

Pioneers through Winter in North America: Paleo-Indians and Paleo-Eskimos

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ABSTRACT

We may never find out exactly how humankind first reacted towards cold, snow, and winter. Yet in North America, this first contact following the post-glacial era (20,000 years ago) can be partly traced back through archaeological evidence. Traces from first settlers, possibly coming from Siberia, can be found in Alaska and in the Yukon as far back as 14,000 years ago. Excavations done farther south (near San Bernardino, California, and in Mexico) strongly suggest that toolmaking people were even there 50,000 years ago (Simpson, 1980). Scientists named these first migrants as Paleo-Indians (47,000 to 14,000 years ago) and Paleo-Eskimos farther north (± 6000 years ago). They possibly crossed the Bering Strait, located between Asia and Alaska, and later settled in vast parts of North America. Others might have sailed along the North American West Coast (Mochanov, 1980).

More specifically, we will examine how people coped with winter in the Canadian Arctic, West Coast and Prairies, Southern Ontario and Michigan, and Québec and the Maritimes/Maine, USA. It appears as though winter created a dual life for all of the new residents.

Keywords: Paleo-Indians, Paleo-Eskimos, winter, North America, cold, snow.

INTRODUCTION

For the past 50 years or so, considerable breakthroughs have been made to better understand how the first inhabitants came to North America after the last ice age and settled and lived through winter. Several archaeological sites (Bada et al, 1974; Bielawski, 1982; Carter, 1980; Chapdelaine and Bourget, 1992; Cole Harris et al. 1987; Crowe, 1979; Delcourt and Delcourt, 1981; Dumais, 1979, 1988; Fladmark, 1979, 1988; Maxwell, 1985; McGhee, 1982, 1984; Storck, 1982, 1984) tend to show that people lived differently according to the season. Several migrations occurred before the wintertime; and habit, infrastructure, and lifestyle changed considerably to adjust to the cold season in order to survive. People also have developed an extensive vocabulary describing winter, cold, and snow (Toupin, 1993).

THE CANADIAN ARCTIC (INCLUDING ALASKA, YUKON AND GREENLAND)

According to Cole Harris et al. (1987), the first people migrating to North America (Paleo-Indians) after the last post-glacial era originally came from Asia (Mochanov, 1980) and reached Alaska and the Yukon around 12,000 B.C. To date, several chipped stone artifacts have been found in small caves in the northern Yukon (Canadian Encyclopedia, 2012). These big game hunters used stone tools such as knives and spearheads (fluted points), artifacts similar to those

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found for the last period of the Paleolithic in North East Asia. It appears they hunted large herbivores for food and made warm clothes from animal fur. Bones, skin, and stones (Crowe, 1979) were also used to build shelters to protect the inhabitants, namely against the long season.

Later (around ± 5000 years ago [McGhee, 1982, 1984]) another group of people (called the Paleo-Eskimos), also possibly coming from North East Asia (Mochanov, 1980), migrated farther north to what is now known as the Canadian Arctic. They quickly settled from Alaska to the very far north, including the Canadian Arctic Archipelago and going as far as Greenland (Maxwell, 1985). Mostly nomads, archeologists classified them as Pre-Dorset, Dorset, Kutchin, Thule, etc., according to their lifestyles, cultures, and geography.

In most cases, archaeological evidence shows a clear and distinctive lifestyle caused by the wintertime as people depended on fishing and hunting for food. Since fish and mammals tend to migrate according to seasons, so did the inhabitants of the Arctic. This is particularly true for at least seven different groups (see Table 1) within the Thule people (Cole Harris et al., 1987). They also used several materials (Canadian Encyclopedia, 2012) to build winter shelters (e.g., stones for floors and walls; whale bones and animal skins for a roof covered up with sod).

Table 1. Seven different groups (Thule people) migrating habits because of winter in the Arctic

Group	Winter	Summer
Mackenzie	Lived in permanent wooden houses, summer stock, part-time ice fishing and hunting	Inland river fishing, hunting (beluga, seal, caribou) from temporary camps
Copper (Victoria Island, Gulf of Coronation, Banks Island, NWT, 1100 A.D.)	Seal hunting from igloo on ice	Inland river and lake fishing, hunting (caribou) from temporary camps
Netsilik (Boothia Peninsula, Somerset Island, NWT)	Seal hunting from igloo on ice	Inland river and lake fishing, hunting (caribou) from temporary camps and also hunting in kayak (seal) along the coast
Caribou (Chesterfield Inlet, NWT, 1800 A.D.)	Caribou hunting and inland fishing from igloo villages on land	Caribou hunting and inland river and lake fishing from temporary camps
Igloodik (Northern Baffin Island, Melville Peninsula, and Northern Quebec (Nunavik))	Permanent villages with stones and sod houses, summer stock used at the beginning of winter and seal hunting towards the end of winter from igloo on ice	Hunting (seal, walrus, beluga and narwhal) in kayak from coastal temporary camps, inland caribou hunting in the fall
Labrador (Ungava Bay, Northern Quebec, Labrador, 1500 A.D.)	Permanent villages with stoned and sod houses, summer stock used at the beginning of winter and seal hunting toward the end of winter from igloo on ice	Hunting (seal, whale) from kayak or umiak from coastal temporary camps, hunting (caribou) as well as inland fishing in early fall
Polar (Eastern Coast of Ellesmere Island and North West of Greenland)	Permanent villages with stoned and sod houses, summer stock, coastal seal, walrus and bear hunting on ice	Hunting (birds, seal, walrus) on ice

