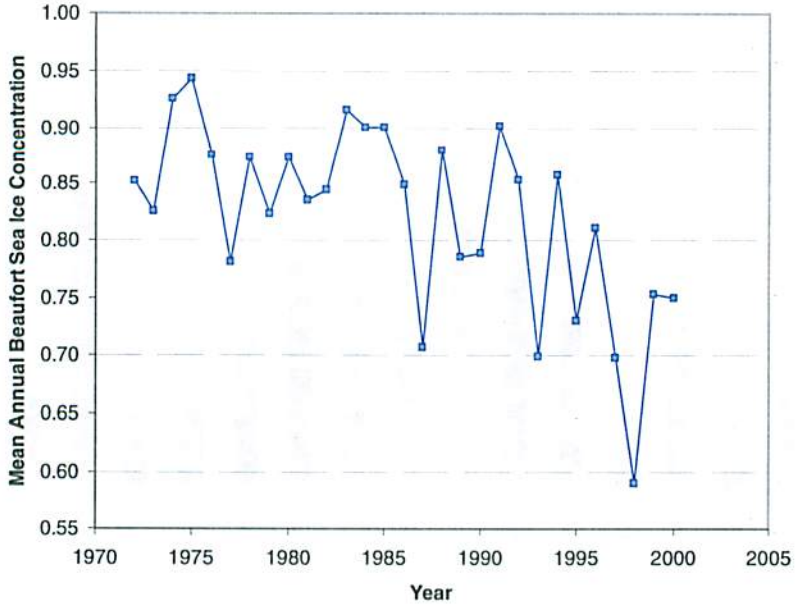


Figure 2.1-8
Number of Days per Year with a Daily Minimum Temperature Below -18°C and -34°C for Barrow (1949–2004)

Source: NCDC (2005)

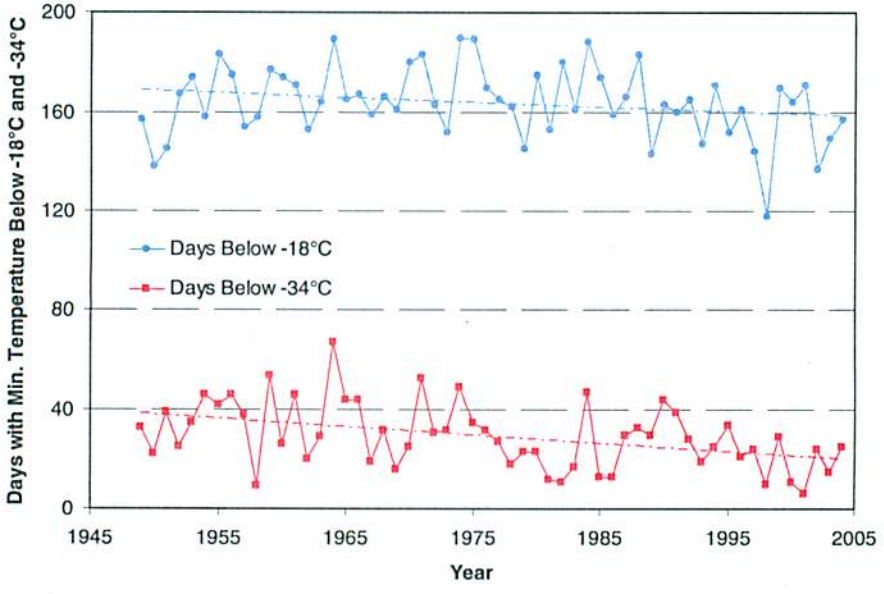


Figure 2.1-9
Number of Days per Year with a Daily Maximum Temperature Above 0°C and 10°C for Barrow (1949-2004)
Source: NCDC (2005)

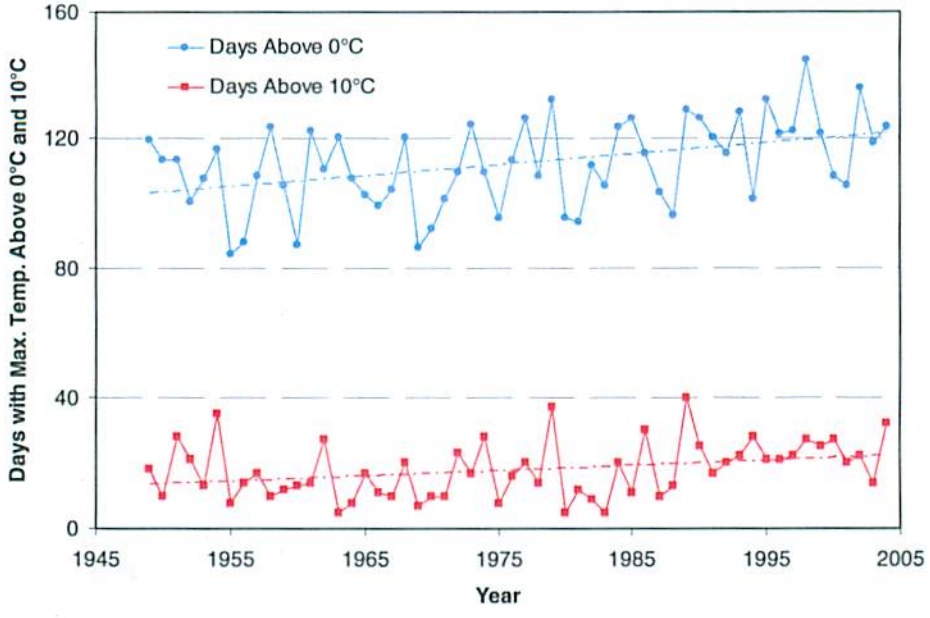


Figure 2.3-1
Foggy Island Bay and Sites of Bluff Erosion Studies
Source: NCDC (2005)

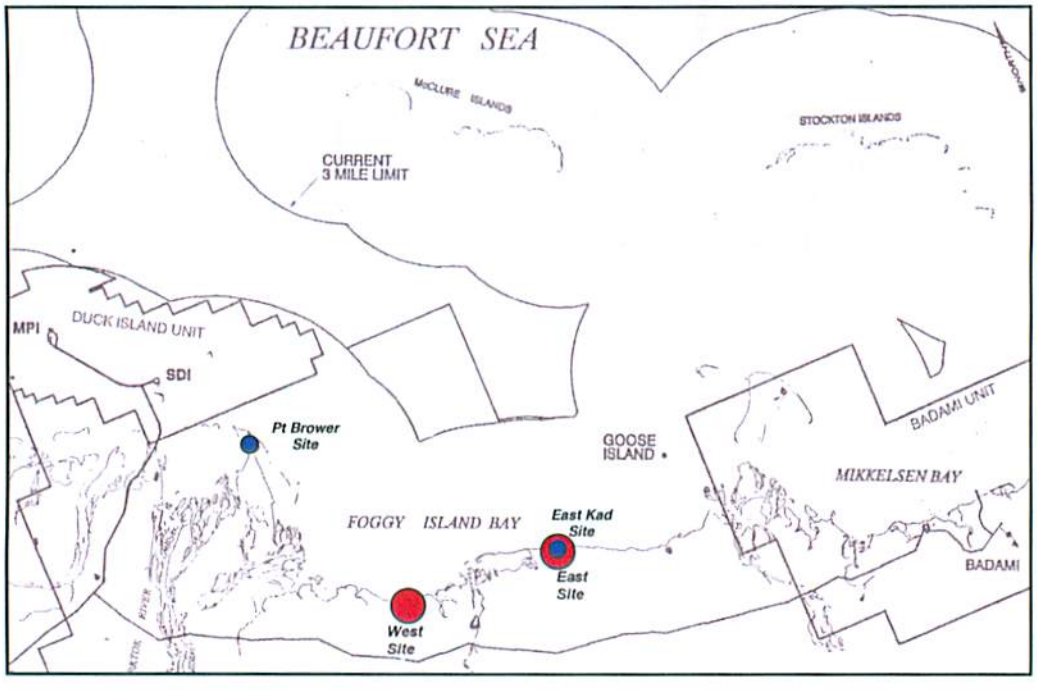


Figure 2.4-1
Wave Prediction Stations Near Endicott SDI
Source: Resio and Coastal Frontiers (2007)

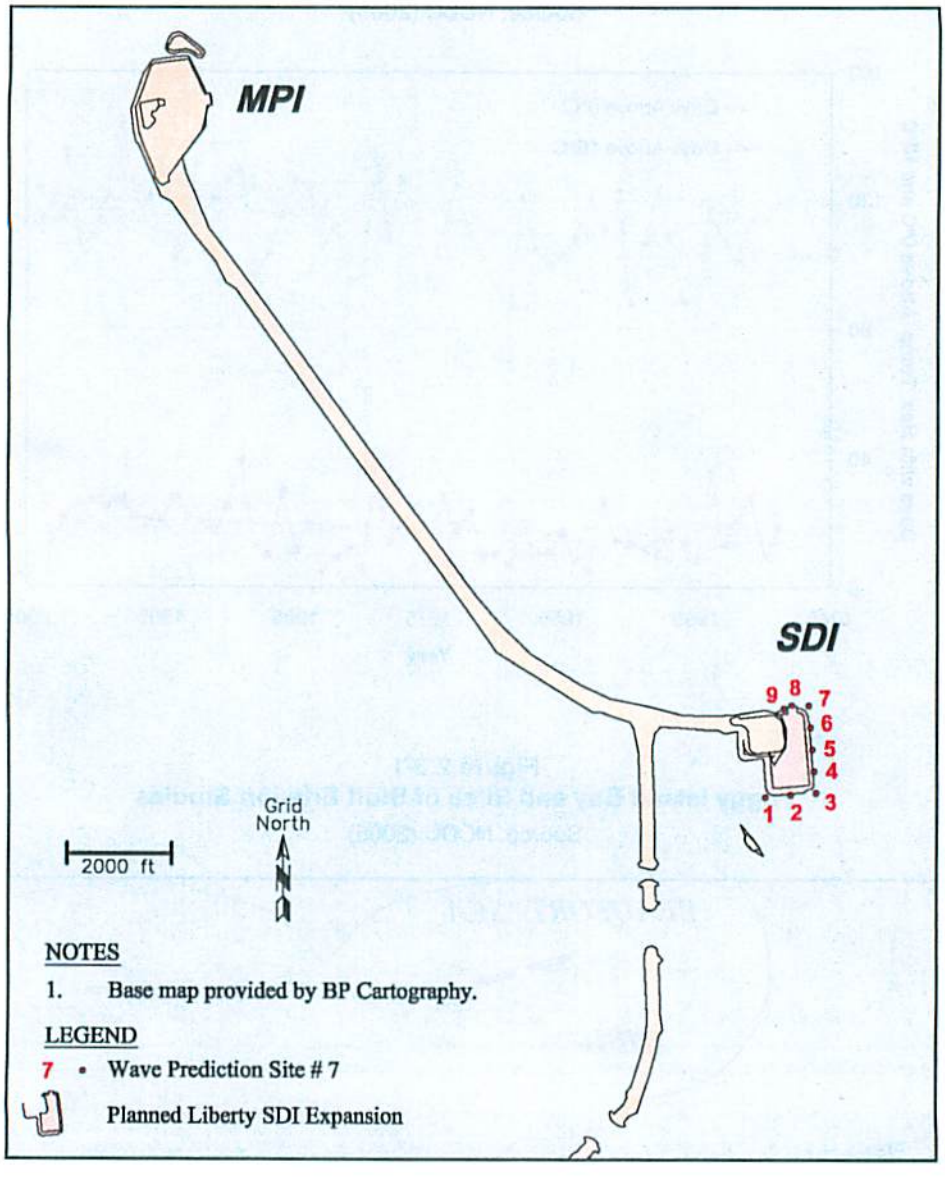


Figure 2.4-2
Mean Monthly Discharge in Sagavanirktok River, 1983-2005
(USGS Stream Gauge 15908000)
Source: USGS (2007)

