ARCTIC
VOL. 50, NO. 2 (JUNE 1997) P. 119–137

Long-Term Coastal Occupancy between Cape Charles and Trunmore Bay, Labrador

MARIANNE P. STOPP[1]

(*Received 6 February 1996; accepted in revised form 18 February 1997*)

ABSTRACT. Ninety-three prehistoric components were discovered during this first comprehensive archaeological survey of the Labrador coastline between Cape Charles and Trunmore Bay. The newly discovered sites show that there was continuous prehistoric occupation from northern Labrador through to the Quebec North Shore and the island of Newfoundland, with radiocarbon dates ranging from 5070 ± 170 to 1050 ± 50 B.P. Dates from Late Palaeoeskimo sites suggest that Middle Dorset occupation of southern Labrador may have begun as early as 1940 ± 70 B.P. and lasted until 1050 ± 50 B.P. Comprehensive survey strategy revealed three broad trends of prehistoric land use and occupation in southern Labrador: the inner coastal zone, in particular the coastline of the largest bays, does not retain any traces of prehistoric coastal occupation; coastal presence by all culture groups is concentrated at or near the mouths of bays and the outer island archipelagoes; and certain coastal locations were preferred areas of land use for prehistoric peoples. At a more specific level, prehistoric Indian sites tend to be situated in protected locations, oriented to both mainland and saltwater resources. Groswater Palaeoeskimo and Late Palaeoeskimo sites, on the other hand, have a decided outer island orientation, which suggests an adaptive focus on saltwater resources. A brief summary of the historic sites recorded during the survey is included.

Key words: Southern Labrador, prehistoric sites, culture history, systematic survey, prehistoric Indian versus Palaeoeskimo subsistence-settlement systems, extended Middle Dorset occupation

RÉSUMÉ. Durant ce premier relevé archéologique approfondi de la côte du Labrador entre le cap Charles et la baie Trunmore, on a découvert 93 articles préhistoriques. Les sites récemment découverts révèlent qu'il y a eu une occupation préhistorique ininterrompue s'étendant du Labrador septentrional jusqu'au littoral nord du Québec et à l'île de Terre-Neuve, avec des radiodatations allant de 5070 ±170 à 1050 ± 50 BP. Des dates provenant de sites du paléoesquimau suggèrent que l'occupation du Labrador méridional durant le Dorset moyen pourrait avoir commencé dès 1940 ± 70 BP et avoir duré jusqu'en 1050 ± 50 BP. Une stratégie détaillée de relevés a montré trois grandes tendances d'utilisation et d'occupation préhistoriques du terrain dans le Labrador méridional: la zone côtière intérieure, en particulier le littoral des plus grandes baies, ne contient pas de traces d'une occupation préhistorique de la côte; la présence sur le littoral de groupes culturels est concentrée à l'embouchure ou près de l'embouchure des baies et près des îles des archipels au large; certains emplacements du littoral représentaient, pour les peuples préhistoriques, des endroits privilégiés quant à l'utilisation du terrain. À un niveau plus spécifique, les sites préhistoriques indiens tendent à être situés dans des lieux protégés, orientés à la fois vers la terre ferme et vers les ressources provenant de l'eau salée. D'un autre côté, les sites de Groswater datant du paléoesquimau et du paléoesquimau supérieur sont nettement orientés vers les îles au large, ce qui suggère une adaptation centrée sur les ressources provenant de l'eau salée. On inclut un bref résumé des sites historiques relevés durant l'étude.

Mots clés: Labrador méridional, sites préhistoriques, histoire culturelle, étude systématique, système indien préhistorique de peuplement de subsistance par opposition au système de peuplement de subsistance du paléoesquimau, occupation prolongée durant le Dorset moyen

Traduit pour la revue *Arctic* par Nésida Loyer.

INTRODUCTION

During the 1991 and 1992 Labrador South Coastal Survey (LSCS) between Cape Charles and Trunmore Bay in southern Labrador (52˚20′N to 53˚45′N; Fig. 1), 135 new sites comprising 156 cultural components were recorded, and 13 previously known sites were revisited (Stopp and Rutherford, 1991; Stopp, 1992, 1995; Stopp and Reynolds, 1992; Table 1). Fifty-nine of these 156 are prehistoric components of an identifiable culture group, and 34 are prehistoric components of uncertain cultural affiliation.

The LSCS represents the first comprehensive archaeological coverage of the coastline from Cape Charles to Sandy Point (southern Trunmore Bay) and is essentially a continuation of the 1986 coastal survey between the Quebec-Labrador border and Cape Charles (Auger and Stopp, 1986). Previous archaeological work in the survey area has been limited to localized testing at the east side of Huntingdon

[1] Department of Archaeology, University of Cambridge, Downing Street, Cambridge, CB2 3DZ, United Kingdom; present address: Historic Resources Division, Government of Newfoundland and Labrador, P.O. Box 8700, St. John's, Newfoundland A1B 4J6, Canada

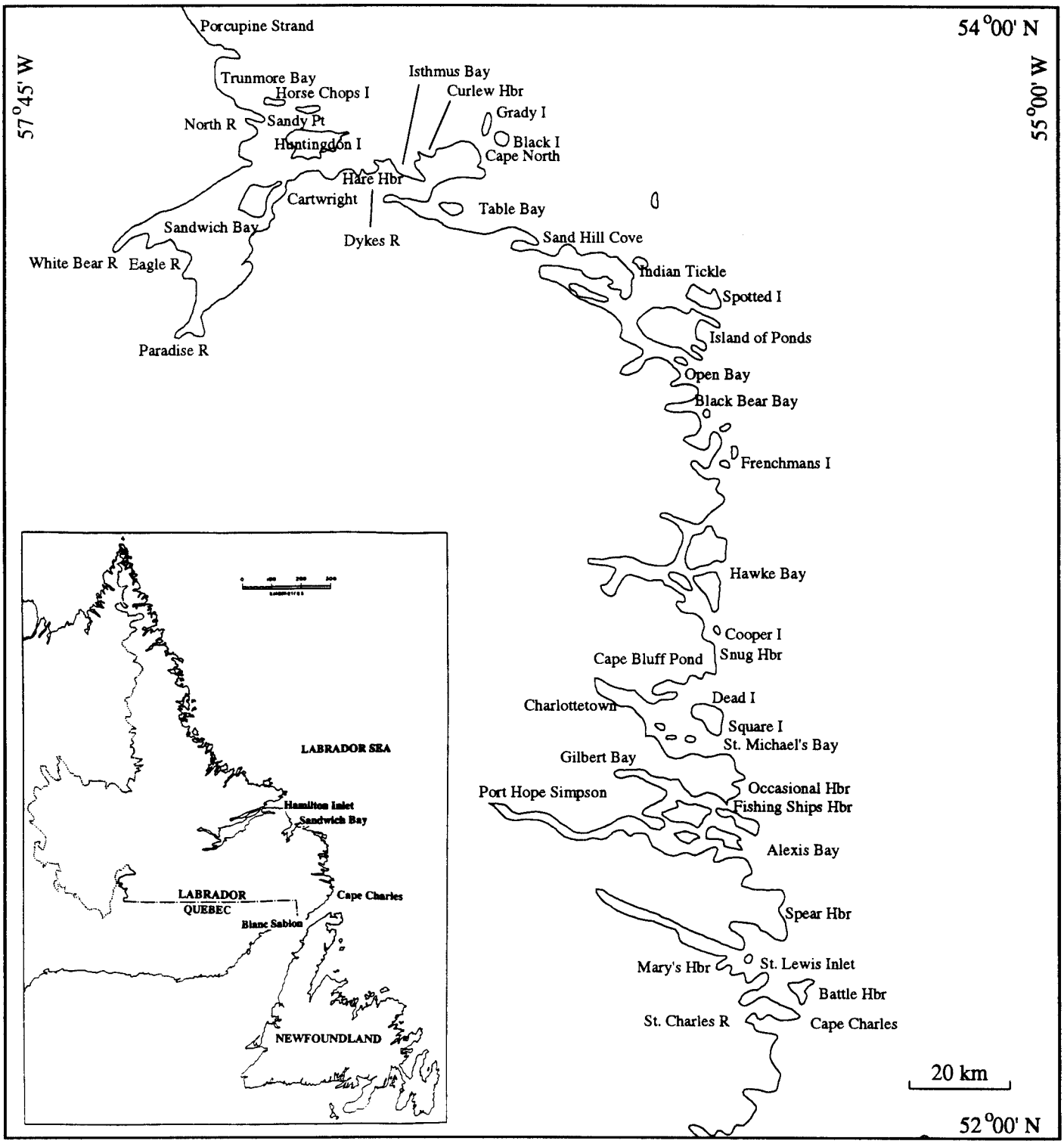

FIG. 1. Area surveyed during the Labrador South Coastal Survey in 1991 and 1992.

Island, Island of Ponds, Battle Harbour, and the Black Tickle archipelago (Fitzhugh, 1982, 1989), Cartwright Island and the community of Cartwright (Penney, 1986), and Cape Charles (Vera et al., 1986).

The project was initiated by the Historic Resources Division of the Government of Newfoundland and Labrador. Its main goals were to define the culture history of this virtually unknown coastal stretch, and to tie the results into existing culture history for southernmost Labrador as well as the Hamilton Inlet area. In this paper, I discuss the 93 prehistoric components found during the survey, focusing on site function and subsistence strategies of each of the prehistoric groups who settled here over the past 6000 years. A very brief summary of the historic sites recorded during the survey is also provided.

TABLE 1. Summary of cultural components.

Cultural Components	Number
Maritime Archaic Indian	12
Intermediate Indian	3
Late Prehistoric Indian	6
Early Palaeoeskimo	2
Late Palaeoeskimo	36
Historic Inuit	6
European	54
Unknown Affiliation[1]	37
Total Components	**156**

[1] Includes components that could be either Historic Inuit or European (two cairn burials and one fish bone midden), as well as components of probable prehistoric affiliation (i.e., cobble beach features).

FIELD METHODOLOGY

The crew of the LSCS numbered five people who were in the field for 10 weeks in both 1991 and 1992. The survey was boat-oriented, landing crews for visual and subsurface survey wherever possible. Test pits were a minimum of 50 × 50 cm in size. Elevations were measured using a hand level with a maximum step of 2 m and sightings no more than 10 m apart. Topographic maps were used to estimate site elevation higher than 15 m above sea level (asl). Finding feasible test locations involved a network of criteria that ranged from the practicable (not in bogs) and obvious (all points of land), to the intuitive (locations that "felt" right). Test locations on the outer coast included topographic features such as points of land, with or without raised terraces; raised terraces anywhere; saddles of land of any elevation between hilly outcrops bridging two bodies of water; areas with ground cover of lichens, crowberry, sea oats, or meadow grasses; surface conditions such as sand, peat, cobble, and gravel, both wind-deflated and undisturbed; proximity to a fresh water source; protected coves not facing the Labrador Sea; and points of land and coves facing the Labrador Sea.

Test locations along the inner coast included mouths of rivulets and streams discharging into the inner bays; the mouths of large rivers at the head of each bay; raised terraces in the nearshore zone; any sand or pebble margins along the shore; and all exposed ground in inner bay communities such as Mary's Harbour, Port Hope Simpson, and Charlottetown. The interior littoral is thickly treed to the water, with few level coastal margins, and the shoreline generally slopes at a steep angle to raised, treed terraces. Reasonably level ground occurs at river mouths and streams, but is frequently boggy. With the exception of a few locations such as Salt Pond Ridge in Spear Harbour, the LSCS crews did not test interior terrain more than .25 km from the coast.

PHYSICAL ENVIRONMENT OF THE SURVEY AREA

The survey area is composed of three vegetational zones: the subarctic tundra of the outer coast, the boreal forest, and the forest-tundra ecotone of the inner coast at the heads of St. Lewis Inlet, Alexis Bay, Gilbert Bay, Hawke Bay, and Sandwich Bay (Fig. 1). There are few areas of significant soil development. Over half the coastal landscape is composed of pre-quaternary rock (primarily granitic gneisses with frequent veins of quartzites), and 14% is backed by cliffs (Woodward-Clyde Consultants, 1980; Fulton, 1986). Littoral gravel and sand deposits occur in Sand Hill Cove and Trunmore Bay. Soil development is largely represented by peat bogs, which formed following Holocene coastal emergence. Increased peat bog frequency may explain the scarcity of sites between Fishing Ships Harbour and Table Bay since the dampness and the insistent presence of blackflies and mosquitoes associated with peat bogs might have restricted warm-weather occupation.