WEST COAST AND THE PRAIRIES

Paleo-Indians soon learned (8000 years ago) to hunt bison in the prairies, and they used the fur and skin to build shelters and make warm clothes. Dried bison meat was also kept for winter food and for trading. Snowshoes were made for hunting bison in the wintertime (Osgood and Hurley,

1974). Other tribes followed caribou moving north in the summertime and south in the wintertime (Crowe, 1979).

Along the West Coast, the migration pattern is similar to the one studied for the people in the Arctic. They migrated from a coastal permanent winter place to an inland temporary camp in the summertime (Inglis and MacDonald, 1979) according to fish and mammals' seasonal migration as well as growing season. Tsimshian, Gitksan (also spelled Gitxsan), and Niska people developed and maintained this lifestyle for millenniums. Hence the Tsimshian (see Table 2) from the Prince Rupert (British Columbia, Canada) area spent winter (in winter villages) along the coast (milder); but as soon as spring arrived, they went eulachon fishing along the Nass River as well as hunted, fished, and collected seashells along the Skeena River. They also went salmon fishing and picked berries as long as summer allowed. By the fall they brought back canoes full of dried fish and traded merchandise in Prince Rupert and were better prepared to live through winter in a warmer and less snowy climate.

Table 2. Tsimshian migrations around Prince Rupert, B.C. according to seasons (Cole Harris et al., 1987.)

End of fall and winter	Live in their winter villages along the coast, seal hunting
End of winter and spring	Eulachon fishing along the Nass River, trade
End of spring	Camps on inland islands along rivers, fishing, hunting, and gathering algae
Summer to fall	Salmon fishing, trade, hunting, picking berries along the Skeena River

SOUTHERN ONTARIO AND MICHIGAN

Artifacts (Gainey-style fluted point) from Paleo-Indians in Southern Ontario and Michigan go back as early as 9000 B.C. They were hunting caribou and perhaps even mammoth and mastodon since a spruce and pine Boreal Forest had grown in the area (Delcourt and Delcourt, 1981). It is now a well-known fact that caribou herds spend winter in the Boreal Forest and summer in the tundra.

The Fisher and the Parkland sites in Southern Ontario and the Barnes site in Michigan seem to establish (Storck, 1982, 1984) that several Paleo-Indian tribes would migrate in early winter from the Fisher location (receiving more snowfall as it is located in the Great Lakes snowbelt) to the Parkhill and Barnes areas to avoid too much snow and harsh conditions during wintertime. This is what archeologist Storck (1984) claims: "Today, the Blue Mountain highlands in the Southern Georgian Bay region are in a prominent snowbelt receiving 112 inches (284.5 cm, Fisher site) of winter precipitation (from mid-November to the end of March). More extensive and persistent snowbelt conditions may have existed during late glacial times making Fossil Hill Chert (close to Fisher site) available only during the snow-free seasons of the year."

Rudimentary snowshoes were probably used as late as 6000 years ago (Carpentier, 1976). Today, Parkhill gets between 80 and 122 cm of snow; but Fisher, located 185 km northeast of Parkhill, gets about twice as much snow (285 cm, according to Environment Canada, 2012), making life possibly much easier in Fisher during wintertime.

QUÉBEC AND THE MARITIMES/MAINE, USA

Excavations in Northern Québec (renamed Nunavik in the 21st Century) reveal artifacts belonging to the Paleo-Eskimos cultures going as far back as 1000 years ago. In Southern Québec (notably along the St. Lawrence River, in Maine, and in the Maritimes in more recent research [Chapdelaine and Bourget, 1992]), lanceolate fluted projectile points from the Clovis culture were left behind (temporary camps) about 13,000 years ago. Paleo-Indians were already hunting and fishing along the Champlain and Goldwaith seas as soon as the Laurentide Ice Sheet melted. They

were also migrating farther south at the arrival of the first snowfalls possibly as far as the US North-East Coast, to avoid part of winter.