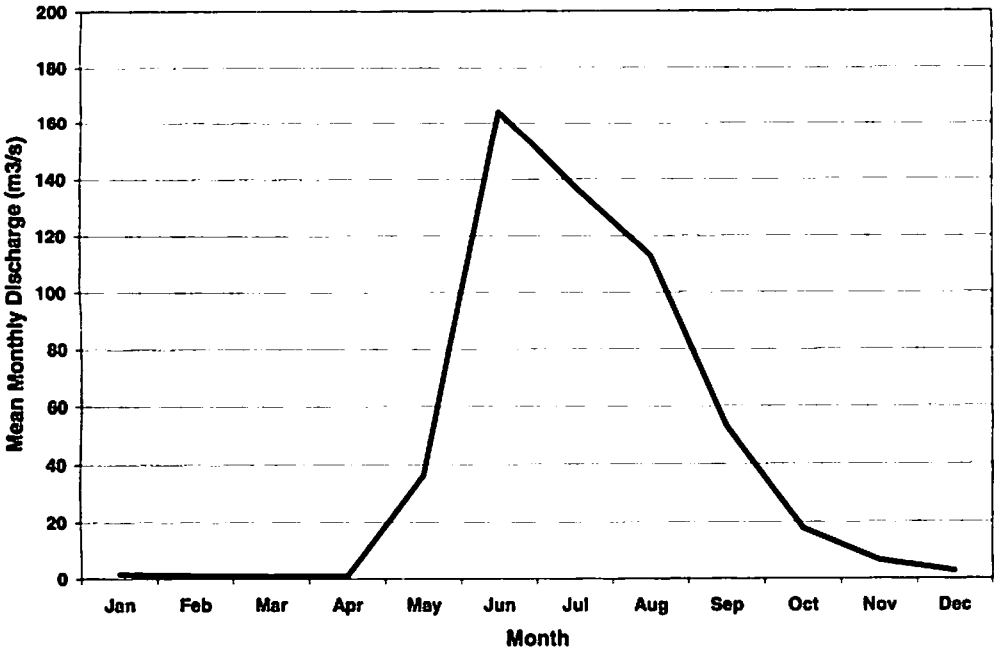


Figure 2.4-3
Average Daily Discharge in the Sagavanirktok River
(USGS Stream Gauge 15908000)
Source: USGS (2007)

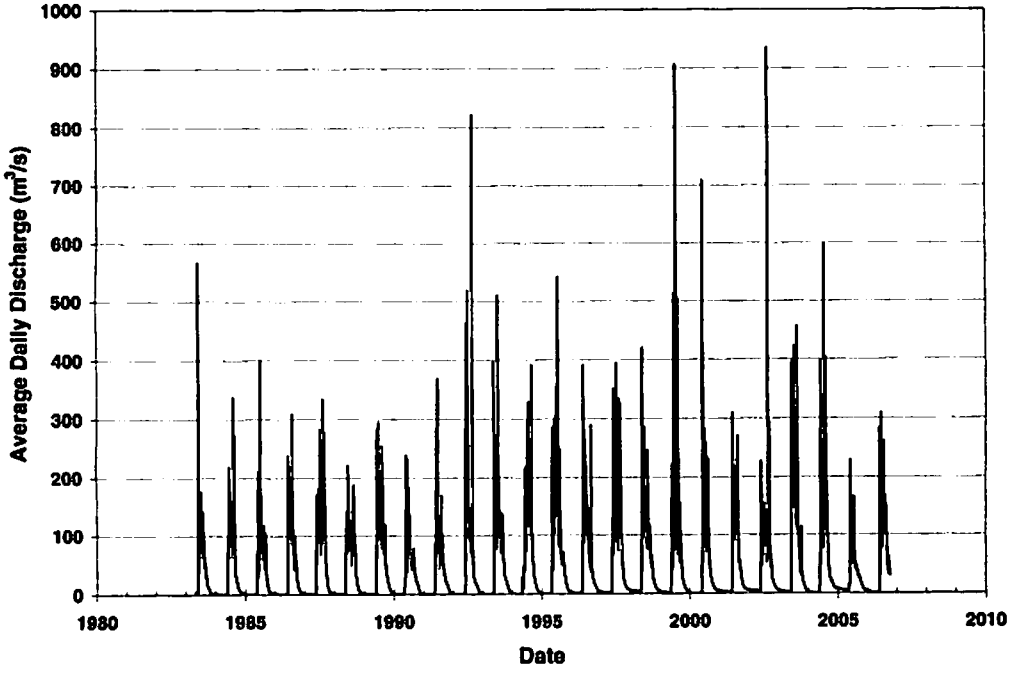


Figure 2.4-4
Historical River-Overflood Limits in Foggy Island Bay
Source: D.F. Dickins (1999) and Coastal Frontiers (2000, 2003a)

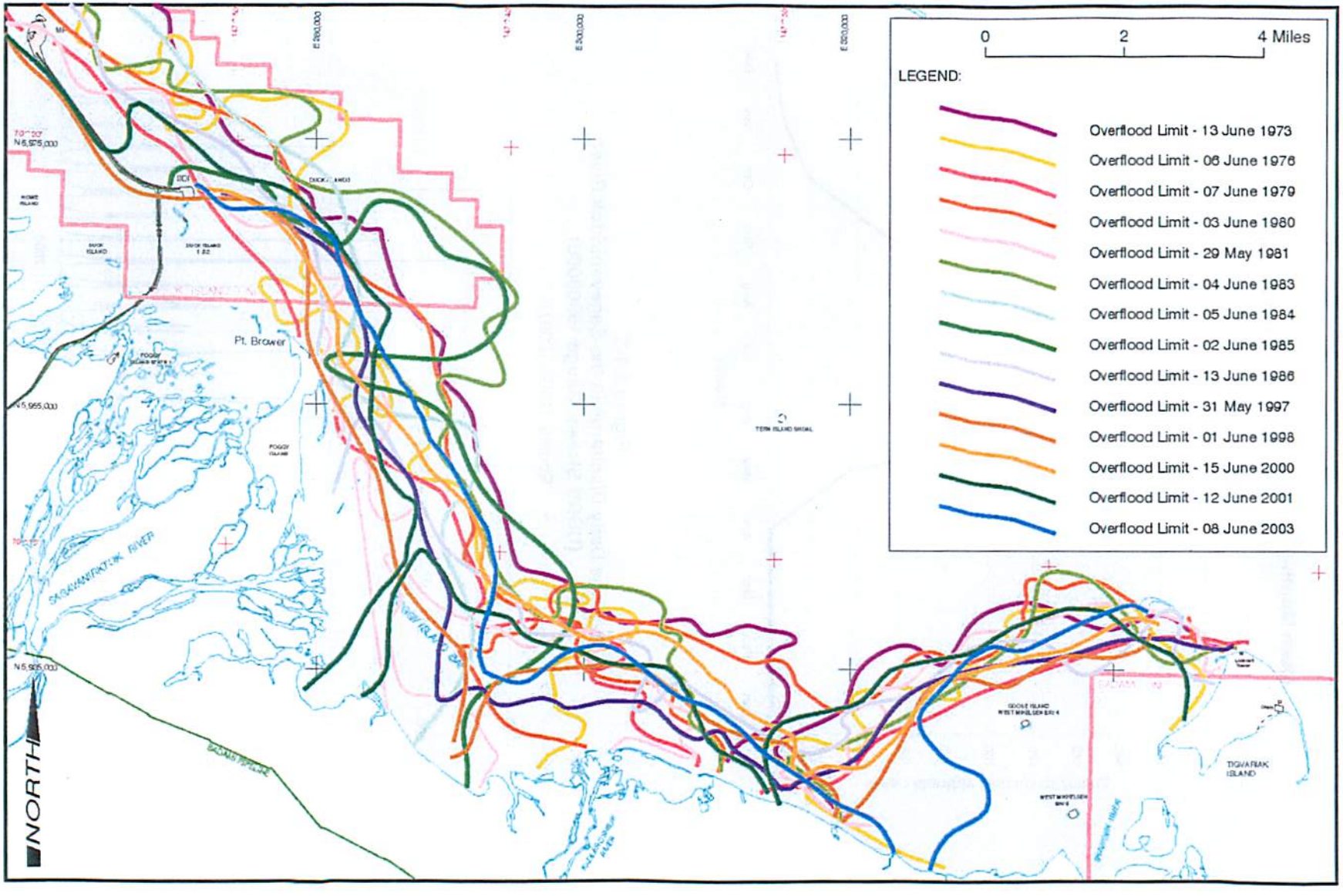


Figure 2.4-5
Ice Pile-up (7.5 m High) Encroached 40 ft onto the Slope of Tern Island during a 25-kt Southwesterly Storm on July 7, 1984

Source: K. Vaudry

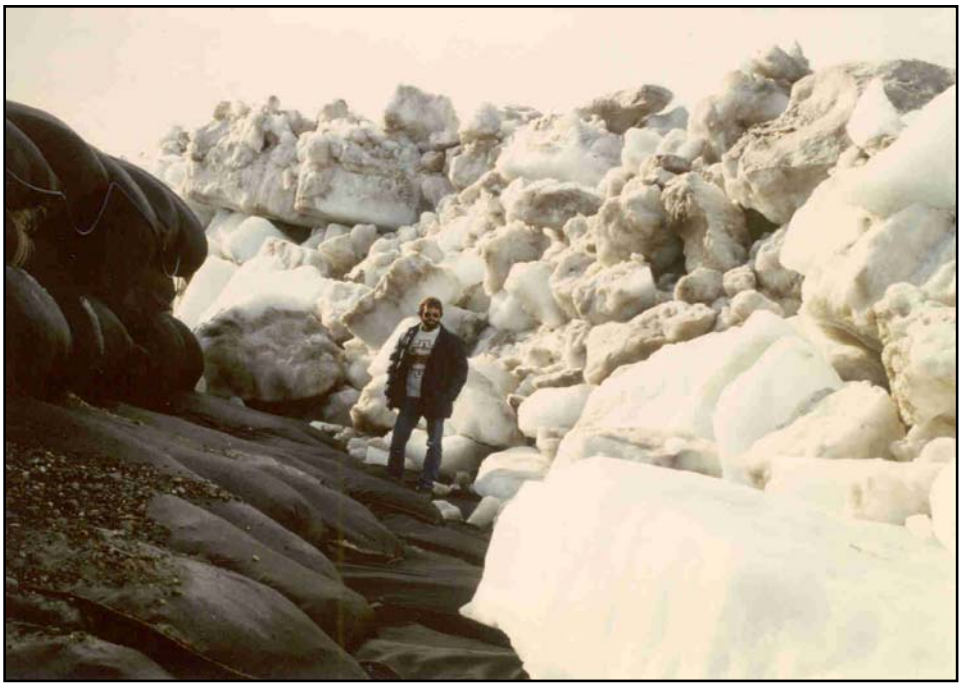


Figure 2.4-6
Ice Rubble Pile 6 m High Formed on West Side of the Duck Island 3 Manmade Gravel Island during a 20-kt Westerly Storm on 15-17 October 1984

