

Living Lightly on Land and Water

Native People and the Bay of Fundy

Puzzle Pieces

Humans first settled the lands around the Bay of Fundy soon after the kilometres-thick ice sheets retreated towards the northwest about 12,000 years ago. Since then, the Bay and the landscape around it have changed markedly, largely as a result of fluctuations in climate and sea level. Over the millennia, plant, animal and human communities have gradually adapted themselves to the changing conditions in order to survive. This is the story of the changing relationships between the people of the Fundy region and the habitats and natural resources that have sustained them.

Although we know much about the plants, animals and people who have lived in the Fundy region for thousands of years, the overall picture is still incomplete - a jigsaw puzzle with some notably large blanks. It has been painstakingly pieced together using three different types of puzzle pieces. Firstly, there are artifacts: the durable objects, such as stone arrowheads or scrapers, that ancient hunters left scattered about the landscape. These offer insights into the maker's lifestyle and stage of cultural development. Secondly, there are oral traditions: the legends, stories, ceremonies and practices passed from generation to generation by the Native people of the area. These provide glimpses into earlier cultures and insights into ancient ways of understanding and dealing with the natural world. Finally, there are written documents by the new settlers, mainly produced during the past 400 years in the Fundy region, that provide a seemingly indelible historical record.

All three ways of interpreting the past have flaws that may hinder our understanding. The problem with using artifacts to interpret human history is that only the most durable objects have survived the passage of time. The moist, acidic soils of the Maritimes rapidly decompose buried objects of wood, bone, bark, hide or natural fibres. All that is usually ever left of tools or weapons are the indestructible stone parts. From such sparse clues, ancient cultures and ways of life have to be reconstructed. Artifacts are usually more informative when found together at obvious places of human settlement, rather than scattered randomly about the landscape. However, the Native people of Fundy lived a mostly migratory existence, living for only short periods in seasonal encampments. The very few such sites that have been found are scattered widely in space and time, making it difficult to paint a seamless picture of human history in the area.

Oral history too has its limitations. Stories about the past were not only meant to be a record of historical events, but were also an effort to express essential truths about human existence in a complex natural world. Legends and stories evolved over time by elaboration and reinterpretation in light of even more recent events. Thus, it is sometimes difficult for us now to separate underlying historical events and persons from cultural metaphors.

Written history can also yield a less than accurate picture of the past. Writings inevitably reflect the knowledge, interests, biases and prejudices of the writer, either unknowingly or knowingly. Thus, the earliest written accounts of Fundy's cultural history reflect the narrow viewpoints of European explorers, colonists and administrators, first French and then

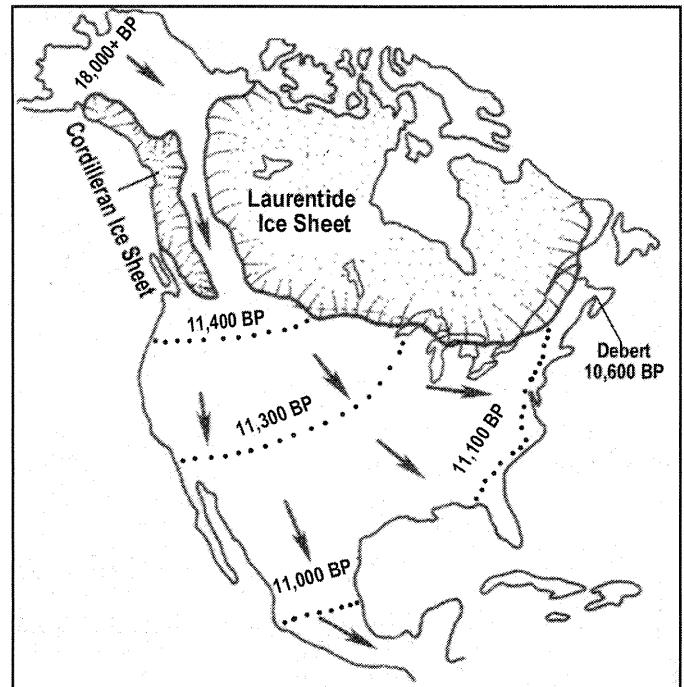
English. Their European mindsets, attitudes and experiences were often diametrically opposed to those of the Native people they met. It is not surprising, therefore, that their written descriptions of the Native people's way of life and cultural values are often distorted or false. Given such difficulties with the different types of historical evidence available, it is not surprising that the story of Fundy's Native people is incomplete and tentative. The further back in time we peer, the greater the uncertainty and the more dependent we are on the testimony of mute stones shaped by unknown hands.

Ancient Americans

Oral tradition informs us that the Creator long ago placed humans in the lush and productive hunting grounds around Fundy. Kisúlkw, the Great Spirit, made Niskam the sun to give light, heat and life to Wsitqamúk, the earthly environment that is today's Maritimes. A human, Glooscap, was fused from its sands, brought to life and given freedom to move about by three successive great bolts of lightening. Later, settling sparks from Glooscap's campfire formed the first seven Mi'kmaq families to inhabit this productive landscape. Glooscap shared with these new people his great wisdom about respecting and using the land and its abundant resources. Once the people were well established in the land, he departed towards the north, promising to return if danger ever threatened the Mi'kmaq people, who revere him to this day.

Archaeological evidence suggests that humans arrived here from Asia. Some 18,000 years ago the Fundy region, and indeed almost all of northern North America, lay beneath kilometres-thick ice sheets, a consequence of a major ice age that began 25,000 years ago. As the globe's water increasingly transformed into glacial ice, sea level fell dramatically and a wide land-bridge, named Beringia, surfaced between Siberia and Alaska.

Many times during this ice age, tribes of migratory hunters from Siberia pursued herds of game, such as caribou, across the tundra landscape of Beringia and into ice-free refuges in Alaska and the Yukon. Evidence from the Yukon reveals that some hunters may have arrived as long ago as 20,000 years, and successive waves of them probably crossed during the ensuing centuries. Eventually the ice age began to wane and the great ice sheets slowly receded, releasing their water, submerging Beringia and trapping the migrants in their Alaskan refuge. Then, about 12,000 years ago, the retreating ice sheets opened a corridor between the Cordilleran Glacier of the



Migration of humans into North America from Asia at end of the last Great Ice Age. Arrows indicate general direction of migration and dotted lines indicate extent of spread over time, expressed as years before present (BP).