Important geomorphological considerations for the survey area are the extent of isostatic uplift that followed Late Wisconsinan deglaciation and its effects on prehistoric site elevations. As a result of melting and receding glaciers, sea levels increased. The decreasing pressure on the earth's crust resulted in isostatic uplifting, thereby raising the land above its former elevations. The process of uplift continues to this day.

The extent to which isostatic rebound has occurred in the survey area is difficult to determine accurately. Uplift rates vary through time and across space, with greater rates occurring in the period immediately following deglaciation. Variable rates across space have been noted in Hamilton Inlet, where one coastal location has risen approximately 7 m in 4000 years while in the interior a 20–25 m asl terrace was also 4000 years old (Fitzhugh, 1972:30). In St. Lewis Inlet, terraces at and near the mouth are 3 m asl, prompting Christie (1951) to suggest that this coastal stretch was never under glacial load. At the mouths of all major rivers in the St. Lewis Inlet region he observed delta terraces, which commonly occurred at more than one elevation in each locality, and concluded that, although reasonably careful measurements were made of their altitudes, no acceptable correlations were possible between terraces of one locality and any other in this region.

Detailed sea level studies have not been possible for the survey area, largely because of the paucity of radiocarbon dates (with the exceptions of GSC-1284, GSC-1330, GSC-1311 in Sandwich Bay; Fulton, 1986). Clark and Fitzhugh (1992) have developed isobase maps for Labrador covering the time period from 7000 to 3000 B.P.; they point out, however, that the coastal zone between 51˚N and 54˚N, essentially the LSCS survey zone, constituted a major gap in their coverage.

The effects of isostatic uplift are visible throughout the survey area. Even historic period uplift has resulted in marked changes in coastline. For example, in 1770 George Cartwright was able to row between Alexis Bay and Gilbert Bay following a channel west of Cartwright Island in Alexis Bay (Cartwright, 1792, Vol. 1:29; not to be confused with Cartwright Island further north at Isthmus Bay). Two hundred years later, this bypass was no longer a possible route for the LSCS vessel because of inner coast isostatic uplift.

PREHISTORIC OCCUPANCY

The culture history of the survey area includes each of the major culture groups known for southern Labrador. Maritime Archaic sites were recorded, as were sites from the Early and Late Palaeoeskimo periods, Intermediate Indian sites, and sites of the Late Prehistoric Indian period (Table 1). The value of culturally diagnostic tools and raw materials cannot be underestimated in a large-scale survey such as the LSCS. There would be many more prehistoric sites in the "Unknown Affiliation" category (Table 1) were it not for the diagnostic links of a side-notched endblade with Groswater groups, for example, or the strong association of Ramah chert with Late Prehistoric Indian groups. Radiocarbon dating can also solve the problem of dubious diagnosis; however, it fails in instances of small, unattributable assemblages where two or more cultures might be contemporaneous, i.e, distinguishing between late Archaic and Intermediate Indian, or whether a carbon-rich but lithic-poor site is Middle Dorset or affiliated with the Daniel Rattle complex. Thirty-four prehistoric sites fall in the "Unknown Affiliation" category precisely because they yielded too little information and are at negligible elevation (in the survey area, sites dating from the Intermediate Indian period through to the European period occur within similar elevation ranges). Indeed, many sites in the Late Palaeoeskimo category yielded signature raw materials in the form of chipping flakes, but it was not possible to place them into any particular phase. Identifying the potential cultural significance of anonymous sites forces us to look outside the culture historical framework for clues to the early inhabitants of Labrador. Although culture historical identification continues to be a necessary focus of archaeology in Labrador, the generic prehistoric sites can nevertheless provide glimpses into subarctic coastal adaptation.

Maritime Archaic Period

Glacial ice withdrew from the Strait of Belle Isle by 10 000 B.P. and from points in central Labrador such as Hopedale and Davis Inlet as late as 8000 B.P. (Clark and Fitzhugh, 1992). Following deglaciation, coastal Labrador went through a succession of vegetation phases beginning with tundra and sedge-tundra, succeeded by birch and alder shrub, then birch and fir, and finally spruce (Fitzhugh, 1972, 1978a; Short, 1978). The Maritime Archaic Indians appear to have spread northward in the wake of alder expansion, which reached Hamilton Inlet by 7000 B.P., not far in advance of Indian groups. Coinciding with Maritime Archaic development and northern population expansion was a comparatively warm postglacial climate for the Northeast, dated to between 7000 and 4000 B.P.

Twelve Maritime Archaic sites were recorded in the survey area (Fig. 2, Table 2). They appear to lack house forms and middens and consist of thin scatters of artifacts. Assemblages are represented mainly by the white and red quartzites so characteristic of early Maritime Archaic sites. Site elevations tend to be higher than those of sites from later periods, and, with few exceptions, sites are situated in protected locations away from the outer coastline. Site locations suggest access to inner coast freshwater resources while also being relatively close to the outer coast. Access to the interior is suggested by site proximity to major river systems.

The most extensive Maritime Archaic representation is in Spear Harbour, where a short isthmus protected by highlands provides a sheltered location with access to the outer sea, to protected waters of nearby small bays, and to the interior. Salt Pond Ridge 1 (FcAw-3), one of the Spear Harbour sites, is a quarry site for white and red quartzites and for quartz crystal. Unworked nodules, flakes, and biface fragments were recovered from a raised terrace approximately 1 km inland. Salt Pond Ridge 1 has an inner bay orientation and is within walking distance of two other Maritime Archaic quartzite surface distributions, Spear Harbour 1 (FcAv-1) and Spear Harbour 3 (FcAv-3). It is also close to high elevation cobble pit features (FcAw-4) on the opposite shore of Salt Pond Ridge, which undoubtedly served as storage pits, and whose elevation of 15 m asl suggests Archaic usage (cf. Stopp, 1994). A date of 5070 ± 170 B.P. (Beta 48303) was obtained from a test pit yielding quartzite flakes and located on the opposite shore of Spear Harbour, in the area of the Pardy site (FcAv-4), a large Palaeoeskimo component. These sites are near the mouths of both Gilbert Bay and Alexis Bay, with further entry into the interior via Alexis and Gilbert Rivers. Another Maritime Archaic site, Occasional Harbour 1 (FdAx-1), yielded quartz and quartz crystal material from blowouts. The site is situated 5 km within the bay of that name. The site of American Cove 1 (FgAx-1), which also yielded quartz and quartzite flakes, is situated approximately 8 km inside the mouth of Hawke Bay. Its location gave interior access via the Hawke River as far inland as the 300 m asl plateau at the head of Northwest Feeder, and potentially to Paradise River and the head of Sandwich Bay. Two red quartzite biface fragments were also found in test pits at the Flagstaff Hill site (FkBg-6) overlooking the community of Cartwright in Sandwich Bay and are associated with three cobble beach pits.

Labrador Sea orientation is suggested by quartzite scatters at Snug Harbour (FfAx-1), Harper Island 1 (FgAw-2), located at the mouth of Caplin Bay, and Frenchman Harbour 1 (FhAw-2). A ground slate adze and celt recovered with Intermediate Indian material at Porcupine Strand 3 in Trunmore Bay (FkBg-9) may also represent a Maritime Archaic presence.

Higher-elevation terraces were examined throughout the survey area, such as the highlands of Cape North, Black Island, Indian Tickle, Spotted Island, Hare Islands in Hare Harbour, and the isthmus between Hare Harbour and Isthmus Bay. An explanation for the scarcity of Maritime Archaic sites may be found in regional uplift. Extrapolating from the Clark and Fitzhugh (1992) Groswater Bay isobase curve, the 6000 B.P. palaeoshoreline is today's 12 m asl elevation. The 12 m contour for much of the survey area suggests that the Maritime Archaic period coastline is 0.5 – 1.5 km inland from today's coast. In Open Bay, Black Bear Bay, or Shoal Bay, the Archaic period coastline was as steep 6000 years ago as it is

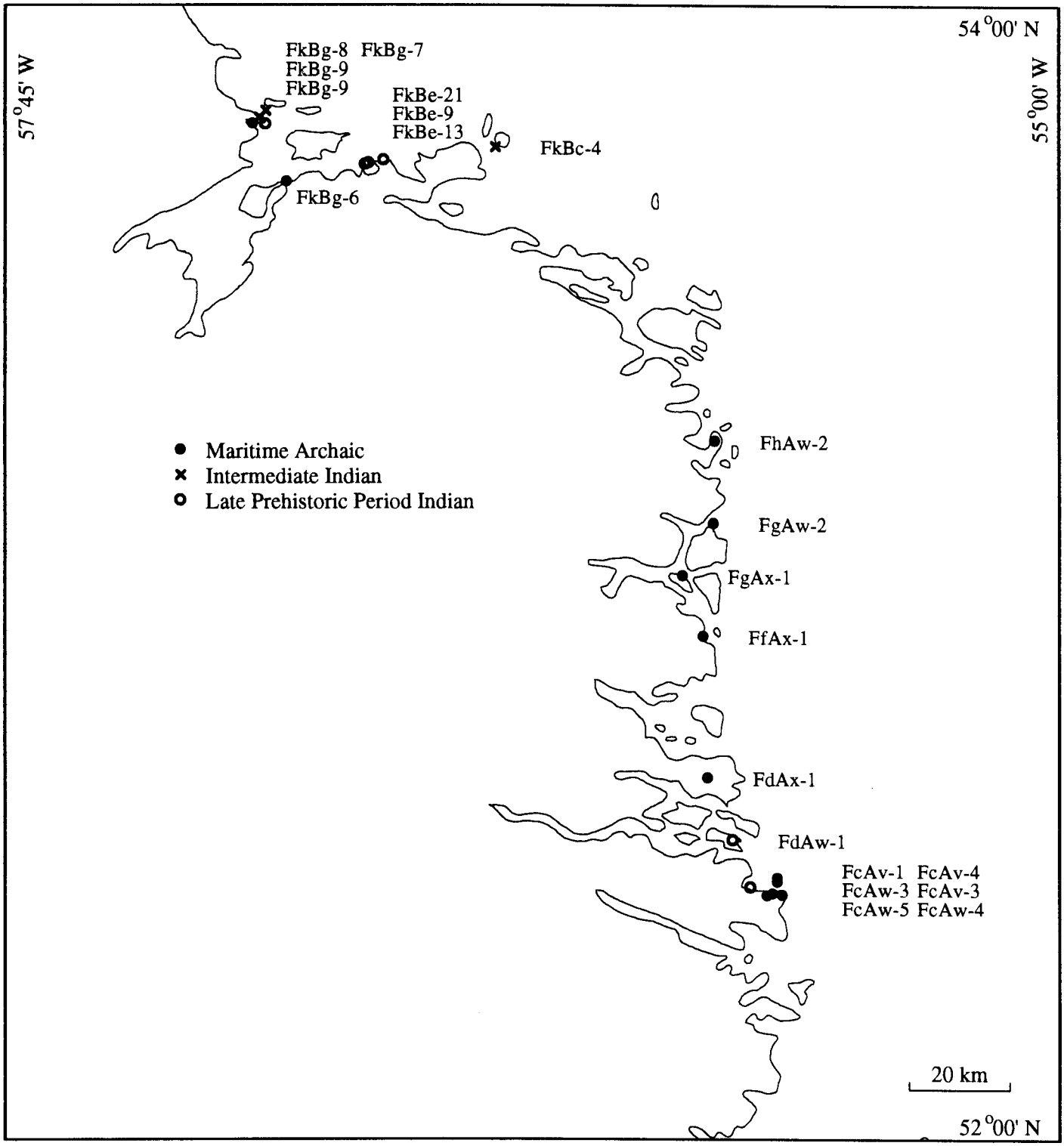

FIG. 2. Maritime Archaic, Intermediate Indian, and Late Prehistoric Indian Period components.

today. Farther north, the peninsulas which form Curlew Harbour and Isthmus Bay were much steeper during the Archaic period than today and thus unlikely occupation areas. These peninsulas were nevertheless fully surveyed in 1992, and no early sites were found. In Sandwich Bay, the Maritime Archaic Flagstaff Hill site (FkBg-6) was once on an island that today forms the Cartwright community peninsula, while the remainder of Sandwich Bay had an extremely steep shoreline. Between Gilbert Bay and Sandwich Bay, the contemporary shoreline was under water 6000 years ago, resulting in a steep-sided Archaic period coastline. Potential Maritime Archaic site locations may be sought further inland, such as along the Dykes River to Sand Hill Cove system of ponds, or in the highlands of the Paradise, Eagle, and White

TABLE 2. Cultural components - 1991/92 LSCS.

