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Prehistory of Newfoundland¹ hunter-gatherers: extinctions or adaptations?

M. A. P. Renouf

Abstract

The island of Newfoundland was occupied by a series of aboriginal cultures, beginning with the Maritime Archaic Indians (c. 4500–3200 BP), followed by the Groswater Palaeoeskimos (c. 2800–1900 BP), Dorset Palaeoeskimos (c. 2000–1200 BP), Recent Indians (c. 2000–300 BP) and ending with the historic Beothuk Indians (European contact to AD 1829). In an early and influential paper Tuck and Pastore (1985) suggested that Newfoundland's long occupation sequence was a series of extinctions which they linked to the limitations of the Newfoundland island ecosystem. Although the extinction model was presented as a hypothesis it has since become the predominant interpretive framework for insular Newfoundland prehistory. This paper presents an alternative model which suggests that prehistoric hunter-gatherers would have ameliorated the unpredictability of the insular Newfoundland resources by maintaining connections with related groups in mainland Labrador. Thus the discontinuities in the archaeological record are interpreted as population shifts rather than extinctions.

Keywords

Hunter-gatherer; prehistoric economy; Newfoundland; island ecosystem.

Extinctions in Newfoundland prehistory

The island of Newfoundland (Fig. 1) enjoys almost five thousand years of prehistory, subdivided into four cultural periods representing at least two distinct ethnic and physical groups, 'Indian' and 'Palaeoeskimo'.

Over a decade ago Tuck and Pastore (1985) characterized Newfoundland prehistory as a series of successful occupations, each of which nevertheless ended in extinction, followed by repopulation from mainland Labrador. They called this a boom and bust pattern and linked it to Newfoundland's resource base, arguing that the terrestrial and marine ecosystems were highly productive and therefore could support large human populations, but that these same resources, in particular caribou and harp seal, were

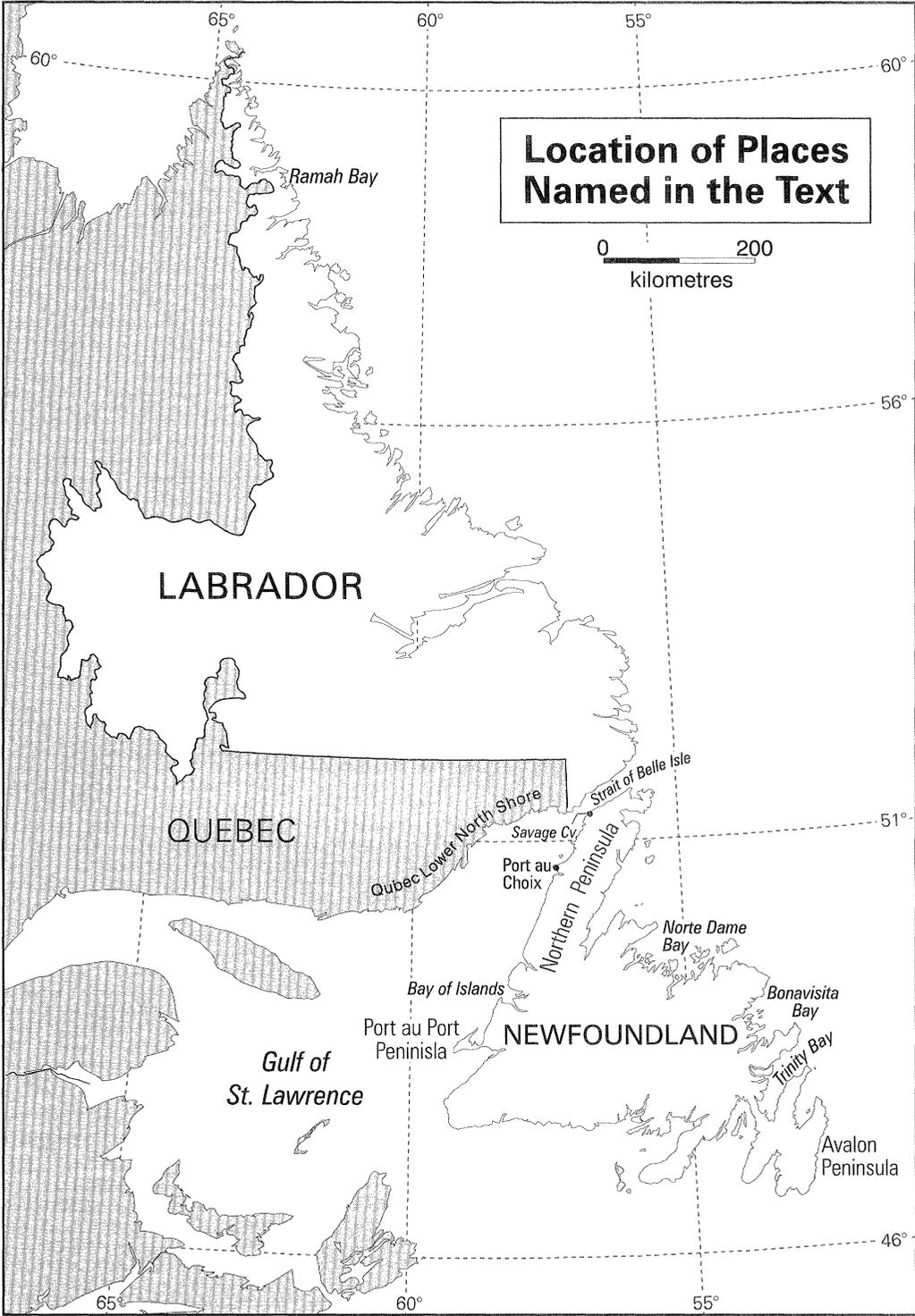


Figure 1 Location of places named in the text.

subject to unpredictable periods of unavailability, thus pulling the rug out from under the human populations. They cite the Beothuk Indians, the last of whom died in AD 1829, as the latest extinction; this time repopulation was from Europe.

Although Tuck and Pastore's ideas were presented as a speculative hypothesis, they have since made the transition to oft-quoted 'fact'. The purpose of this paper is to reopen the discussion. I argue that hunter-gatherers adapt to resource uncertainty via a variety of risk-reducing mechanisms. Consequently, it is unlikely that Newfoundland hunter-gatherers would have been as vulnerable to extinction as the current model suggests. An implication of this alternative point of view is that changes in the cultural sequence have yet to be accounted for.

The Newfoundland cultural sequence

Newfoundland's prehistoric cultural sequence comprises four periods (Table 1). Sites from each are found around most of the coast, but interior sites are few (Pastore 1986; Schwarz 1990, 1994). Although faunal assemblages are relatively scarce except on the northwest coast (Harp 1976; Renouf 1993a, 1994), the available material along with site location and artefact assemblages points to reliance on sea mammals and to a lesser extent

Table 1 Earliest and latest radiocarbon dates for the prehistoric cultural periods in Newfoundland.