— Map modified from that of Paul S. Martin, *Science* volume. 179. 1973.

Rocky Mountains and the larger Laurentide Glacier centred on Hudson Bay. The tribes followed migrating game southward through this corridor and quickly spread south and east through the heart of the continent. A ripple of this wave of humanity skirted the southern edge of the receding Laurentide Glacier and about 11,000 years ago edged north into a Maritimes whose barren landscape was just emerging from its icy grip.

Denizens of Debert

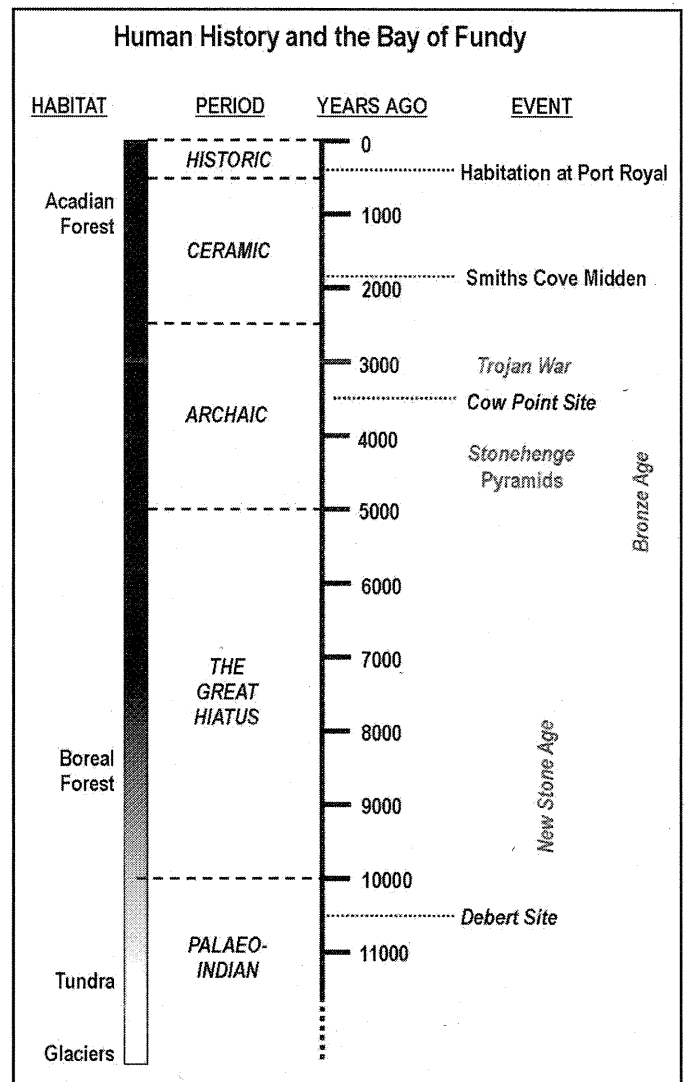
The earliest certain evidence of people in the Maritimes was found beside the upper reaches of the Bay of Fundy. In 1948, blueberry pickers stumbled upon a spear point and other stone artifacts at Debert near the north shore of Cobequid Bay. Over the next 15 years archaeologists came to realize the great age and historical significance of these artifacts. In 1963-64, a team from the National Museum of Canada explored the area. Their excavations revealed a number of sites of early human occupation scattered over 9 hectares. Stone hearths marked the location of ancient dwellings and also yielded charcoal fragments. Radio-carbon dating of these revealed that the site had been occupied about 10,600 years ago, a time

corresponding to the Middle Stone Age in Europe. In all, about 4,500 stone artifacts of an early Palaeo-Indian (from the Greek "Palaios" meaning ancient) culture were discovered at Debert. These included knives, spear-points, scrapers and awls made from chalcedony, a form of quartz. They had been carefully shaped and sharpened by chipping flakes from the tools' edges. The spear points were an advanced design, with an incised groove on either side into which a bone or wooden shaft would have been fitted and bound on with strips of sinew or hide. Larger tools, made from beach cobbles, were probably used as heavy choppers or hammers. Archaeologists suggest that the large stone knives found were used for cutting up caribou and other game, while the different types of scrapers helped in the removal of fat from the hides. Remarkably, some tools still had traces of an organic material that was tentatively identified as caribou blood. Many of the stone tools were clearly designed for working with wood or bone, suggesting that other implements were made from such materials, although none have survived. In 1989, workers clearing tree stumps found two additional Palaeo-Indian sites nearby, named Belmont I and II, covering more than 20 hectares. The more than 700 artifacts found were almost identical to those at the Debert site. A 260 hectare area encompassing the three archaeological sites has since been designated a "special place" under the Nova Scotia Special Places Protection Act.

The artifacts collected at Debert, along with other archaeological and geological information, have enabled scientists to draw a fairly credible picture of the Fundy landscape and its inhabitants of 10,000-11,000 years ago. Then, only a few small glacial ice caps persisted at higher elevations in central Nova Scotia, Cape Breton and the Gaspé. The mean annual temperature was just below freezing, some 10-15°C lower than today. Sea level was about 60 metres lower than now, making for a dramatically different landscape. Prince Edward Island was connected to the mainland by a broad continental plain in the Southern Gulf of St. Lawrence. In the Gulf of Maine, Browns Bank and Georges Bank were large islands that effectively blocked the entrance to a greatly reduced and very different Gulf of Maine - Bay of Fundy marine system. In the upper Bay, much of Minas Basin and all of Cobequid Bay formed a broad tundra plain underlain by permafrost. It was a decidedly barren landscape reminiscent of much of Canada's Arctic today.