Borden #	Site Name	Elevation (m asl)	Site Size (m^2)[1]
Maritime Archaic:			
FcAv-1	Spear Harbour 1	18	25
FcAv-3	Spear Harbour 3	24	20
FcAv-4	Pardy	12	15
FcAw-3	Salt Pond Ridge 1	15	500
FcAw-4	Salt Pond Ridge 2	15	100
FdAx-1	Occasional Harbour 1	5	16
FfAx-1	Snug Harbour 1	12	25
FgAw-2	Harper Island 1	12	16
FgAx-1	American Cove 1	14.5	5000
FhAw-2	Frenchman Harbour 1	3.3	55
FkBg-6	Flagstaff Hill	18	25
FkBg-9	Porcupine Strand 3	4–6	2000
Total Maritime Archaic			12/12.9%
Intermediate Indian:			
FkBc-4	Black Island/Grady Harbour 3	4.4	415
FkBg-8	Porcupine Strand 2	4–6	2000
FkBg-9	Porcupine Strand 3	4–6	2000
Total Intermediate Indian			3/3.2%
Late Prehistoric Indian:			
FcAw-5	Mosquito Cove 1	7.7	25
FdAw-1	Black Haired Bight 1	4	4
FkBe-9	Hare Harbour 1	3.4	300
FkBe-13	Hare Harbour 5	15.0	140
FkBe-21	Fish Cove 1	2.5	6
FkBg-7	Porcupine Strand 1	5.1	500
Total Late Prehistoric Indian			6/6.5%
Early Palaeoeskimo:			
FeAw-1	Square Islands 1	4.3	24
FkBc-2	Black Island/Grady Harbour 2	5	25
Total Early Palaeoeskimo			2/2.2%
Late Palaeoeskimo:			
FbAv-7	Cape Charles 2	17	620
FbAv-9	Wall Island 2	12	1
FbAv-11	Caribou Run 1	1.4	4
FbAv-12	Sand Cove 1	3	400
FbAw-6	Assizes Island 1	4	400
FbAw-7	Assizes Island 2	5	200
FcAv-4	Pardy	15	62,500
FcAv-5	Sealing Bight 1	12	6
FdAw-2	Granby Island 1	2.5	3000
FdAw-3	Granby Island 2	8	12
FdAw-4	Sandy Hook 1	5	225
FdAw-5	St. Francis Harbour Bight 1	5	25
FdAw-8	Fishing Ships Harbour 1	7	200
FeAw-3	Butler Island 1	3	10
FeAx-3	North Island 1	5	6000
FfAw-1	Cooper Island 1	3	4000
FfAw-2	Cooper Island 2	4	40
FfAx-1	Snug Harbour 1	6.5	25
FhAw-5	Fling Islands 1	21	50
FhAw-6	Frenchmans Run 1	3.4	4
Late Palaeoeskimo: continued			
FhAw-7	Frenchmans Island 1	4.9	50
FhAw-8	Seine Island 1	4	4
FhAw-11	Bed Head 1	4	20
FjAx-5	Lynch Island 1	3.5	6
FkBc-1	Table Bay 1	3	2
FkBc-4	Black Island/Grady Harbour 3	4.4	400
FkBc-6	Little Black Island 2	4.2	12
FkBc-7	Grady Island 1	5	25
FkBc-8	Grady Island 2	12	500
FkBc-11	Black Island/Grady Harbour 4	3	25
FkBd-16	Table Bay 2	5	16
FkBe-19	Flossie Curl 1	3.1	300
FkBg-2	Huntingdon Island 3	8.1	4
FkBg-4	Huntingdon Island 6	4.6	25
FkBg-5	Coastguard Radio Station	11	1000
FlBg-3	Horse Chops Island 3	4.9	100
Total Late Palaeoeskimo			36/38.7%
Prehistoric Sites of Unknown Affiliation:			
FbAv-10	Caribou Cove 1	3	200
FbAv-13	Great Caribou Island 1	2.5	4000
FbAv-14	Mouse Island Tickle 1	9.8	660
FbAw-8	Captain Jack's Island 1	3.7	30
FbAw-9	Kyer Cove 1	6.2	10
FcAw-1	Fox Harbour 1	2.3	4
FcAw-2	Fox Harbour 2	2.5	50
FdAw-1	Black Haired Bight 1	4	4000
FfAw-3	Venison Island 1	3.5	2
FfAw-4	Cox Cove 1	3	2
FgAw-5	Caplin Bay 1	4.5	25
FhAw-1	Cobble Beach 1	3.5	50
FhAw-4	Salmon Point 1	6	20
FjAw-1	Spotted Island 1	24	200
FjAx-4	Salmon Point 2	3.75	12
FkBc-4	Black Island/Grady Harbour 3	10	100
FkBc-9	Mullins Cove 1	12	12
FkBd-5	Cape North 1	5.3	2
FkBd-6	Blackguard Bay 2	10	40
FkBd-11	Curlew Harbour 1	7.6 and 10	50
FkBd-13	Table Bay 5	4	18
FkBd-14	Table Bay 4	3.5	4
FkBd-15	Table Bay 3	15	16
FkBd-17	Table Bay 6	3	6
FkBe-7	Hare Islands 1	3	20
FkBe-15	Hare Harbour 7	10 and 20	25
FkBe-20	Flossie Curl 2	7	8
FkBe-22	Uncle Pompey's Island	12–15	2000
FkBf-1	Huntingdon Island 1	4	60
FkBf-2	Huntingdon Island 2	6–8	2000
FlBf-5	Independent Island 1	4.5	4
FlBg-1	Horse Chops Island 1	3.5	90
FlBg-2	Horse Chops Island 2	6.5	9
FlBg-4	Woody Island 1	3.4 and 7.5	500
Total Unknown Sites			34/36.6%
Total Sites			**93**

[1] Site size reflects the area across which prehistoric material was recovered. Site size is an inconclusive variable and should be considered in conjunction with the size of the collected assemblage. A large site, such as FkBe-19, for instance, was heavily test pitted and only four flakes were recovered across 300 m^2. FcAv-4, on the other hand, is also a large site, but with cultural material in abundance across an area 250 × 250 m. In this case, only a sample of material was collected. Several of the listed sites have historic components which are not reflected in the size category.

Bear Rivers, which flow into Sandwich Bay. A private collection of quartz crystal and white quartzite secondary and chipping flakes shown to the author in 1991 was collected from sandy terraces along Cape Bluff Pond. Cape Bluff Pond is 5–10 km west, or inland, from Snug Harbour, and the collection attests to Maritime Archaic presence in the unsurveyed interior. Evidence for interior occupation and resource utilization during the Archaic period is growing as

more archaeology is done in the interior. Sites such as the Northwest Corners site inland from Big Bay on the Hunt River (Fitzhugh, 1986), Nomoshoom in the Voisey Bay hinterland (Ryan and Biggin, 1989), and Cape Bluff Pond suggest an Archaic interior resource strategy accompanied by a strong coastal subsistence round.

Intermediate Indian Period

The Intermediate Indian occupation is one of the least understood periods of Labrador culture history largely because we have only small numbers of diagnostic tools from a modest number of sites. Prior to the LSCS, Intermediate Indian material had been identified between Hamilton Inlet and Hebron (Fitzhugh, 1972; Nagle, 1978) with a tentative presence in southernmost Labrador (Harp, 1963; McGhee and Tuck, 1975). The few sites found during the LSCS are thus important additions to this relatively scanty database.

The idea of a distinct Indian occupation between the Maritime Archaic and the Late Prehistoric Indian periods was first introduced by Fitzhugh (1975) on the basis of regional sequences for North West River and Groswater Bay in Hamilton Inlet. Nagle (1978) reported further sites on the central Labrador coast between Groswater Bay and Hebron, which resembled the Hamilton Inlet assemblages in terms of raw material and tool types but differed in greater site size and evidence of longer or more intense occupations. The Intermediate Indian period dates roughly from 3800 to 1500 B.P. The shrub tundra characteristic of most of Labrador during the Archaic period gave way to open spruce woodland by 4000 B.P. during a period of climatic warming. Climatic cooling from about 3000 B.P. resulted in a cooler environment, inhibiting treeline expansion northwards. Climatic cooling also coincided with marine cooling, as well as modern positioning of the Labrador Current. Except for brief periods of warming, particularly between 1500 and 600 B.P., these conditions have continued to this day (Short, 1978). The beginning of the Intermediate period is, interestingly, marked by the southward migration of Early Pre-Dorset Palaeoeskimo populations into the Nain and Okak regions, heralding a lengthy period of Indian and Eskimo coexistence on the Labrador coast.

Intermediate Indian sites were restricted to the northernmost extent of the survey area. Two were found in the sand dune environment of southern Trunmore Bay at Sandy Point (Fig. 2, Table 2). No Intermediate Indian sites were identified between Cape North and the Strait of Belle Isle coast. Assemblages comprise quartz crystal, red and white quartzites, and some Ramah and dark grey cherts. Scattered fire-cracked rock, charcoal bits, and calcined bone were also recovered amongst the lithics. Extensive wind erosion evidenced by deep blowouts along the Trunmore Bay coast makes it impossible to link hearth debris with cultural material (cf. Plumet et al., 1994). Vestiges of an eroding cultural level in one of the blowouts indicate that original site elevations may once have been 4 – 6 m asl.

A Brinex Complex (3200 – 3000 B.P.; Fitzhugh, 1972; Nagle, 1978) side-notched, convex-based biface identified from FkBg-8 (Porcupine Strand 2) at Trunmore Bay (Fig. 3) resembles one from the Red Ochre site in Hamilton Inlet (Fitzhugh, 1972:276, Plate 53c). The remaining assemblage consists of scrapers and flakes of red and white quartzites and some Ramah chert.

Possible Charles Complex (3000 – 2800 B.P.) linear flakes retouched to serve as scrapers were identified from Porcupine Strand 3 (FkBg-9). The scrapers are crudely manufactured, with one or several arrises, high dorsal faces, and two or more retouched edges. They correspond with elongated flake forms from Charles Complex sites on the central Labrador coast (Nagle, 1978). Raw materials include banded light, dark grey and patinated cherts, but white quartzite predominates. The tool types also include a small selection of biface fragments (Figs. 4 and 5).

A third possible Intermediate Indian component was recorded at Black Island/Grady Harbour (FkBc-4). A cluster of white quartzite flakes and a single biface proximal fragment with an ovate base were part of this surface distribution.

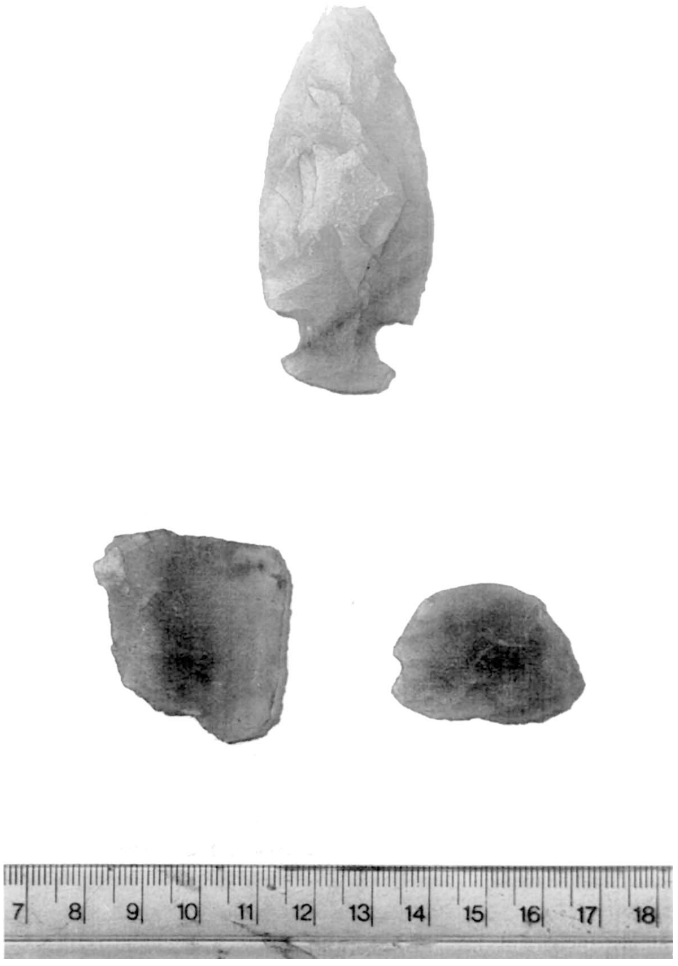

FIG. 3. Artifacts from the Intermediate Indian Porcupine Strand 2 site (FkBg-8). Top row: Ramah chert side-notched biface with convex base; bottom row: Ramah chert retouched flake scrapers.