<i>Uncalibrated radiocarbon date</i>	<i>Lab. no.</i>	<i>Site</i>	<i>Reference</i>
<i>Maritime Archaic Indian</i>			
4900 ± 230 BP	SI-1384	Beaches	Carignan 1975
4540 ± 135 BP	S-1859	Cape Cove I	Austin 1980, 1984
3410 ± 100 BP	I-4677	Port au Choix cemetery	Tuck 1976
3270 ± 50 BP	Beta-108099	Gould Site	Renouf and Bell 1998
<i>Groswater Palaeoeskimo</i>			
2845 ± 120 BP	DAL-274	Cow Head site	Tuck 1978
2805 ± 130 BP	DAL-277	Cow Head site	Tuck 1978
2760 ± 90 BP	Beta-23979	Phillip's Garden East	Renouf 1994
2700 ± 140 BP	Beta-4047	Factory Cove	Auger 1984
2090 ± 70 BP	Beta-49759	Phillip's Garden West	Renouf 1994
1960 ± 80 BP	Beta-66438	Phillip's Garden West	Renouf 1994
<i>Dorset Palaeoeskimo</i>			
2140 ± 100 BP	Beta-23976	Phillip's Garden	Renouf 1987
1970 ± 60 BP	Beta-23977	Phillip's Garden	Renouf 1987
1890 ± 90 BP	Beta-42967	Phillip's Garden	Renouf 1987
1280 ± 60 BP	Beta-4062	Stock Cove	Robbins 1985
1280 ± 60 BP	Beta-4065	Stock Cove	Robbins 1985
<i>Recent Indian</i>			
1995 ± 90 BP	SAL-275	Cow Head site	Tuck 1978
1744 ± 100 BP	S-831	Cape Freels	Carignan 1977
1695 ± 110 BP	DAL-273	Cow Head site	Tuck 1978

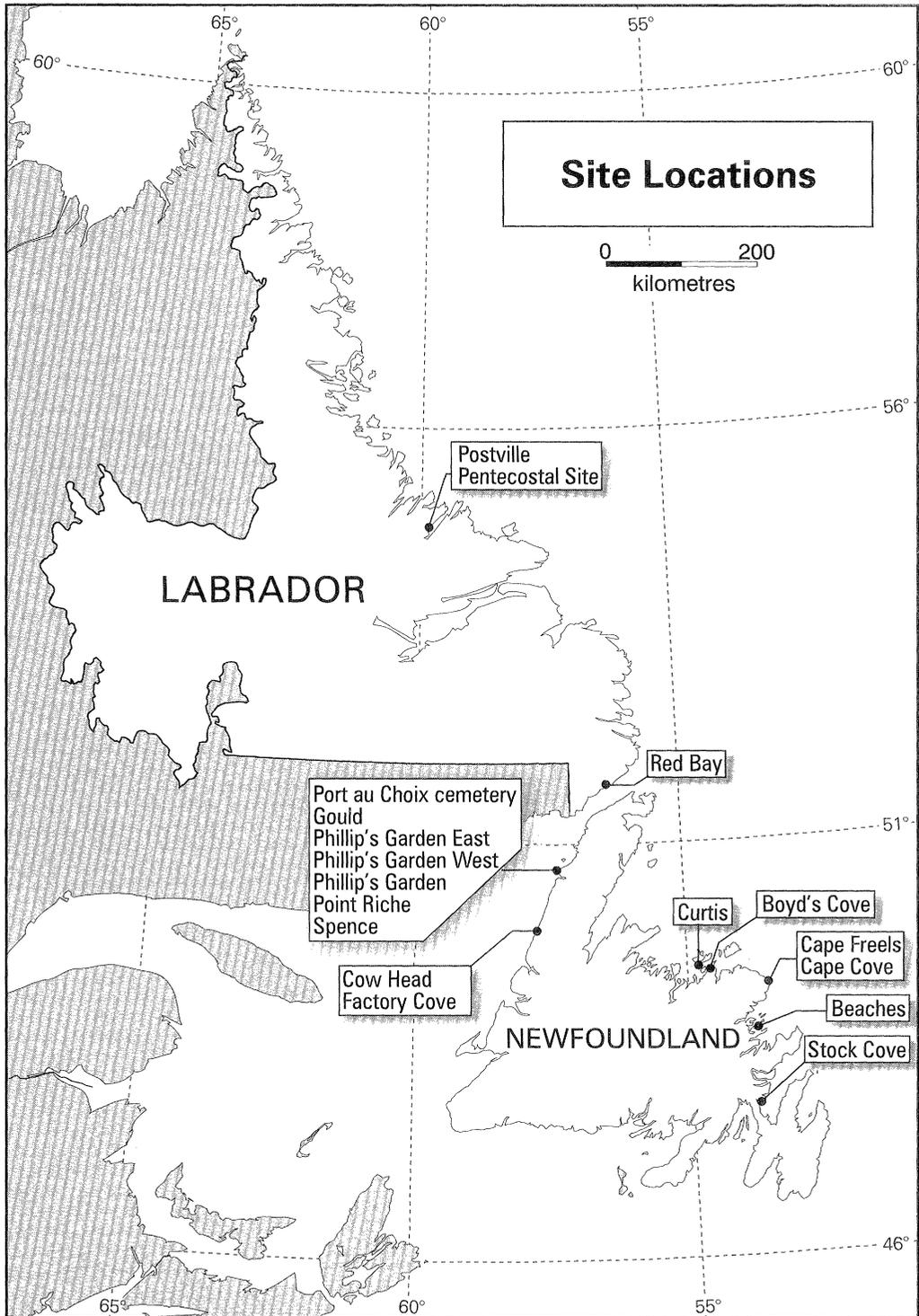


Figure 2 Location of sites named in the text.

sea birds, terrestrial fauna, and fish, with the particular combination varying from period to period.

The Maritime Archaic Indians (MAI) were the first occupants of Newfoundland, arriving between 5,000 and 4,500 years ago, when the climate was significantly warmer than today (Macpherson 1995). The earliest radiocarbon dates (Table 1) are from the Beaches and Cape Cove 1 (Fig. 2).

Relatively few MAI sites in Newfoundland have been extensively excavated and most information comes from the cemetery at Port au Choix (Tuck 1970, 1971, 1976). As a consequence, subsistence is largely speculative, based on site location, technology and the lengthy list of marine and terrestrial species found in the Port au Choix cemetery. Although most of the bones are amulets or pendants, they nevertheless demonstrate the importance of sea mammals, fish, and a wide variety of sea birds, along with caribou and small game. Grave goods reflect a significant wood working industry, a well-developed marine hunting technology, terrestrial hunting, trapping, and a spiritual involvement with the killer whale and the now-extinct Great Auk. In non-mortuary sites a chipped and ground stone industry reflects hunting and woodworking, and tools made from Ramah chert from northern Labrador (Fig. 1) are present in significant numbers. MAI sites occur in roughly similar proportions in both outer coastal and more sheltered inner coastal areas suggesting a generalized maritime economy (Pastore 1986: 133).