Large caribou herds migrated seasonally through the region. The Debert and Belmont encampments were

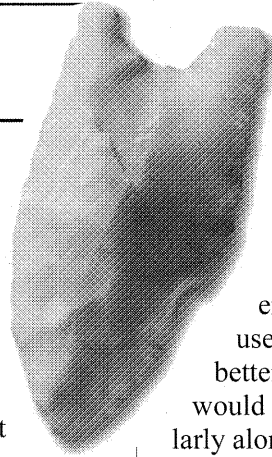
probably set up near a caribou calving area or migration route on the nearby Cobequid plain. The sites seem to have been used over a 50-year period by small groups of 30-40 people following the migrating herds. They would have depended on the caribou for food, hides, bones and sinews. The hides were made into warm clothing and may have also covered their wood-framed shelters. Their stone awls were designed to pierce holes in the hides, which could then be sewn together with sinews or strips of leather. Smaller tundra game, such as foxes, hares and ptarmigan, as well as a variety of waterfowl and fresh-



The major archaeological periods in the Fundy region. The gradual transition from glacial to Acadian forest habitat is indicated by shading. The dates of key archaeological sites are shown. Some other historical events are included for reference.

Stone projectile point found at Debert, N.S. Length ~1.5 inches.

— Canadian Museum of Civilization collection.



water fish, probably rounded out their diet.

The finds at Debert unequivocally prove that people were present in Nova Scotia almost 11,000 years ago. However, our understanding of their lifestyle, social structure and use of natural resources is based mainly on circumstantial evidence and informed speculation. Nevertheless, we know more about these earliest people of the Fundy region than we do about those who followed them.

Huge Hiatus

Almost nothing is known about the people who lived in the Maritimes from about 10,000 to 5,000 years ago. Because of our inability to find any remains of settlements or other artifacts from this period, puzzled archaeologists label this blank stretch in our history "The Great Hiatus". Geological studies and other evidence reveal that at this time the climate, landscape and habitats were changing dramatically. Some scientists believe that the variations in climate and sea level were great enough to make much of the region inhospitable to the herds of game and the hunters who depended upon them. The people may simply have migrated southward in search of a more plentiful and reliable food supply. A minor expansion of the region's glaciers between 10,000 and 9,500 years ago may have further "encouraged" both herds and people to move elsewhere. However, many archaeologists are convinced that the people remained here and simply changed their way of life to adapt to the environmental conditions. It was a time of steady warming of the climate. Dense coniferous forests were gradually taking hold across the region as the permafrost thawed beneath the tundra barrens. The shrinking tundra plains heralded the end of the great caribou herds that had sustained the Palaeo-Indians.

Instead, the people may have increasingly come to rely on the abundant fish, shellfish and marine mammals present in the coastal waters. Evidence from other parts of eastern North America shows that the people of this era had the tools and skills to hunt walrus, seals and small

whales, as well as large fish such as swordfish. Marine mammals were plentiful in the region and the small, semi-enclosed outer Bay of Fundy was probably warm enough to support populations of swordfish. These large marine species may have been hunted from seagoing dugout canoes. Evidence from the Magdalene Islands indicates that people in eastern Canada were fashioning vessels suitable for use in the sea at least 9,000 years ago. In order to better exploit the abundant marine resources people would undoubtedly have settled near the coast, particularly along protected estuaries. Today, the remains of any such coastal campsites would lie well offshore, submerged by the great rise in sea level. Tantalizingly, scallop fishermen in the Bay of Fundy have dredged up some ancient artifacts, such as a stone ulu, a curved knife similar to those used by the Inuit to cut meat and scrape blubber off marine mammal skins. Are these an indication of ancient campsites beneath the waves or simply items lost overboard from a passing dugout? One day we may be able to unravel some of the mystery of the Great Hiatus as marine archaeologists use the latest tools of subsea geology and underwater archaeology to look in places that were once out of reach.

Archaic Advances

The archaeological record finally breaks its protracted silence about 5,000 years ago with the appearance of stone tools crafted by a revolutionary new method. This is the beginning of the Archaic Period (from the Greek "Archaikos", also meaning ancient). The old edge-flaking method was still being used to make spear points, chopping tools, scrapers and knives for hunting, butchering and skinning game. But clearly there was a need for more robust tools that wouldn't break as easily or dull as quickly as the earlier ones made of brittle chalcedony. These newer tools were fashioned from much tougher igneous rocks such as basalt and quartzite. The stone was first hammered and chipped to the general shape and then ground and polished to form a durable, keen edge. The most commonly found tools of this type are axes, adzes and heavy gouges, implements clearly designed for working on large pieces of wood.

There is another curious stone artifact characteristic of the Archaic Period — the plummet. This resembles a

"The finds at Debert unequivocally prove that people were present in Nova Scotia almost 11,000 years ago. However, our understanding of their lifestyle, social structure and use of natural resources is based mainly on circumstantial evidence and informed speculation."

lopsided dumb-bell with one bulbous end separated from the other by a narrower neck groove clearly designed for wrapping a cord around it. Plummets of different sizes have been found, and there is much speculation about what they were used for. Smaller ones, suspended on leather cords, could have been decorative pendants worn around the neck. They might also have been used as weights for twirling and twisting together strands of bark or rush to produce twine for making mats, robes or baskets. Larger plummets could have been tied together in pairs with a strip of leather and hurled at small game, similar to the "bolas" that some South American tribes used in hunting. However, their abundance, varying sizes and overall design have convinced most archaeologists that they were used primarily as sinkers on fishing lines and as weights tied along the bottom of fishing nets suspended across small streams.

The ground tools and plummets of the Archaic Period have been found at widely scattered locations throughout the Maritimes, but only two significant archaeological sites dating from this period have been found and excavated. One is a 3,500-year-old site at Cow Point in central New Brunswick, where a number of distinctive stone implements were found. A site of similar age in the Tan-tramar area also yielded several plummets and a number of walrus bones.

It is unclear if the people living around Fundy during the Archaic Period were direct descendants of the original Paleo-Indians of Debert or were newcomers who had migrated from the west. Whatever their origin, their novel stone tools suggest that their way of life was quite different from those of the earliest people in the area. As the climate, habitats, plants and animals of the region gradually changed, the people adjusted their life-style, tools and food gathering methods accordingly. They were probably still mostly migratory, moving with the changing seasons to places where food species were abundant and accessible. The great variety of fish, fowl and game available would have provided them with some security against the inevitable fluctuations in abundance of food species. There is no evidence that they domesticated livestock or cultivated crops. It is

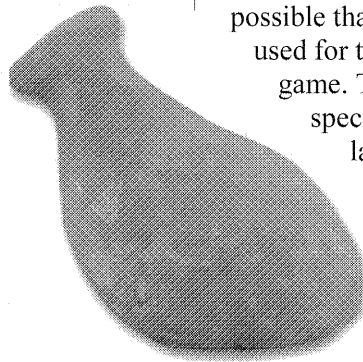
likely that game, fish, wild fruit, berries, tuberous roots such as the groundnut or Indian potato, and other food plants were normally abundant enough to satisfy their modest needs.