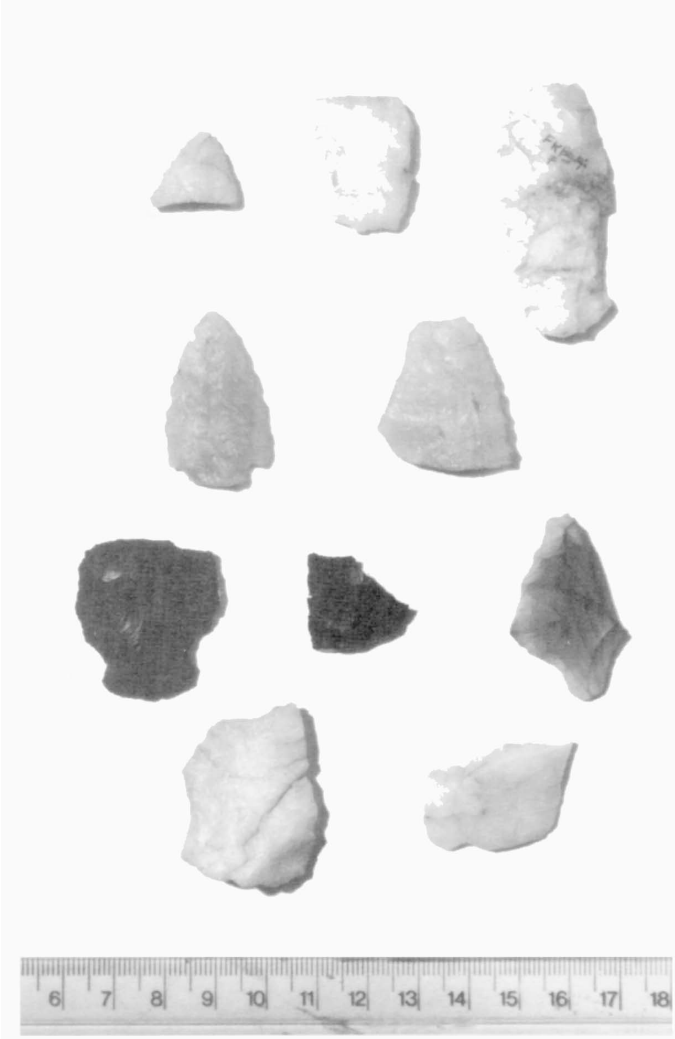

FIG. 4. Artifacts from the Intermediate Indian component of the Porcupine Strand 3 site (FkBg-9). Top row, left to right: biface tip, proximal half of biface, biface with distal tip missing; all of quartzite; second row, left to right: quartzite biface and biface midsection; third row, left to right: chert biface base, chert biface midsection, possible biface fragment of chert (these have dubious Intermediate Indian origin); bottom row, left to right: quartzite preform and biface base.

FIG. 5. Artifacts from the Intermediate Indian component of the Porcupine Strand 3 site (FkBg-9). All are elongated retouched flakes of chert except the bottom right artifact, which is a chert punch.

Scrapers are the most common tool type recovered from FkBg-8 and 9 (Porcupine Strand 2 and 3) at Trunmore Bay. Their roughly defined forms and working edges suggest expediency tools, produced for specific on-site activities, perhaps in the context of a large number of resources that required processing in relatively short periods of time. Indian groups probably came to Trunmore Bay to acquire a variety of seasonal resources. Caribou inhabit the area year-round, while trout and salmon abound in the North River and timber is plentiful along its banks. Seabirds, shorebirds, and saltwater resources such as walrus and seal were also readily available. The Trunmore Bay and Black Island sites extend Intermediate Indian presence southward from Hamilton Inlet. The stylistic and raw material similarities with Hamilton Inlet sites (Fitzhugh, 1972), however, suggest that the same population was making full use of regional resources.

The absence of Intermediate Indian sites between Sandwich Bay and the Strait of Belle Isle may be explained by the absence of major river systems along this bleak stretch of coastline. The Trunmore Bay and Black Island sites are probably the coastal vestiges of a seasonal movement from interior to coast by Indian groups following the Paradise, North, or Eagle Rivers from the interior caribou grounds or the Lake Melville area. Intermediate Indian sites recorded in the interior throughout the Quebec-Labrador peninsula support the premise of an interior-coastal seasonal round at this early period (Samson, 1978; Denton and McCaffrey, 1985; Denton, 1988; McCaffrey, 1989; McCaffrey et al., 1989; Ryan and Biggin, 1989).

Late Prehistoric Indian Period

The final period of prehistoric Indian occupation in Labrador is characterized by Daniel Rattle complex sites (1750–950 B.P.), and Point Revenge complex sites (1250–300 B.P.). This occupation was initially identified through the study of Point Revenge stylistic material in the Hamilton

Inlet area (Fitzhugh, 1972, 1978b). Subsequent studies have significantly expanded its temporal and geographical boundaries and have demonstrated interrelationships between late Indian and Palaeoeskimo peoples in central and northern Labrador, as well as cultural continuity between late Indian peoples and the contemporary Innu of Labrador (Fitzhugh, 1981; Thomson, 1982; Loring, 1983, 1985, 1988, 1989, 1992).

Late Prehistoric Indian site locations and assemblages suggest a mixed economy not dissimilar to that of the Intermediate Indian period. These people were involved in an intricate exchange network in Ramah chert that extended from the Ramah Bay area as far afield as southern Quebec and New England, and included Middle Dorset and Late Dorset Palaeoeskimo groups in Labrador. Indeed, Late Prehistoric Indian assemblages in Labrador consist almost entirely of Ramah chert flaking debris, relatively small numbers of Ramah tools, and minute amounts of quartz. There is currently no evidence of base camps in the form of structures, carbon-rich cultural layers, or middens, and hearths are rare. Faunal material has been found, however, at sites on the Caniapiscau plateau in central-interior Labrador, where calcined caribou bone fragments and beaver bone occur regularly in hearth features, and porcupine, waterfowl, and fish are present in lesser quantities (Denton, 1988).

The Late Prehistoric Indian sites recorded by the LSCS occur near sea level (Fig. 2, Table 2). Large primary flakes with cortex indicate that unprocessed Ramah chert was transported to site locations. None of the sites yielded diagnostic tools, and cultural affiliation is based on the configuration of raw material, elevation, and radiocarbon dates. Lithic counts are given to emphasize the virtually exclusive use of Ramah chert by these people.

Two radiocarbon dates were obtained from Late Prehistoric Indian sites. The Mosquito Cove 1 (FcAw-5) site, one of several sites in the Spear Harbour area, yielded a date of 1220 ± 100 B.P. (Beta-48301) associated with an extremely large amount of Ramah flaking debris (602 Ramah chert flakes, of which 188 retain cortex). An assemblage of 101 Ramah chert flakes and a single quartz crystal flake at Fish Cove 1 (FkBe-21) in eastern Hare Harbour yielded a radiocarbon date of 1580 ± 90 B.P. (Beta-56251) from a well-defined hearth feature.

Four further sites are identified as *probable* Late Prehistoric Indian sites on the basis of raw materials and near-sea-level elevation. Black Haired Bight (FdAw-1) includes a historic component, six cobble beach feature pits, as well as a small (18-flake) Ramah concentration 50 m south of the other components. Both surface collection and test pitting yielded only Ramah flakes. Porcupine Strand 1 (FkBg-7) is a surface distribution of Ramah flakes (9 flakes, all with cortex) eroded from a peat stratum approximately 60 cm below surface. Hare Harbour 1 (FkBe-9) has a historic component and an extensive Ramah flake distribution disturbed by long-term gardening activities. A small, undisturbed portion of the original site was discovered adjacent to the garden (311 Ramah flakes, of which 13 retain cortex), and a large, unstemmed Ramah biface from the garden was viewed in a private collection in Cartwright. Hare Harbour 5 (FkBe-13) is a small Ramah scatter (36 flakes, of which 3 have cortex) atop the southern tip of East Hare Island in Hare Harbour. Test pits were shallow, reaching bedrock at 3 cm, and site orientation is towards Hare Harbour and the other mainland Hare Harbour sites.

These Late Prehistoric Indian sites share similarities with preceding Indian occupations. Settlement in the inner island zone gave resource flexibility, furnishing access to both freshwater and terrestrial resources and to resources of the Labrador Sea. For instance, sites FkBe-9, 13, and 21 are situated in the mouth of Sandwich Bay, but are oriented westward. This vantage ensured access to saltwater resources such as seals, fowl, and fish, as well as to the interior resources to the south along the Dykes River and the Sand Hill Cove catchment system (the Sand Hill River is one of the main salmon rivers in Labrador). Late Prehistoric Indian sites recorded during the LSCS are small and sporadically spaced, suggesting impermanent coastal presence as part of a gathering-and-hunting cycle that did not involve strong economic emphasis on resources of the Labrador Sea. This pattern coincides with Late Prehistoric Indian period evidence from coastal northern Labrador (Loring, 1992), as well as with evidence from the Quebec North Shore and southernmost coastal Labrador (Auger and Stopp, 1986; Pintal, 1989; Loring, 1992).

Despite the lack of faunal evidence, the locations of Late Prehistoric Indian sites in the survey area coincide with Loring's (1992) description of these people as maintaining a diversified economy based on both terrestrial and maritime resources across a broad expanse of the Northeast. The small number of tools from Late Prehistoric Indian sites throughout coastal Labrador could in some cases be the result of brief occupation periods, but is more likely to be the negative evidence of warm-season occupation. During the warmer months, gathering and fishing were key economic activities. These activities—as well as related technologies such as basketry, net weaving, and the fashioning of bone and wood tools such as fish hooks, lures, and fish spears—leave archaeological signatures only inasmuch as they are implied by site locations.

Palaeoeskimo Tradition

The development of Palaeoeskimo culture history in Labrador became possible following surveys in Saglek between 1969 and 1971 (Tuck, 1975, 1976) and in the area between Hamilton Inlet and Saglek from the late 1960s to the late 1980s (Fitzhugh, 1976a, 1976b, 1981, 1986). Tuck's (1975, 1976) culture historical sequence was further expanded by projects carried out in 1974 in Nain (Fitzhugh, 1976b) and in the Okak area (Cox, 1977, 1978). Together, these surveys revealed a long Palaeoeskimo sequence for coastal Labrador from Groswater Bay northwards, spanning the period from approximately 3800 to 900 B.P. Useful summations of the Palaeoeskimo occupation of Labrador are provided by Cox (1978), and Tuck and Fitzhugh (1986). Simplified, the

culture historical sequence for Palaeoeskimo occupation in Labrador is divided into Early and Late Palaeoeskimo periods. The Early Palaeoeskimo period represents the first Arctic-adapted peoples to enter Labrador at about 4000 B.P. This culture is referred to as Independence 1 or Early Pre-Dorset in northernmost Labrador, and for the remainder of Labrador it is variously referred to as Early Pre-Dorset or Pre-Dorset. This occupation was followed by the Groswater Palaeoeskimo, also referred to in the literature as the Late Pre-Dorset, Transitional or Terminal Pre-Dorset, and Groswater Dorset. The Late Palaeoeskimo tradition began about 2500 B.P. and represents a widespread Dorset occupation of coastal Labrador and the island of Newfoundland, although it began later on the island, around 1900 B.P. The Late Palaeoeskimo tradition is divided into three phases, namely Early Dorset (2500–2400 B.P.), represented only in northern Labrador, Middle Dorset (1900–1100 B.P.), represented throughout Labrador and Newfoundland, and Late Dorset (1100–600 B.P.), again represented only in northern Labrador (for dating schemes, cf. Cox, 1978; Tuck and Fitzhugh, 1986; Renouf, 1991, 1994).

The appearance of the first Early Palaeoeskimo peoples in northern Labrador approximately 4000 years ago seems to correspond with the onset of an extended cold episode, wetter conditions, and southward withdrawal of the treeline. This cold episode also marks the end of Maritime Archaic culture in central and northern Labrador. Cooling continued until approximately 2100 B.P., introducing coastal and marine conditions similar to those of the eastern Arctic. This cooling trend is thought to have facilitated the southward expansion of Arctic-adapted Palaeoeskimo groups. Middle Dorset expansion throughout Labrador and Newfoundland occurred during a warming trend about 2000 years ago (Fitzhugh, 1972).