Source: K. Vaudry

Figure 2.5-1
Interpolated Concentrations of TSS in Foggy Island Bay
Source: Dunton et al. (2005)

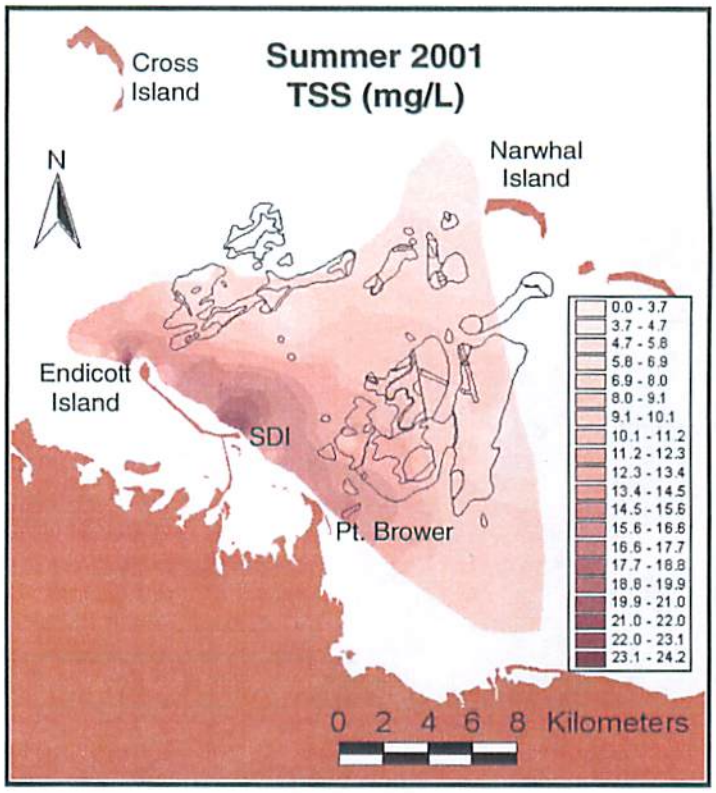


Figure 2.5-2
Concentrations of TSS and River Discharge for the Sagavanirktok River During Spring 2001
Source: Trefry et al. (2004a)

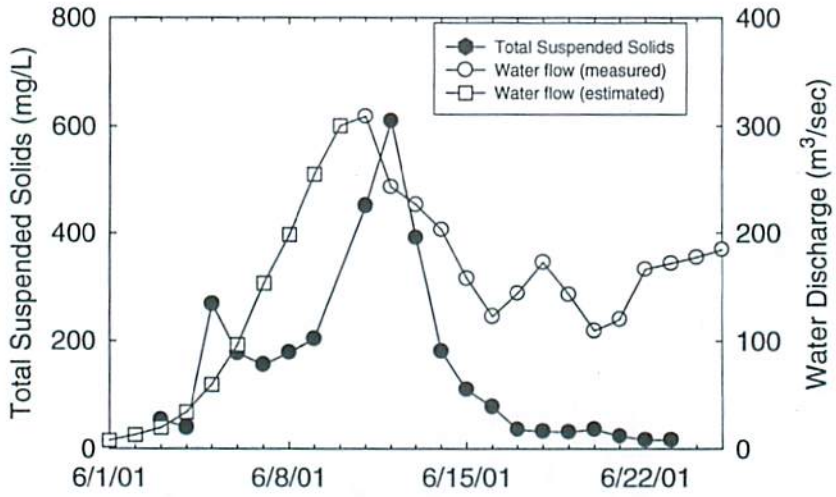


Figure 2.5-3
Concentrations in Sediment from the Coastal Beaufort Sea, Including Foggy Island Bay, for Al Versus (a) Cu, (b) Pb, (c) Hg and (d) Ba

Source: Trefry et al. (2003)

Equations are from linear regression calculations, r is the correlation coefficient and n is the total number of data points. Dashed lines above and below the regression line show the 99% prediction intervals. Points marked with large letters on selected graphs are for suspended sediment from the Sagavanirktok (S), Kuparuk (K) and Colville (C) rivers. Data for sites identified on the graph were not included in the regression calculations.

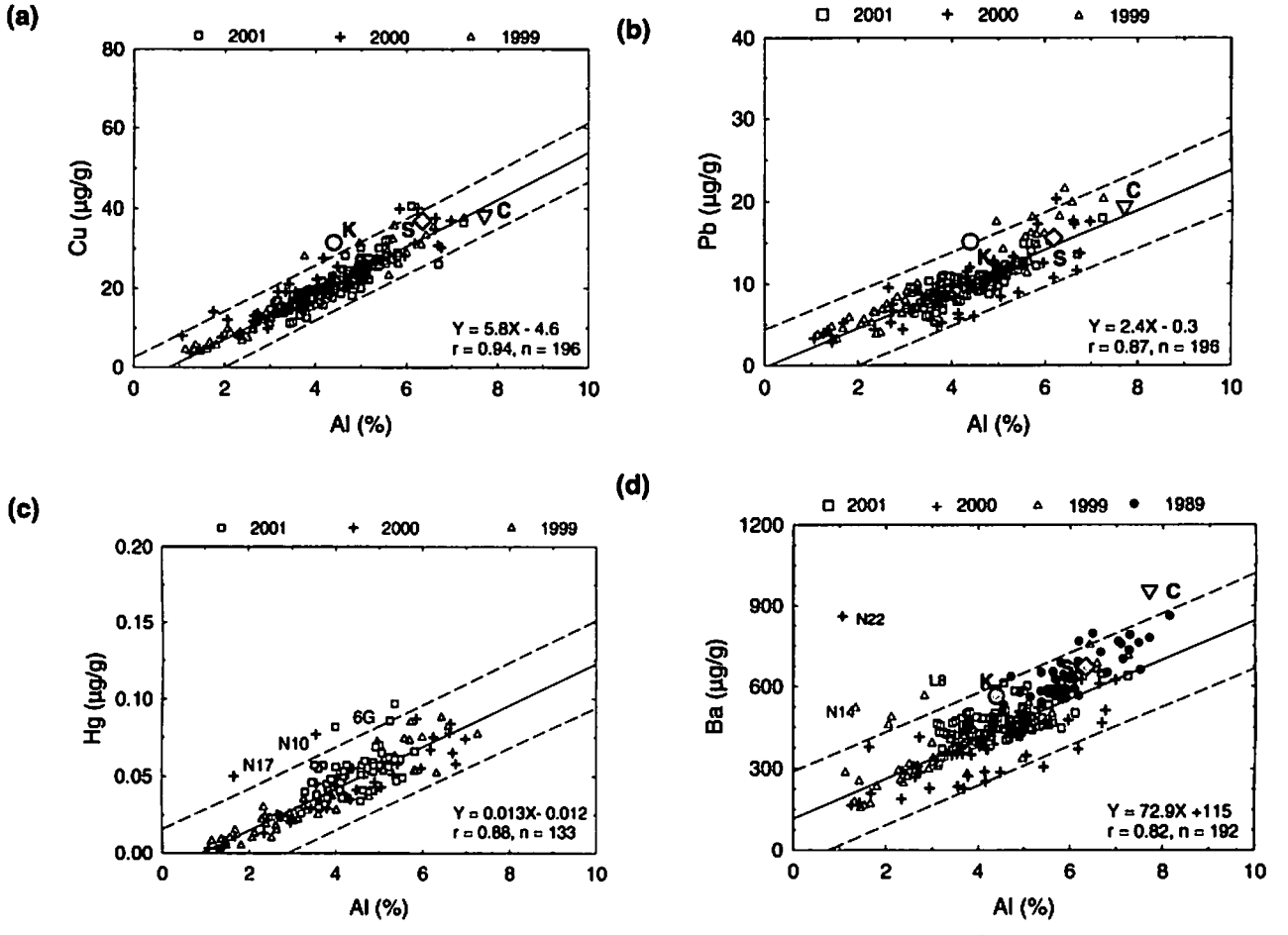


Figure 2.5-4
Trace Metal Concentrations in Clams (Astarte) from the Coastal Beaufort Sea, Including Foggy Island Bay
Source: Brown et al. (2004)