Throughout the Great Hiatus, the climate had slowly warmed, so that by the dawning of the Archaic Period the dense coniferous forests had given way to mixed stands of large hardwood trees. Game such as caribou, deer, moose, porcupine, rabbit and squirrel were probably more abundant in these more diverse, open woodlands. Rivers teemed with fish, such as salmon and gaspereaux, which were easily speared or netted during their annual spawning runs.

The heavier, more robust tools of the period were probably used for making useful items from the abundant large trees. All such wooden artifacts have long since disappeared, leaving us to conjecture about which objects might have been created. They probably used the stone gouges to hollow out logs to form large communal cooking pots. At the time of European contact, game was still boiled and stews simmered in such wooden vats by the simple expedient of immersing large stones heated in a fire. It may be, that early in the Archaic Period seagoing canoes were still being hollowed out of large logs and used in the pursuit of larger fish such as cod, swordfish and sturgeon, as well as in hunting marine mammals such as seals, walrus and porpoises. It is possible that snowshoes and toboggans were also being used for traveling over deep snow in pursuit of large game. There is evidence from New Brunswick that special spear throwers enabled hunters to hurl lances with greater force. Some new tools, weapons and construction techniques may have been introduced into the region by trade and social interactions with neighbouring tribes.

Roughly 3,500 years ago, midway through the Archaic Period, the making of heavy stone gouges seems to have ceased. This may have coincided with the discovery of a new way of building boats using a remarkable natural product. The bark of the large, abundant birch trees of the spreading hardwood forests proved to be an extremely useful commodity. It is durable, tough, flexible and waterproof and can easily be peeled from the trees in large

“the discovery of a new way of building boats using a remarkable natural product. The bark of the large, abundant birch trees of the spreading hardwood forests proved to be an extremely useful commodity.”



Stone Plummet found at Cow Point, New Brunswick.
— Canadian Museum of Civilization Collection.

sheets. It is an ideal material for constructing durable, light, maneuverable and portable canoes far superior to cumbersome dugouts, particularly for use in rivers and lakes. These unique bark vessels ranged in length from small portable hunting canoes of 3-4 metres, large river canoes of 4-6 metres and very large open water canoes up to 7.5 metres in length. The people were probably also quick to recognize the utility of birchbark as a weather-proof covering for their cone-shaped portable shelters or wikuoms, in place of the traditional animal hides. Dishes, boxes, containers, ornaments and other handicrafts were also fashioned from the versatile birch bark. These were often elaborately decorated with distinctive, colourful patterns made by inserting dyed porcupine quills into the bark. Birch bark continued to be the "plastic" wonder material of the Native people of the Fundy region for many centuries.



other natural products for their survival and well being. In many coastal areas, one- to three-thousand-year-old "middens", or mounds of mollusk shells and other waste that accumulated over the years at dumpsites near settlements, attest to the fact that shellfish were an important part of their diet at particular times of the year. These heaps typically contain the shells of mussels, clams, oysters, quahogs, moon snails and several other intertidal species. The calcium of the deeply layered shells tends to buffer the usually acid soils, thus preserving the remains of other discarded organic materials such as animal bones. The bones found in middens indicate that the diet probably also included moose, black bear, dog, raccoon, woodchuck, porcupine, beaver, muskrat, squirrel, rabbit, whale, seal, walrus, seabirds, waterfowl and upland game birds, as well as a variety of freshwater and marine fish. There were probably regional preferences for certain types of food. For example, the Mi'kmaq nicknamed the Maliseet "ki'kwesu'k" or muskrat, after a favoured item in their diet. The Maliseet retaliated by referring to the Mi'kmaq as "porcupine people" because they often ate porcupines and used the quills for decoration.

Moose had been a mainstay of the Native people in the region for many thousands of years. It provided not only a large amount of nutritious and tasty meat, but also valuable hides and sinews for making clothing and containers, and large bones and antlers for making tools, projectile points and fishing hooks. Moose butter or "cacamo" was a great delicacy and a high energy, portable food for long winter hunting trips. It was prepared by boiling crushed moose bones in a large wooden vat. The extracted fat was skimmed from the water, allowed to congeal and packed in birch bark boxes for storage.

Different hunting and fishing techniques were used to harvest different species. Wooden lances or spears tipped with stone or bone points, as well as bows for shooting arrows with stone or bone tips were probably used to hunt moose and other large game. Hunters may have also used several fox-sized dogs to assist in the hunt. In winter, snowshoes were used to walk and toboggans to haul gear through the deep snow when traveling or hunting moose.

Smaller animals were caught with snares made out of sinew, or with deadfall traps that dropped heavy logs on

Pottery Period

About 2,500 years ago, the people dwelling around Fundy learned how to make ceramic pots from clay collected from alluvial deposits found throughout the area. These pots, commonly used for cooking and food storage, were made by rolling the damp clay into ropelike lengths that were then coiled to form the desired shape. Over the centuries, different decorative designs were impressed or incised into the damp clay before the pot was hardened over a campfire. Pots made in this way are brittle and fragile, so it is not surprising that intact ones have never been found. Nevertheless, the abundant shards found throughout the Maritimes give us some appreciation of the changing styles and decorative detailing of these earthenware vessels through the centuries. The presence of such pottery shards is a key identifying feature of old settlement sites, and archaeologists have labeled this 2,000-year time span the Ceramic Period. Not surprisingly, we know more about this period than any that preceded it. Not only have many more settlement sites been found and excavated, but also many European explorers who arrived near the end of the period left detailed written accounts of seemingly long-established cultural, social and other characteristics of the Native people they encountered.