Early Palaeoeskimo Tradition

The Groswater phase of the Early Palaeoeskimo tradition was defined by Fitzhugh (1972, 1976a) from small sites located on outer islands and seaward exposures along the northern coast of Groswater Bay. Groswater sites in Labrador are few in number, small, and sparing of cultural material. After a quarter century of archaeological survey work, a picture is emerging of Groswater as widely dispersed marine mammal hunters with interior resource interests (Fitzhugh, 1972; Cox, 1978; Renouf, 1993, 1994). The Postville Pentecostal site represents the only detailed excavation of a site of this period in Labrador (Loring and Cox, 1986). It remains an unusual site because of its inland orientation, evidence of structural remains, and a relatively rich material culture assemblage. For the coast south of Sandwich Bay, Groswater components have previously been recorded at Battle Harbour (Fitzhugh, 1982), at Deer Island, south of Carroll Cove in the Strait of Belle Isle (Auger and Stopp, 1986), and in the Blanc Sablon area (Pintal, 1994; Plumet et al., 1994). Groswater occupation is dated between 2800 and 2100 B.P., with a few new radiocarbon dates as late as 2000–1900 B.P. from the Phillips Garden East (Kennett, 1990; Renouf, 1993, 1994) and Phillips Garden West (Renouf, 1994) sites at Port au Choix on the island of Newfoundland.

Two Groswater components were recorded during the LSCS (Fig. 6, Table 2). Square Islands 1 (FeAw-1) is a small site on a saddle of land between Square Islands Harbour and St. Michael's Bay, and is identified as Groswater on the basis of a single side-notched, plano-convex endblade of Ramah chert. A patinated chert microblade and a second endblade fragment of Ramah chert were also recovered. The flake assemblage consists of Ramah chert, red/brown chert, black and green cherts, and quartz crystal. The presence of red/brown and Ramah cherts is consistent with Groswater raw material preferences at the Postville Pentecostal site (Loring and Cox, 1986).

A second Groswater component was recorded farther north on the eastern side of Black Island, 7 km east of Cape North. Black Island/Grady Harbour 2 (FkBc-2) is also a small campsite, which yielded quartz crystal flakes and core fragments, and Ramah chert from an occupation layer 18–22 cm below surface. A sample of charcoal from the cultural lens gave a date of 1910 ± 100 B.P. (Beta-56247). A bi-pointed, ovate sideblade of Ramah found on the surface corresponds with Groswater forms from the Phillips Garden East site (Renouf, 1993, 1994), as well as with sideblades from the Postville Pentecostal site (Loring and Cox, 1986). The radiocarbon date suggests a terminal Groswater affiliation. It corresponds well with similar late dates from the Phillips Garden East site, which prompted Kennett (1990) and Renouf (1993, 1994) to suggest a prolongation of the Groswater phase from 2800 B.P. to 1900 B.P.

Both Groswater sites are situated on outer islands with an unimpeded view of and access to the open sea. These characteristics, as well as the side-notched endblade's association with harpooning (Renouf, 1987, 1994), point to marine mammal hunting. The scarcity of tool types relative to the large amount of flaking debris and the apparent absence of structures at these sites correspond with the observation by Loring and Cox (1986) that Groswater outer island sites are "impoverished." This is undoubtedly a direct function of a highly mobile settlement-subsistence system involving brief use of outer island sites.

Late Palaeoeskimo Tradition

Late Palaeoeskimo sites in the survey area outnumber those of other prehistoric groups (36 sites, or 38.7%) (Fig. 6, Table 2). The majority of these sites are small, subsurface deposits found through test pitting and are discussed following a description of the radiocarbon-dated sites (Table 3).

Cooper Island 1 (FfAw-1) is located on the north side of Cooper Island. Two wood charcoal samples from a hearth feature yielded dates of 1840 ± 70 B.P. (Beta-48305) and 1940 ± 70 B.P. (Beta-48306). The hearth consisted of charcoal concentration, burned fat, and fire-cracked rock associated with flakes of cream, brown, grey, mottled blue/black, and Ramah cherts. Bone preservation at this site appears to be

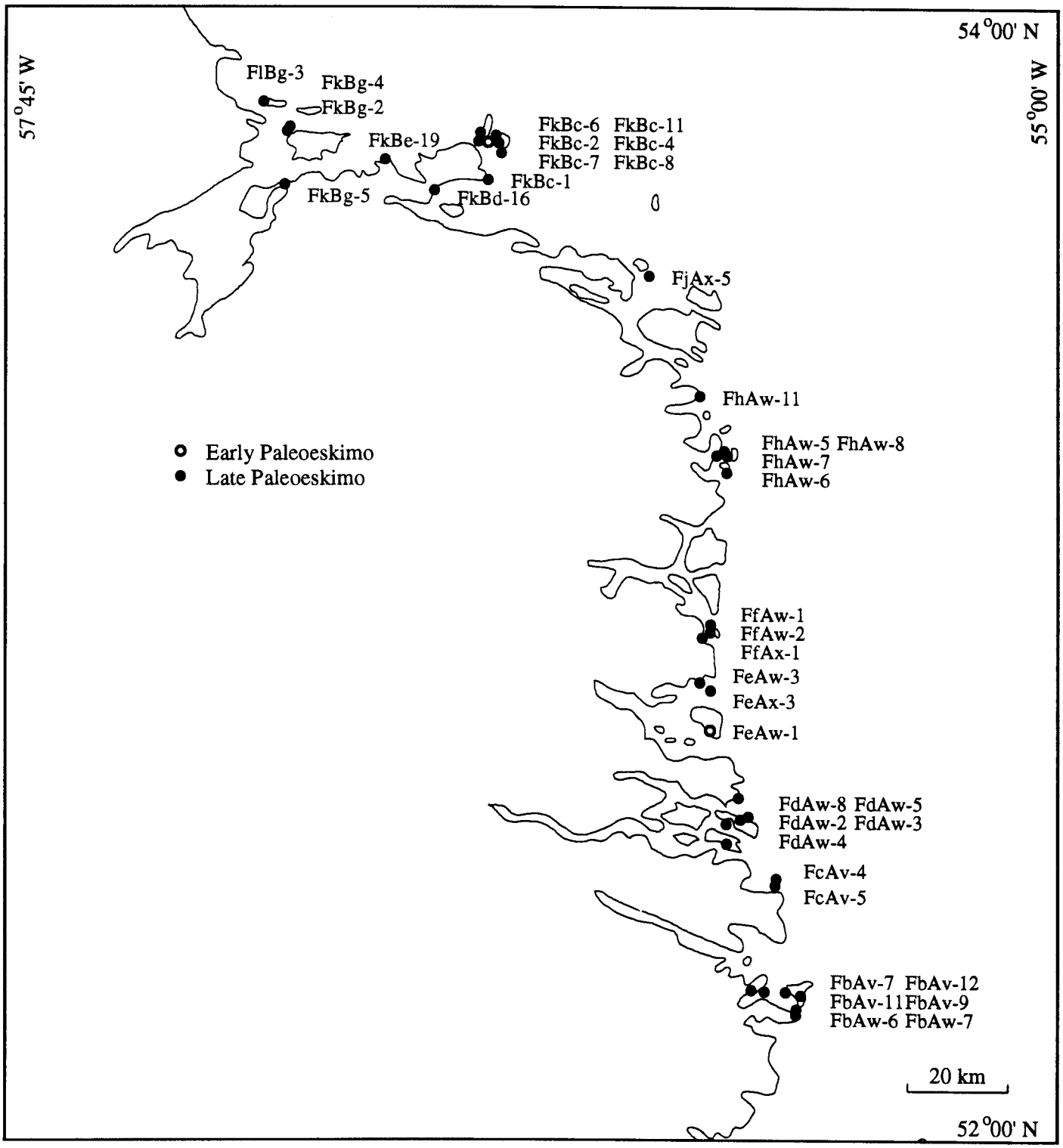

FIG. 6. Early and Late Palaeoeskimo Tradition components.

excellent, and seal bone fragments were recovered from several test pits. Further cultural material includes two microblades of brown and Ramah chert, a patinated chert tip flute spall, the distal tip of an amber chalcedony biface, and a quartzite endscraper. The former date is on carbonized wood from a test pit containing burnt fat and may be affected by old carbon contamination. The latter date is from an uncontaminated sample. Tool types and raw materials suggest a Middle Dorset origin for Cooper Island 1. The radiocarbon dates, however, place it either very late in the Groswater phase, or within the poorly understood transitional period between Early and Middle Dorset phases.

Little Black Island 2 (FkBc-6), in the Grady Islands archipelago at the mouth of Sandwich Bay, also yielded an

TABLE 3. Radiocarbon dates for Palaeoeskimo sites (in chronological order).

Borden Number	Site Name	Date (B.P.)
FfAw-1	Cooper Island 1	1940 ± 70 (Beta-48306)
FkBc-2	Black Island/Grady Harbour 2	1910 ± 100 (Beta-56247)
FkBc-6	Little Black Island 2	1840 ± 100 (Beta-56249)
FfAw-1	Cooper Island 1	1840 ± 70 (Beta-48305)
FkBc-4	Black Island/Grady Harbour 3	1280 ± 70 (Beta-56248)
FeAx-3	North Island 1	1100 ± 80 (Beta-48308)
FeAx-3	North Island 1	1060 ± 120 (Beta-48307)
FlBg-3	Horse Chops Island 3	1050 ± 50 (Beta-56253)

early radiocarbon date of 1840 ± 100 B.P. (Beta-56249). Cultural material from this small site consisted of quartz crystal, Ramah, and vari-coloured cherts.

Black Island/Grady Harbour 3 (FkBc-4), on the other hand, yielded a radiocarbon date of 1280 ± 70 B.P. (Beta-56248) and an array of cultural material including Ramah chert tip flute spalls; small endscrapers; green nephrite burin-like tools; a grey chert, concave-based endblade; quartz crystal and grey chert microblades; a quartz crystal core; and numerous flakes of quartz crystal, Ramah, grey, and brown cherts. This multicomponent site is associated with an Intermediate Indian surface concentration of white quartzite flakes, a historic tent ring feature, and cobble beach pits in an uplifted terrace overlooking the site. In the context of its Middle Dorset artifact assemblage, this date suggests that FkBc-4 is a very late Middle Dorset site.

North Island 1 (FeAx-3) is situated in a protected cove on the west side of North Island, one of the Dead Islands in St. Michaels Bay. This large site has both an eighteenth-century component of two sod houses with red earthenware, bone, and iron fragments and a prehistoric component consisting of undiagnostic lithics. The lithics include the midsection of a fine-grained quartzite biface and flakes of Ramah, cream, brown, and grey cherts. Two charcoal samples gave dates of 1060 ± 120 B.P. (Beta-48307) and 1100 ± 80 B.P. (Beta-48308), again placing the site beyond the suggested terminal Middle Dorset date of approximately 1300 B.P.

At the northernmost boundary of the survey, Horse Chops Island 3 (FlBg-3) is located on the island of that name, part of the archipelago that protects the coast of southern Trunmore Bay from the Labrador Sea. FlBg-3 is a subsurface cultural component (18–25 cm below surface) covering an area approximately 100 m^2 with some evidence of historic disturbance. Materials recovered include a flake assemblage of Ramah and brown chert and a ground slate fragment. A carbon date of 1050 ± 50 B.P. (Beta-56253) once again suggests a camp quite late in the Palaeoeskimo tradition for southern Labrador.