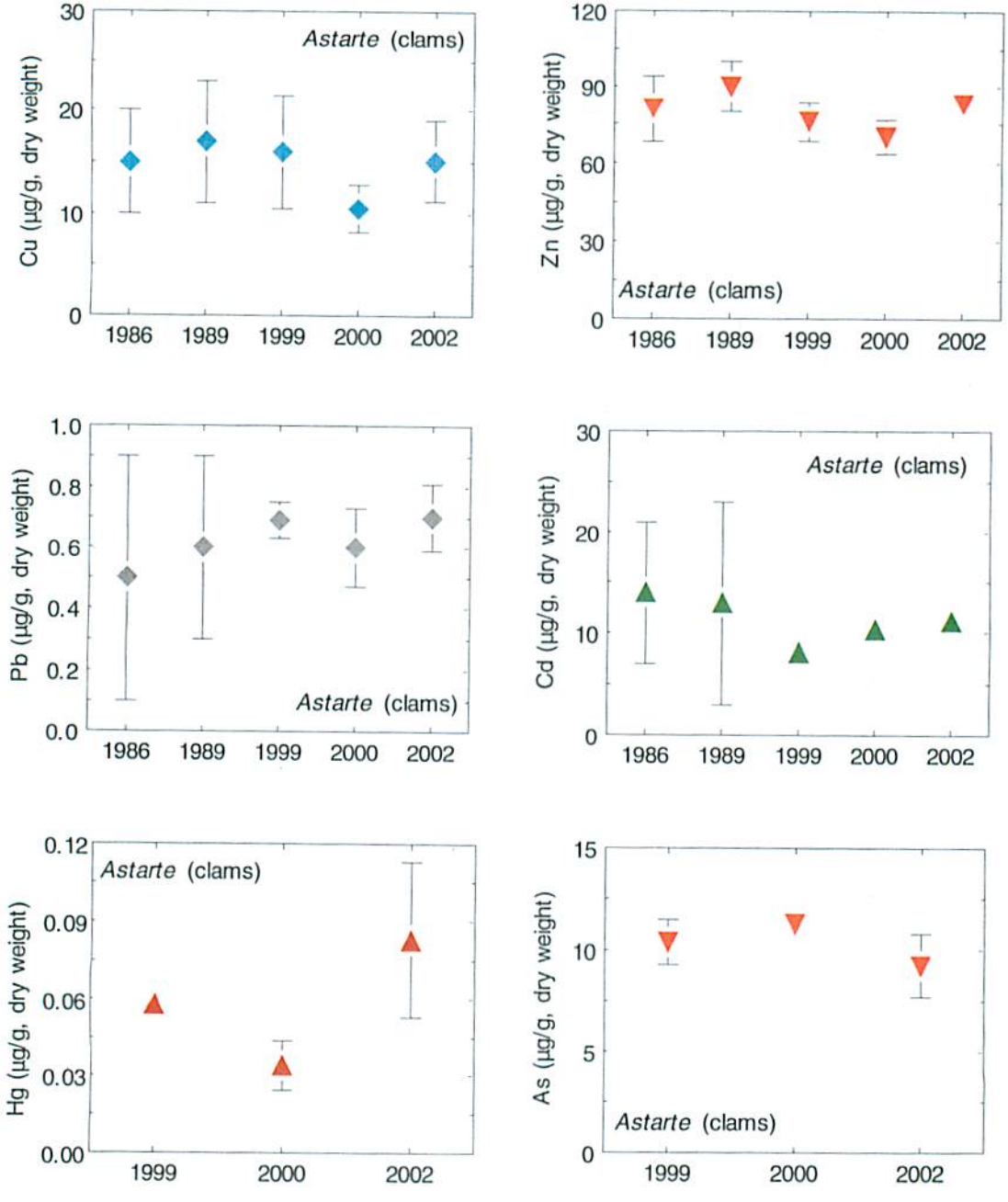
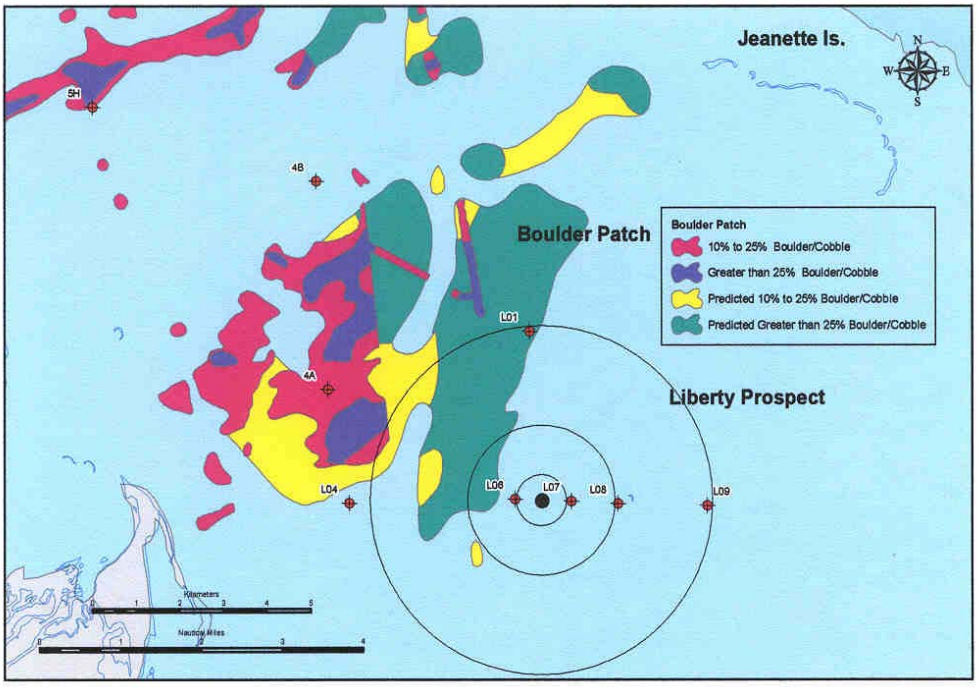


Figure 2.5-5
Map Showing Foggy Island Bay Sampling Stations and Table of Concentrations for Selected Organic Parameters and Grain Size in Sediment Samples

PAH = polynuclear aromatic hydrocarbons; PHC = petroleum hydrocarbons; S = steranes; T = triterpanes; TOC = total organic carbon

Source: Brown et al. (2004)



Station	Total PAH (µg/kg)	Total PHC (mg/kg)	Total S/T (µg/kg)	TOC (%)	Silt+Clay (%)
Foggy Island Bay- 2000					
L01	610	12	62	1.0	66
L04	400	7.7	51	0.47	60
L06	400	11	51	0.90	94
L07	220	6.9	20	1.5	36
L081	280 (70)	12 (1.7)	41 (10)	0.24 (0.06)	31 (7.4)
L09	99	1.9	11	0.49	5.3
Mean (SD)	340 (180)	8.6 (3.9)	39 (20)	0.76 (0.45)	49 (31)

Station	Total PAH (µg/kg)	Total PHC (mg/kg)	Total S/T (µg/kg)	TOC (%)	Silt+Clay (%)
Foggy Island Bay- 2002					
L01	150	2.9	15	0.59	11
L04	400	7.1	34	0.71	53
L06	420	6.5	32	1.2	58
L07	340	5.9	28	0.88	49
L08	340	10	52	0.67	6.4
L09	84	3.4	11	0.18	9.7
Mean (SD)	290 (140)	6.0 (2.6)	29 (15)	0.70 (0.33)	31 (24)

Note[1] – Field triplicates were collected at this station. The average value of the triplicates is reported with the standard deviation in parentheses

Figure 2.5-6
Concentrations of (silt + clay) versus Total Polynuclear Aromatic Hydrocarbons (PAH) in Sediments from Foggy Island Bay, Northstar and the Coastal Beaufort Sea for 1999, 2000, 2002 and 2004

Source: Brown et al. (2006)

The central line, the 95% prediction intervals, and the r-squared are from linear regression calculations.

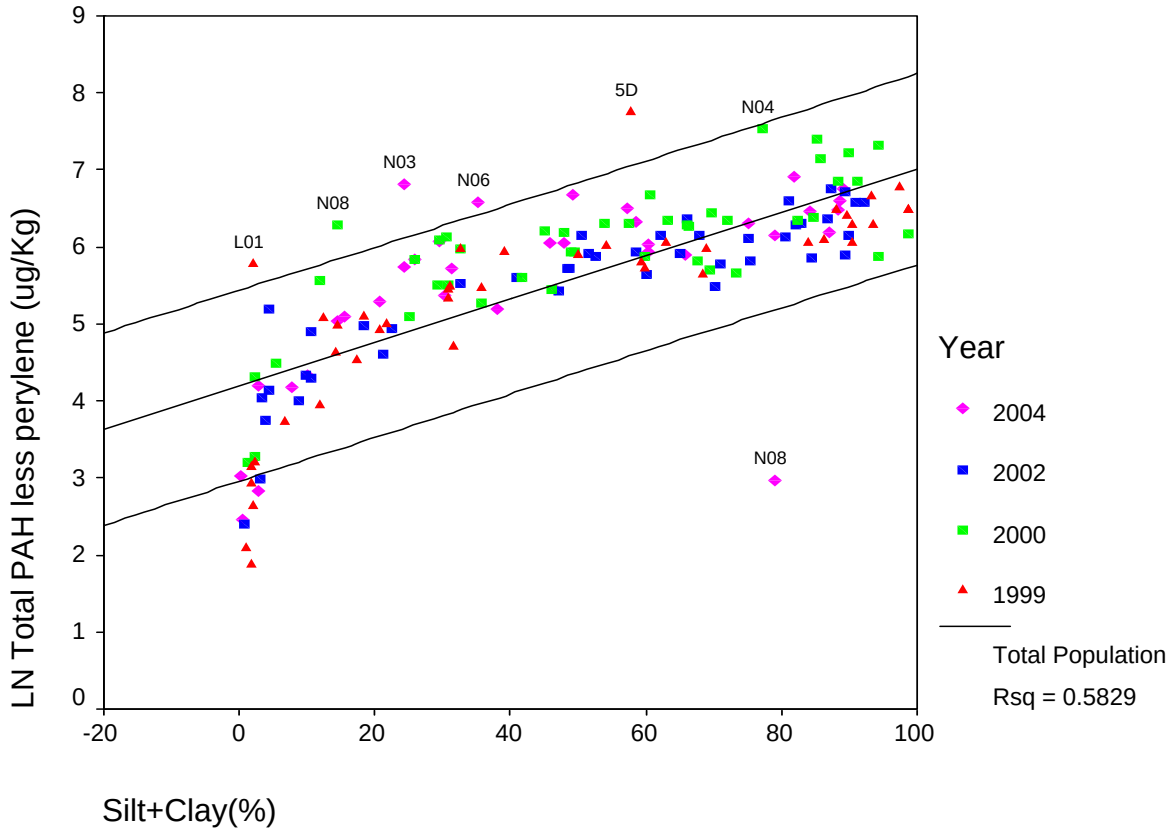


Figure 2.5-7
Concentrations of Total Polynuclear Aromatic Hydrocarbons (Total PAH) for Sediments from the Sites in the Beaufort Sea Monitoring Program — BSMP, Foggy Island Bay, and Northstar

Source: Long et al. (1995); Brown et al. (2006)

Horizontal lines show values for the Effects Range Low (ERL) and Effects Range Median (ERM)
Note: the y axis is a logarithmic scale