As we have seen, over the millennia the people of Fundy have depended upon many different plants, animals and

passing prey. In Fundy's tidal estuaries, brush weirs were used to trap a variety of marine and anadromous fish. These were made by driving stakes into the seafloor at low tide and interweaving brush to create a "fence" that trapped fish on the falling tide. Similarly, stakes were driven into the beds of streams and interwoven with branches or fibre netting to block the passage and force the migrating fish into large, sac-like nets or cages positioned in openings in the barrier. Fish were also caught on moose hide lines fitted with swiveling bone gorges that rotated and stuck in a fish's throat, or with sharp hooks carved from bone. Larger fish, such as sturgeon and salmon, were speared with a three-pronged, bone-tipped lance, often at night, when they were attracted to the light of birch torches. Larger, lance-like harpoons were used for hunting seals, walrus and small whales from seagoing canoes.

Family groups moved around during the year to make the most effective use of the resources available. There may have been different patterns of seasonal movement in different areas of the Maritimes, depending on the species used. Spring often found families camped by an estuary, near the head of tide, to take advantage of spring runs of anadromous fish. During the summer, they moved even closer to the coast to harvest cod, small marine mammals and shellfish. Fall and winter usually found them inland, where moose, deer, beaver, bear and muskrat were plentiful and lakes provided opportunities for ice fishing. Throughout much of the region, wild fruit, berries, nuts and tubers such as groundnuts were abundant. Maple and birch saps were collected and boiled down to make a sweet drink or sugar. A variety of leaves, roots, stems, barks and sap of different plants were harvested for medicinal purposes. Natural fibres, such as spruce roots, reeds, and strips of moose hide or sinews were used for sewing together pieces of birch bark or moose hides to form larger sheets. Plant fibres were also woven into cloth. An early chronicler, Marc Lescarbot reported that the Native people were using hemp fibres to produce cloth that was "finer, whiter and stronger than that of France."

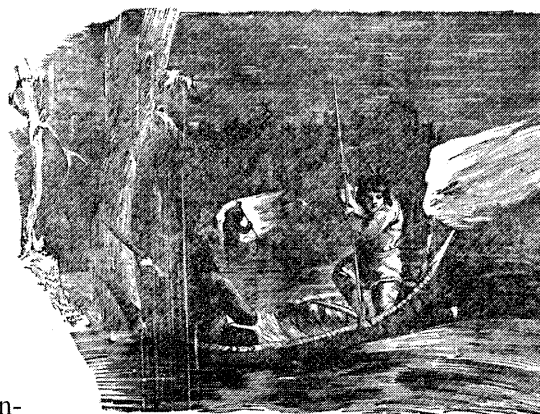
"Oral tradition and Native people's ongoing encounters with the major features of their landscape serve as constant reminders of their close relationship to Glooscap and to the Creator."

Landscape Links

The great Glooscap is the esteemed cultural hero and a distant relation of all the Maritime Native people. He dwelt atop Cape Blomidon, which juts dramatically into the upper Bay of Fundy and guards the entrance to the Minas Basin. It is a place long revered by Native people. Glooscap's activities define three major historical periods. Before he came into being, the land was a harsh, inhospitable place dominated by many terrifying giant creatures. He set about modifying the world to make it more suitable for humans. He drove away the monstrous animals or reduced their size and he altered the landscape to make it more habitable. He taught the people how to live wisely by showing them how to hunt for game, identify plants suitable for medicines and food, and use the natural resources so that they would always be available. Glooscap had the ability to turn living things into stone, and oral tradition traces the formation of many of the striking landforms in the region to this often-used power. Eventually, he departed the region, leaving subsequent generations to enjoy the bountiful land that he had prepared for them. Oral tradition and the Native people's ongoing encounters with the major features of their landscape serve as constant reminders of their close relationships to Glooscap and the Creator.

The people's migratory existence, timed to the changing seasons, meant that Native families occupied large areas of Fundy's watershed. It is hardly surprising, therefore, that they had an intimate and detailed knowledge of its many distinctive geographical features and natural processes. Their environment was not just a place where they lived; it was a complex web of cultural knowledge and intimate personal links. Particularly striking formations in the landscape, such as unusual or spectacular rock outcrops, often had a special significance and were considered sacred. Such intense familiarity gave the people a deeply felt sense of unity with, and belonging to, the natural world.

The Native people also had an intimate and detailed knowledge of the different resource species that they de-



Spearing salmon by torchlight.
— Arttoday.com

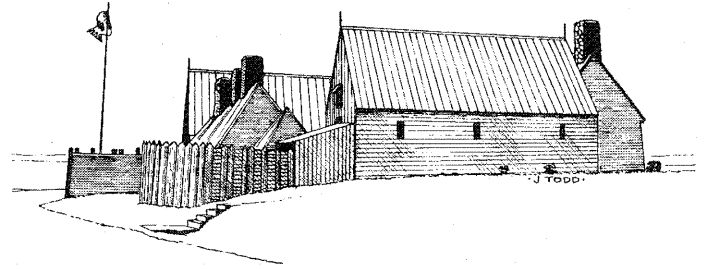
pended on for survival. Many cultural practices and traditions ensured that critical natural resources were used in a manner that is characterized nowadays as sustainable. In the past, the relatively small population and migratory lifestyle also enabled people to live "lightly" on the land and water. If hunting significantly reduced the game or fish in one area, families simply moved to a more productive site, allowing the resources time to recover. Needs were modest and geared mostly to personal consumption. Nicolas Denys, another early French chronicler, noted approvingly that "they kill animals only in proportion as they have need of them", and that "they never make an accumulation of skins of moose, beaver, otter or others, but only as far as they need them for personal use." There was very little waste, with as much as possible of each animal being used. The hunter's sense of responsible stewardship was reinforced by feelings of respect for, and spiritual kinship with the quarry, mingled with gratitude to it for allowing itself to be caught for the use of his family and tribe.

Documenting Devastation

Chief Membertou and his small band of Mi'kmaq could have had little inkling of the consequences of their friendly welcome and aid to the struggling band of French colonists who settled at Port Royal, Nova Scotia, in the summer of 1605. A way of life that had persisted and evolved over millennia was about to be profoundly altered in a few generations.