After almost two millennia the MAI disappear from the archaeological record (Table 1). The reason for the disappearance of this successful culture is poorly understood. It may relate to climate, since 3000 BP is the beginning of a cooling trend (Macpherson 1995), or to the appearance of the succeeding Palaeoeskimo culture, although there is currently a 300 year gap between them, or possibly the next stage of the MAI in Newfoundland is not yet discovered or recognized (Tuck 1982). Tuck and Pastore (1985: 77) suggest that the MAI died out as a result of short-term unavailability of one or more crucial resources. In Labrador, the MAI date as early as 8500 BP (McGhee and Tuck 1975); at approximately 3500 BP they disappear, possibly re-emerging as the Intermediate Indians (3000–2000 BP). Intermediate Indians are not so far found in Newfoundland.

The Groswater Palaeoeskimos were an arctic adapted population who reached their southernmost extent on Newfoundland, arriving from Labrador about 2800 BP at the beginning of a climate period that was significantly colder than today (Macpherson 1995). The earliest Groswater dates are from the northwest coast (Fig. 2 and Table 1). Faunal remains suggest heavy reliance on seals (particularly harp seal), with sea birds, ducks, small game and caribou represented as well (Auger 1984: 126; Renouf 1991: 41ff.). Sites tend to be situated on headlands from which sea mammals could be hunted, and the marine adaptation may be more specialized than for the MAI. This is also demonstrated in their lithic and bone technology which is demonstrably geared towards sea mammal hunting. The stone tools are small and very finely chipped, and the distinctive fine-grained chert that was essential to this came from the west coast Cow Head and Port au Port beds. In addition Ramah chert consistently appears in small amounts. The period lasted for a millennium, and its relationship to the next Palaeoeskimo cultural period is unclear, although one hypothesis is that they represent two separate occupations (Tuck 1982). Tuck and Pastore (1985: 71) link the disappearance of the Groswater to another crash in the resource base. Groswater Palaeoeskimos in Labrador date from 2800–2200 BP (Cox 1978).

The Groswater are followed by *Dorset Palaeoeskimos*, and the best dated site is Phillip's Garden where there is one isolated early date of 2140 ± 100 BP followed by a cluster around 1970–1800 BP (Table 1). Like the Groswater, many Dorset sites are on headlands, reflecting their focused marine economy. However, the larger Dorset sites (Pastore 1986: 133) seem to indicate some kind of intensification of marine resource use. A comparison of the Dorset and Groswater faunas from Port au Choix reveals a narrowing of the species list during Dorset as they zeroed in on harp seal (Renouf 1993a). This intensification is also reflected by the introduction of oil-burning stone lamps and pots. Dorset lithic technology is also geared towards marine hunting, and lithic styles become regionalized within Newfoundland (Robbins 1986). Ramah chert is still present in significant amounts. Then after almost eight centuries, this clearly successful population disappears. This may be related to a period of warming climate (Renouf 1993a), the re-emergence of an Indian population (Tuck 1982), or be another extinction related to an unexpected resource shortfall (Tuck and Pastore 1985: 71). In Labrador, Dorset Palaeoeskimos appear earlier, at around 2600 BP, and sites continue until 500 BP (Cox 1978).

Recent Indians follow and overlap with Dorset Palaeoeskimos. The period is divided into three phases: the Cow Head phase is the earliest; the Beaches phase covers the period 1500–800 BP; the Little Passage phase is the latest. Sites are located in both outer and inner coastal areas (Pastore 1986: 133) as well as inland (Schwarz 1994: 61ff.), which suggests a generalized marine economy (see also Cridland 1998). At Port au Choix, Recent Indian sites are in protected, centralized locations in distinction to the exposed Palaeoeskimo sites and similar to the one known MAI occupation site from the area (Renouf and Bell 1998). This suggests a general contrast between the specialized marine exploitation of the Palaeoeskimo groups and the more generalized, although marine oriented, adaptation of the Indian groups (Pastore 1986; Schwarz 1990, 1994). In the historic period (300 BP) the Recent Indians are known as the Beothuk, Newfoundland's indigenous culture. In Labrador, the period parallels Newfoundland and is divided into the early period (1800–1000 BP) called Daniel Rattle and late (1000–historic) called Point Revenge. It is argued that Point Revenge represents ancestral Montagnais-Naskapi, today known as Innu (Loring 1988, 1992).

Extinctions?

Tuck and Pastore (1985) interpret the prehistoric record as a series of extinctions and repopulations. They explain the apparent anomaly of highly successful and long-lasting occupations coming to an abrupt end as a logical outcome of the Newfoundland ecosystem, describing the island as 'an impoverished piece of the boreal forest surrounded by the Atlantic Ocean and the Gulf of St. Lawrence' (Tuck and Pastore 1985: 77). Citing Bergerud (1983) they note that Newfoundland has only fourteen indigenous terrestrial mammals (excluding humans), of which nine are carnivorous, making for a simple, unbalanced and inherently unstable terrestrial ecosystem. They argue that the marine ecosystem is also unstable. Many of the resources are migratory (in particular caribou and harp seal) which means that, while they usually appear in abundance at predictable places and times, they are also sometimes prone not to show up, or be rendered inaccessible by

local weather conditions. The relatively few available species is key, because it means that when harp seals or caribou are unexpectedly unavailable there are few back-ups. Tuck and Pastore (1985: 77) cite written descriptions of Beothuk storage technology for caribou, salmon, seal oil, lobster tails, and eggs as evidence of the unreliability of their resource base. They conclude that 'stressed by a few seasons of unfavourable weather, local bands would face starvation. Prolonged unfavourable conditions, we suggest, would result in the extinction of entire populations' (Tuck and Pastore 1985: 77).

This model appears to be heavily influenced by the historical Beothuk extinction. Sixteenth-century reports mention Beothuks throughout the coastal areas and in some central inland areas (Marshall 1996). However, by the eighteenth century the Beothuk appear to have withdrawn from intrusive European settlement, to concentrate in Bonavista and Notre Dame Bays (Pastore 1989). By the early nineteenth century they were rarely seen, and mentions of long and elaborate caribou fences in the interior suggest that they were driven inland for much of the year, where they had to rely more exclusively on caribou (Pastore 1989). In 1823 three Beothuk women were found on the coast of Notre Dame Bay and taken captive. They explained that their people were dying of starvation and disease and that they were the only survivors. Two of the women died shortly after, and the third, Shanawdithit, died in 1829 (Marshall 1996). Current explanations link the Beothuk demise to a complex of factors that include European disease and predation, lack of regularized interaction with Europeans, and most importantly, a retreat into the interior as European settlement blocked access to the coast and forced them to rely more heavily on caribou (Pastore 1989, 1990, 1992, 1993; but see Marshall 1990; Rowley-Conwy 1990). In other words, European presence, like variable weather, rendered marine resources inaccessible.