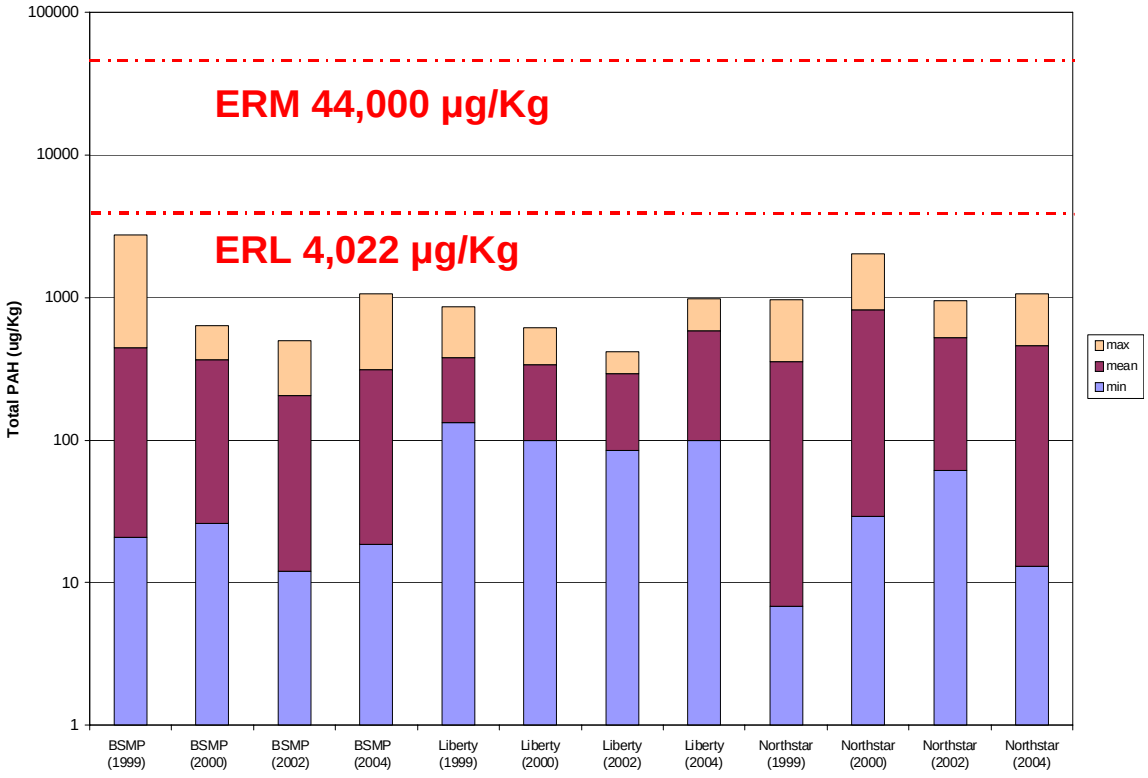
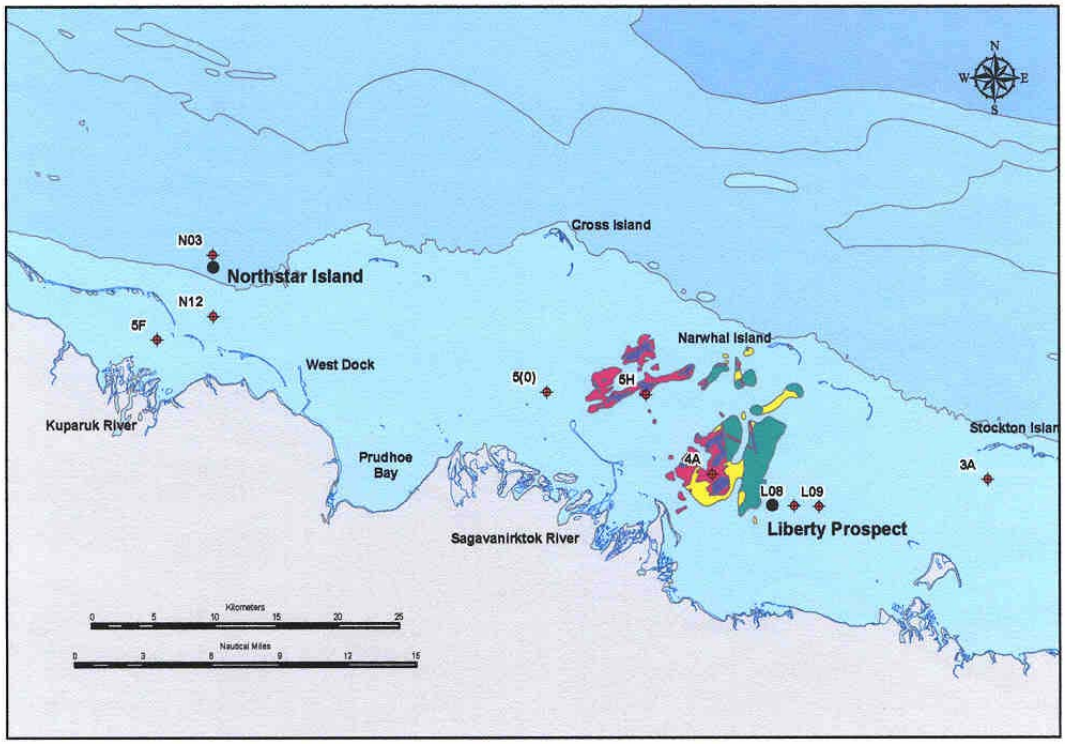


Figure 2.5-8
Map Showing Sampling Stations and Table Showing Concentrations for 2000 of Total Polynuclear Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (PHC), and Steranes/Triterpanes (S/T) for Clams (*Astarte* and *Cyrtodaria*), Amphipods (*Anonyx*) for the Coastal Beaufort Sea, Including Foggy Island Bay

Source: Brown et al. (2004)



Station	Species	Total PAH (µg/kg wet weight)	Total PHC (mg/kg wet weight)	Total S/T (µg/kg wet weight)
Summer - 2000				
N03	*Anonyx*	23	12	8.1
N12	*Anonyx*	16	26	3.2
N13	*Anonyx*	14	14	4.1
N18	*Anonyx*	12	15	2.8
L08	*Astarte*	13	ND	2.7
L09	*Astarte*	16	ND	2.5
3A	*Astarte*	7.4	1.6	2.0
4A	*Anonyx*	18	ND	2.4
5(0)	*Anonyx*	20	ND	2.0
5F	*Cyrtodaria*	39	4.4	3.6
5H	*Astarte*	15	ND	4.0

Anonyx (an amphipod), *Astarte* (a clam), *Cyrtodaria* (a clam).
ND – Not detected.

Figure 2.6-1
Mean Daily Discharge, Sagavanirktok River near Pump Station 3, 1983-2005
Source: USGS 15908000 SAGAVANIRKTOK R NR PUMP STA 3 AK" found at http://waterdata.usgs.gov/ak/nwis/dv/?site_no=15908000

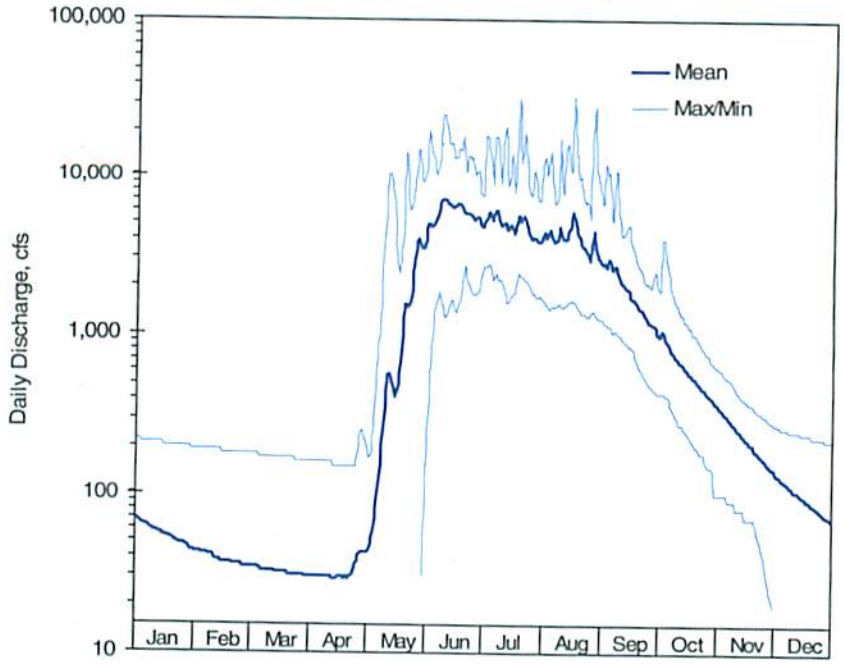


Figure 2.6-2
Flow Distribution in the Sagavanirktok River Delta, 1982 to 1990
Source: PND (2006b)

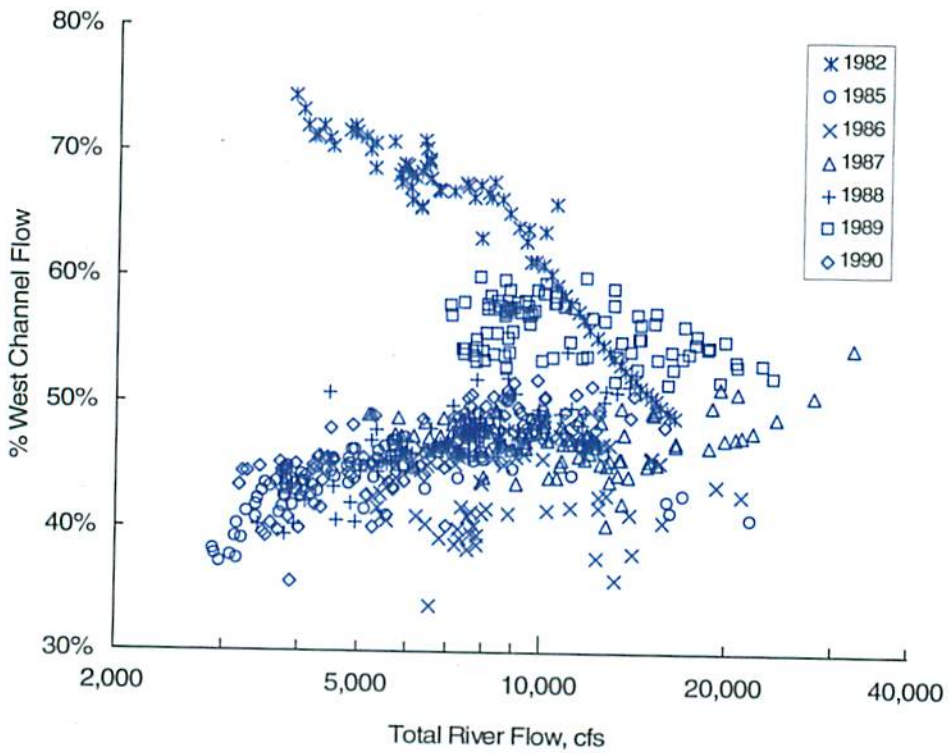


Figure 2.6-3
Flood Frequency at the Sagavanirktok River West Channel (Endicott Road) Bridge
Source: PND (2006b)