Earlier European visitors, such as fishermen from Western Europe who had harvested local and offshore cod and marine mammals for more than a century, had little impact on the way of life of the Native people of Fundy. These early contacts with Europeans initiated the written records about the original inhabitants of the New World and their unique society, culture and lifestyle. The subsequent five-century time span is, therefore, designated the Historic Period by archaeologists. Ironically, it is a period of increasingly detailed documentation of Native culture and lifestyle at a time when these were changing dramatically.

The first European settlers in the Fundy region were primarily interested in colonizing the land and harvesting resources for European markets. Cod and marine mammals continued to be a major attraction, but over time interest turned to the abundant fur-bearing animals and massive trees of the endless old growth forests. The im-



The Habitation at Port Royal, Nova Scotia, built by French explorers in 1605-1606, was Canada's first enduring European settlement.

— Sketch by Jim Todd for Port Royal 400th Anniversary Society.

part of the expanding fur trade on the way of life of Fundy's Native people was felt swiftly. By the middle of the 1600's, the focus of many Native hunters was shifting from satisfying their family's modest needs to hunting and trapping as many furs and hides as possible for trade. European manufactured goods began to replace traditional stone and bone implements and imported European foodstuffs supplemented the indigenous foods that were becoming scarcer. Beaver was the most lucrative of the pelts available, and the pressure on beaver populations was intense. By the time the fur trade gathered momentum in central Canada, overhunting had

largely wiped out the beaver in the Maritimes and had also decimated the moose population. Slowly but inexorably, their way of life shifted from one of independence and self-sufficiency to increasing de-

pendence on traders, government largesse and European goods. Social, cultural and ecological equilibria that had lasted thousands of years were increasingly disrupted.

Private Property?

The Native people were contemptuous of the European obsession with ownership of goods and considered them grasping and exploitative. Marc Lescarbot commented tellingly upon their different values in noting "the small care that they take for the commodities of their life for which we French torment and vex ourselves". The concept of amassing large quantities of natural products for trade and of building up one's personal wealth was alien to them. The land and its natural products were there to be used as needed to sustain them and their families. Extra game was shared with friends and neighbours. Individual species were not regarded as commodities that existed in isolation from their natural environment. Most

“Chief Membertou and his small band of Mi'kmaq could have had little inkling of the consequences of their friendly welcome and aid to the struggling band of French colonists who settled at Port Royal, Nova Scotia, in the summer of 1605.”

Europeans had a very different perspective. Every natural resource was an opportunity to acquire wealth. Each species was a distinct entity that could be harvested with little regard to its place or its role in the greater ecosystem. The complex relationships between the different parts of the natural environment and the consequences of wholesale exploitation of particular components did not interest or concern them.

From earliest times, the Native people had no sense of individual ownership of the land upon which they dwelt. To them it was truly a "commons" available for communal use. It couldn't be divided, traded or sold like other goods. Families and larger communal units occupied particular defined areas by tradition and tribal consensus within their national territory. The "land" wasn't something separable from the totality of the environment. Thus, they had no concept of, and no need for, deeds of ownership and boundary surveys. If the natural landscape and its abundant resources belonged to anyone, it was to the Creator who had freely made it available for the use of the people he had placed upon the earth. Their greatest responsibility was to use it wisely, respectfully and sparingly to sustain themselves, their family, tribe and future generations. The Europeans had a very different view of land ownership. Individuals could own defined tracts of land under the ultimate authority of the Crown. The settlers and their governments concluded that since the Native people roamed the landscape and hadn't engaged in actively working specific tracts of land, they didn't own it. It was, therefore, available for anyone to claim, settle and develop.

At first, Fundy's Native people probably assumed that the European colonists were simply using the land in the way that they had done for centuries, and that it was still freely accessible to everyone. This may have been the case with the earliest European fishermen, who only temporarily occupied summer encampments while they processed their fish. But the later colonists had other ideas. The Native people never imagined that by accepting the settlers they were surrendering the land in the Fundy region and their rights to use it. They never knowingly yielded these rights, and the Europeans never officially acquired ownership by the legal means of discovery, conquest or cession. Nevertheless, presumed ownership of the new land was traded back and forth between the warring French and English by legal settle-

ments such as the Treaty of Utrecht in 1713, by which France ceded much of the Maritimes to Great Britain. Great Britain also signed several Treaties of Peace and Friendship with Native groups that explicitly recognized their right to the use the natural resources, without specifically resolving the question of land ownership.

Retreat to Reserves

The earliest French colonists settled mostly near fertile salt marshes that were easily dyked, drained and converted into productive farmland. There, they interfered little with the hunting, fishing and other traditional activities of the Native inhabitants. Thus, the early relationships between the Native people and newcomers were generally amicable, particularly as the French quickly recognized the strategic importance of having the Native people on their side in the ongoing conflicts with England. However, the number of colonists steadily

increased, their settlements spread and colonial governments became more firmly entrenched. The Native people found themselves excluded from more and more tradi-

"From earliest times, the Native people had no sense of individual ownership of the land upon which they dwelt. To them it was truly a 'commons' available for communal use. It couldn't be divided, traded or sold like other goods. "

tional territories that had suddenly and inexplicably (to them) became privately owned. Grants of Crown land were being given to more and more settlers in "fee simple", that is, with no restriction on ownership, sale or inheritance. The grants also gave the settlers the right to exclude others from "their" land and to decide who could use its natural resources.

Colonial governments had generally allowed the Native bands to continue to use publicly owned Crown lands. However, with expanding settlements and the granting of ever more land to newly arriving settlers, the space available for traditional use by Native people shrank steadily. There was a modest influx of about 7,000 "planters" from New England soon after the expulsion of the Acadians in 1755, although most of these simply occupied the abandoned farmlands. Of more import was the arrival in the early 1780's of some 35,000 loyalists fleeing in the wake of the American Revolution. In the year 1782 alone, the population of Nova Scotia tripled. These new arrivals were particularly intent on acquiring the best available lands for fishing, farming or forestry, particularly the productive coastal areas and fertile river valleys, thus forcing the Native bands from many of their traditional fishing and hunting areas. In addition, the spreading settlements, the increasing agriculture and forestry, and the damming of rivers to power industrial

mills hastened the decline of wildlife populations by destroying habitats. This, coupled with over hunting, ended the fur trade upon which many Native bands had come to depend, and even made subsistence hunting difficult.