The majority of Late Palaeoeskimo sites recorded in 1991 and 1992 are subsurface components characterized by thin (5–8 cm), black cultural lenses ranging from 14 to 25 cm below the surface, but with little charcoal. The cultural layer frequently rests upon a fossil beach layer. Site size tends to be small (averaging 20 m^2), and cultural material is scarce and consists chiefly of chipping flakes. Flakes are occasionally retouched and are mainly of Ramah, brown, black, and grey cherts. Site size and flake numbers suggest brief periods of site use. Several radiocarbon samples were collected from these camps but were too small to date. It is in fact difficult to place these small subsurface components within any phase of the Palaeoeskimo tradition. They can be approximately grouped into sites with an inner coast orientation in the large bays (FbAw-6, FbAw-7, FcAv-5, FfAx-1, FhAw-5, FkBd-16, FkBe-19, FkBg-2, FkBg-4), and sites with a decided outer sea orientation, situated on the eastern or southern coasts of the islands between Sandwich Bay and Frenchmans Island (FcAw-3, FhAw-8, FhAw-11, FjAx-5, FkBc-1, FkBc-6, FkBc-7, FkBc-11). Only one small, outer island subsurface component was recorded in the southernmost part of the survey, Wall Island 2 at Cape Charles (FbAv-9). Although not identifiable to any phase of the Palaeoeskimo tradition, these small components nevertheless add to our understanding of land use and occupation. Small, temporary bivouacs situated along a considerable stretch of coastline imply the presence of more established sites elsewhere. Their homogeneity in terms of depth of cultural layer, small flake assemblage, and raw materials suggests that they were created during one phase of the Palaeoeskimo tradition. The preponderance of Middle Dorset sites in Labrador increases the probability that these small deposits date from 1900 to 1100 B.P. Their locations also imply that a range of coastal environments was exploited, including the extreme outer island zone, probably for *sina*-related hunting (at the ice edge), and the very protected inner bay areas.

However, with the single exception of Black Island/Grady Harbour 3, actual settlement, as represented by the larger sites, was consistently located in protected coves but near the outer coast. Thus, there is no evidence for well-defined settlement in the inner coast zone by Palaeoeskimo peoples in this part of Labrador, although the small camps mentioned in the preceding paragraph indicate that the inner coast zone was exploited.

In contrast to the small camps, the larger sites have thicker, richer cultural levels and were evidently more intensely occupied. They undoubtedly served as base camps where marine resources were processed and rendered into foodstuffs, clothing, and hardwares. Cooper Island 1 and North Island 1 are examples of large sites situated in protected coves with easy access to the outer sea, as are the Pardy site in Spear Harbour, Sand Cove 1, and the large sites that Fitzhugh recorded in the early 1980s at Battle Harbour (FbAv-1) and Black Tickle (FiAw-3). Another site in a protected cove but with easy access to the open sea is Granby Island 1 (FdAw-2). This was once a sizeable site but has now been virtually destroyed by the expansion of the community of William's Harbour. An observation of George Cartwright's (1792) indicates that structures were still visible in the late 1700s:

> On our return we hauled up the wherry in Belle Harbour, there being only a narrow isthmus between that, and Harbour Haines. On this isthmus my tent was pitched, in

> a pleasant grove of young larch trees, where we found two old winter-houses of the Esquimaux (Vol. I:162; Harbour Haines is today's William's Harbour).

Prehistoric Sites of Unknown Affiliation

These 34 (36.6%) sites (Fig. 7, Table 2) yielded no diagnostic material. Six (FcAw-1, FcAw-2, FfAw-3, FfAw-4, FkBd-5, and FlBf-5) are low-elevation, small (from 1 to 11 flakes) Ramah chert scatters which could be either Late Prehistoric Indian or Palaeoeskimo: hence their inclusion in the unknown category. The remaining sites are cobble beach features which are assumed to date to the prehistoric period. I have argued previously that location and morphology of cobble beach pit features tell something of their function and that the pit features in particular would have served as storage features (Stopp, 1994). The cobble pit features recorded during the survey fall into two types: level "floors" or bases of smaller cobbles surrounded by larger cobbles, which may represent tent foundations (at FbAw-9, FkBe-22, FkBf-1, FkBf-2); and conical pits dug into cobble beaches with a cobble buildup around the outer rim, which are interpreted as food storage features. As Figure 7 shows, cobble beach features occur throughout the survey area. They are consistently situated in exposed locations and are buffeted by winds and waves throughout much of the year. The correspondence of seasonal coastal resource procurement with cobble beach features along the coastal periphery, as in the survey area, is suggested as a significant relationship since storage was undoubtedly an integral aspect of seasonal economies.

Elevation is not considered a reliable method of cultural identification, since later groups may well have used the high-elevation cobble beach pits for food storage purposes (although we can be reasonably certain that Archaic period Indians did not utilize the low-elevation cobble beach pits). That being said, two of the highest-elevation cobble beach feature sites, Salt Pond Ridge 2 and Flagstaff Hill, are associated with Maritime Archaic material and have been included in the site list for that period.

HISTORIC OCCUPANCY – A SUMMARY

Sixty-three historic components were recorded during the survey, including sod house remains (222), two-chambered drystone structures (13), cobble bawns, or platforms, for fish drying (11), fox traps (4), tent rings (4), and cairn burials (2). These features are vestiges of a developing permanent and seasonal European population during the latter half of the nineteenth century (cf. Ryan, 1986). Historic Inuit presence is suggested by fox traps, the tent rings, possibly the cairn burials, and perhaps some of the sod houses. The two-chambered drystone structures represent an unusual type of nineteenth-century architecture for southern Labrador. A preliminary study of early merchant locations along this coastline suggests that the sod house clusters are associated with merchant stations (Stopp, 1995). Notable is that Historic Inuit sod houses could not be clearly distinguished from European habitations. This difficulty is due to the developing overlap of material culture items between the two groups through trade and to the growth of Inuit/European households who established Labrador's Settler population (Stopp, 1995; cf. also Auger, 1991; Kennedy, 1985). Finally, Basque whaling activity was concentrated in the Strait of Belle Isle, and Cape Charles Cove appears to be the northernmost Basque station in Labrador. Roof tile fragments were recorded along the west side of the cove in 1985 (Vera et al., 1986), and the 1991 LSCS located a tryworks on the eastern shore of that cove.

CONCLUSIONS

Comprehensive surveys such as the LSCS are of great value precisely because they provide regional coverage and generate inspection of areas that would otherwise be bypassed for more promising locations such as sandy blowouts or areas of favourable boat mooring. The field methodology proved productive and introduced a degree of thoroughness that made for a highly successful survey effort on the outer coast. The results provide important and reliable comparative material for further culture historical studies in Labrador and on the island of Newfoundland, as well as for developing models of occupation and subsistence, or for research problems of a predictive nature.

Survey of the inner coast environment resulted in very few sites. One explanation for the lack of sites in the inner coast region may be found in ethnohistorical evidence. At the time of initial British and Moravian trading activity, in the late eighteenth and early nineteenth centuries, the inlets and bays of the survey area were primarily points of access or thresholds between the interior and the outer coast for Innu peoples; they were not places of recurring or permanent habitation. The dwindling Historic Inuit groups in southern Labrador at that time remained on the outer coast (Unitas Fratrum, 1774; Cartwright, 1792; Crantz, 1820; Hind, 1863; Cabot, 1912; Tanner, 1944). By the late nineteenth century, however, the inner zone had gradually become inhabited by Europeans at locations corresponding with today's communities of Paradise River, Charlottetown, Port Hope Simpson, and Mary's Harbour, and in now-abandoned, smaller settlements. G. Cartwright's brief trading encounters with the Innu in the survey area during the late 18th century, and his records of their rare, abandoned tents in the inner coastal zone, constitute some proof of their inconsistent use of this region (Stopp, 1995). W.B. Cabot's (1912) observations in the Davis Inlet region indicate a situation that had changed little in two hundred years. The Innu he encountered made only brief forays to the coast to meet trade vessels and to purchase goods at the Hudson's Bay post. Much to the frustration of Cabot, who wished to travel with them to their interior camps, the Innu would depart as suddenly and quietly as they had arrived, leaving no trail to follow.

A second explanation for the lack of inner coast sites undoubtedly lies in the low probability of finding small sites

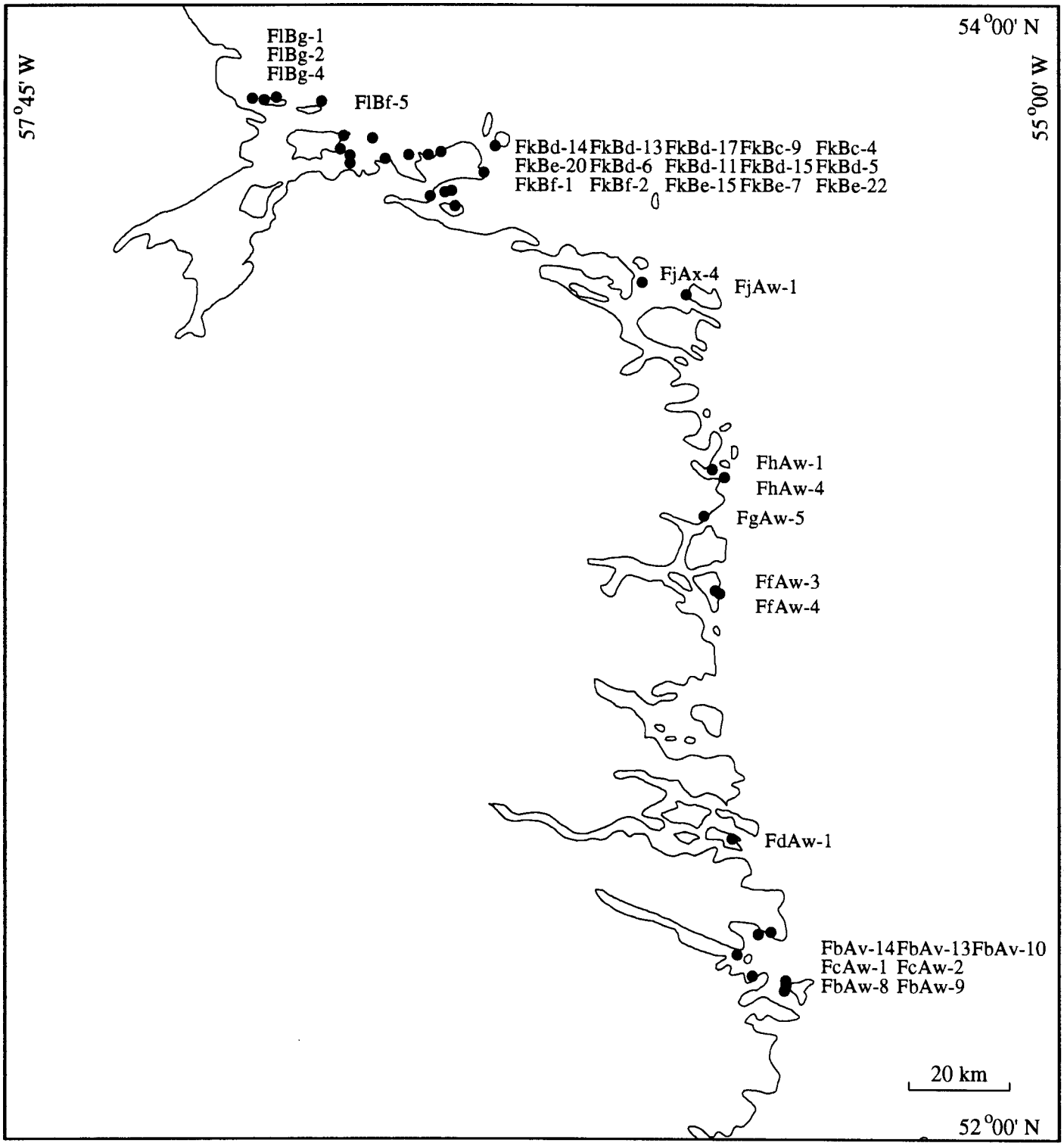

FIG. 7. Prehistoric sites of unknown affiliation.

in heavily wooded, terraced terrain. In Postville, for instance, the Daniel Rattle and Groswater components stood a low chance of discovery without trail and road development in an expanding community (Loring, pers. comm. 1996). The lack of inner coast sites recorded during the survey may to a certain extent be the result of untested, dense, spruce shore cover, but I believe that the results of the survey correctly reflect the dichotomous use of the inner and outer coastal zones by late prehistoric and protohistoric peoples. On the other hand, prehistoric sites corresponding with isostatically raised terrain will be difficult to locate. Sites will continue to be found as communities expand, and with increasing mineral exploration in Labrador. Interior, near coastal, and inner coast sites are being found as impact regions undergo

archaeological survey; however, the physical and material outlay is considerable (Jacques Whitford Environment, 1996; Y. Labrèche, F. Schwartz, pers. comm. 1996, regarding interior surveys in Voisey Bay mineral claim stake area). A remarkable cache of large ovate Ramah bifaces was discovered in 1995 at a near coastal location in Alexis Bay. Unfortunately, the finders will not release the site location. Photographs of the pieces indicate a resemblance to the finely made, large, ovate Ramah bifaces from the Spingle site in L'Anse au Clair, southern Labrador (Historic Resources Division, 1996) and to the side-notched Saunders chert biface from Daniel Rattle, dated to the Intermediate Indian period (Loring, 1989).