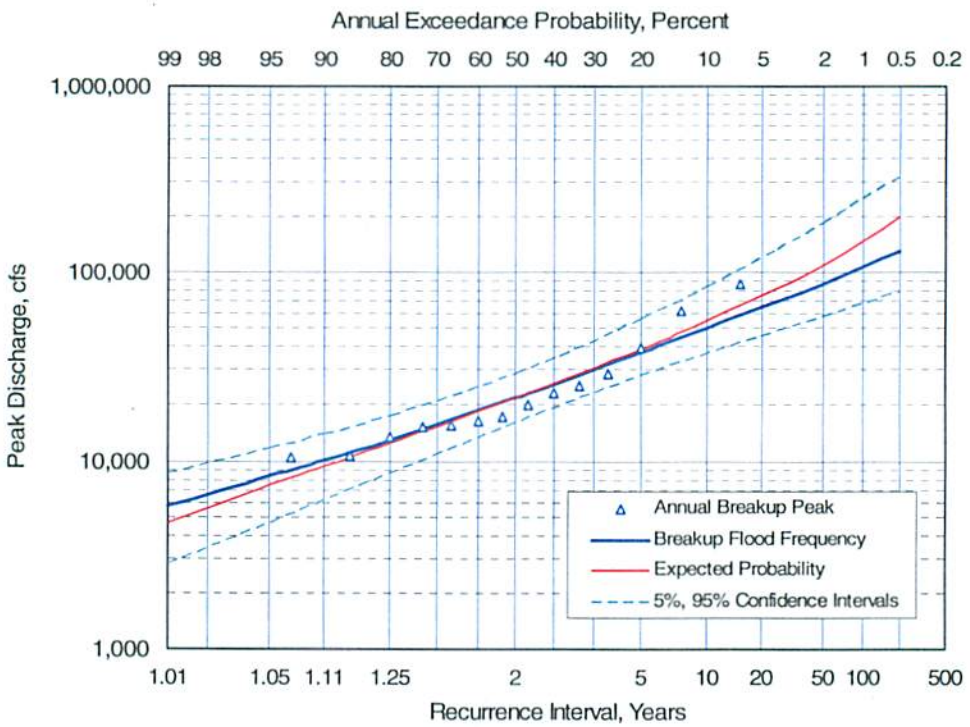
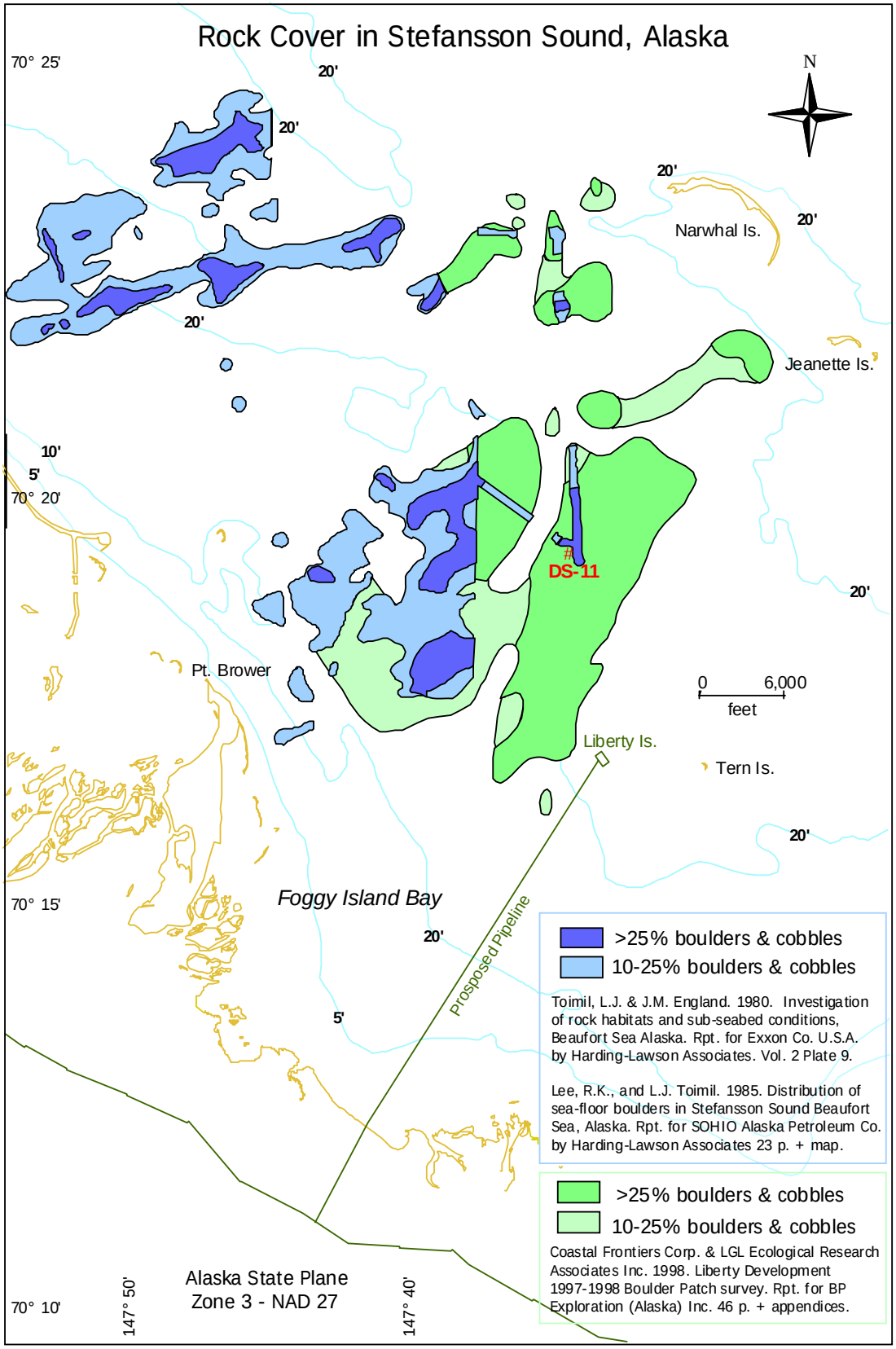


Figure 2.7-1
The Stefansson Sound Boulder Patch



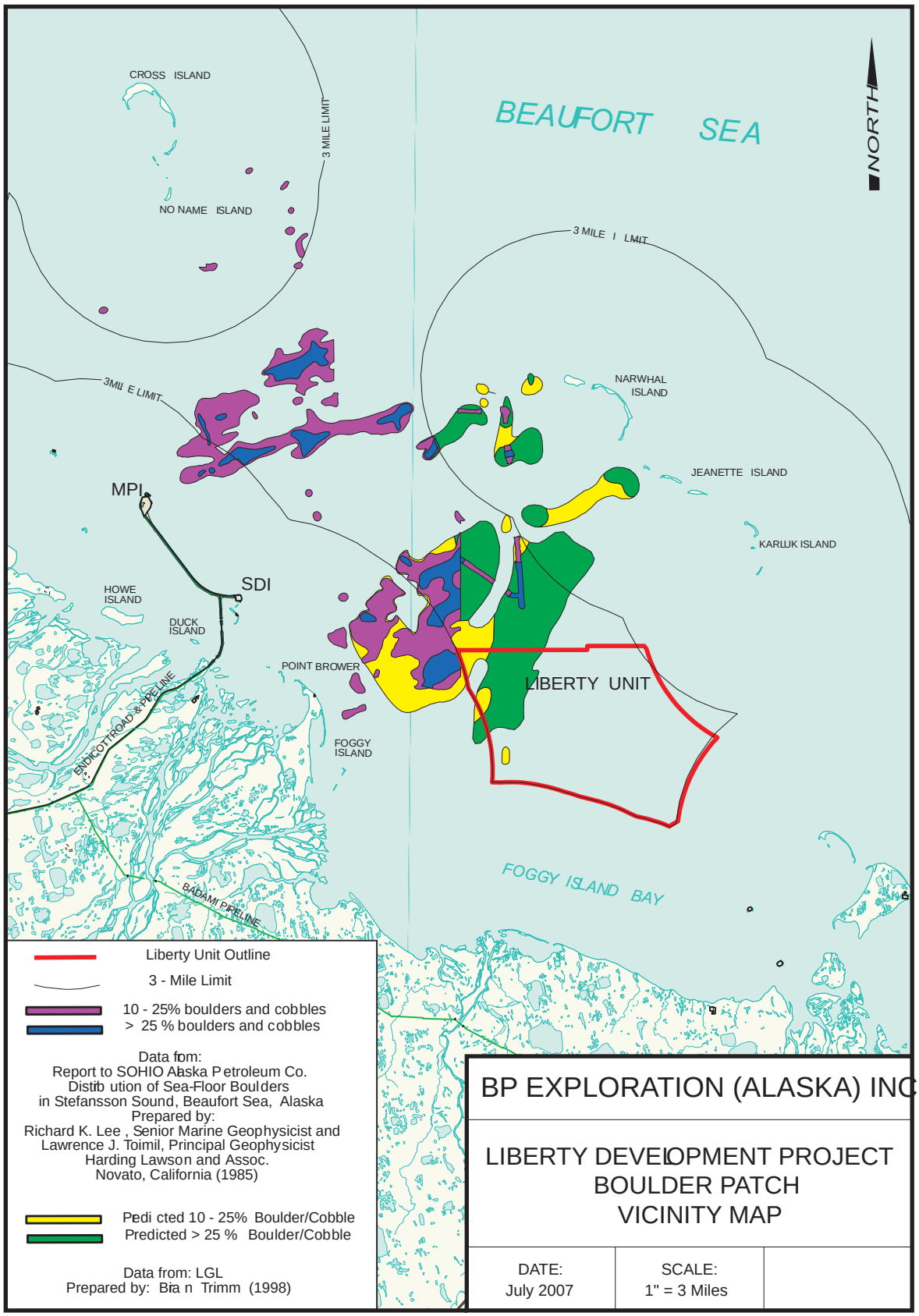


Figure 2.7-1a Liberty Development Project Boulder Patch Vicinity Map

ms15521b.dgn

Figure 2.7-2
Relative Contribution (% total biomass) of the Predominant Epilithic Flora and Fauna Collected in 0.05-m^2 Rock Scrapes in the Boulder Patch, Stefansson Sound, 1979-1980.

Source: Dunton and Schonberg (2000)

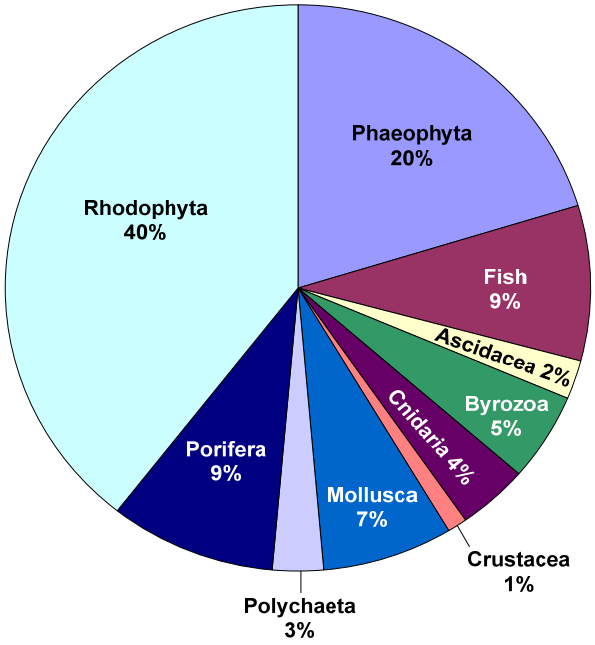


Figure 2.7-3
Annual Linear Growth of *Laminaria solidungula* Blades for 8 Years at 7 Sites in Stefansson Boulder Patch

Compiled from Aumack (2003)

Values are Mean ± SE (n=15 to 30)