Unable to pursue their traditional independent lifestyle, Native people had little choice but to adopt the more settled European way of life. Many eked out a meagre existence by labouring or by making and selling baskets and other traditional handicrafts. Native bands soon realized that the only way to protect some vestige of their rapidly shrinking traditional domain was to "play the game" and apply for land grants themselves; individuals, families and bands petitioned colonial governments for land. Some government officials felt that setting aside reserves or tracts of Crown lands for the exclusive use of Native people might encourage them to settle down and take up farming or other commercial enterprises. However, these reserve lands were not to be granted in fee simple as for most other settlers. Instead, the Native people received only usufructuary right to the land. In law, such a right allows someone to use or profit from something that legally belongs to someone else. In other words, Native groups were free to use their own land "at the pleasure of the Crown," but its legal ownership remained with colonial, and later provincial, governments. They couldn't sell the granted lands to anyone but the government. Furthermore, the land was granted to the group and not to individuals.

Most Native reserves in the Maritimes were created in the late 1700s and early 1800s. Although efforts were made to locate reserves on lands traditionally occupied by the bands, most of the prime land had already been given to settlers. Thus, reserves were mostly established on marginal lands poorly suited to agriculture or other commercial use. It is not surprising that many of the early Native farming efforts failed. Furthermore, since the reserve lands were usually poorly surveyed, there was a constant encroachment upon their boundaries by settlers, both knowingly and unknowingly. The colonial governments invariably turned a blind eye to this. In fact, the governments themselves sometimes sold portions of reserve land to pay for services provided to the bands. Thus, the reserves were steadily whittled away. To its credit, the British government issued a Royal Proclamation in 1763 intended to protect "Indian lands" in British North America, but colonial administrators and settlers often ignored or circumvented such edicts. Cut off from their traditional livelihoods, life was diffi-

cult for many Native bands over the ensuing centuries. Many people on reserves made a living selling traditional handicrafts such as baskets woven from ash, decorative quillwork items and hand-carved ash axe-handles, for which there was a ready market throughout the Maritimes. Some, particularly in the Passamaquoddy region of New Brunswick and at the Bear River Reserve in Nova Scotia, found a lucrative niche hunting porpoises in the Bay of Fundy. The oil rendered from their fat was of high quality and much in demand as a lubricant for the machinery of farms and factories. It was also sought after by lighthouse keepers as lamp oil because it was unaffected by the cold and burned cleanly with little odour. However, by the late 1800s, the ready availability of cheaper petroleum-based lubricants and fuels put an end to the market for porpoise oil. Over the past century, many Native people have put their intimate knowledge of the landscape and familiarity with wildlife to use by working as hunting or fishing guides to sportsmen visiting the region. The more skilled were internationally known and much in demand. During the 1950s and 1960s, many Native people abandoned reserves to seek jobs in urban centres throughout the Maritimes and further afield.

The population of Mi'kmaq and Maliseet in the Maritimes is now over 21,000, or just about one percent of the total population. Almost 70% of them live on reserves. There are 30 First Nations bands in the region (15 in New Brunswick, 13 in Nova Scotia and 2 in Prince Edward Island) living on or using over 40 tracts of reserve land of varying size. The total reserve area is only one percent of the territory originally occupied at the time of European contact and the Crown, in the name of individual bands, still legally owns the land.

Controversial Claims

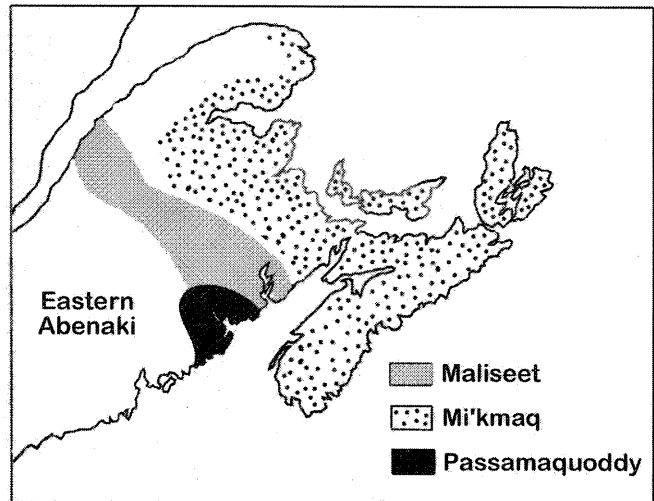
For centuries before the Europeans arrived, there were three main cultural and political groupings or nations in the Fundy region. The Mi'kmaq ("the people" or "kin") had a large territory, Mi'kma'ki, that encompassed Nova Scotia, Prince Edward Island, eastern New Brunswick and part of the Gaspé Peninsula. The Maliseets (in their own language, Wolastoqiyik, "people of the beautiful river") lived in the valley of the St. John River including adjacent parts of Quebec. The Passamaquoddy ("people who spear pollock") occupied a small area around Passamaquoddy Bay. The three groups, along with the Penobscot of Maine and the Abenaki of northwestern New England and southern Quebec, were members of a larger confederacy, the Wabenaki or "people of the dawn".

The colonial governments in the Maritimes had granted reserve lands to smaller groups of Native people rather than to these nations, thus sowing seeds of political and social fragmentation that would last for decades. However, by the 1950s and 1960s there were concerted efforts on some reserves to improve living conditions and assume greater responsibility for social, educational, medical and other services. These efforts were accompanied by a growing determination to seek lasting solutions to issues related to self-government, land ownership and access to natural resources. Newly formed local, regional and national organizations presented a more unified voice in negotiations with federal and provincial governments.

The momentum continued into the 1980s, particularly with the reaffirmation of treaty rights in the Canadian Constitution, which was repatriated in 1982. However, the details of how such rights were to be interpreted and applied were left largely to the courts and the political process. Inevitably, this led to heated debates and protracted negotiations. The Supreme Court has been called upon to make a number of important rulings that better define the rights of Native people regarding land ownership and resource use. Traditionally, Native people had viewed the land and its natural resources holistically and not as something to be considered in isolation. However, legal struggles often forced them to deal with land title and the right to use and manage natural resources as distinct issues.