The model of prehistoric extinctions has likewise become entrenched in our thinking. Schwarz (1994) takes issue with the environmental determinism of the Tuck and Pastore model, in which the environment overrides cultural response, but accepts the idea of extinction. He notes that different cultures had different settlement and subsistence systems, and were therefore not rigid in the face of an unreliable environment. He concludes that 'we should perhaps pay less attention to the *natural* instability of the Newfoundland ecosystems than to possible *cultural* sources of instability' (Schwarz 1994: 67, original emphasis). Loring (1992) make an eloquent case for regular interaction and communication amongst Recent Indian groups within Labrador, and between Labrador and Newfoundland. Although he emphasizes hunter-gatherer flexibility in Labrador, he does not extend this conceptual framework to Newfoundland and summarizes its prehistory as a series of extinctions connected to an unpredictable ecosystem (Loring 1992: 450). Martijn (1990) cites Tuck and Pastore's extinction model as the prehistoric context for the historical movements of Labrador Montagnais-Naskapi (Innu) into Newfoundland. He interprets these as incursions from Labrador, rather than the expression of what might have been regular movement across the Strait of Belle Isle.

Extinctions re-examined

The Tuck and Pastore model is based on three premises: (1) Newfoundland resources were unreliable and unpredictable; (2) Newfoundland hunter-gatherers were therefore

vulnerable; and (3) Newfoundland hunter-gatherers lived in a bounded universe. These will be examined in turn.

Were insular Newfoundland resources unreliable and unpredictable?

Newfoundland's environment is more northerly than its latitude (approx. 47–52°N) would suggest, influenced by the cold waters of the Labrador Current. Like all northern environments it is seasonal and therefore has a series of predictably occurring resources. It has relatively few species compared to more southerly areas, but these few species appear in abundance. However, as Bergerud (1983: 130) pointed out, the number of terrestrial species is small, fourteen compared to thirty-four in Labrador and thirty-eight in Cape Breton Island. Nevertheless, the paucity of resources in Newfoundland is overstated. From the perspective of omnivorous human populations the Newfoundland menu is not all that bad, and includes caribou, arctic fox, red fox, lynx, otter, weasel, pine marten, muskrat, beaver, various species of freshwater, anadromous, catadromous and inshore marine fish, not to mention ducks, gulls, auks, four species of seal, walrus, small whales, shellfish and a variety of plants.

Tuck and Pastore stress the importance of resource failures due to small-scale processes that are not observable in palaeoclimate records. Undoubtedly both marine and terrestrial resources would have been unpredictable from year to year as weather conditions varied; however, it is likely that such variability would have been localized rather than island-wide. For instance, an icy spring on the Northern Peninsula of Newfoundland (where today there is a caribou herd) would not necessarily mean spring sleet on the Avalon Peninsula (where there is another). A late arrival of snow in the Northern Peninsula will delay caribou movement to the coastal plains, but will not have the same effect on caribou in central Newfoundland (where there is a third herd).

Similarly, access to late winter–early spring harp seal herds may be blocked by a continuous onshore wind that chokes the shoreline with ice. However, if one harbour is blocked with ice, another will be open. For instance, today sealers from Port au Choix say that they take off for the seal hunt in small boats from Phillip's Garden because the seals are close by and the water usually stays open. However, in the occasional year when the wind pushes the ice into Phillip's Garden they disembark from Point Riche just a kilometer away, where those same winds keep the water open. By the same token, should the harp seals be inaccessible along the Newfoundland side of the Strait of Belle Isle, they may be accessible along the Quebec side or along Newfoundland's northeast coast. According to the 1923 *Chafe's Sealing Book* the harp seals 'disappeared' along the north side of the Gulf of St Lawrence in 1800 and again from 1850 to 1865 (Mosdell 1923). However, the 1857 census reports successful non-commercial sealing in that year (Sanger 1977: 143) and from 1851 to 1860 there are reports of hundreds of thousands of pelts from the commercial spring seal hunt (Ryan 1994: 104). This suggests either that the disappearance of seal was exaggerated or that it was a local occurrence.

Tuck and Pastore also note the importance of harp seal and caribou population crashes. However, there is little historic evidence of island-wide harp seal population crashes, aside from passing references of the kind referred to above, and references to the occasional year when the spring pack ice, and the harp seals with it, remained north of Newfoundland (cf.

Ryan 1994: 104). As for caribou, the population is currently rebounding from an all-time low earlier this century (Bergerud 1983: 135). Today they form four or more herds based in different areas of the island (Mercer et al. 1985) and it has been hypothesized that these might be remnant populations of one or more larger herds. If so, postulated prehistoric caribou population lows might have broken up caribou into localized herds, each probably sufficiently numerous to be exploited by small hunter-gatherer groups.

But were there prehistoric crashes in caribou numbers? The current population size results from over hunting following the opening of the Newfoundland railroad at the turn of the century, and perhaps indirectly from the 1864 introduction of the snowshoe hare. Bergerud (1983) argues that the initial rapid increase of snowshoe hare led to a pronounced increase in lynx, which had previously preyed on the small and well-dispersed arctic hare population. The snowshoe hare population then crashed, and the numerous and then-hungry lynx turned to caribou. Caribou, adapted to wolf predation, were particularly vulnerable to this new predator which targeted calves, and their numbers plummeted. Then snowshoe hare populations rose again and lynx switched back to them, giving the caribou herds time to regenerate before the cycle was repeated. Ten-year cyclical crashes in snowshoe hare populations continued, and it is suggested that they indirectly precipitated the ten year crashes in caribou that have been recorded since 1950 (Bergerud 1983: 135). The current caribou population appears to be the result of two historical circumstances: the introduction of the snowshoe hare; and the opening up of the countryside to overly enthusiastic hunters. There is therefore no way of knowing if similar caribou population crashes occurred in the past. If they did then it is possible that they would have resulted in caribou populations contracting to localized areas.

What this suggests is that although resources would likely have fluctuated unpredictably, these fluctuations would have been localized. Thus, rather than forming a single rug to be pulled out from underneath Newfoundland hunter-gatherers, there was more likely a mosaic of smaller-scale variability.

Were insular Newfoundland hunter-gatherers vulnerable to environmental unpredictability?

Risk management is an integral part of hunter-gatherer societies. Hunter-gatherers factor in risk when they make decisions about which species to hunt, when, where, and with whom, and there is always a back-up plan. When uncertainty may be great (as in Newfoundland) options are kept open. Surpluses are targeted, efforts are co-ordinated, and preservation and storage technology is employed. An alternative to storage is to share it with relatives across a broad region, thus 'storing' goodwill and reciprocal obligations. In such societies social and territorial boundaries are flexible, wide-ranging kin and non-kin ties are maintained across them, and people can therefore move over a large area. When unpredictability of important resources is the norm over generations (as Tuck and Pastore argue for Newfoundland), mechanisms for sharing within and between groups become an integral part of the cultural pattern (Lee 1979; Balikci 1970; Halstead and O'Shea 1989).