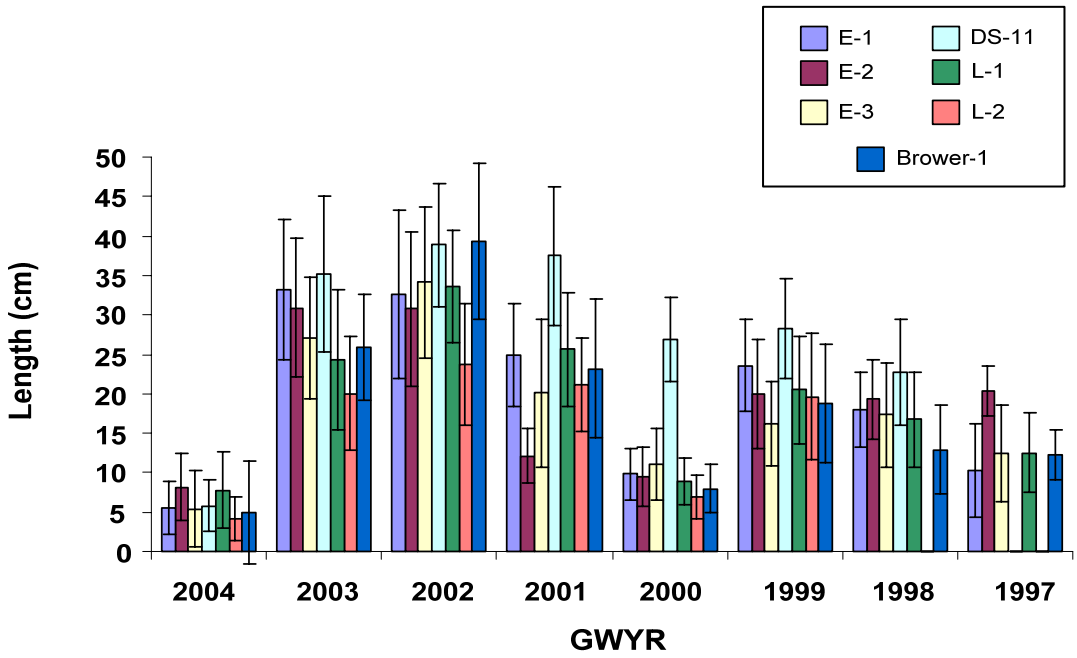


Figure 2.10-1
Snow Goose, Brant and Common Eider and Glaucous Gull Nesting Areas
Sources: Johnson (2000b); Sedinger and Stickney (2000); Noel et al. (2005); Rodrigues, McKendrick, and Reiser (2006)

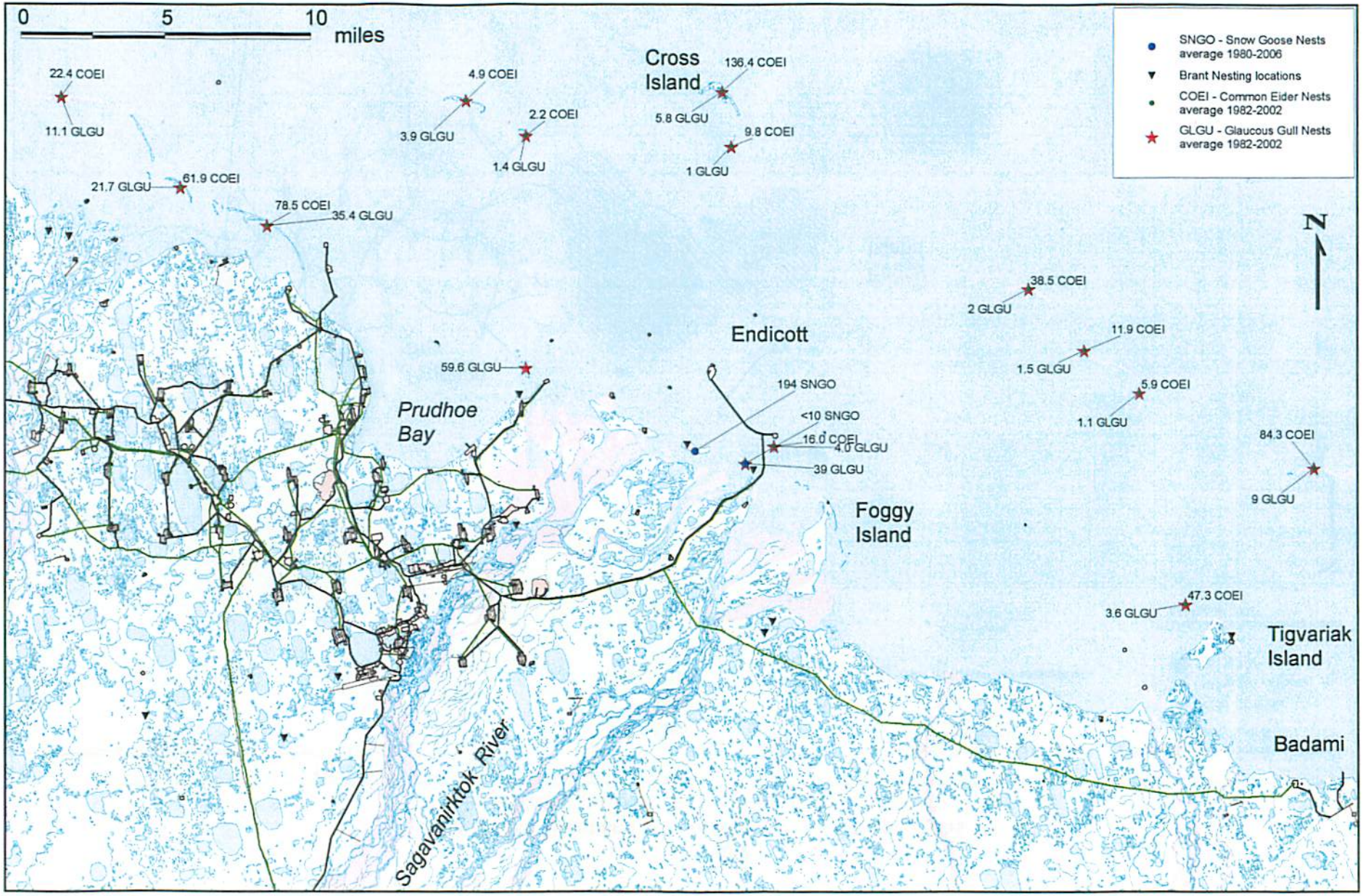


Figure 2.10-2
Snow Goose, Brant and Tundra Swan Brood-Rearing Areas
Sources: Noel et al. (2005), LGL unpublished data (2002, 2006)

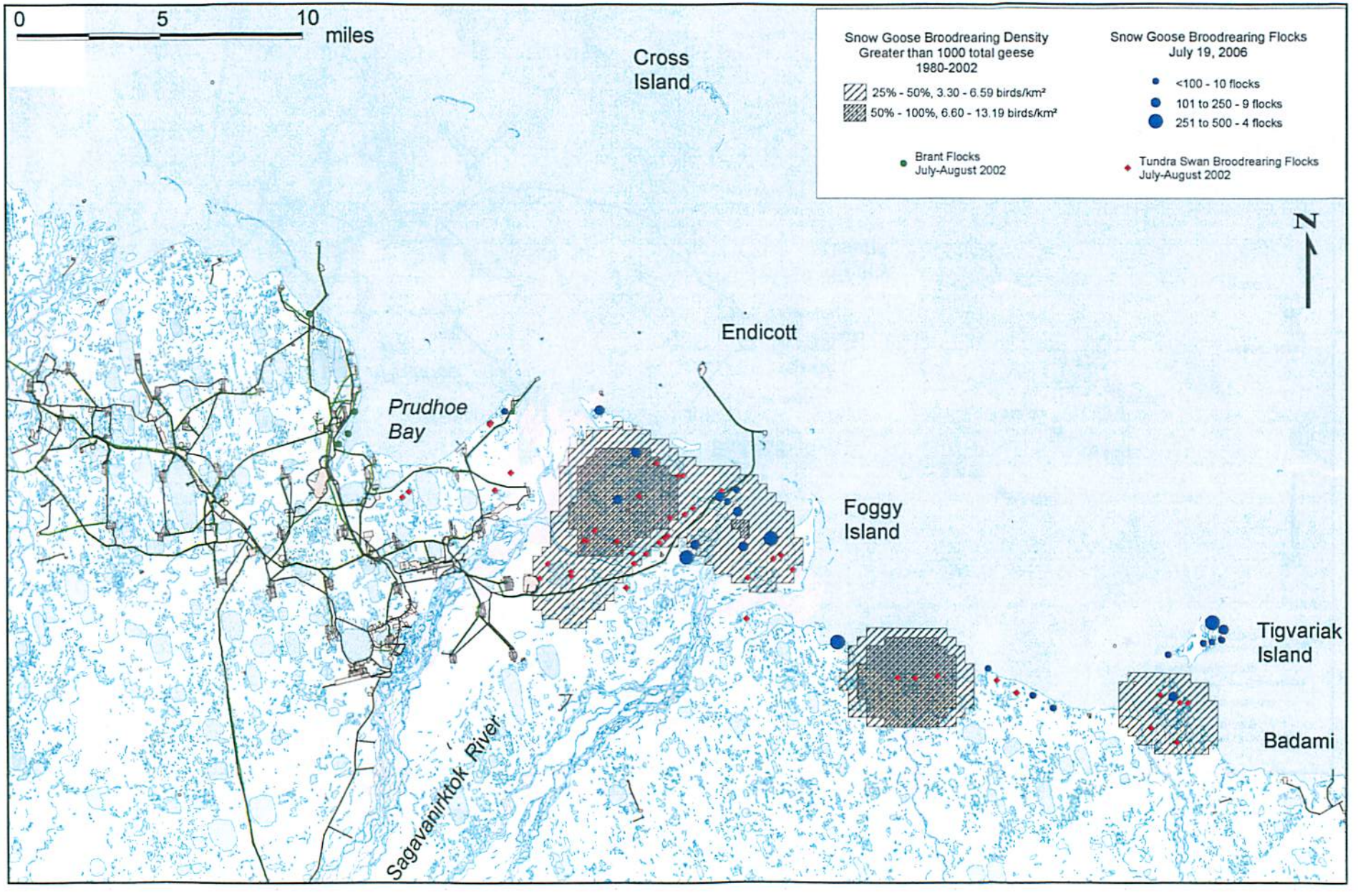


Figure 2.10-3
Long-tailed Duck, Eider and Scoter August Concentration Areas in Lagoons 1999-2002, and Offshore Distribution and Abundance June to September 1999-2001

Sources: Fischer and Larned (2004); Noel, Johnson, and O'Doherty (2005)

