DISCUSSION PAPERS IN ECONOMICS

Working Paper No. 11-06

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Canadian Journal of Zoology 76 (1998): 1922-31.

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- RG.R Biology of the Kamiuriak Population of Barren Ground Caribou. Cill 1970. DEiccil 972.
- PATF.Vectors of Death: The Archaeology of European Contact. AlgNONE987.
- RAM Indians in the Fur Trade: Their Role as Hunters, Trappers and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870.
- RE.E., el Cumberland House Journals and Inland Journals: 1775-82, 2 bil HiB 1952.
- RE.E. Hudson's Bay Company 1670-1870, 2 bil HiB set

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The Backbone of History: Health and Nutrition in the Western

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\$2002.

Journals of Samuel Hearne and Philip Turnor Between the Years 1774 and

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Company	25	63	88
Indians	9	6	15
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Low estimate	167	177	344
High estimate	220	263	483
Total reported deaths			
Low estimate	201	246	447
High estimate	254	332	586
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Table 1. Number of Smallpox Deaths based on reports to Hudson House and Cumberland House

Table 3. Trade Goods Sent from York Factory to Cumberland House, 1781 and 1785

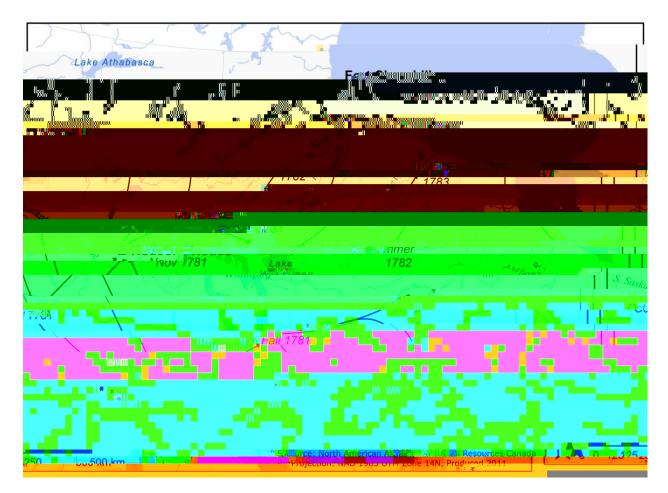
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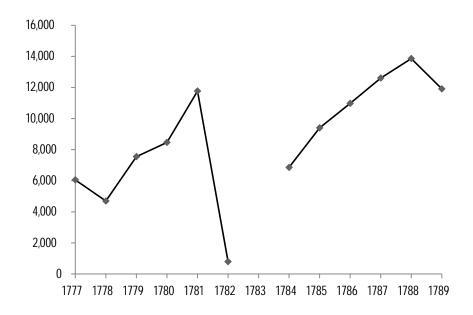
Figure 1. Hudson House, Cunberland House and the Principal Paths of Diffusion of the Smallpox Epidemic, 1781-1782



Sources: Ray (1974:107); Hackett (2002:98).

Map: Hilary Dugan 2011.

Figure 2. The Value in *Made Beaver* of Trade Goods Sent from York Factory to Cumberland House, 1777 ±1789



Note: Includes trade goods sent to Hudson House.

Source: HBC, Post Accounts: York Factory, 1777-89.