Hence a life cycle is developed according to seasons. From May to June they fished (from seawater) and hunted, and from October to mid-December they fished around lakes and hunted small game. In the wintertime, the people would divide into smaller groups to hunt moose while migrating farther south.

CONCLUSION

More than 14,000 years ago, people (Paleo-Indians and Paleo-Eskimos) possibly migrating from Asia, came to North America right after the last Ice Age and faced and adapted to winter. They were most likely the first to experience cold, snow and winter in this vast new land. Over several decades they spread to just about every corner of North America, from Alaska, to Yukon to the Great North, and almost everywhere else, including along the West and the East Coast of this New World. Thousands of artifacts (mostly tools used for fishing and hunting) were left behind and discovered through several archaeological sites across North America, clearly showing migrations caused by winter. Since very little organic matter is preserved over such a long period, it is still difficult at this stage to reconstruct the exact winter lifestyles of Paleo-Indians and Paleo-Eskimos. Further studies and research will in the near future help to better understand how they lived through winter.

REFERENCES

- Bada JL, Schroeder RA, Carter GF. 1974. New evidence on the antiquity of man in North America deduced from Aspartic Acid Racemization, *Science* **184**: 791–793.
- Bielawski E. 1982. Spatial behavior of prehistoric arctic hunters: analysis of the site distribution on Aston Bay, Somerset Island, NWT. *Canadian Journal of Archaeology* **6**: 33–45.
- Carpentier P. 1976. *La raquette à neige*. Boréal Express: Montréal; 115.
- Carter GF. 1980. The Metate: An early grain-grinding implement in the New World. In *Early Native Americans*, Browman DL (ed). Mouton Publishers: Great Britain; 7–20.
- Chapdelaine C, Bourget S. 1992. Premier regard sur un site paléoindien récent à Rimouski. *Recherches amérindiennes au Québec* **22**(1): 17–32.
- Cole Harris R. et al. 1987. Historical Atlas of Canada: from Origins to 1800. Presses de l'Université de Montréal; 198.
- Crowe K. 1979. *Histoire des autochtones du nord canadien*. Cultures amérindiennes. Les Cahiers du Québec. Hurtubise HMH: LaSalle, Québec; 266.
- Delcourt PA, Delcourt HA. 1981. *Vegetation maps for Eastern North America: 40000 yr B.P. to the Present*, Romans RC (ed). Geobotany II. Plenum: New York.
- Dumais P. 1979. *Les schémas d'établissement préhistoriques au sud de l'estuaire du Saint-Laurent*. Université de Montréal.
- Dumais P. 1988. *Le Bic: images de neuf mille ans d'occupation amérindienne*. Ministère des Affaires culturelles.
- Environment Canada. 2012. *National Climate Data and Information Archive*. http://climate.weatheroffice.gc.ca/Welcome_e.html.
- Fladmark KR. 1979. Routes: alternative migration corridors for early man in North America. *American Antiquity* **44**(1): 55–69.
- Fladmark KR. 1988. La préhistoire de la Colombie-Britannique. Musée canadien de la Civilisation, musées nationaux du Canada. Fides: Montréal; 173.
- Historica-Dominion Institute. 2012. *Canadian Encyclopedia*. www.historica-dominion.ca.
- Inglis R, Macdonald GF. 1979. *Skeena River Prehistory*. Mercure. Archeological Commission of Canada no. 87. National Museums of Canada: Ottawa; 87.
- Maxwell MS. 1985. *Prehistory of the Eastern Arctic*. Orlando Academic Press.
- McGhee R. 1982. The past ten years in Canadian Arctic prehistory. *Canadian Journal of Archaeology* **6**: 65–75.

- McGhee R. 1984. *La préhistoire de l'Arctique canadien*. Fides: Montréal.
- Mochanov JA. 1980. Early migrations to America in the light of a study of the Dyuktai Paleolithic culture in Northeast Asia. In *Early Native Americans*, Browman DL (ed). Mouton Publishers: Great Brittan; 119–131.
- Osgood W, Hurley L. 1974. *La raquette*. Édition de l'Homme: Montréal; 133p.
- Simpson RE. 1980. The Calico Mountains Site: Pleistocene Archaeology in the Mojave Desert, California. In *Early Native Americans*, Browman DL (ed). Mouton Publishers: Great Brittan; 7–20.
- Storck P. 1982. Paleo-Indian Settlement Patterns associated with the Stranoline of Glacial Lake Algonquin in South-Central Ontario. *Canadian Journal of Archaeology* **6**(1): 1–32.
- Storck, P. 1984. Research into Paleo-Indian Occupations in Ontario: A Review. *Ontario Archaeology* **41**: 3–28.
- Toupin, J. 1993. North American Native terminology for snow. *Le Climat* **11**(1): 60–63.