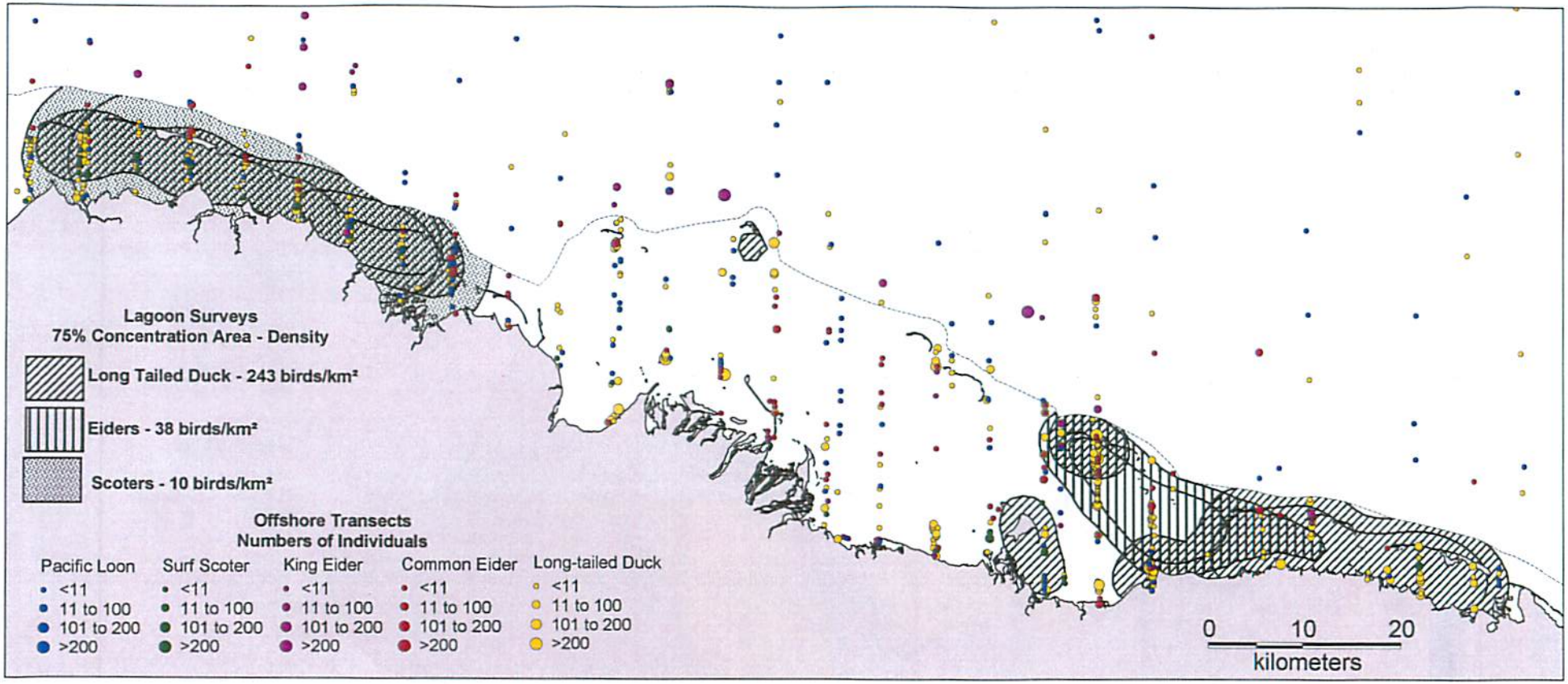


Figure 2.11-1
Seasonal Range of Central Arctic Caribou Herd
(Source: Arthur and Del Vecchio, 2004)

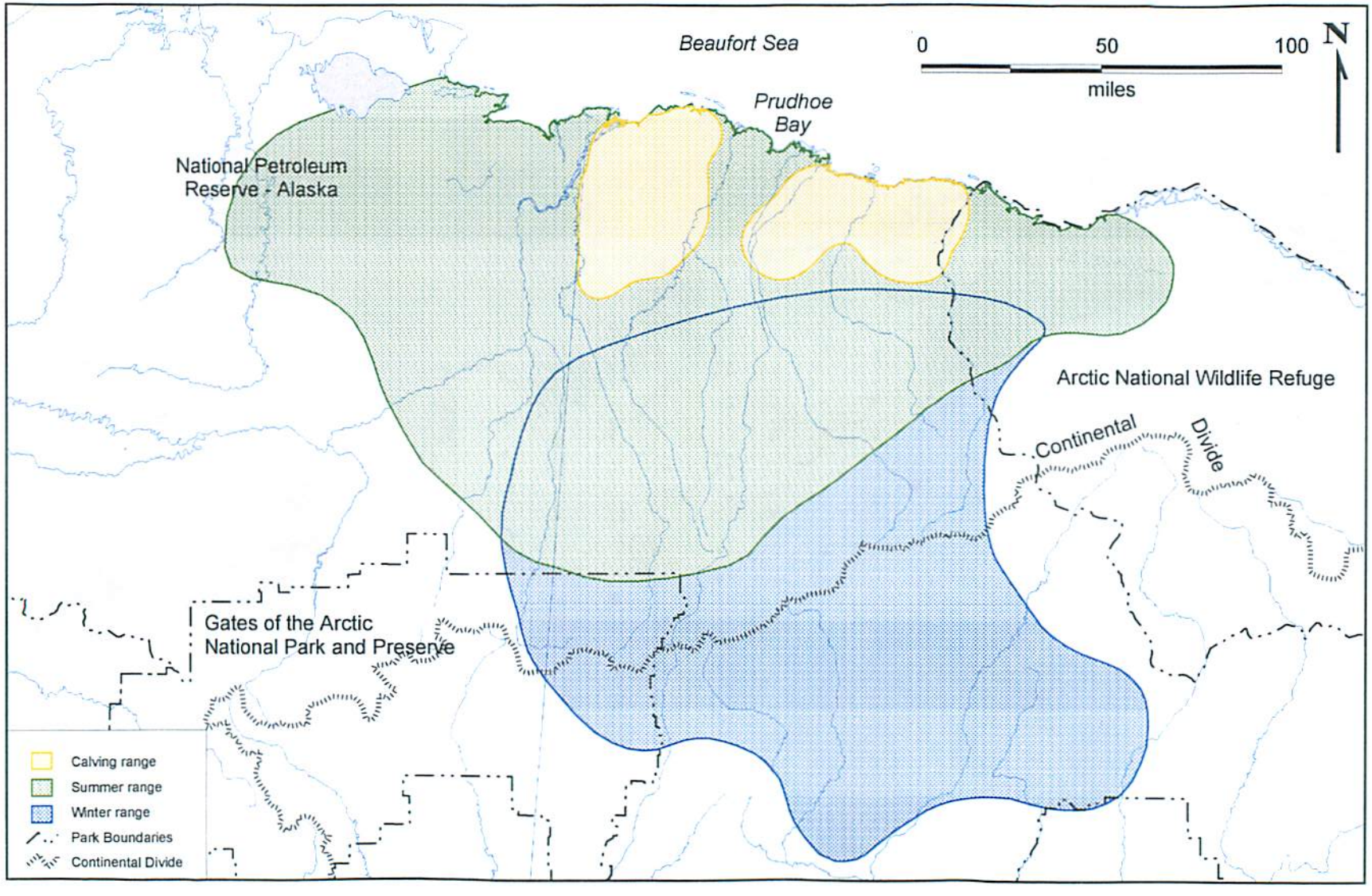


Figure 2.11-2
Caribou Calving Densities and Summer Large Group Distributions 1998-2003
Sources: LGL unpublished data (1998-2002); ENTRIX unpublished data (2003)

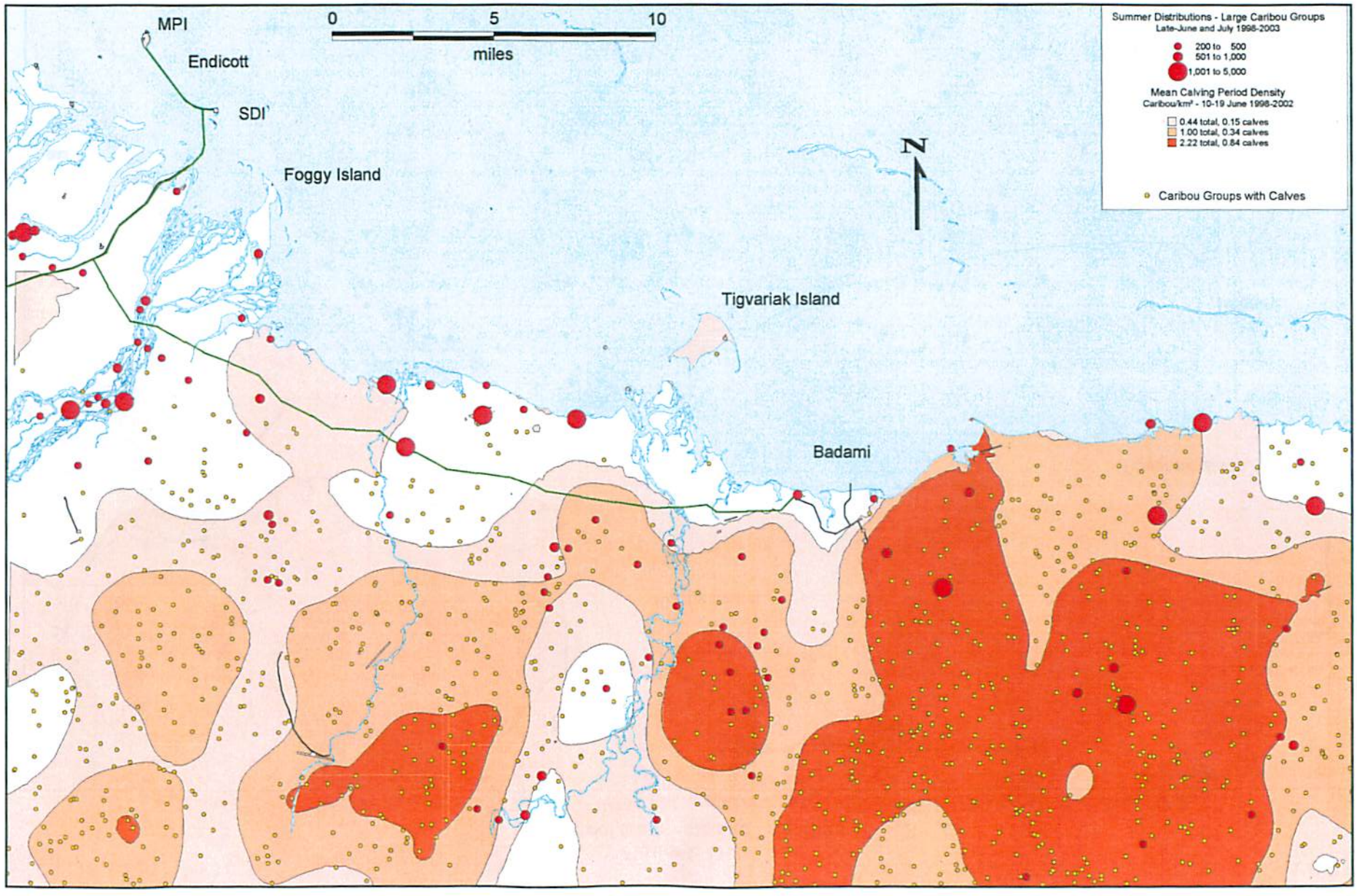


Figure 2.11-3
Terrestrial Mammals and Den Sites

Sources: Burgess and Banyas (1993); USDOI, MMS (1998); LGL unpublished data (1998-2002); ENTRIX unpublished data (2003)