For example, !Kung gift exchange (*hxaro*) partners could be as near as the cooking fire or as distant as 200km (Wiessner 1982: 75). Distant *hxaro* partners tended to be non-kin,

and were thus brought into a relationship of reciprocal obligations. Similarly, trading partnerships of the North Alaskan Eskimos connected non-kin from widely distant regions within a structured reciprocal relationship (Burch 1970). Although superficially such partnerships were about gift exchange, underneath they were about creating and maintaining social ties and visiting rights in times of need. Mailhot (1997) describes the ‘stretchable kinship’ of the Sheshatshit (Innu) of central Labrador and her map of the Sheshatshit social network covers most of south and central Labrador. Groups are mobile beyond their habitually used land areas; individuals are even more mobile, moving long distances to visit kin, staying a few days, a few weeks, or perhaps several years. Mailhot stresses that these movements are about social connections and that people move to people rather than to place. Information exchange is an important part of these movements, and knowledge of caribou or harp seal movements or ice conditions can be transmitted over long distances. Smith (1978) describes how the caribou-reliant Chipewyan had wide-ranging kin-based information networks that allowed a flexible response to changing caribou movements. Sharing hunting territories was a key element of managing the fluctuating behaviour and numbers of the Barren Ground caribou.

The implication of these examples is that Newfoundland hunter-gatherers would also have had a variety of ways to offset resource fluctuations. That is, they would have culturally created the back-up resources necessary to offset any unscheduled disappearance or unavailability of important resources. Their considerable longevity in the prehistoric record suggests that this must have been the case. The complex Beothuk storage technology is just one example, and rather than indicating stress in the face of an unreliable environment it is an example of adapting to the periodicity of the resources. If resource fluctuations were, as I have suggested, local rather than widespread, it is likely that the prehistoric Indian and Palaeoeskimo populations would have maintained access to a variety of places, near and far.

Did insular Newfoundland hunter-gatherers live in a bounded universe?

To assume that island hunter-gatherers were drastically vulnerable to resource fluctuations is to assume that they lived in a bounded universe. However, hunter-gatherer universes tend not to be restricted and defined, but rather fluid and permeable (Wobst 1978). Although Newfoundland is an island, and consequently there is a tendency to regard it as geographically bounded, Labrador is in fact just 18km across the Strait of Belle Isle – clearly visible in good weather. Rather than acting as a barrier, the Straits would have been an avenue of communication (Pastore 1989: 61).

Historical records, incomplete at best, show that from the seventeenth century the Strait of Belle Isle was a busy place. An early seventeenth-century Basque source mentions ‘esquimaos’, ‘montanases’ and ‘canaleses’, thought to be Inuit, Montagnais-Naskapi (Innu) and Beothuk, respectively (Martijn 1990: 229; see Marshall 1996 for a contrary view). They were encountered on the north side of the Strait, and if the ‘canaleses’ are correctly identified this means that Beothuk were in southern Labrador (Martijn 1990: 230). Subsequent records indicate regular to-ing and fro-ing across the Straits. In the seventeenth century Montagnais-Naskapi regularly moved between Newfoundland and Labrador to hunt and trap and by the late eighteenth century to settle. They moved

beyond just the northwest coast of Newfoundland; they met and sometimes married Micmac from Nova Scotia, who had visited the south and west coasts of Newfoundland since the seventeenth century. Little is known about the interactions between Montagnais-Naskapi and Beothuk, but Shanawdithit (the last Beothuk) apparently referred to them as ‘Shaunamuncs’ or ‘good people’ and told how the two groups exchanged visits across the Strait of Belle Isle and traded stone axes and other things (Martijn 1990: 236; Pastore 1987: 57; Marshall 1996: 60). Pastore (1987: 57) found blue and white beads at the Beothuk site of Boyd’s Cove, which he suggests might be evidence of trade between the Beothuk and Montagnais-Naskapi. Inuit also moved back and forth across the Straits. Eighteenth-century sources mention Inuit winter houses on the Northern Peninsula (Martijn 1980: 195) and along the coast as far as Notre Dame Bay (Marshall 1996: 54).

While occasional reports of an Innu here or an Inuk there tend to suggest that the interchanges were occasional, it is possible that they were regular events. Howley (1915: 33) notes that old French charts call the area of the Northern Peninsula at the narrowest point on the Strait of Belle Isle the ‘Chemin de Sauvage’. He also observes that a 1755 English Coastal Pilot map marks a place near Port au Choix called ‘Passages de Sauvages’.

It is likely that during all periods of prehistory hunter-gatherers were connected to each other across the Straits, and that these on-going connections would have extended directly or indirectly throughout Labrador and Newfoundland. Undoubtedly these connections would have varied in nature and intensity over the course of prehistory in light of changing cultural, historical, and ecological contexts.

Connections between insular Newfoundland and Labrador

A systematic tracing of prehistoric connections between Newfoundland and Labrador has yet to be undertaken. However, a number of lines of evidence are generally acknowledged.

Ramah chert

The clearest and most enduring connection is the occurrence of Ramah chert throughout the Newfoundland prehistory. Ramah chert is a distinctive, coarse-grained, translucent chert of which there is only one identified source: Ramah Bay in northern Labrador (Nagle 1984). Ramah chert is commonly found in MAI contexts throughout Labrador and Newfoundland and is found in isolated instances in Archaic Indian contexts as far south as Maine (Fitzhugh 1978). Ramah chert continues to be found throughout Labrador and Newfoundland during the succeeding Groswater, Dorset and Recent Indian periods, less being found in Newfoundland than in Labrador (Nagle 1986; Tuck 1982).

West coast cherts

Contact goes both ways, and during the Groswater period distinctive cherts from the west coast of Newfoundland appear in Labrador Groswater assemblages, from the Quebec Lower North Shore (Pintal 1994) to central (Loring and Cox 1986) and northern Labrador

(Nagle 1986). These cherts are from the Cow Head and Port au Port area; all have tell-tale radiolari by which they can be visually identified. Although almost absent from the northern Labrador Early Dorset (c. 2800–2400 BP), they appear consistently in small amounts in Middle Dorset assemblages (c. 2000–1200 BP). Nagle (1986: 101) notes that Newfoundland cherts appear in central Labrador Dorset sites in about the same frequency as Ramah chert occurs in Newfoundland sites, at roughly 5 per cent. West coast cherts are also present in Late Dorset sites in Labrador (1000–500 BP) which are contemporaneous with the Recent Indian occupation of Newfoundland. This suggests the possibility of long-distance connections between these two demonstrably different cultural groups (Nagle 1986). Groswater Palaeoeskimos used these cherts throughout Newfoundland, while during the Dorset period their distribution contracted to the west coast (Robbins 1986: 121).