The near absence of prehistoric occupation between Hamilton Inlet and the southern Strait of Belle Isle was once considered both puzzling and an indication that more work was needed in the area (Fitzhugh, 1982; Jordan, 1986). The results of the LSCS demonstrate that the coastline between Cape Charles and Trunmore Bay supported six millennia of Native occupation. The majority of site locations are at the mouths of protected bays and on island archipelagoes. The exceptions are Maritime Archaic sites situated along the inner coast and Palaeoeskimo sites established on exposed points of land on outer islands. Overall, site representation in the survey area is sparse and of low density when compared to site distribution in other parts of Labrador. In the Voisey Bay area, for instance, 125 prehistoric sites are known across approximately 750 km of shoreline, which calculates to a site density of 17 sites per 100 km. This figure represents relatively intensive occupation of a coastline which has *not* been systematically surveyed. (These distances are not straight-line measurements, but approximate shoreline distances measured from national topographic system maps, and they include shorelines of islands.) In southernmost Labrador, 123 sites have been recorded in the fully surveyed 175 km stretch between Blanc Sablon and Cape Charles, with a site density of 70 sites per 100 km. In contrast, the fully surveyed shoreline between Cape Charles and Trunmore Bay calculates to 7.5 sites per 100 km (113 prehistoric sites, including sites recorded prior to the LSCS, across approximately 1500 km of coast). Geographical and ecological grounds can be cited for low site density in the 1991/1992 survey area since extensive sections of the coast are barren headlands, or low elevation coastal peat bogs and rocky expanses, which are not conducive to habitation. The survey results nevertheless provide evidence for continuous prehistoric coastal occupancy from northern Labrador through to the Quebec North Shore and the island of Newfoundland.

I have followed the culture ecological approach introduced by Fitzhugh (1972) for the Hamilton Inlet sites as a way of presenting and humanizing the technical data. Palaeoenvironmental data, such as isostatic rebound, natural resources, climatic variability, and ecosystems, continue to offer a way of interpreting early human lifeways in Labrador that significantly expands on the culture historical approach. Settlement and subsistence analysis are further developed through the study of raw materials, lithic typology, site size, intensity of occupation based on thickness of cultural layers, and site locations within the coastal zone. As noted, the region's culture history will continue to undergo changes such as in chronological scaling (for instance, the Middle Dorset dates discussed below). There is also room for change in the degree to which a "lumping" or "splitting" approach is taken towards assemblage identification. For instance, until a stronger database is developed, the many components, complexes, and phases characterizing the Intermediate Indian period are not considered a reasonable option for classifying the Trunmore Bay material. The greatest room for change in expanding the story of Labrador's prehistoric peoples, however, lies in the explicit integration of ethnographically derived models for resource procurement and particularly resource processing.

The sites associated with each culture group reflect unique subsistence patterns and seasonal rounds. Each of the prehistoric Indian groups occupied inner island, or protected inner coast locations that allowed access to resources of the sea but also to terrestrial and freshwater resources of the mainland. Their seasonal round would have been determined by access to lithic sources and the availability of land mammals and freshwater fish, while their presence near the open sea would have been influenced by presence of sea mammals, salmon, char, and seabirds. The Maritime Archaic sites recorded during the survey suggest intermittent presence along this coast in contrast to the numerous sites along the Strait of Belle Isle and central Labrador shorelines. The small Intermediate Indian representation found only at Trunmore Bay supports the idea that these people arrived from the Hamilton Inlet area rather than from points along the southern coast. The Intermediate Indian period continues to be enigmatic, with few sites known and little understanding of material culture manifestation. Finally, the low number of Late Prehistoric Indian sites in the survey area (and between Hamilton Inlet and the Quebec North Shore) reflects infrequent use of the coast south of Hamilton Inlet, which may be the result of a developed interior component of their economy. The exclusivity of Ramah chert for Late Prehistoric period Indian peoples suggests that this material holds an integral ideological position, both as a stylistic statement and as a unifying element in reinforcing group identity among a relatively small but widespread population. The extensive trading of Ramah chert throughout the Northeast at this time would not have come about without developed social networks and travel routes (cf. also Loring, 1992). The proximity of the large Middle Dorset Pardy site to the Late Prehistoric Indian Mosquito Cove 1 site, both in Spear Harbour, may be some indication of Palaeoeskimo and Late Prehistoric Indian social and economic relations. As well, the Late Prehistoric Indian sites at Hare Harbour near the mouth of Sandwich Bay (Fish Cove 1, Hare Harbour 1 and 5) are within easy travelling distance of the Middle Dorset sites at the mouth of Sandwich Bay. Although there is no definitive evidence of interaction between these two groups, the presence of Ramah chert and the adjacent, contemporaneous sites speak volumes for a situation of interrelations.

Discussion of Groswater settlement in the survey area is presently limited to two components. They fit the pattern of sparse Groswater site distribution along the outer coast between Hamilton Inlet and Blanc Sablon, where we find a clustering of Groswater sites (Pintal, 1994; Plumet et al., 1994). The location of the LSCS Groswater sites does not reflect the near interior orientation suggested by several Groswater sites in central and northern Labrador (Fitzhugh, 1972; Cox, 1978; Loring and Cox, 1986; Stopp, 1996). It is possible that Groswater components may be found at the larger Middle Dorset sites recorded during the survey, but even then their presence along the southern Labrador coast would have to be considered limited. The radiocarbon date obtained from Black Island/Grady Harbour 2 supports the slightly longer time frame for Groswater initially suggested by dates from Port au Choix. This extended Groswater occupation, in conjunction with extended Middle Dorset occupation, brings us one step closer to determining the nature of the link, if any, between these two phases of the Palaeoeskimo tradition.

Late Palaeoeskimo sites are numerous and consistently occur on outer islands adjacent to the open expanse of the Labrador Sea as well as in inner bay settings. The larger Late Palaeoeskimo sites, such as Pardy (FcAv-4), Granby Island 1 (FdAw-2), St. Francis Harbour Bight 1 (FdAw-5), Cooper Island 1 (FfAw-1), and Black Island/Grady Harbour 3 (FkBc-4), are situated in protected lees and coves in the outer island zone. The differences in size, location, and material content between the smaller and larger sites undoubtedly reflect site function; reasonable distinctions may be made between base camps and smaller temporary camps. Without further excavation, it remains difficult to suggest seasonality for the large camps. Nor is there evidence to suggest contemporaneity between the larger, more protected sites and the small outer island sites, although a case could be made for contemporaneity of the small radiocarbon-dated camps (Table 3) at North Island 1 and Horse Chops Island 3 with Black Island/Grady Harbour 3. In contrast to the Indian assemblages, Palaeoeskimo assemblages are characterized by a broad selection of lithic types. As with the Indian materials, the choice of raw materials may tie in with social identity; however, their variety may express a lesser need to affirm group cohesion among a more populous and perhaps less isolated group of people (Pearson, 1984).

The radiocarbon dates from the Late Palaeoeskimo sites can be interpreted in two ways. They could represent an extended period of Middle Dorset occupation for southern Labrador (1940–1050 B.P.), which would overlap with terminal dates for Groswater and lengthen Middle Dorset presence by over 200 years. They could also reflect transitional occupations between the Early and Middle Dorset periods and between the Middle and Late Dorset periods. Tuck and Fitzhugh (1986) have brought attention to gaps in dates between the Early, Middle, and Late Dorset phases of the Late Palaeoeskimo tradition, suggesting that these gaps represent population reductions or discontinuities, with new phases initiated by population diffusion from the north. I favour the explanation of extended Middle Dorset occupation, since the lithic samples collected from Cooper Island 1, with its very early date, and from Black Island/Grady Harbour 3 and North Island 1, with their very late dates, all fit easily into the Middle Dorset assemblage. The new dates represent tighter control of existing cultural chronology and, importantly, they suggest that perceived gaps in occupation are the result of incomplete archaeological coverage rather than of chronological or cultural significance.

The highest level of interpretation that the majority of survey data confidently yield is that of prehistoric economies. Social systems are not as visible. Trade networks in Ramah chert during the late prehistoric period in Labrador provide a rare glimpse into widespread prehistoric interaction and aspects of ideology and social function. Low site density, relative to that of the Strait of Belle Isle coast or northwards at Voisey Bay, suggests that the survey area was somewhat peripheral and not a coastline where people chose to spend long periods of time. Times of social gathering were undoubtedly reserved for elsewhere. Small site size and low regional site density are, equally, evidence that the prehistoric groups who did frequent this coastline were small, highly mobile groups or bands. Mobility, coupled with small numbers of people, bespeaks highly developed responsiveness and adaptability to changes in both social relationships and the resource base. Thus, wide-ranging social networks are particularly suggested for the Indian occupations in the survey area. An ethnographic situation that reflects such social and economic flexibility is found among the Innu who have contemporary and ancestral interrelationships, based on both blood and marriage ties, extending the width and breadth of the Quebec-Labrador peninsula, between Davis Inlet, Sheshashit, the interior tundra, Sept-Îles, and other points on the Upper St. Lawrence, and back to Hamilton Inlet (Mailhot, 1993). This patterning, while partially a product of historic trade and religious establishments, illustrates that interrelationships did not become static with the advent of Europeans, and that continual human movement across broad expanses of territory, for purposes of food getting and maintenance of human relations, was the key to cultural unity among the Innu. This same remarkable mobility, it is felt, characterized the ancestors of today's Innu, as well as other prehistoric groups who inhabited Labrador.

An obvious yet intriguing aspect of the data is the evidence for sustained occupation through time of many prime coastal locations. Locations such as Cape Charles, Spear Harbour, the Grady Islands, and the mouth of Sandwich Bay have been inhabited time and again by different cultural groups. The exact choice of site orientation may differ between Indian and Palaeoeskimo groups in areas of reoccupation; nevertheless, certain areas were evidently better living places than others for straightforward reasons, such as access to both terrestrial and marine resources, presence of fresh water, or relative protection from the elements.

Finally, the thorough field methodology of the LSCS offers some security that identified settlement-subsistence patterns correctly reflect prehistoric settlement choices. By

its very nature, a coastal survey develops a picture of coastally focused peoples, regardless of differences in the positioning of sites. As noted earlier, testing of the near coastal and interior zones was not conducted. As these areas come under study, sites will undoubtedly appear that will shift our current perception of coastally oriented peoples and coastally driven adaptations.

ACKNOWLEDGEMENTS

The field data for this paper were collected with the support of a 1991/1992 Labrador Comprehensive Development Agreement grant administered through the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador. I greatly appreciated constructive suggestions to various stages of the manuscript from R. Auger, W.W. Fitzhugh, S. Loring, M.A.P. Renouf, and C. Thomson. K. McCullough's final editorial touches were also extremely helpful. I am grateful to R.F. McKenna for his support throughout this project, and for effortlessly programming digitized topographic data and producing the maps.

REFERENCES

AUGER, R. 1991. Labrador Inuit and Europeans in the Strait of Belle Isle: From the written sources to the archaeological evidence. Laval: Collection Nordicana, Centre d'études nordiques, Université Laval. No. 55.

AUGER, R., and STOPP, M.P. 1986. 1986 archaeological survey of southern Labrador: Quebec/Labrador border to Cape St. Charles. Unpubl. ms. Available at Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

CABOT, W.B. 1912. In northern Labrador. London: John Murray.

CARTWRIGHT, G. 1792. A journal of transactions and events during a residence of nearly sixteen years on the coast of Labrador. Facsimile Edition 1980. 3 vols. Newark: Allin and Ridge.

CHRISTIE, A.M. 1951. Geology of the southern coast of Labrador from Forteau Bay to Cape Porcupine, Newfoundland. Geological Survey of Canada, Department of Mines and Technical Surveys, Canada, Paper 51-13.

CLARK, P.U., and FITZHUGH, W.W. 1992. Postglacial relative sea level history of the Labrador coast and interpretation of the archaeological record. In: Johnson, L.L., ed. Paleoshorelines and prehistory: An investigation of method. Boca Raton: CRC Press. 189–213.

COX, S.L. 1977. Prehistoric settlement and culture change at Okak, Labrador. Ph.D. Thesis, Department of Anthropology, Harvard University.

———. 1978. Palaeo-Eskimo occupations of the north Labrador coast. Arctic Anthropology 15(2):96–118.