A 1973 decision in the "Calder Case" in British Columbia recognized that Native people have rights predating European settlement. It also affirmed that they enjoy the same rights regarding the protection of property as do other Canadian citizens. This forced the federal government to acknowledge their claims to a land base and to participation in the harvesting and management of wildlife. Complicating the issue, however, is the fact that Crown land is mostly under the jurisdiction of provincial governments and the management of terrestrial and freshwater resources is primarily a provincial responsibility. These governments have been reluctant to recognize Native land claims or to relinquish any control over the management of natural resources.

The Mi'kmaq and Maliseet around Fundy are engaged in ongoing efforts to claim title to land outside the existing reserve areas. They feel that this will help to improve economic opportunities on reserves. However, there is a vigorous debate as to whether Native title to



Distribution of Aboriginal Nations in the Maritimes.

— After Leavitt, 1997.

such larger land areas still exists or was extinguished earlier. The Mi'kmaq and Maliseet argue that title to the land belongs collectively to the people who occupied it before the Europeans arrived. They note that they never ceded any land by treaties and were never conquered or assimilated. However, federal and provincial governments argue that treaties between European colonial powers and subsequent political restructuring and legislation largely extinguished or diminished aboriginal title to all lands outside designated reserves. Although the courts have generally refuted this government-held view, progress towards the settling of land claims has been tortuous and slow.

Native claims pertaining to the use and management of resources received a boost in 1999 with the Supreme Court ruling in Nova Scotia's Marshall Case. This judgment reaffirmed rights granted in treaties between the Mi'kmaq and the Crown in 1752 and 1760. These recognized traditional hunting, fishing and trading, particularly the right of Native people to make a "moderate living" from the harvest of resources. This ruling, coming at a time when many commercial fish stocks were plummeting, increased tensions between non-native and Native fishermen in some Maritime communities. The court further clarified its ruling in rejecting an appeal by some non-native fishermen. It affirmed that the particular decision applied only to the fisheries and that, furthermore, Native and non-native fishermen are equally bound by fisheries regulations and licensing requirements. The court's decision also implied that the management of fish stocks is a joint

responsibility shared by Native and non-native harvesters as well as by both levels of government.

Lessons to Learn

The effort to settle the outstanding issues about land ownership and resource management in Canada and around the Bay of Fundy will undoubtedly continue for many years. It will probably be a slow and frustrating process. However, there are many dedicated people, both Native and non-native, who are striving to find workable solutions that will allow all people in the region to live in harmony and to share equitably in the rich resources of the Bay of Fundy and its watersheds. We must work together to ensure that these natural resources are used wisely and sustainably. We have not done this over the past 400 years, and, tellingly, many resource species and the habitats they depend on in the Bay are in jeopardy. We would do well to recognize that the Native peoples of the region, with their ancient traditions founded upon knowledge, respect and appreciation for the natural world, have much to teach us about caring for the land and water, and using its plants and animals wisely. If we heed their counsel, appreciate the fundamental truths of their age-old wisdom and work constructively together, future generations may yet continue to reap the benefits of Fundy's diverse and productive natural resources, as the Native people of the region successfully did for many thousands of years.

Acknowledgements

Thanks to the following reviewers for their constructive comments on an early draft of the manuscript:

Robert Leavitt (*Mi'kmaq-Maliseet Institute, University of New Brunswick, Fredericton, New Brunswick*).

John Reid (*Department of History, Saint Mary's University, Halifax, Nova Scotia*).

Peter Wells (*Canadian Wildlife Service, Environment Canada, Dartmouth, Nova Scotia*).

The Fundy Issues series is financially supported by:

**The Environmental Conservation Branch
Environment Canada - Atlantic Region
Dartmouth, Nova Scotia**

The views expressed herein are not necessarily those of Environment Canada or other BoFEP partners.

*Written and produced by J.A. Percy,
SeaPen Communications, Granville Ferry, N.S.
e-mail: bofep@auracom.com*

Further Information

Mi'kmaq. Peoples of the Maritimes. Stephen A. Davis. Nimbus Publishing, Halifax, Nova Scotia. 74 pages. (1997).

Early Man in Nova Scotia. Patricia Hayward. Nova Scotia Museum, Halifax, Nova Scotia. 36 pages. (1973).

The Old Man Told Us: Excerpts from Micmac History, 1500-1950. Ruth Holmes Whitehead. Nimbus Publishing, Halifax, Nova Scotia. 385 pages. (1991).

Maliseet and Micmac: First Nations of the Maritimes. Robert M. Leavitt. New Ireland Press, Fredericton, New Brunswick. 332 pages. (1997).

Mi'kmaq of the East Coast. Robert M. Leavitt, Fitzhenry and Whiteside, Toronto, Ontario. 72 pages. (2000).

History of New France. Marc Lescarbot (1609). Volumes 1, 2 and 3. Translated and edited by W.L. Grant. Champlain Society, Toronto, Ontario. (1910). Reprinted by Greenwood Publishing Group, Inc. Westport, CT. 331, 584 and 555 pages. (1969).

Debert: A Palaeo-Indian Site in Central Nova Scotia. George F. MacDonald. National Museum of Man, Anthropology Papers number 16. Queen's Printers, Ottawa, Ontario. (1968).

Cross Currents: 500 Generations of Aboriginal Fishing in Atlantic Canada. Exhibition by Canadian Museum of Civilization, Hull, Québec. (2001). <http://www.civilization.ca/hist/lifelines/licra01e.html> (accessed July 2003)

Cultural Origins: The First People. Archaeology in Nova Scotia. The Nova Scotia Museum. Halifax, Nova Scotia. <http://museum.gov.ns.ca/arch/culture.htm> (accessed July 2003).

The Great White Mantle: The Story of the Ice Ages and the Coming of Man. David O. Woodbury. The Viking Press, New York, N.Y. 214 pages. (1962).

The Last Billion Years: A Geological History of the Maritime Provinces of Canada. G.L. Williams and R.A. Fensome (editors). Atlantic Geoscience Society. Nimbus Publishing Ltd., Halifax, Nova Scotia. 212 pages. (2001).

The Mi'kmaq Portal. <http://www.mikmaq.com/>. (Accessed November 2003)

This fact sheet may be reproduced and circulated with credit to the

Bay of Fundy Ecosystem Partnership

Fundy Issues are available on the BoFEP Website at <http://www.bofep.org>