Stylistic similarities

There are widespread stylistic similarities throughout Newfoundland and Labrador in all cultural periods, except for the Intermediate Indian period which is not represented in Newfoundland. These similarities are commonly acknowledged to reflect a broad sphere of interaction.

Maritime Archaic Indian material culture is stylistically similar in Labrador and Newfoundland, although it is divided into a northern branch (northern and central Labrador) and a southern branch (southern Labrador and Newfoundland) (Tuck 1982). Not only do the northern and southern branches share chipped stone projectile points, ground slate points, celts and gouges, they also share similarities in early mound-building mortuary ceremonialism as well as subsequent development of cemeteries (Tuck and McGhee 1976; Tuck 1976; Fitzhugh 1978).

Groswater Palaeoeskimo tool assemblages are remarkably similar throughout Newfoundland and Labrador. All share distinctive high side-notched endblades (stone tips for harpoons), circular and ovate side blades (inset into harpoon heads or bone handles) and chipped and ground engraving tools. The closest similarities are between Port au Choix (Renouf 1994) and Factory Cove (Auger 1984) and a series of sites on the Quebec Lower North Shore (Pintal 1994) (Figs 1 and 2). Some of the pieces illustrated by Pintal (1994: 156) are strikingly similar to those in the Port au Choix collections, as are many from the Postville Pentecostal site in central Labrador (Loring and Cox 1986), illustrating the close connections amongst these areas.

The Newfoundland Dorset artefact assemblage shares many elements with the contemporary Labrador Dorset, for example triangular endblades sharpened at the tip by means of removal of two or more flakes, ground and polished nephrite engraving tools, small rectangular soapstone lamps and some decorative elements on tools and amulets (Jordan 1986).

Recent Indian material in Labrador and Newfoundland is also similar, especially late in the period. At 900 years ago, the Little Passage phase in Newfoundland is considered to be ancestral Beothuk (Pastore 1992) and the Point Revenge phase in Labrador is thought to be ancestral Montagnais-Naskapi (Loring 1992). Predominant in these assemblages are distinctive small, corner-notched or side-notched, flake and bifacially reduced projectile

points. The essential difference between Labrador and Newfoundland is raw material: Labrador groups used an overwhelming proportion of Ramah chert, while Newfoundland groups relied on fine grained local cherts, with Ramah chert present in lesser amounts.

Interestingly, the distinction is least clear on either side of the Strait of Belle Isle. Late Recent Indian sites on the Quebec Lower North Shore, with characteristic corner-notched points made of fine grained cherts, are categorized as Little Passage (Pital 1989), relating them to Newfoundland rather than Labrador. A late Recent Indian site in Red Bay, southern Labrador, has both Little Passage and Point Revenge elements, with small corner-notched points of Ramah chert and other points of fine grained local chert (Tuck 1987; Robbins 1989). Similarly, both Little Passage and Point Revenge elements appear on the northwest coast of Newfoundland. A Recent Indian site (the Spence site) at Port au Choix is radiocarbon dated to between 1500 and 800 BP (Renouf 1993b), Little Passage contexts with points of fine grained chert providing the younger dates. In contrast, a late Recent Indian point of Ramah chert was found about 110km north of Port au Choix, eroding out of a stream bank. Either Ramah chert was being used to make some late Recent Indian points in this part of Newfoundland (though not at the Spence site); or Point Revenge people from central or northern Labrador were coming across the Straits; or there are fewer differences between Little Passage and Point Revenge than we think. Whichever is the case, it is clear that from 900 to 300 years ago the route between Newfoundland and Labrador was open.

Extinctions or adaptations?

If the adaptation model proposed here is correct, how would one interpret the changes or discontinuities in Newfoundland prehistory? The disappearance of Maritime Archaic Indians from the archaeological record would be seen not as an insular Newfoundland phenomenon but as a Newfoundland/Labrador issue, since they disappear at about the same time in both areas. The nature of their disappearance or possible transformation to interior-based Intermediate Indian groups (Madden 1976) remains one of the most interesting questions in Labrador culture history (Hood 1993).

Similarly, the disappearance from the archaeological record of Groswater Palaeoeskimos is a Newfoundland/Labrador phenomenon. If Groswater Palaeoeskimos shifted back and forth between Newfoundland and Labrador, they might have shifted out of Newfoundland only to shift back generations later as Dorset, the transformation occurring in Labrador. Whether this was an *in situ* transformation, or a population replacement, or some combination of the two is currently unresolved (Tuck and Fitzhugh 1986).

Regarding the Dorset disappearance from Newfoundland, the non-extinction view would see Newfoundland populations shifting to Labrador where the Dorset continued for another 700 years. While this used to be thought unlikely given the paucity of Dorset sites in southern and central Labrador, recent surveys in this area have turned up twenty sites (Stopp 1997: 130). Of the eight radiocarbon dates from these Dorset sites, four are contemporary with the Dorset occupation of Newfoundland while four immediately post-date it. As with the previous cultural periods, the eventual disappearance of the Dorset is a problem within a larger regional context.

Finally, Recent Indians on Newfoundland became the historic Beothuk who became extinct. While this was clearly the case for the Beothuk in the northeast of the island, what about Beothuk elsewhere? Were there any Beothuk on the northwest coast? There is very little information, primarily because this area was part of the French Shore from 1713 to 1904, which meant that the French had summer fishing rights under British jurisdiction. As a consequence, this area was under little official scrutiny by either French or British and few records were kept. However, there are eighteenth-century references to Beothuk at the tip and the base of the Northern Peninsula (Marshall 1996: 208, Martijn 1990: 233), in addition to references to them in southern Labrador. Furthermore, a Little Passage site has been found in the Bay of Islands on the west coast (Reader pers. comm. 1997), not to mention the Recent Indian Spence site at Port au Choix. If there were Beothuk on the northwest coast what happened to them? According to nineteenth-century Micmac oral history, the last of the Beothuk tribes fled to Labrador around AD 1800 (Howley 1915: 257), a well-known story that has never been taken very seriously. However, if there were northern Beothuk this prompts the question of whether they saw the writing on the wall and shifted out, perhaps accompanied by individuals from other areas of Newfoundland, calling upon existing relationships with Labrador Montagnais-Naskapi and becoming assimilated into that population.