CRANTZ, D. 1820. The history of Greenland and an appendix containing a sketch of the mission of the Brethren in Labrador. London, Vol. 1.

DENTON, D. 1988. Long term land use patterns in the Caniapiscau area, Nouveau Quebec. Boreal forest and sub-Arctic archaeology. Occasional Publications of the London chapter, Ontario Archaeological Society Inc. 6:146–156.

DENTON D., and McCAFFREY, M. 1985. Prehistoric utilization of chert in the Schefferville region of northern Quebec. Paper presented at the annual meeting of the Canadian Archaeological Association, Winnipeg. On file, Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

FITZHUGH, W.W. 1972. Environmental archeology and cultural systems in Hamilton Inlet, Labrador: A survey of the central Labrador coast from 3000 B.C. to the present. Smithsonian Contributions to Anthropology, No. 16.

———. 1975. A comparative approach to northern maritime adaptations. In: Fitzhugh, W.W., ed. Prehistoric maritime adaptations of the circumpolar zone. The Hague. 339–386.

———. 1976a. Paleoeskimo occupations of the Labrador coast. In: Maxwell, M., ed. Eastern Arctic prehistory: Paleoeskimo problems. Society for American Archaeology, Memoir 31. 103–118.

———. 1976b. Preliminary culture history of Nain, Labrador: Smithsonian fieldwork for 1975. Journal of Field Archaeology 3(2):123–142.

———. 1978a. Maritime archaic cultures of the central and northern Labrador coast. Arctic Anthropology 15(2):61–95.

———. 1978b. Winter Cove 4 and the Point Revenge occupation of the central Labrador coast. Arctic Anthropology 15(2):146–174.

———. 1981. Smithsonian archaeological surveys, central and northern Labrador, 1980. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1980. Annual Report 1:26–47. St. John's: Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

———. 1982. Smithsonian surveys in central and southern Labrador in 1981. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1981. Annual Report 2:32–55. St. John's: Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

———. 1986. Maritime Archaic field studies in central Labrador and notes on Northwest Corners. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1985. Annual Report 6:54–65. St. John's: Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

———. 1989. Hamilton Inlet and Cartwright reconnaissance. In: Thomson, C., and Thomson, J. Sproull, eds. Archaeology in Newfoundland and Labrador 1986. Annual Report 7:164–180. St. John's: Historic Resources Division, Department of Municipal and Provincial Affairs, Government of Newfoundland and Labrador.

FULTON, R.J. 1986. Surficial geology, Cartwright, Labrador, Newfoundland. Geological Survey of Canada Map 1620A, scale 1:500 000.

HARP, E. 1963. Evidence of Boreal Archaic Culture in Southern Labrador and Newfoundland. Ottawa: National Museum of Canada, Bulletin No. 193:184–261.

HIND, H.Y. 1863. Explorations in the interior of the Labrador peninsula. Vol. 1. London: Longman. Reprinted 1973, Millwood, New York: Klaus Reprint Co.

HISTORIC RESOURCES DIVISION. 1996. Site form EiBg-12. On file at Historic Resources Division, Department of Tourism and Culture, P.O. Box 8700, St. John's, Newfoundland A1B 4J6, Canada.

JACQUES WHITFORD ENVIRONMENT. 1996. 1995 Stage 1 overview assessment of Voisey's Bay mineral exploration area. On file, Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

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. Memorial University of Newfoundland Reports in Archaeology 1:135–150.

KENNEDY, J. 1985. Northern Labrador: An ethnohistorical account. In: Paine, R., ed. The white Arctic: Case studies from the Labrador coast. St. John's: Institute of Social and Economic Research, Memorial University of Newfoundland. 264–305.

KENNETT, B.L. 1990. Phillip's Garden East: An examination of the Groswater Palaeo-Eskimo phase. M.A. thesis, Department of Anthropology, Memorial University of Newfoundland, St. John's, Newfoundland A1C 5S7, Canada.

LORING, S. 1983. An archaeological survey of the inner bay region between Nain and Davis Inlet, Labrador: A report of 1982 fieldwork. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1982. Annual Report 3:32–56. St. John's: Historic Resources Division, Government of Newfoundland and Labrador.

———. 1985. Archaeological investigations into the nature of the Late Prehistoric Indian population in Labrador: A report on the 1984 Field Season. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1984. Annual Report 5:122–153. St. John's: Historic Resources Division, Department of Municipal and Provincial Affairs, Government of Newfoundland and Labrador.

———. 1988. Keeping things whole: Nearly two thousand years of Indian (Innu) occupation in northern Labrador. Boreal forest and sub-Arctic archaeology. Occasional Publications of the London chapter, Ontario Archaeological Society Inc. 6:157–182.

———. 1989. Tikkoatokak (HdCl-1): A late prehistoric Indian site near Nain. In: Thomson, C., and Thomson, J. Sproull, eds. Archaeology in Newfoundland and Labrador 1986. Annual Report 7:52–71. St. John's: Historic Resources Division, Department of Municipal and Provincial Affairs, Government of Newfoundland and Labrador.

———. 1992. Princes and princesses of ragged fame: Innu archaeology and ethnohistory in Labrador. Ph.D. thesis, Department of Anthropology, University of Massachusetts.

LORING, S., and COX, S. 1986. The Postville Pentecostal Groswater Site, Kaipokok Bay, Labrador. Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. Memorial University of Newfoundland, Reports in Archaeology 1:65–94.

MAILHOT, J. 1993. Au pays des Innus: Les gens de Sheshashit. Signes des Amériques 9. Montréal: Société Recherches amérindiennes au Québec.

McCAFFREY, M.T. 1989. Archaeology in Western Labrador. In: Thomson, C., and Thomson, J. Sproull, eds. Archaeology in Newfoundland and Labrador 1986. Annual Report No. 7:72–113. St. John's: Historic Resources Division, Department of Municipal and Provincial Affairs, Government of Newfoundland and Labrador.

McCAFFREY, M.T., LORING, S., and FITZHUGH, W.W. 1989. An archaeological reconnaissance of the Seal Lake region, interior Labrador. In: Thomson, C., and Thomson, J. Sproull, eds. Archaeology in Newfoundland and Labrador 1986, Annual Report 7:114–163. St. John's: Historic Resources Division, Department of Municipal and Provincial Affairs, Government of Newfoundland and Labrador.

McGHEE, R., and TUCK, J. 1975. An Archaic sequence from the Strait of Belle Isle, Labrador. Ottawa: Archaeological Survey of Canada, Mercury Series Paper No. 34.

NAGLE, C. 1978. Indian occupation of the Intermediate period on the central Labrador Coast: A preliminary synthesis. Arctic Anthropology 15(2):119–145.

PEARSON, M.P. 1984. Social change, ideology and the archaeological record. In: Spriggs, M., ed. Marxist perspectives in archaeology. Cambridge: Cambridge University Press. 59–71.

PENNEY, G. 1986. Historic resources overview assessment, environmental screening report, Cartwright, Labrador. Unpubl. ms. Available at the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

PINTAL, J.-Y. 1989. Contributions à la préhistoire récente de Blanc-Sablon. Recherches amérindiennes au Québec 19(2-3): 33–44.

——. 1994. A Groswater site at Blanc-Sablon, Québec. In: Morrison, D., and Pilon, J.-L., eds. Threads of Arctic prehistory: Papers in honour of William E. Taylor, Jr. Ottawa: Archaeological Survey of Canada, Mercury Series Paper No. 149. 145–164.

PLUMET, P., LASCOMBES, C., ELLIOT, V., LAURENT, M., and DELISLE, A. 1994. La question de la coexistence du Paléoesquimau et de l'Amérindien: Recherches dans la région de Blanc-Sablon, Basse-Côte-Nord, Québec. Recherches Amérindiennes au Québec, Coll. Paléo-Québec No. 21.

RENOUF, M.A.P. 1987. Archaeological investigations at the Port au Choix National Historic Park: Report of 1986 field activities. Unpubl. ms. Available at the Archaeology Division, Canadian Parks Branch, Atlantic Region, Halifax, Nova Scotia.

———. 1991. Paleoeskimo in Newfoundland and Labrador. Museum notes - Information sheets from the Newfoundland Museum, No. 5. Newfoundland Museum, Department of Tourism and Culture, Government of Newfoundland and Labrador, A1B 4J6.

———. 1993. Palaeoeskimo seal hunters at Port au Choix, northwestern Newfoundland. Newfoundland Studies 9(2): 185–212.

———. 1994. Two transitional sites at Port au Choix, northwestern Newfoundland. In: Morrison, D., and Pilon, J.-L., eds. Threads of Arctic prehistory: Papers in honour of William E. Taylor, Jr. Ottawa: Archaeological Survey of Canada, Mercury Series Paper 149. 165–195.

RYAN, A.B., and BIGGIN, M.S. 1989. An archaeological reconnaissance survey of the Kogaluk River area, Labrador. Unpubl. ms. Available at the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

RYAN, S. 1986. Fish out of water: The Newfoundland saltfish trade 1814–1914. St. John's: Breakwater.

SAMSON, G. 1978. Preliminary cultural sequence and palaeo-environmental reconstruction of the Indian House Lake region, Nouveau-Quebec. Arctic Anthropology 15(2):186–205.

SHORT, S.K. 1978. Palynology: A holocene environmental perspective for archaeology in Labrador-Ungava. Arctic Anthropology 15(2):9–35.

STOPP, M.P. 1992. Summary of 1991/92 LSCS field seasons. The NLQUA newsletter, Autumn-Winter 1992. Newsletter of the Newfoundland and Labrador Quaternary Association, Terrain Sciences Section, Newfoundland Geological Survey, Department of Natural Resources, St. John's, Newfoundland. 5–6.

———. 1994. Cultural utility of the cobble beach formation in coastal Newfoundland and Labrador. Northeast Anthropology 48:69–89.

———. 1995. Long term coastal occupancy in southern Labrador. Unpubl. ms. Available at the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

———. 1996. Prehistoric settlement and subsistence in Voisey Bay, Labrador. Paper presented at the 1996 Canadian Archaeological Association Conference, Halifax, Nova Scotia.

STOPP, M.P., and REYNOLDS, K. 1992. Report of the 1992 Labrador South Coastal Survey. Unpubl. ms. Available at the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

STOPP, M.P., and RUTHERFORD, D. 1991. Report of the 1991 Labrador South Coastal Survey. Unpubl. ms. Available at the Historic Resources Division, Department of Tourism and Culture, Government of Newfoundland and Labrador, St. John's, Newfoundland A1B 4J6, Canada.

TANNER, V. 1944. Outlines of the geography, life and customs of Newfoundland-Labrador. Helsinki: Helsingfors.

THOMSON, C. 1982. Archaeological findings from Saglek Bay, 1981. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador. Annual Report 2:5–31. St. John's: Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

TUCK, J.A. 1975. Prehistory of Saglek Bay, Labrador: Archaic and Palaeo-Eskimo occupations. Ottawa: Archaeological Survey of Canada, Mercury Series No. 32.

———. 1976. Paleoeskimo cultures of northern Labrador. In: Maxwell, M., ed. Eastern arctic prehistory: Paleoeskimo problems. Society for American Archaeology, Memoir 31. 89–102.

TUCK, J., and FITZHUGH, W.W. 1986. Palaeo-Eskimo traditions of Newfoundland and Labrador: A re-appraisal. Palaeo-Eskimo cultures in Newfoundland, Labrador and Ungava. Memorial University of Newfoundland Reports in Archaeology 1:161–168.

UNITAS FRATRUM. 1774. A brief account of the mission established among the Esquimaux Indians on the coast of Labrador by the Church of the Brethren, or Unitas Fratrum. London, M. Lewis. On file in the Centre for Newfoundland Studies, Queen Elizabeth II Library, Memorial University of Newfoundland, St. John's, Newfoundland A1B 5S7, Canada.

VERA, J.A.H., CALVO, J.J.B., MARCEN, J.N., and IGARTUA, I.Z. 1986. Basque expedition to Labrador, 1985. In: Thomson, J. Sproull, and Thomson, C., eds. Archaeology in Newfoundland and Labrador 1985. Annual Report 6:81–98. St. John's: Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

WOODWARD-CLYDE CONSULTANTS. 1980. Physical shore-zone analysis of the Labrador Coast. Offshore Labrador Biological Studies (OLABS). Unpubl. ms. Available at the Centre for Newfoundland Studies, Queen Elizabeth II Library, Memorial University, St. John's, Newfoundland A1B 5S7, Canada.