Conclusions

This paper presents an alternative perspective of Newfoundland prehistory. The current interpretive framework sees the cultural sequence as a series of extinctions and reoccupations. The alternative framework put forward here views the occupation as a series of successful adaptations. An essential element of a successful adaptation in any northern area is coping with the unpredictability of seasonal resources. The most common way to deal with this amongst ethnographically known hunter-gatherers is to extend the net of reciprocal connections to other people and other locations. Such connections are apparent in the prehistoric record, suggesting that this mechanism existed throughout Newfoundland prehistory. Thus, island cultures did not become extinct; they shifted their ground according to how they could best optimize resources, contracting to Labrador and expanding to Newfoundland as circumstances changed. At present, both models are based largely on argument and common sense, and where one seems to be influenced by the historical extinction of the Beothuk, the other is influenced by the ethnography of hunter-gatherers. Both now need to be tested against the archaeological data.

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Note

- 1 Throughout this paper the term 'Newfoundland' refers to the island of Newfoundland, not to the 'Province of Newfoundland', which includes mainland Labrador.

References

- Auger, R. 1984. Factory cove: recognition and definition of the early palaeo-eskimo period in Newfoundland. Master's thesis. Department of Anthropology, Memorial University of Newfoundland, St. John's.
- Austin, S. J. 1980. Cape Cove Beach (DhAi-5,6,7), Newfoundland: prehistoric cultures. Master's thesis. Department of Anthropology, Memorial University of Newfoundland, St. John's.
- Austin, S. 1984. Maritime Archaic and Recent Indian evidence from Cape Cove Beach, Newfoundland. *Canadian Journal of Archaeology*, 8(2): 115–126.
- Balikci, A. 1970. *The Netsilik Eskimo*. New York: Garden City Press.
- Bergerud, A. T. 1983. Prey switching in a simple ecosystem. *Scientific American*, 24(9): 130–41.
- Burch, E. S. 1970. The eskimo trading partnership in North Alaska: a study in 'balanced reciprocity'. *Anthropological Papers of the University of Alaska*, 15: 49–80.
- Carignan, P. 1975. *The Beaches: A Multicomponent Habitation Site in Bonavista Bay*. Mercury Series, 39. Archaeological Survey of Canada, National Museums of Canada, Ottawa.
- Carignan, P. 1977. *Beothuck Archaeology in Bonavista Bay*. Mercury Series, 69. Archaeological Survey of Canada, National Museums of Canada, Ottawa.
- Cox, S. L. 1978. Palaeo-eskimo occupations of the north Labrador coast. *Arctic Anthropology*, 15(2): 96–118.
- Cridland, J. 1998. Late prehistoric Indian subsistence in northeastern Newfoundland: faunal analysis of Little Passage Complex assemblages from the Beaches and Inspector Island sites. Master's thesis. Department of Anthropology, Memorial University of Newfoundland, St. John's.
- Fitzhugh, W. W. 1978. Maritime Archaic cultures of the central and northern Labrador coast. *Arctic Anthropology*, 15(2): 61–95.
- Halstead, P. and O'Shea, J. (eds) 1989. *Bad Year Economics*. Cambridge: Cambridge University Press.
- Harp, E. 1976. Dorset settlement patterns in Newfoundland and southeastern Hudson Bay. In *Eastern Arctic Prehistory: Palaeoeskimo Problems* (ed. M. M. Maxwell). *Memoir for the Society for American Archaeology*, 31, pp. 119–38.
- Hood, B. C. 1993. The Maritime Archaic Indians of Labrador: investigating prehistoric social organization. *Newfoundland Studies*, 9(2): 163–85.

- Howley, J. P. 1915. *The Beothucks or Red Indians: The Aboriginal Inhabitants of Newfoundland*. Cambridge: Cambridge University Press.
- Jordan, R. H. 1986. Palaeo-eskimos in Atlantic Canada: a regional comparison of Newfoundland and Labrador Middle Dorset. *Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. In Reports in Archaeology*, 1. Memorial University of Newfoundland, St. John's, pp. 135–50.
- Lee, R. B. 1979. *Men, Women and Work in a Foraging Society*. Cambridge: Cambridge University Press.
- Loring, S. G. 1988. Keeping things whole: nearly two thousand years of Indian (Innu) occupation of Northern Labrador. In *Boreal Forest and Sub-Arctic Archaeology* (ed. C. S. Paddy Reid). Occasional Papers of the London Chapter, Ontario Archaeological Society 6, pp. 157–82.
- Loring, S. G. 1992. Princes and princesses of ragged fame: Innu archaeology and ethnohistory in Labrador. Doctoral dissertation. University of Massachusetts, Amherst.
- Loring, S. G. and Cox, S. 1986. The Postville Pentecostal Groswater site, Kaipokok Bay, Labrador. *Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. In Reports in Archaeology*, 1. Memorial University of Newfoundland, St. John's, pp. 65–94.
- McGhee, R. J. and Tuck, J. A. 1975. *An Archaic Sequence from the Strait of Belle Isle, Labrador*. Mercury Series, 34. Archaeological Survey of Canada, National Museums of Canada, Ottawa.
- Macpherson, J. B. 1995. Palaeoenvironments. In *West Coast of Newfoundland Field Trip Guide* (eds D. Liverman and M. Batterson). CANQUA-CGRG Meeting, St. John's, pp. 55–61.
- Madden, M. M. 1976. A late archaic sequence in southern Labrador. Master's thesis. Department of Anthropology, Memorial University of Newfoundland, St. John's.
- Mailhot, J. 1997. *The People of Sheshatshit: In the Land of the Innu*. Social and Economic Studies, 58. St. John's: Institute for Social and Economic Research.
- Marshall, I. 1990. Evidence for two Beothuk subsistence economies. In *Papers of the Twenty-First Algonquian Conference* (ed. W. Cowan). Ottawa: Carleton University, pp. 216–26.
- Marshall, I. 1996. *A History and Ethnography of the Beothuk*. Montreal: McGill-Queen's University Press.
- Martijn, C. 1980. The Inuit of southern Quebec-Labrador: a rejoinder to Garth Taylor. *Études/Inuit/Studies*, 4: 194–8.
- Martijn, C. 1990. Innu (Montagnais) in Newfoundland. In *Papers of the Twenty-First Algonquian Conference* (ed. W. Cowan). Ottawa: Carleton University, pp. 227–46.
- Mercer, E., Mahoney, S., Curnew, K. and Finlay, C. 1985. Distribution and abundance of insular Newfoundland caribou and the effects of human activities. *Proceedings of the Second North American Caribou Workshop* (ed. Val Morin). McGill Subarctic Research Paper No. 40, pp. 15–32.
- Mosdell, H. M. (ed.) 1923. *Chafe's Sealing Book*, 3rd edn. St. John's, Nfld: The Trade Printers and Publishers.
- Nagle, C. L. 1984. Lithic raw materials procurement and exchange in Dorset culture along the Labrador coast. Doctoral dissertation. Department of Anthropology, Brandeis University.
- Nagle, C. L. 1986. Flaked stone procurement and distribution in Dorset culture sites along the Labrador coast. In *Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. Reports in Archaeology*, 1. Memorial University of Newfoundland, St. John's, pp. 95–110.
- Pastore, R. T. 1986. The spatial distribution of late palaeo-eskimo sites on the island of Newfoundland. In *Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. Reports in Archaeology*, 1. Memorial University of Newfoundland, St. John's, pp. 125–34.
- Pastore, R. T. 1987. Fishermen, furriers, and Beothuks: the economy of extinction. *Man in the Northeast*, 33: 47–62.

- Pastore, R. T. 1989. The collapse of the Beothuk world. *Acadiensis*, 19(1): 52–71.
- Pastore, R. T. 1990. Native history in the Atlantic region during the colonial period. *Acadiensis*, 20(1): 200–25.
- Pastore, R. T. 1992. *Shanawdithit's People*. St. John's: Atlantic Archaeology Ltd.
- Pastore, R. T. 1993. Archaeology, history and the Beothuks. *Newfoundland Studies*, 9(2): 260–78.
- Pintal, J-Y. 1989. Contributions à la Préhistoire Recente de Blanc Sablon. *Recherches Amerindiennes au Quebec*, 2–3: 33–44.
- Pintal, J-Y. 1994. A Groswater site at Blanc-Sablon, Quebec. *Threads of Arctic Prehistory: Papers in Honour of W. E. Taylor, Jr.* (eds D. A. Morrison and J.-L. Pilon). Ottawa: Canadian Museum of Civilization, pp. 145–64.
- Renouf, M. A. P. 1987. Archaeological investigations at the Port au Choix National Historic Park: report of 1986 field activities. Report on file at Archaeology Division, Parks Canada, Atlantic Region, Halifax.
- Renouf, M. A. P. 1991. Archaeological investigations at the Port au Choix National Historic Park: report of the 1990 field activities. Report on file at Archaeology Division, Parks Canada, Atlantic Region, Halifax.
- Renouf, M. A. P. 1993a. Palaeoeskimo seal hunters at Port au Choix, northwestern Newfoundland. *Newfoundland Studies*, 9(2): 185–212.
- Renouf, M. A. P. 1993b. The 1992 archaeological field season, Port au Choix National Historic Park: report of archaeological excavations. Report prepared for Parks Canada, Archaeology, Atlantic Region, Halifax.
- Renouf, M.A.P. 1994. Two transitional sites at Port au Choix, northwestern Newfoundland. In *Threads of Arctic Prehistory: Papers in Honour of W. E. Taylor, Jr.* (eds D.A. Morrison and J.-L. Pilon). Ottawa: Canadian Museum of Civilization, pp. 165–95.
- Renouf, M. A. P. and T. Bell, 1998. Searching for the Maritime Archaic Indian habitation site at Port au Choix, Newfoundland: an integrated approach using archaeology, geomorphology and sea level history. Report on file at Culture and Heritage Division, Department of Tourism, Culture and Recreation, Government of Newfoundland and Labrador, St. John's.
- Robbins, D. T. 1985. Stock Cove, Trinity Bay: the Dorset Eskimo occupation of Newfoundland from a southeastern perspective. Master's thesis. Department of Anthropology, Memorial University of Newfoundland.
- Robbins, D. T. 1986. 'Newfoundland Dorset' culture? In *Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. Reports in Archaeology*, 1. Memorial University of Newfoundland, St. John's, pp. 119–24.
- Robbins, D. T. 1989. Regards archéologiques sur les Beothuks de Terre-Neuve. *Recherches Amerindiennes au Quebec*, 2–3: 21–32.
- Rowley-Conwy, P. R. 1990. Settlement patterns of the Beothuk Indians of Newfoundland: a view from away. *Canadian Journal of Archaeology*, 14: 13–32.
- Ryan, S. 1994. *The Ice Hunters: A History of Newfoundland Sealing to 1914*. St. John's: Breakwater Press.
- Sanger, C. W. 1977. The evolution of sealing and the spread of settlement in northeastern Newfoundland. In *The Peopling of Newfoundland* (ed. J. J. Mannion). Social and Economic Papers, 8. St. John's: Institute for Social and Economic Research, pp. 136–52.
- Schwarz, F. A. 1990. Cultural structures versus environmental conditions: towards an understanding of short-lived and persistent prehistoric occupations in the Canadian arctic. Doctoral dissertation. Department of Archaeology, University of Cambridge, Cambridge.

- Schwarz, F. A. 1994. Paleo-Eskimo and Recent Indian subsistence and settlement patterns on the island of Newfoundland. *Northeastern Anthropology*, 47: 55–70.
- Smith, J. G. E. 1978. Economic uncertainty in an 'original affluent society': caribou and Caribou Eater Chipewyan adaptive strategies. *Arctic Anthropology*, 15(1): 68–88.
- Stopp, M. P. 1997. Long-term coastal occupancy between Cape Charles and Trunmore Bay, Labrador. *Arctic*, 50(2): 119–37.
- Tuck, J. A. 1970. An Archaic Indian cemetery in Newfoundland. *Scientific American*, 226(6): 112–21.
- Tuck, J. A. 1971. An Archaic cemetery at Port au Choix, Newfoundland. *American Antiquity*, 36(3): 343–58.
- Tuck, J. A. 1976. *Ancient People of Port au Choix*. Newfoundland Social and Economic Studies, 17. St John's: Institute of Social and Economic Research.
- Tuck, J. A. 1978. Excavations at Cow Head, Newfoundland: an interim report. *Etudes/Inuit/Studies*, 2(1): 138–41.
- Tuck, J. A. 1982. Prehistory in Atlantic Canada since 1975. *Canadian Journal of Archaeology*, 6: 210–23.
- Tuck, J. A. 1987. European–native contacts in the Strait of Belle Isle, Labrador. In *Between Greenland and America: Cross-cultural Contacts and the Environment in the Baffin Bay Area* (eds L. Hacquebord and R. Vaughan). Groningen: Arctic Centre, pp. 61–74.
- Tuck, J. A. and Fitzhugh, W. W. 1986. Palaeo-eskimo traditions in Newfoundland and Labrador. In *Palaeo-Eskimo Cultures of Newfoundland, Labrador and Ungava. Reports in Archaeology*, 1. Memorial University of Newfoundland, pp. 161–8.
- Tuck, J. A. and McGhee, R. J. 1976. An Archaic Indian burial mound in Labrador. *Scientific American*, 235(5): 122–9.
- Tuck, J. A. and Pastore, R. T. 1985. A nice place to visit . . . but: prehistoric extinctions on the island of Newfoundland. *Canadian Journal of Archaeology*, 9(1): 69–80.
- Wiessner, P. 1982. Risk, reciprocity and social influence on !Kung San economics. In *Politics and History in Band Societies* (eds E. Leacock and R. B. Lee). Cambridge: Cambridge University Press, pp. 61–84.
- Wobst, H. M. 1978. The archaeo-ethnology of hunter-gatherers or the tyranny of the ethnographic record in archaeology. *American Antiquity*, 43: 303–9.